# Mobile Crane Grue mobile

LTM 1350-6.1

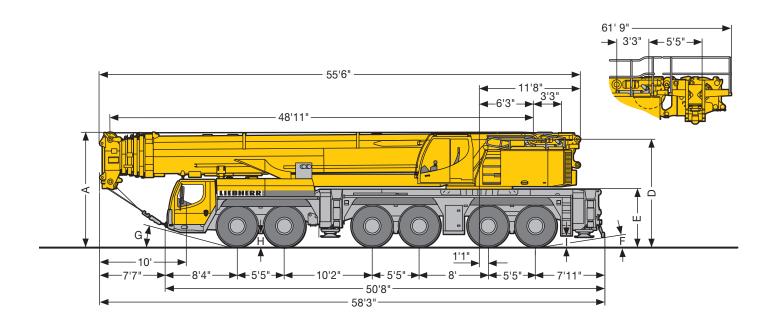
Technical Data Caractéristiques techniques

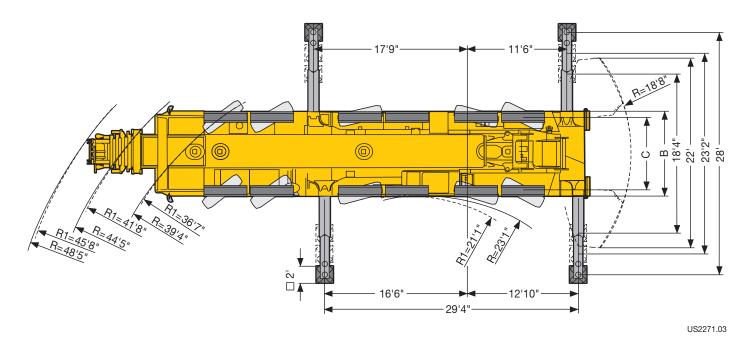


# LIEBHERR

#### Table of content Tables des matières

| Technical Data  |         |
|---|---------|
| Dimensions  | 3       |
| Boom/jib combinations                                 | 4 – 7   |
| Weights, Working speeds                               | 8       |
| Lifting capacities on telescopic boom T               | 9 – 12  |
| Lifting capacities on guyed telescopic boom TY        | 13 – 15 |
| Lifting capacities on the lattice fly jib TF          | 16 – 24 |
| Lifting capacities on TYVEF boom/derrick combination  | 25 – 39 |
| Lifting capacities on the luffing lattice jib TN      | 40 – 52 |
| Lifting capacities on TYVEN boom/derrick combination  | 53 – 71 |
| Equipment   | 72      |
| Remarks referring to load charts                      | 74      |
|   |         |
| Caractéristiques techniques                           |         |
| Encombrement  | 3       |
| Configurations de flèche                              | 4 – 7   |
| Poids, Vitesses                                       | 8       |
| Forces de levage à la flèche télescopique T           | 9 – 12  |
| Forces de levage à la flèche télescopique haubanée TY | 13 – 15 |
| Forces de levage à la fléchette treillis fixe TF      | 16 – 24 |
| Forces de levage en configuration TYVEF               | 25 – 39 |
| Forces de levage à la fléchette treillis relevable TN | 40 – 52 |
| Forces de levage en configuration TYVEN               | 53 – 71 |
| Equipement  | 73      |
| Remarques relatives aux tableaux des charges          | 74      |
|   |         |



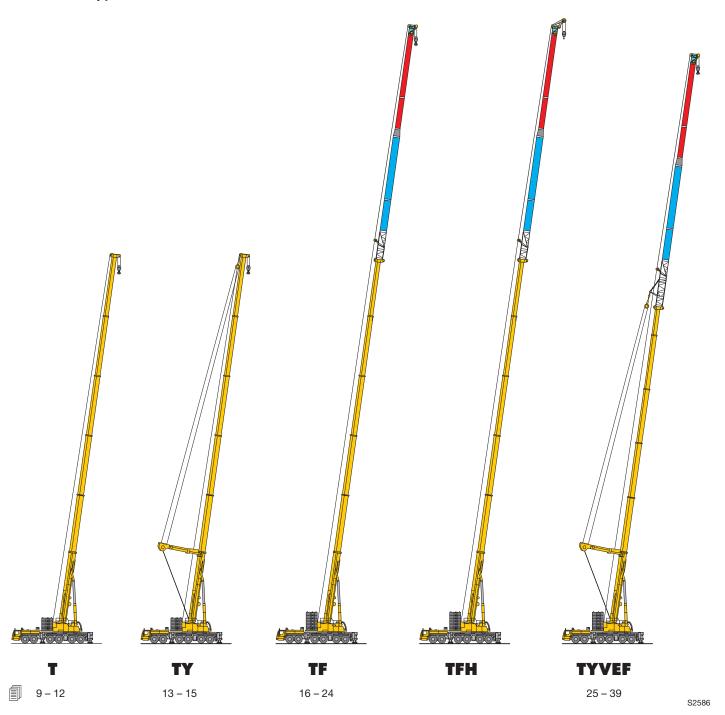


 $R_1$  = All-wheel steering · Direction toutes roues

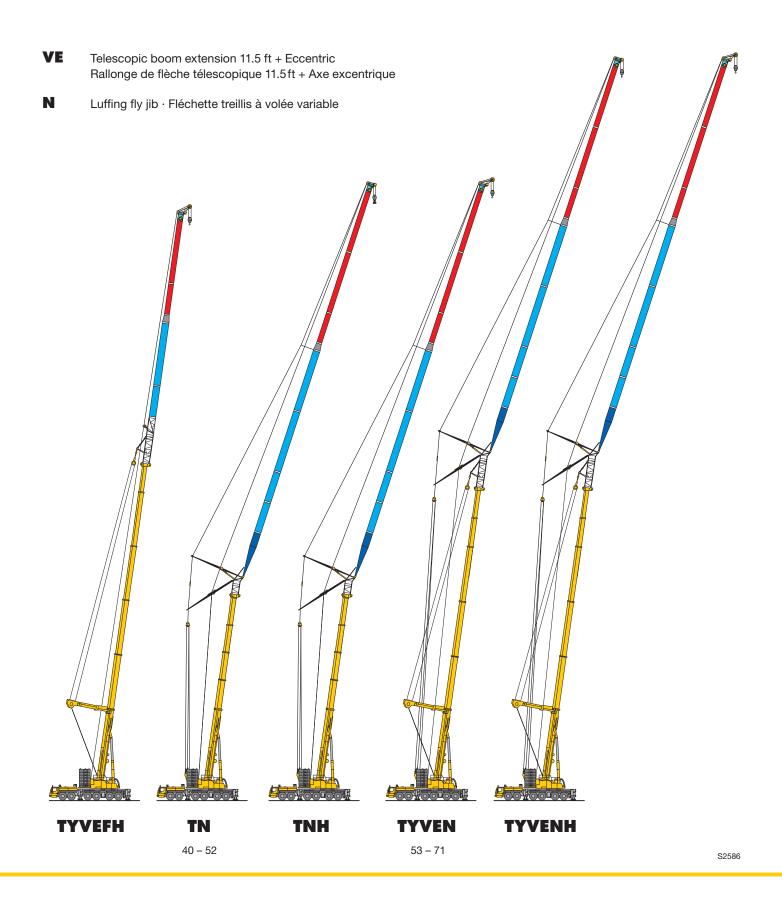
|                          |       |       | Dir   | mensions · E | Encombrem | ent  |    |     |      |      |
|--------------------------|-------|-------|-------|--------------|-----------|------|----|-----|------|------|
| <b>(</b> ( <b>(</b> ))   | Α     | Α     | В     | С            | D         | E    | F  | G   | Н    | 1    |
|                          |       | 6"    |       |              |           |      |    |     |      |      |
| 445/95 R 25 (16.00 R 25) | 13'1" | 12'8" | 9'10" | 8'4"         | 12'4"     | 6'7" | 8° | 14° | 1'4" | 1'2" |
| 525/80 R 25 (20.5 R 25)  | 13'1" | 12'8" | 10'2" | 8'5"         | 12'4"     | 6'7" | 8° | 14° | 1'4" | 1'2" |
| * lowered · abaissé      |       |       |       |              |           |      |    |     |      |      |

#### Boom/jib combinations Configurations de flèche

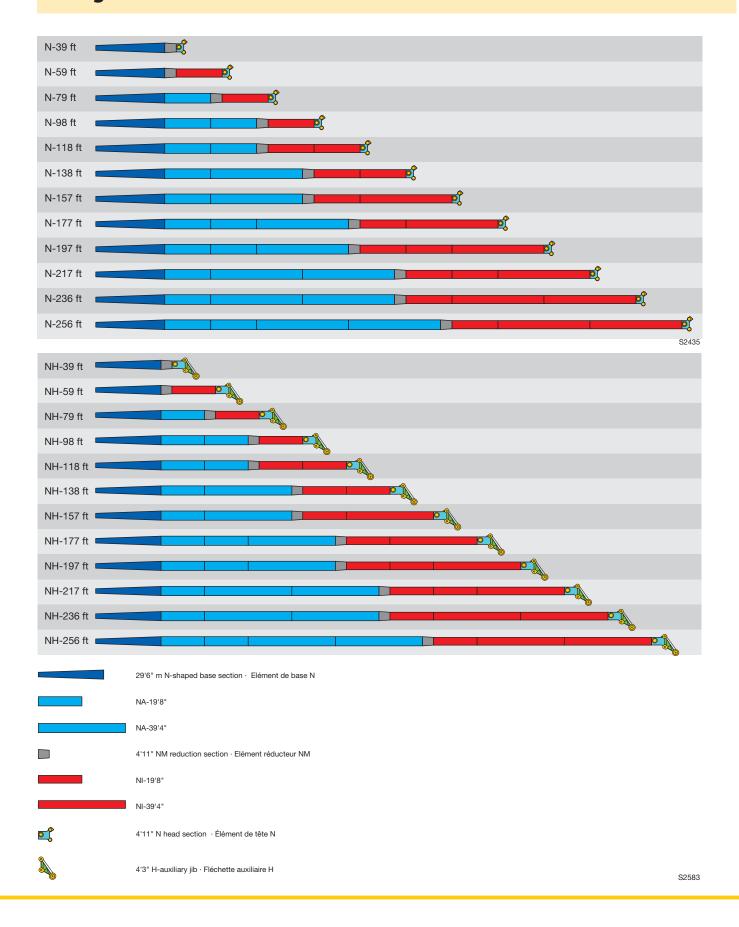
- Telescopic boom · Flèche télescopique
- Y-shaped guying system · Haubanage Y
- Fixed lattice jib · Fléchette treillis fixe
- ★ Auxiliary jib · Fléchette auxiliaire



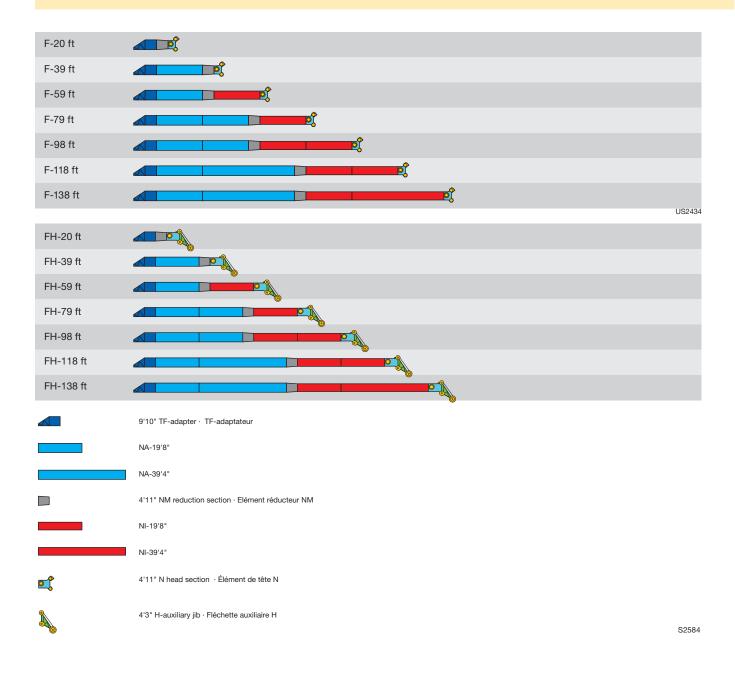
#### Boom/jib combinations Configurations de flèche

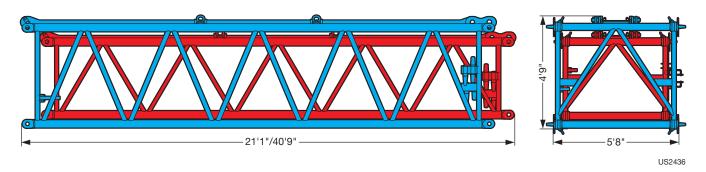


#### Boom/jib combinations - Luffing fly jib Configurations de flèche - Fléchette à volée variable



#### Boom/jib combinations - Fixed fly jib Configurations de flèche - Fléchette fixe





# Weights Poids



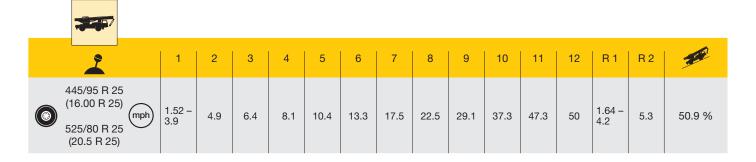
| Axle   |       |       |       |       |       |       | Total weight lbs |
|--------|-------|-------|-------|-------|-------|-------|------------------|
| Essieu | 1     | 2     | 3     | 4     | 5     | 6     | Poids total lbs  |
| lbs    | 26400 | 26400 | 26400 | 26400 | 26400 | 26400 | 158400           |

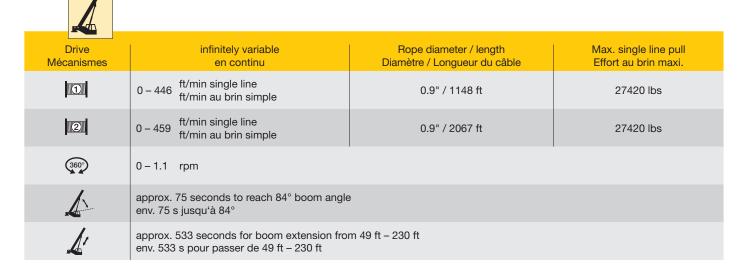


| Load kips<br>Forces de levage kips | No. of sheaves Poulies | No. of lines<br>Brins | Weight lbs<br>Poids lbs |
|------------------------------------|------------------------|-----------------------|-------------------------|
| 463                                | 12                     | 24 (20)               | 7500                    |
| 343.3                              | 7                      | 14                    | 4850                    |
| 275.6                              | 5                      | 11                    | 3630                    |
| 176.4                              | 3                      | 7                     | 3200 / 6615*            |
| 79.8                               | 1                      | 3                     | 2200                    |
| 27.1                               | _                      | 1                     | 1320                    |

<sup>\*</sup> only necessary for operation with 39 ft luffing fly jib · nécessaire uniquement en cas de fonctionnement avec la fléchette à volée variable de 39 ft

# Working speeds Vitesses



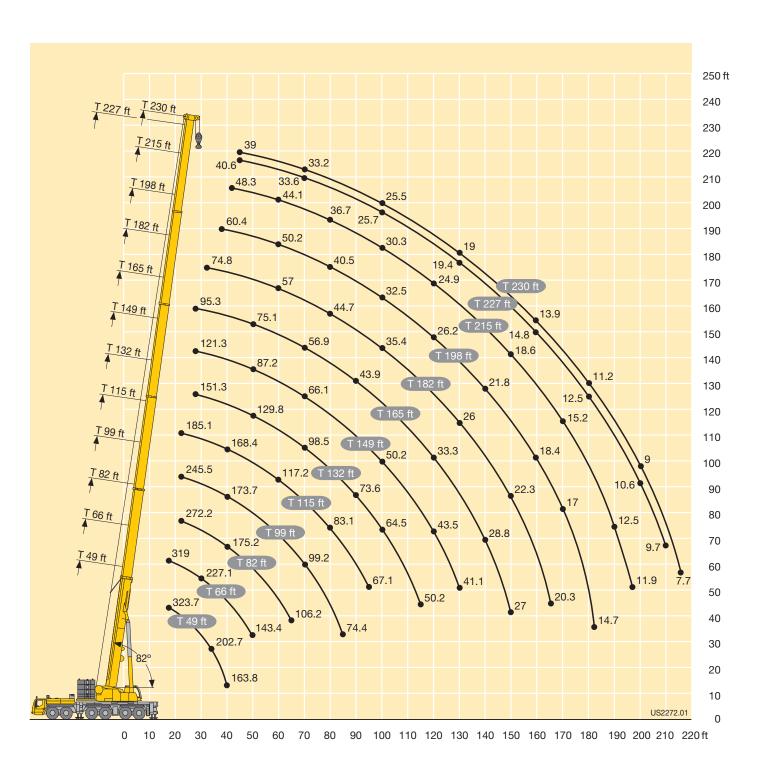


|            | 49 – 230 ft    |                |                | 360° 308       | 600 lbs        | 85%            |                |              |              |              |              |              |              |            |
|------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| **         | 49 ft          | 66 ft          | 82 ft          | 99 ft          | 115 ft         | 132 ft         | 149 ft         | 165 ft       | 182 ft       | 198 ft       | 215 ft       | 227 ft       | 230 ft       | ft         |
| 18         | 323.7          | 319            |                |                |                |                |                |              |              |              |              |              |              | 18         |
| 20         | 308.8          | 309            |                |                |                |                |                |              |              |              |              |              |              | 20         |
| 22         | 288.4          | 289.6          | 272.2          | 245.5          | 185.1          |                |                |              |              |              |              |              |              | 22         |
| 24         | 269.8          | 271.5          | 260.2          | 240.7          | 185            |                |                |              |              |              |              |              |              | 24         |
| 26<br>28   | 253<br>238.7   | 254.8<br>240.5 | 247<br>235.7   | 233.9<br>223.4 | 197.6<br>197.4 | 151.3          | 121.3          | 95.3         |              |              |              |              |              | 26<br>28   |
| 30         | 225.3          | 227.1          | 224.6          | 212.9          | 195.4          | 156.1          | 119.5          | 94.9         |              |              |              |              |              | 30         |
| 32         | 213.5          | 215.2          | 213.4          | 203.9          | 192.7          | 156.1          | 116.4          | 93.9         | 74.8         |              |              |              |              | 32         |
| 34         | 202.7          | 204.3          | 202.7          | 195.7          | 187.7          | 155.5          | 113.1          | 92.4         | 74.5         |              |              |              |              | 34         |
| 36         | 192.4          | 194.1          | 192.5          | 187.9          | 181.1          | 154.5          | 109.7          | 90.6         | 73.9         | 00.4         |              |              |              | 36         |
| 38<br>40   | 182.4<br>163.8 | 185.2<br>176.8 | 183.6          | 180.8<br>173.7 | 174.6<br>168.4 | 151.9          | 106.1<br>102.7 | 88.4<br>86.1 | 73.1         | 60.4<br>60   |              |              |              | 38<br>40   |
| 40         | 103.0          | 169.3          | 175.2<br>167.4 | 166.4          | 162.6          | 149<br>145.8   | 99.4           | 83.8         | 72.1<br>70.6 | 59.5         | 48.3         |              |              | 40         |
| 44         |                | 162.2          | 160.3          | 159.4          | 157.1          | 142            | 96.1           | 81.5         | 69.1         | 58.8         | 48.1         | 40.6         | 39           | 44         |
| 46         |                | 155.4          | 153.5          | 152.6          | 151.8          | 137.9          | 92.9           | 79.3         | 67.5         | 57.9         | 47.9         | 40.3         | 38.9         | 46         |
| 48         |                | 149.4          | 147.7          | 146.8          | 146.8          | 133.9          | 90             | 77.2         | 66           | 56.8         | 47.5         | 39.9         | 38.6         | 48         |
| 50         |                | 143.4          | 142            | 141.1          | 141.8          | 129.8          | 87.2           | 75.1         | 64.4         | 55.7         | 47           | 39.5         | 38.4         | 50         |
| 55<br>60   |                |                | 128.7<br>116.6 | 127.9<br>116.7 | 129.4<br>117.2 | 120.6<br>112.4 | 80.4<br>74.2   | 70.2<br>65.5 | 60.6<br>57   | 53<br>50.2   | 45.7<br>44.1 | 38.2<br>36.7 | 37.4<br>36.2 | 55<br>60   |
| 65         |                |                | 106.2          | 107.8          | 106.7          | 105            | 69.9           | 60.9         | 53.7         | 47.5         | 42.3         | 35.2         | 34.7         | 65         |
| 70         |                |                | 100.2          | 99.2           | 97.9           | 98.5           | 66.1           | 56.9         | 50.6         | 45.1         | 40.4         | 33.6         | 33.2         | 70         |
| 75         |                |                |                | 91.4           | 90.1           | 91.8           | 62.8           | 53.1         | 47.6         | 42.8         | 38.6         | 32.2         | 31.8         | 75         |
| 80         |                |                |                | 83.7           | 83.1           | 85.1           | 59.9           | 49.7         | 44.7         | 40.5         | 36.7         | 30.8         | 30.5         | 80         |
| 85         |                |                |                | 74.4           | 76.9           | 79             | 57             | 46.6         | 42.2         | 38.3         | 35.1         | 29.4         | 29.1         | 85         |
| 90<br>95   |                |                |                |                | 71.7<br>67.1   | 73.6<br>68.8   | 54.6<br>52.3   | 43.9<br>41.2 | 39.7<br>37.5 | 36.3<br>34.4 | 33.4<br>31.8 | 28.2<br>26.9 | 27.9<br>26.7 | 90<br>95   |
| 100        |                |                |                |                | 07.1           | 64.5           | 50.2           | 39           | 35.4         | 32.5         | 30.3         | 25.7         | 25.5         | 100        |
| 105        |                |                |                |                |                | 60.5           | 48.3           | 37.4         | 33.3         | 30.8         | 28.8         | 24.5         | 24.3         | 105        |
| 110        |                |                |                |                |                | 56.5           | 46.6           | 36           | 31.4         | 29.2         | 27.4         | 23.4         | 23.2         | 110        |
| 115        |                |                |                |                |                | 50.2           | 45             | 34.6         | 29.8         | 27.7         | 26.1         | 22.3         | 22           | 115        |
| 120<br>125 |                |                |                |                |                |                | 43.5<br>42.2   | 33.3<br>32   | 28.4<br>27.1 | 26.2<br>24.9 | 24.9<br>23.8 | 21.2<br>20.3 | 20.9<br>19.9 | 120<br>125 |
| 130        |                |                |                |                |                |                | 41.1           | 30.8         | 26           | 23.9         | 22.6         | 19.4         | 19.9         | 130        |
| 135        |                |                |                |                |                |                |                | 29.8         | 25           | 22.8         | 21.5         | 18.6         | 18           | 135        |
| 140        |                |                |                |                |                |                |                | 28.8         | 24           | 21.8         | 20.5         | 17.7         | 17.1         | 140        |
| 145        |                |                |                |                |                |                |                | 27.8         | 23.1         | 20.9         | 19.5         | 16.9         | 16.2         | 145        |
| 150        |                |                |                |                |                |                |                | 27           | 22.3         | 20.1         | 18.6         | 16.2         | 15.4         | 150        |
| 155<br>160 |                |                |                |                |                |                |                |              | 21.6<br>20.9 | 19.2<br>18.4 | 17.7<br>16.9 | 15.5<br>14.8 | 14.6<br>13.9 | 155<br>160 |
| 165        |                |                |                |                |                |                |                |              | 20.3         | 17.7         | 16.3         | 14.2         | 13.1         | 165        |
| 170        |                |                |                |                |                |                |                |              |              | 17           | 15.2         | 13.6         | 12.5         | 170        |
| 175        |                |                |                |                |                |                |                |              |              | 16.4         | 14.5         | 13.1         | 11.8         | 175        |
| 180        |                |                |                |                |                |                |                |              |              | 15.8         | 13.8         | 12.5         | 11.2         | 180        |
| 185<br>190 |                |                |                |                |                |                |                |              |              | 14.7         | 13.2<br>12.5 | 12<br>11.5   | 10.6<br>10   | 185<br>190 |
| 190        |                |                |                |                |                |                |                |              |              |              | 11.9         | 11.5         | 9.5          | 190        |
| 200        |                |                |                |                |                |                |                |              |              |              | 11.5         | 10.6         | 9.5          | 200        |
| 205        |                |                |                |                |                |                |                |              |              |              |              | 10.1         | 8.5          | 205        |
| 210        |                |                |                |                |                |                |                |              |              |              |              | 9.7          | 8.1          | 210        |
| 215        |                |                |                |                |                |                |                |              |              |              |              |              | 7.7          | 215        |

|            | 49 – 230 ft    | ŗ              |                | ±10° 308       | 6600 lbs       | 85%            |                |              |              |              |              |              |              |                       |
|------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------|
| ft ft      | 49 ft          | 66 ft          | 82 ft          | 99 ft          | 115 ft         | 132 ft         | 149 ft         | 165 ft       | 182 ft       | 198 ft       | 215 ft       | 227 ft       | 230 ft       | ft                    |
| 9          | 343.3          |                |                |                |                |                |                |              |              |              |              |              |              | 9                     |
| 10<br>11   | 343.3<br>343.3 | 343.3          |                |                |                |                |                |              |              |              |              |              |              | 10<br>11              |
| 12         | 343.3          | 343.3          |                |                |                |                |                |              |              |              |              |              |              | 12                    |
| 13         | 343.3          | 343.3          | 342            | 050.5          |                |                |                |              |              |              |              |              |              | 13                    |
| 14<br>15   | 343.3<br>343.3 | 343.3<br>343.2 | 341.7<br>338.7 | 252.5<br>252.5 |                |                |                |              |              |              |              |              |              | 14<br>15              |
| 16         | 343.3          | 342.4          | 328            | 252.5          |                |                |                |              |              |              |              |              |              | 16                    |
| 17         | 342.2          | 337            | 318.3          | 252.5          | 005            |                |                |              |              |              |              |              |              | 17                    |
| 18<br>20   | 340.3<br>333.9 | 328.5<br>311.6 | 309.2<br>291.3 | 252.5<br>251.8 | 205<br>204.7   |                |                |              |              |              |              |              |              | 18<br>20              |
| 22         | 314.2          | 295.2          | 275            | 247.3          | 202.8          | 156.1          |                |              |              |              |              |              |              | 22                    |
| 24         | 296.1          | 279.6          | 260.2          | 241.3          | 201            | 156.1          | 100.0          |              |              |              |              |              |              | 24                    |
| 26<br>28   | 279.6<br>264   | 264.5<br>251.7 | 247<br>236     | 233.9<br>223.4 | 199.3<br>197.4 | 156.1<br>156.1 | 122.9<br>121.4 | 95.3         |              |              |              |              |              | 26<br>28              |
| 30         | 248.5          | 239.6          | 225.6          | 212.9          | 195.4          | 156.1          | 119.5          | 94.9         |              |              |              |              |              | 30                    |
| 32         | 232.7          | 228.8          | 216            | 203.9          | 192.7          | 156.1          | 116.4          | 93.9         | 74.8         |              |              |              |              | 32                    |
| 34<br>36   | 218.3<br>204.9 | 217.3<br>205.5 | 206.9<br>197.9 | 195.7<br>187.9 | 187.7<br>181.1 | 155.5<br>154.5 | 113.1<br>109.7 | 92.4<br>90.6 | 74.5<br>73.9 |              |              |              |              | 34<br>36              |
| 38         | 187.9          | 194.4          | 190.1          | 180.9          | 174.6          | 151.9          | 106.1          | 88.4         | 73.1         | 60.4         |              |              |              | 38                    |
| 40         | 164.2          | 183.9          | 182.1          | 174.1          | 168.4          | 149            | 102.7          | 86.1         | 72.1         | 60           | 40.0         |              |              | 40                    |
| 42<br>44   |                | 174.8<br>166.8 | 173.7<br>165.4 | 167.5<br>161.3 | 162.6<br>157.1 | 145.8<br>142   | 99.4<br>96.1   | 83.8<br>81.5 | 70.6<br>69.1 | 59.5<br>58.8 | 48.3<br>48.1 | 40.6         | 39           | 42<br>44              |
| 46         |                | 159.3          | 157.3          | 155.3          | 151.8          | 137.9          | 92.9           | 79.3         | 67.5         | 57.9         | 47.9         | 40.3         | 38.9         | 46                    |
| 48         |                | 152.3          | 150.6          | 148.9          | 146.9          | 133.9          | 90             | 77.2         | 66           | 56.8         | 47.5         | 39.9         | 38.6         | 48                    |
| 50<br>55   |                | 145.3          | 144<br>129.2   | 142.5<br>128.3 | 142<br>129.5   | 129.8<br>120.6 | 87.2<br>80.4   | 75.1<br>70.2 | 64.4<br>60.6 | 55.7<br>53   | 47<br>45.7   | 39.5<br>38.2 | 38.4<br>37.4 | 50<br>55              |
| 60         |                |                | 116.6          | 116.7          | 117.2          | 112.4          | 74.2           | 65.5         | 57           | 50.2         | 44.1         | 36.7         | 36.2         | 60                    |
| 65         |                |                | 106.2          | 107.8          | 106.7          | 105            | 69.9           | 60.9         | 53.7         | 47.5         | 42.3         | 35.2         | 34.7         | 65                    |
| 70<br>75   |                |                |                | 99.2<br>91.4   | 97.9<br>90.1   | 98.5<br>91.8   | 66.1<br>62.8   | 56.9<br>53.1 | 50.6<br>47.6 | 45.1<br>42.8 | 40.4<br>38.6 | 33.6<br>32.2 | 33.2<br>31.8 | 70<br>75              |
| 80         |                |                |                | 83.7           | 83.1           | 85.1           | 59.9           | 49.7         | 44.7         | 40.5         | 36.7         | 30.8         | 30.5         | 80                    |
| 85         |                |                |                | 74.4           | 76.9           | 79             | 57             | 46.6         | 42.2         | 38.3         | 35.1         | 29.4         | 29.1         | 85                    |
| 90<br>95   |                |                |                |                | 71.7<br>67.1   | 73.6<br>68.8   | 54.6<br>52.3   | 43.9<br>41.2 | 39.7<br>37.5 | 36.3<br>34.4 | 33.4<br>31.8 | 28.2<br>26.9 | 27.9<br>26.7 | 90<br>95              |
| 100        |                |                |                |                | 07.1           | 64.5           | 50.2           | 39           | 35.4         | 32.5         | 30.3         | 25.7         | 25.5         | 100                   |
| 105        |                |                |                |                |                | 60.5           | 48.3           | 37.4         | 33.3         | 30.8         | 28.8         | 24.5         | 24.3         | 105                   |
| 110<br>115 |                |                |                |                |                | 56.5<br>50.2   | 46.6<br>45     | 36<br>34.6   | 31.4<br>29.8 | 29.2<br>27.7 | 27.4<br>26.1 | 23.4<br>22.3 | 23.2<br>22   | 110<br>115            |
| 120        |                |                |                |                |                | 30.2           | 43.5           | 33.3         | 28.4         | 26.2         | 24.9         | 21.2         | 20.9         | 120                   |
| 125        |                |                |                |                |                |                | 42.2           | 32           | 27.1         | 24.9         | 23.8         | 20.3         | 19.9         | 125                   |
| 130<br>135 |                |                |                |                |                |                | 41.1           | 30.8<br>29.8 | 26<br>25     | 23.9<br>22.8 | 22.6<br>21.5 | 19.4<br>18.6 | 19<br>18     | 130<br>135            |
| 140        |                |                |                |                |                |                |                | 28.8         | 24           | 21.8         | 20.5         | 17.7         | 17.1         | 140                   |
| 145        |                |                |                |                |                |                |                | 27.8         | 23.1         | 20.9         | 19.5         | 16.9         | 16.2         | 145                   |
| 150        |                |                |                |                |                |                |                | 27           | 22.3         | 20.1<br>19.2 | 18.6         | 16.2         | 15.4         | 150                   |
| 155<br>160 |                |                |                |                |                |                |                |              | 21.6<br>20.9 | 18.4         | 17.7<br>16.9 | 15.5<br>14.8 | 14.6<br>13.9 | 155<br>160            |
| 165        |                |                |                |                |                |                |                |              | 20.3         | 17.7         | 16           | 14.2         | 13.1         | 165                   |
| 170        |                |                |                |                |                |                |                |              |              | 17<br>16.4   | 15.2         | 13.6         | 12.5         | 170                   |
| 175<br>180 |                |                |                |                |                |                |                |              |              | 16.4<br>15.8 | 14.5<br>13.8 | 13.1<br>12.5 | 11.8<br>11.2 | 175<br>180            |
| 185        |                |                |                |                |                |                |                |              |              | 14.7         | 13.2         | 12           | 10.6         | 185                   |
| 190        |                |                |                |                |                |                |                |              |              |              | 12.5         | 11.5         | 10           | 190                   |
| 195<br>200 |                |                |                |                |                |                |                |              |              |              | 11.9         | 11.1<br>10.6 | 9.5<br>9     | 195<br>200            |
| 205        |                |                |                |                |                |                |                |              |              |              |              | 10.1         | 8.5          | 205                   |
| 210        |                |                |                |                |                |                |                |              |              |              |              | 9.7          | 8.1          | 210                   |
| 215        |                |                |                |                |                |                |                |              |              |              |              |              | 7.7<br>t_18  | 215<br>0_50201_00_000 |

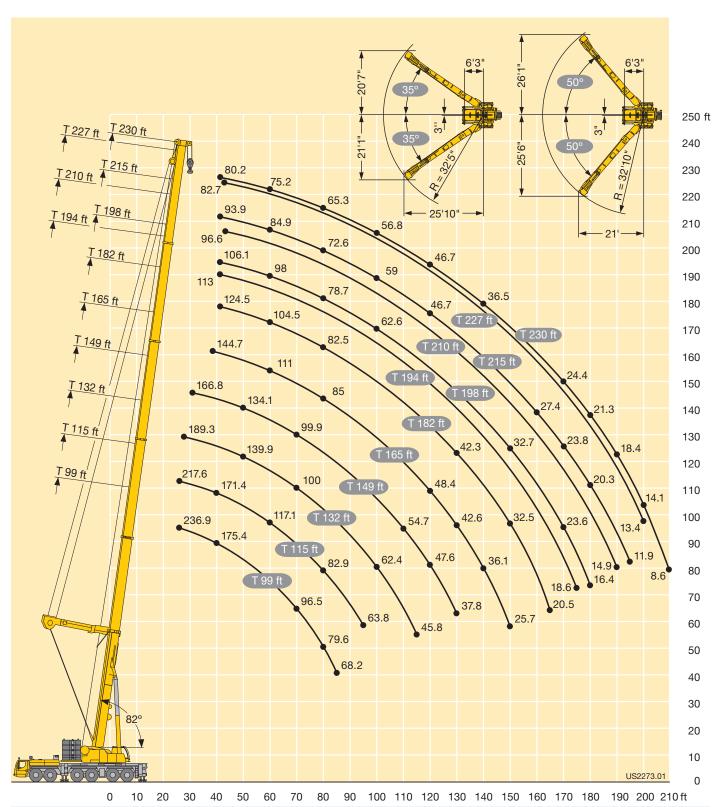
49 – 230 ft 360° 220500 lbs

|            | NINE S         | Ĭ              | ŢÇ             |                |                | 85%          | Ď              |                |              |              |              |              |              |              |            |
|------------|----------------|----------------|----------------|----------------|----------------|--------------|----------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| <b>A</b>   | 49             | ft             | 66 ft          | 82 ft          | 99 ft          | 115 ft       | 132 ft         | 149 ft         | 165 ft       | 182 ft       | 198 ft       | 215 ft       | 227 ft       | 230 ft       | A          |
| 9          | *              | 343.3          |                |                |                |              |                |                |              |              |              |              |              |              | 9          |
| 10         | 742            | 343.3          |                |                |                |              |                |                |              |              |              |              |              |              | 10         |
| 11         | 554            | 343.3          | 343.3          |                |                |              |                |                |              |              |              |              |              |              | 11         |
| 12         | 454.8          | 343.3          | 343.3          |                |                |              |                |                |              |              |              |              |              |              | 12         |
| 13         | 438.6          | 343.3          | 343.3          | 342            | 050.5          |              |                |                |              |              |              |              |              |              | 13         |
| 14         | 417.7          | 343.3          | 343.3<br>343   | 341.7          | 252.5          |              |                |                |              |              |              |              |              |              | 14<br>15   |
| 15<br>16   | 397.4<br>381.3 | 343.1<br>342.2 | 341.6          | 338.7<br>328   | 252.5<br>252.5 |              |                |                |              |              |              |              |              |              | 16         |
| 17         | 367.8          | 334.7          | 334.3          | 318.3          | 252.5          |              |                |                |              |              |              |              |              |              | 17         |
| 18         | 356.1          | 322.7          | 323            | 309.2          | 252.5          | 205          |                |                |              |              |              |              |              |              | 18         |
| 20         | 332.1          | 299.3          | 300.8          | 291.3          | 251.8          | 204.7        |                |                |              |              |              |              |              |              | 20         |
| 22         | 304.4          | 279.5          | 281.1          | 275            | 247.3          | 202.8        | 156.1          |                |              |              |              |              |              |              | 22         |
| 24         | 279.3          | 261.4          | 263.2          | 259.5          | 241.3          | 201          | 156.1          |                |              |              |              |              |              |              | 24         |
| 26         | 256.7          | 245.1          | 246.9          | 244.9          | 233.9          | 199.3        | 156.1          | 122.9          |              |              |              |              |              |              | 26         |
| 28         | 238.3          | 231.2          | 233            | 231.3          | 223.4          | 197.4        | 156.1          | 121.4          | 95.3         |              |              |              |              |              | 28         |
| 30         | 221.4          | 218            | 219.8          | 218.2          | 212.7          | 195.4        | 156.1          | 119.5          | 94.9         | 74.0         |              |              |              |              | 30         |
| 32         | 207.1          | 206.1          | 208            | 206            | 202.8          | 192.7        | 156.1          | 116.4          | 93.9         | 74.8         |              |              |              |              | 32         |
| 34<br>36   | 194.2<br>182.2 | 194.2<br>182.2 | 196.1<br>184.2 | 194.2<br>182.4 | 192.4<br>181.6 | 187.7<br>181 | 155.5<br>154.5 | 113.1<br>109.7 | 92.4<br>90.6 | 74.5<br>73.9 |              |              |              |              | 34<br>36   |
| 38         | 172.2          | 172.2          | 174.1          | 172.4          | 173            | 172.6        | 151.9          | 109.7          | 88.4         | 73.9         | 60.4         |              |              |              | 38         |
| 40         | 155.6          | 155.6          | 164.6          | 162.9          | 164.5          | 164          | 149            | 102.7          | 86.1         | 72.1         | 60           |              |              |              | 40         |
| 42         |                |                | 156.3          | 154.5          | 156.4          | 155.4        | 145.8          | 99.4           | 83.8         | 70.6         | 59.5         | 48.3         |              |              | 42         |
| 44         |                |                | 148.7          | 147.6          | 148.8          | 147.6        | 142            | 96.1           | 81.5         | 69.1         | 58.8         | 48.1         | 40.6         | 39           | 44         |
| 46         |                |                | 141.3          | 141.5          | 141.5          | 140.3        | 137.9          | 92.9           | 79.3         | 67.5         | 57.9         | 47.9         | 40.3         | 38.9         | 46         |
| 48         |                |                | 135.3          | 135.6          | 135.4          | 134.2        | 133.3          | 90             | 77.2         | 66           | 56.8         | 47.5         | 39.9         | 38.6         | 48         |
| 50         |                |                | 129.3          | 129.7          | 129.4          | 128.2        | 128.6          | 87.2           | 75.1         | 64.4         | 55.7         | 47           | 39.5         | 38.4         | 50         |
| 55         |                |                |                | 116.5          | 116            | 114.7        | 116.9          | 80.4           | 70.2         | 60.6         | 53           | 45.7         | 38.2         | 37.4         | 55         |
| 60         |                |                |                | 105.2          | 104.7          | 103.6        | 105.5          | 74.2           | 65.5         | 57           | 50.2         | 44.1         | 36.7         | 36.2         | 60         |
| 65         |                |                |                | 95.7           | 95.3           | 95.6         | 96             | 69.9           | 60.9         | 53.7         | 47.5         | 42.3         | 35.2         | 34.7         | 65         |
| 70<br>75   |                |                |                |                | 87.3<br>79.8   | 88.8<br>82   | 87.9<br>80.5   | 66.1<br>62.8   | 56.9<br>53.1 | 50.6<br>47.6 | 45.1<br>42.8 | 40.4<br>38.6 | 33.6<br>32.2 | 33.2<br>31.8 | 70<br>75   |
| 80         |                |                |                |                | 73.4           | 75.3         | 73.6           | 59.9           | 49.7         | 44.7         | 40.5         | 36.7         | 30.8         | 30.5         | 80         |
| 85         |                |                |                |                | 69.2           | 69.1         | 67.4           | 57             | 46.6         | 42.2         | 38.3         | 35.1         | 29.4         | 29.1         | 85         |
| 90         |                |                |                |                | 00.2           | 63.9         | 62.2           | 54.6           | 43.9         | 39.7         | 36.3         | 33.4         | 28.2         | 27.9         | 90         |
| 95         |                |                |                |                |                | 59.2         | 57.5           | 52.3           | 41.2         | 37.5         | 34.4         | 31.8         | 26.9         | 26.7         | 95         |
| 100        |                |                |                |                |                |              | 53.2           | 50.2           | 39           | 35.4         | 32.5         | 30.3         | 25.7         | 25.5         | 100        |
| 105        |                |                |                |                |                |              | 49.4           | 48.3           | 37.4         | 33.3         | 30.8         | 28.8         | 24.5         | 24.3         | 105        |
| 110        |                |                |                |                |                |              | 46             | 46.5           | 36           | 31.4         | 29.2         | 27.4         | 23.4         | 23.2         | 110        |
| 115        |                |                |                |                |                |              | 43             | 44.2           | 34.6         | 29.8         | 27.7         | 26.1         | 22.3         | 22           | 115        |
| 120        |                |                |                |                |                |              |                | 41.8           | 33.3         | 28.4         | 26.2         | 24.9         | 21.2         | 20.9         | 120        |
| 125        |                |                |                |                |                |              |                | 39.1           | 32<br>30.8   | 27.1         | 24.9<br>23.9 | 23.8<br>22.6 | 20.3         | 19.9<br>19   | 125        |
| 130<br>135 |                |                |                |                |                |              |                | 36.8           | 29.8         | 26<br>25     | 23.9         | 21.5         | 19.4<br>18.6 | 18           | 130<br>135 |
| 140        |                |                |                |                |                |              |                |                | 28.8         | 24           | 21.8         | 20.5         | 17.7         | 17.1         | 140        |
| 145        |                |                |                |                |                |              |                |                | 27.8         | 23.1         | 20.9         | 19.5         | 16.9         | 16.2         | 145        |
| 150        |                |                |                |                |                |              |                |                | 27           | 22.3         | 20.1         | 18.6         | 16.2         | 15.4         | 150        |
| 155        |                |                |                |                |                |              |                |                |              | 21.6         | 19.2         | 17.7         | 15.5         | 14.6         | 155        |
| 160        |                |                |                |                |                |              |                |                |              | 20.9         | 18.4         | 16.9         | 14.8         | 13.9         | 160        |
| 165        |                |                |                |                |                |              |                |                |              | 20.3         | 17.7         | 16           | 14.2         | 13.1         | 165        |
| 170        |                |                |                |                |                |              |                |                |              |              | 17           | 15.2         | 13.6         | 12.5         | 170        |
| 175        |                |                |                |                |                |              |                |                |              |              | 16.4         | 14.5         | 13.1         | 11.8         | 175        |
| 180        |                |                |                |                |                |              |                |                |              |              | 15.8         | 13.8         | 12.5         | 11.2         | 180        |
| 185<br>190 |                |                |                |                |                |              |                |                |              |              | 14.7         | 13.2<br>12.5 | 12<br>11.5   | 10.6<br>10   | 185<br>190 |
| 190        |                |                |                |                |                |              |                |                |              |              |              | 11.9         | 11.5         | 9.5          | 190        |
| 200        |                |                |                |                |                |              |                |                |              |              |              | 11.5         | 10.6         | 9.5          | 200        |
| 205        |                |                |                |                |                |              |                |                |              |              |              |              | 10.1         | 8.5          | 205        |
| 210        |                |                |                |                |                |              |                |                |              |              |              |              | 9.7          | 8.1          | 210        |
| 215        |                |                |                |                |                |              |                |                |              |              |              |              |              | 7.7          | 215        |



|            | 99 – 230 ft    |                | <u>i</u>       |                | 30860<br>30860 |              | 5%           |              |              |              |              |              |             |
|------------|----------------|----------------|----------------|----------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| ft ft      | 99 ft          | 115 ft         | 132 ft         | 149 ft         | 165 ft         | 182 ft       | 194 ft       | 198 ft       | 210 ft       | 215 ft       | 227 ft       | 230 ft       | ft ft       |
| 26         | 236.9          | 217.6          |                |                |                |              |              |              |              |              |              |              | 26          |
| 28         | 227            | 212.9          | 189.3          |                |                |              |              |              |              |              |              |              | 28          |
| 30         | 217.3          | 207.4          | 186.1          | 400.0          |                |              |              |              |              |              |              |              | 30          |
| 32         | 207.7          | 199.7          | 184.2          | 166.8          |                |              |              |              |              |              |              |              | 32<br>34    |
| 34<br>36   | 199.5<br>192.4 | 192.1<br>184.4 | 179.7<br>173.7 | 165.3<br>163.1 |                |              |              |              |              |              |              |              | 36          |
| 38         | 183.8          | 177.9          | 168.6          | 159.2          | 144.7          |              |              |              |              |              |              |              | 38          |
| 40         | 175.4          | 171.4          | 163.4          | 155            | 143.2          |              |              |              |              |              |              |              | 40          |
| 42         | 167.3          | 165.2          | 157.7          | 150.5          | 140            | 124.5        | 113          | 106.1        |              | 93.9         |              | 80.2         | 42          |
| 44         | 159.9          | 159.3          | 152.9          | 146            | 136.4          | 123.8        | 112.6        | 105.8        | 96.6         | 93.6         | 82.7         | 80           | 44          |
| 46         | 152.9          | 153.5          | 148.5          | 141.5          | 132.8          | 122.9        | 111.9        | 105.4        | 96.2         | 93.1         | 81.8         | 79.6         | 46          |
| 48         | 146.8          | 147.7          | 144.2          | 137.8          | 129.6          | 120.5        | 110.2        | 104.7        | 95.4         | 92.3         | 80.8         | 79.2         | 48          |
| 50         | 140.8          | 141.9          | 139.9          | 134.1          | 126.3          | 118.2        | 108.5        | 104          | 94.6         | 91.5         | 79.7         | 78.7         | 50          |
| 55         | 127.2          | 128.7          | 129.1          | 125            | 118.4          | 111.6        | 104.1        | 101.5        | 92.1         | 88.6         | 76.9         | 77.2         | 55          |
| 60         | 115.5          | 117.1          | 118.5          | 116.2          | 111            | 104.5        | 99.6         | 98           | 89           | 84.9         | 73.9         | 75.2         | 60          |
| 65         | 105.6          | 107.1          | 108.7          | 107.8          | 104.4          | 98.3         | 94.8         | 92.9         | 85.5         | 81.6         | 70.9         | 72.7         | 65          |
| 70<br>75   | 96.5           | 98.3           | 100<br>91.9    | 99.9           | 97.8           | 92.9         | 89.7         | 87.8         | 82.3         | 78.4         | 68.3         | 70.1         | 70          |
| 75<br>80   | 88.3<br>79.6   | 90.3<br>82.9   | 84.4           | 92.2<br>84.8   | 91.4<br>85     | 87.6<br>82.5 | 84.8<br>80.3 | 83.1<br>78.7 | 79.1<br>75.9 | 75.4<br>72.6 | 65.9<br>63.7 | 67.6<br>65.3 | 75<br>80    |
| 85         | 68.2           | 76.2           | 77.9           | 78.2           | 78.5           | 77.6         | 75.8         | 74.3         | 72.4         | 69.4         | 61.6         | 63.1         | 85          |
| 90         | 00.2           | 70.5           | 72.2           | 72.6           | 72.9           | 72.5         | 71.7         | 70.4         | 68.6         | 65.7         | 59.7         | 60.9         | 90          |
| 95         |                | 63.8           | 67.1           | 67.5           | 67.8           | 67.4         | 67.4         | 66.6         | 65.1         | 62.2         | 57.7         | 58.9         | 95          |
| 100        |                |                | 62.4           | 62.8           | 63.1           | 62.7         | 63.1         | 62.6         | 61.7         | 59           | 55.8         | 56.8         | 100         |
| 105        |                |                | 58.1           | 58.5           | 58.8           | 58.4         | 58.8         | 58.3         | 58.4         | 56           | 53.9         | 54.5         | 105         |
| 110        |                |                | 53             | 54.7           | 55.1           | 54.7         | 55           | 54.6         | 54.9         | 53           | 51.9         | 52           | 110         |
| 115        |                |                | 45.8           | 51.2           | 51.7           | 51.2         | 51.5         | 51.1         | 51.5         | 49.8         | 49.5         | 49.4         | 115         |
| 120        |                |                |                | 47.6           | 48.4           | 48           | 48.3         | 47.8         | 48.2         | 46.7         | 46.8         | 46.7         | 120         |
| 125        |                |                |                | 43.6           | 45.4           | 45.1         | 45.3         | 44.8         | 45.2         | 43.7         | 44           | 44           | 125         |
| 130        |                |                |                | 37.8           | 42.6           | 42.3         | 42.7         | 42.1         | 42.5         | 40.9         | 41.4         | 41.4         | 130         |
| 135<br>140 |                |                |                |                | 39.7<br>36.1   | 39.7<br>37.3 | 40.1<br>37.6 | 39.6<br>37.1 | 40<br>37.5   | 38.3<br>35.8 | 38.9<br>36.4 | 38.9<br>36.5 | 135<br>140  |
| 145        |                |                |                |                | 31.4           | 34.8         | 35.3         | 34.9         | 35.3         | 33.5         | 34.1         | 34.3         | 145         |
| 150        |                |                |                |                | 25.7           | 32.5         | 33.2         | 32.7         | 33.1         | 31.3         | 32           | 32           | 150         |
| 155        |                |                |                |                |                | 29.2         | 31.2         | 30.5         | 31           | 29.3         | 29.9         | 30           | 155         |
| 160        |                |                |                |                |                | 25.2         | 28.8         | 28.5         | 29.1         | 27.4         | 28           | 28           | 160         |
| 165        |                |                |                |                |                | 20.5         | 26           | 26.5         | 27.3         | 25.5         | 26.1         | 26.2         | 165         |
| 170        |                |                |                |                |                |              | 22.6         | 23.6         | 25.5         | 23.8         | 24.3         | 24.4         | 170         |
| 175        |                |                |                |                |                |              | 18.6         | 20.3         | 23.5         | 22.2         | 22.8         | 22.8         | 175         |
| 180        |                |                |                |                |                |              |              | 16.4         | 21.1         | 20.3         | 21.3         | 21.3         | 180         |
| 185        |                |                |                |                |                |              |              |              | 18.2         | 17.9         | 19.8         | 19.8         | 185         |
| 190        |                |                |                |                |                |              |              |              | 14.9         | 15.2         | 18.2         | 18.4         | 190         |
| 195<br>200 |                |                |                |                |                |              |              |              |              | 11.9         | 15.9<br>13.4 | 16.4<br>14.1 | 195<br>200  |
| 200        |                |                |                |                |                |              |              |              |              |              | 13.4         | 11.5         | 200         |
| 210        |                |                |                |                |                |              |              |              |              |              |              | 8.6          | 210         |
|            |                |                |                |                |                |              |              |              |              |              |              |              | )_60101_00_ |

|            | 99 – 230 ft    |                |                | <b>1</b>       | 22050          |                | 5%             |              |              |              |              |              |                |
|------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|--------------|--------------|--------------|--------------|----------------|
| ↑ ft       | 99 ft          | 115 ft         | 132 ft         | 149 ft         | 165 ft         | 182 ft         | 194 ft         | 198 ft       | 210 ft       | 215 ft       | 227 ft       | 230 ft       | ft ft          |
| 15         | 256.7          |                |                |                |                |                |                |              |              |              |              |              | 15             |
| 16         | 259.8          |                |                |                |                |                |                |              |              |              |              |              | 16             |
| 17         | 261.2          |                |                |                |                |                |                |              |              |              |              |              | 17             |
| 18         | 261.7          | 001.0          |                |                |                |                |                |              |              |              |              |              | 18             |
| 20<br>22   | 262<br>259.1   | 231.6<br>234.4 |                |                |                |                |                |              |              |              |              |              | 20<br>22       |
| 24         | 251.8          | 232            | 198.9          |                |                |                |                |              |              |              |              |              | 24             |
| 26         | 240.4          | 224.8          | 198.8          |                |                |                |                |              |              |              |              |              | 26             |
| 28         | 228.6          | 216.1          | 196.8          | 167.4          |                |                |                |              |              |              |              |              | 28             |
| 30         | 217.1          | 207.4          | 193.9          | 167.8          | 145.1          |                |                |              |              |              |              |              | 30             |
| 32         | 206.4          | 199.7          | 189            | 167.8          | 145.3          |                |                |              |              |              |              |              | 32             |
| 34<br>36   | 196.5<br>187.1 | 192.1<br>184.4 | 182.8<br>175.8 | 166.7<br>164.7 | 145.4<br>145.4 |                |                |              |              |              |              |              | 34<br>36       |
| 38         | 177.6          | 176.7          | 169.5          | 159.9          | 144.7          | 124.6          | 113.3          | 106.3        |              |              |              |              | 38             |
| 40         | 168.2          | 168.8          | 163.4          | 155            | 143.2          | 124.6          | 113.3          | 106.3        | 97           | 94.2         |              | 79.8         | 40             |
| 42         | 159.1          | 160.3          | 157.7          | 150.5          | 140            | 124.5          | 113.1          | 106.1        | 96.9         | 93.9         | 82.8         | 80.2         | 42             |
| 44         | 150.8          | 152.2          | 151.6          | 146            | 136.4          | 123.8          | 112.6          | 105.8        | 96.6         | 93.6         | 82.7         | 80           | 44             |
| 46         | 143            | 144.4          | 145.4          | 141.5          | 132.8          | 122.9          | 111.9          | 105.4        | 96.2         | 93.1         | 81.8         | 79.6         | 46             |
| 48<br>50   | 136.5<br>130.1 | 138.1<br>131.7 | 139.2<br>133   | 136.6<br>131.7 | 129.6<br>126.3 | 120.5<br>118.2 | 110.2<br>108.5 | 104.7<br>104 | 95.4<br>94.6 | 92.3<br>91.5 | 80.8<br>79.7 | 79.2<br>78.7 | 48<br>50       |
| 55         | 115.7          | 117.5          | 119            | 119.3          | 117.3          | 111.4          | 104.1          | 101.5        | 92.1         | 88.6         | 76.9         | 77.2         | 55             |
| 60         | 103.6          | 105.3          | 106.9          | 107.2          | 107.3          | 103.6          | 99.3           | 97.8         | 89           | 84.9         | 73.9         | 75.2         | 60             |
| 65         | 93.5           | 95.2           | 96.8           | 97.1           | 97.3           | 94.7           | 93             | 91.4         | 85.5         | 81.6         | 70.9         | 72.7         | 65             |
| 70         | 84.7           | 86.6           | 88.2           | 88.5           | 88.8           | 86.7           | 85.5           | 84.1         | 81.3         | 78.1         | 68.3         | 70.1         | 70             |
| 75         | 77             | 79.1           | 80.6           | 81             | 81.3           | 79.6           | 78.6           | 77.2         | 76.1         | 73.4         | 65.9         | 67.5         | 75             |
| 80<br>85   | 70.1<br>63.6   | 72.3<br>66.1   | 73.9<br>68     | 74.3<br>68.3   | 74.6<br>68.7   | 73.2<br>67.5   | 72.3<br>66.8   | 71.1<br>65.6 | 70.3<br>64.9 | 67.7<br>62.4 | 63.5<br>60.8 | 64.8<br>61.6 | 80<br>85       |
| 90         | 03.0           | 60.6           | 62.5           | 62.9           | 63.3           | 62.4           | 61.8           | 60.7         | 60.2         | 57.7         | 57           | 57.1         | 90             |
| 95         |                | 55.4           | 57.4           | 57.9           | 58.3           | 57.7           | 57.3           | 56.2         | 55.7         | 53.3         | 53           | 52.9         | 95             |
| 100        |                |                | 52.8           | 53.3           | 53.6           | 53.2           | 53.1           | 52.1         | 51.7         | 49.3         | 49.1         | 49           | 100            |
| 105        |                |                | 48.5           | 49             | 49.4           | 49             | 49.2           | 48.3         | 47.9         | 45.7         | 45.5         | 45.4         | 105            |
| 110        |                |                | 44.7           | 45.2           | 45.7           | 45.2           | 45.6           | 44.8         | 44.6         | 42.4         | 42.3         | 42.2         | 110            |
| 115<br>120 |                |                | 41.1           | 41.7<br>38.5   | 42.3<br>39.1   | 41.8<br>38.6   | 42.2<br>39     | 41.6<br>38.4 | 41.5<br>38.6 | 39.3<br>36.5 | 39.3<br>36.5 | 39.3<br>36.5 | 115<br>120     |
| 125        |                |                |                | 35.6           | 36.1           | 35.8           | 36.1           | 35.5         | 35.9         | 33.9         | 33.9         | 33.9         | 125            |
| 130        |                |                |                | 32.8           | 33.5           | 33.1           | 33.6           | 32.9         | 33.3         | 31.5         | 31.6         | 31.6         | 130            |
| 135        |                |                |                |                | 31             | 30.7           | 31.1           | 30.5         | 30.9         | 29.2         | 29.4         | 29.4         | 135            |
| 140        |                |                |                |                | 28.7           | 28.3           | 28.8           | 28.2         | 28.6         | 27           | 27.3         | 27.3         | 140            |
| 145        |                |                |                |                | 26.5           | 26.2           | 26.6           | 26.1         | 26.6         | 24.9         | 25.3         | 25.4         | 145            |
| 150<br>155 |                |                |                |                | 24.3           | 24.2<br>22.4   | 24.7<br>22.9   | 24.1<br>22.2 | 24.6<br>22.7 | 22.9<br>21.1 | 23.4<br>21.6 | 23.5<br>21.7 | 150<br>155     |
| 160        |                |                |                |                |                | 20.7           | 21.2           | 20.5         | 21           | 19.4         | 20           | 20           | 160            |
| 165        |                |                |                |                |                | 18.5           | 19.5           | 18.9         | 19.4         | 17.8         | 18.3         | 18.4         | 165            |
| 170        |                |                |                |                |                |                | 18             | 17.4         | 17.9         | 16.2         | 16.8         | 16.9         | 170            |
| 175        |                |                |                |                |                |                | 16.6           | 15.9         | 16.5         | 14.9         | 15.4         | 15.5         | 175            |
| 180        |                |                |                |                |                |                |                | 14.2         | 15.1         | 13.5         | 14.1         | 14.1         | 180            |
| 185<br>190 |                |                |                |                |                |                |                |              | 13.9<br>12.7 | 12.3<br>11.1 | 12.8<br>11.6 | 12.8<br>11.6 | 185<br>190     |
| 195        |                |                |                |                |                |                |                |              | 12.1         | 9.9          | 10.5         | 10.5         | 195            |
| 200        |                |                |                |                |                |                |                |              |              |              | 9.4          | 9.4          | 200            |
| 205        |                |                |                |                |                |                |                |              |              |              |              | 8.4          | 205            |
| 210        |                |                |                |                |                |                |                |              |              |              |              | 7.3          | 210            |
|            |                |                |                |                |                |                |                |              |              |              |              | TAB 180      | 0_60105_00_000 |



Angle of the Y-suspension between 35° and 50° depending on the extension condition of the individual telescopic sections. Angle du haubanage Y entre 35° et 50°, en fonction de l'état de sortie des différents éléments télescopiques.

|            | A STATE                | 2    | A    | F    | Ţ            | 7      | 1    | 4            |      |        |      |      | 85           | %      |      |      |      |       |      |      |              |       |      |            |              |                                |     |
|------------|------------------------|------|------|------|--------------|--------|------|--------------|------|--------|------|------|--------------|--------|------|------|------|-------|------|------|--------------|-------|------|------------|--------------|--------------------------------|-----|
| B.         | 49 +                   | 8 ft | k    |      | 132 +        | ⊦ 8 fl | *    | 1            | 49 - | + 8 ft | *    |      | 165 -        | - 8 fl | *    | 1    | 82 - | + 8 f | t*   | 1    | 98 +         | 8 ft' | ŧ    | 2          | 15 +         | 8 ft*                          |     |
|            |                        | ) ft |      |      |              | ) ft   |      |              | _    | ) ft   |      |      |              | ) ft   |      |      |      | ) ft  |      |      | 20           |       |      |            | 20           |                                |     |
| π          | 0° 20°                 | 40°  | 60°  | 0°   | 20°          | 40°    | 60°  | 0°           | 20°  | 40°    | 60°  | 0°   | 20°          | 40°    | 60°  | 0°   | 20°  | 40°   | 60°  | 0°   | 20°          | 40°   | 60°  | 0°         | 20°          | 40° 60°                        |     |
| 11         | 99.3<br>98.9           |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 11  |
| 12<br>13   | 98.1                   |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 12  |
| 14         | 96.3                   |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 14  |
| 15         | 94.3                   |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 15  |
| 16         | 91.6                   |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 16  |
| 17         | 89.1                   |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 17  |
| 18         | 86.7 74.6              |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 18  |
| 20         | 81.9 72.4              |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 20  |
| 22         | 77.5 69                | 61   |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 22  |
| 24         | 73.4 65.9              |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 24  |
| 26         | 69.5 63                |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 26  |
| 28         | 66.3 60.4              |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 28  |
| 30         | 63.2 57.9              |      |      |      |              |        |      | 70.0         |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 30  |
| 32<br>34   | 60.3 55.7<br>57.8 53.7 |      |      |      |              |        |      | 79.8<br>79.8 |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 32  |
| 36         | 55.3 51.8              |      |      |      |              |        |      | 79.8         |      |        |      | 65.5 |              |        |      |      |      |       |      |      |              |       |      |            |              |                                | 36  |
| 38         | 53.1 50.1              |      |      |      |              | 60.5   |      | 79.5         | 69.9 |        |      | 65.2 |              |        |      | 52.1 |      |       |      |      |              |       |      |            |              |                                | 38  |
| 40         | 51 48.4                |      |      |      |              |        |      | 78.8         |      |        |      | 64.6 |              |        |      | 52   |      |       |      |      |              |       |      |            |              |                                | 40  |
| 42         | 49.1 46.9              | 44.8 | 45.8 | 83.8 | 68.2         | 58.6   | 53.6 |              |      |        |      | 63.7 |              |        |      | 51.7 |      |       |      |      |              |       |      |            |              |                                | 42  |
| 44         | 47.3 45.5              | 43.7 | 45.2 | 81.5 | 66.7         | 57.6   | 53.6 | 75.4         | 66.2 | 57.3   | 53.4 | 62.4 | 61.7         |        |      | 51.4 |      |       |      | 41.2 |              |       |      |            |              |                                | 44  |
| 46         | 45.6 44.1              | 42.6 | 44.5 | 79.3 | 65.3         | 56.7   | 53.5 | 73.4         | 64.9 | 56.5   | 53.2 | 61   | 60.7         |        |      | 50.9 |      |       |      | 41.1 |              |       |      |            |              |                                | 46  |
| 48         | 44.2 42.9              |      |      |      |              |        |      |              |      |        |      |      |              |        |      | 49.9 |      |       |      | 40.8 |              |       |      |            |              |                                | 48  |
| 50         | 42.8 41.6              |      |      |      |              |        |      |              |      |        |      |      | 57.8         |        |      |      |      |       |      | 40.5 |              |       |      | 33         |              |                                | 50  |
| 55         | 39.6 38.8              |      |      |      |              |        | 50.6 |              |      |        |      |      |              |        |      |      |      |       | 46.1 |      |              |       |      | 32.5       |              |                                | 55  |
| 60         | 37 36.5                | 34.8 |      |      | 57           |        |      |              |      | 51.3   |      |      |              |        |      |      |      |       |      |      | 37.4         |       | 00.4 | 31.7       |              | 00.4                           | 60  |
| 65         |                        |      |      |      | 54.6         |        |      |              |      |        |      | ł    |              |        |      |      |      |       | 42.8 |      |              |       |      |            |              |                                | 65  |
| 70<br>75   |                        |      |      |      | 52.3<br>50.3 |        |      | 53.4<br>50   |      |        |      |      | 42.9         |        | 45.8 |      |      |       |      |      |              |       |      |            |              | 29.4 29.7<br>28.3 28.7         |     |
| 80         |                        |      |      |      | 48.4         |        |      | 46.7         |      |        |      |      | 40.4         |        |      | 34.8 |      |       |      |      |              |       |      |            |              | 20.3 20. <i>1</i><br>27.1 27.6 |     |
| 85         |                        |      |      |      | 46.7         |        |      | 43.8         |      |        |      |      | 38.1         |        |      | 32.9 |      |       |      |      |              |       |      |            |              | 26 26.5                        |     |
| 90         |                        |      |      |      | 45.2         |        |      | 41           |      |        |      |      | 35.8         |        |      |      |      | 31.8  |      |      | 27.7         |       | 00.0 |            |              | 24.9 25.4                      |     |
| 95         |                        |      |      |      | 43.6         |        |      |              |      | 38.8   |      |      | 33.7         |        |      |      |      | 30.1  |      |      | 26.3         |       |      |            | 23.5         |                                | 95  |
| 100        |                        |      |      |      | 42.2         |        |      | 1            |      | 36.5   |      |      | 31.7         |        |      | 27.8 |      |       |      |      | 24.9         |       |      |            | 22.4         |                                | 100 |
| 105        |                        |      |      | 43.5 | 40.8         |        |      | 34           | 34.1 | 34.3   |      | 29.6 | 29.8         | 30.2   |      | 26.2 | 26.5 | 26.7  |      | 23.1 | 23.6         | 24    |      | 20.7       | 21.3         | 21.7                           | 108 |
| 110        |                        |      |      | 41.9 | 39.6         |        |      | 31.9         |      |        |      |      | 28.1         |        |      |      |      | 25.3  |      |      | 22.4         |       |      | -          | 20.2         |                                | 110 |
| 115        |                        |      |      |      | 38.5         |        |      | 30           |      |        |      |      | 26.4         |        |      | i    |      | 23.8  |      |      | 21.2         |       |      |            | 19.2         |                                | 115 |
| 120        |                        |      |      |      | 37.3         |        |      | 28.3         |      |        |      |      | 24.8         |        |      |      |      | 22.5  |      |      | 20.1         |       |      |            | 18.2         |                                | 120 |
| 125        |                        |      |      | 35.7 |              |        |      | 26.7         |      |        |      |      | 23.3         |        |      | 20.6 |      |       |      |      | 19           |       |      | 16.8       |              |                                | 125 |
| 130<br>135 |                        |      |      | 33.3 | 33.9         |        |      | 25.4<br>24.2 |      |        |      |      | 21.9<br>20.6 |        |      | 19.3 | 19.7 |       |      |      | 17.9<br>16.9 |       |      |            | 16.4<br>15.5 |                                | 130 |
| 140        |                        |      |      | 29.1 |              |        |      | 23           |      |        |      | 1    | 19.5         |        |      | 17   |      |       |      |      | 15.9         |       |      |            | 14.7         |                                | 140 |
| 145        |                        |      |      | 26.6 |              |        |      | 22           |      |        |      |      | 18.5         |        |      |      | 16.4 |       |      | 14.5 |              | 10.1  |      |            | 13.9         |                                | 145 |
| 150        |                        |      |      | _0.0 |              |        |      | 20.9         |      |        |      |      | 17.5         |        |      | 15   |      |       |      |      | 14.1         |       |      |            | 13.1         |                                | 150 |
| 155        |                        |      |      |      |              |        |      | 20           |      |        |      |      | 16.6         |        |      | 14.1 |      |       |      |      | 13.2         |       |      |            | 12.3         |                                | 155 |
| 160        |                        |      |      |      |              |        |      |              |      |        |      | 15.6 |              |        |      | 13.3 |      |       |      |      | 12.4         |       |      | 11.1       |              |                                | 160 |
| 165        |                        |      |      |      |              |        |      |              |      |        |      | 14.8 |              |        |      | 12.6 | 12.9 |       |      |      | 11.6         |       |      | 10.4       | 10.9         |                                | 168 |
| 170        |                        |      |      |      |              |        |      |              |      |        |      | 14   |              |        |      |      | 12.2 |       |      | 10.7 | 11           |       |      |            | 10.2         |                                | 170 |
| 175        |                        |      |      |      |              |        |      |              |      |        |      | 13.4 |              |        |      | 11.3 |      |       |      |      | 10.4         |       |      |            | 9.5          |                                | 175 |
| 180        |                        |      |      |      |              |        |      |              |      |        |      |      |              |        |      | 10.7 |      |       |      |      | 9.8          |       |      |            | 8.8          |                                | 180 |
| 185        |                        |      |      |      |              |        |      |              |      |        |      |      |              |        |      | 10.1 |      |       |      | 9    |              |       |      |            | 8.2          |                                | 185 |
| 190        |                        |      |      |      |              |        |      |              |      |        |      |      |              |        |      | 9.6  |      |       |      |      | 8.7          |       |      |            | 7.6          |                                | 190 |
| 195        |                        |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      | 8    |              |       |      |            | 7.1          |                                | 195 |
| 200        |                        |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      | 7.6  |              |       |      |            | 6.6          |                                | 200 |
| 205        |                        |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      | 7.2  |              |       |      | 5.8        |              |                                | 205 |
| 210<br>215 |                        |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      | 6.8  |              |       |      | 5.3<br>4.9 |              |                                | 210 |
| 215        |                        |      |      |      |              |        |      |              |      |        |      |      |              |        |      |      |      |       |      |      |              |       |      | 4.9        |              |                                | 220 |

|             | SEE SEE          | 39 f         | ŢF              | Ţ      |      |      |                   | 0500 |      | 85         | %    |      |          |      |              |            |      |              |      |      |              |      |           |     |
|-------------|------------------|--------------|-----------------|--------|------|------|-------------------|------|------|------------|------|------|----------|------|--------------|------------|------|--------------|------|------|--------------|------|-----------|-----|
| •           | 49 + 8 ft*       | <b>P</b> ∛ F |                 | ) ft*  |      | 49 + | 0 ft <sup>2</sup> | *    |      | 165 +      | 0 f  | ·*   | -        | 00   | ⊦ 8 fl       | <b>L</b> * | -1   | 98 +         | 0 ft | *    | ا ا          | 15   | - 8 ft*   |     |
|             | 39 ft            | _            | 132 + 8<br>39 f |        | -    | 39   |                   |      |      | 39         |      |      | <u>'</u> |      | ft ft        |            |      | 39           |      |      |              | 39   |           |     |
| <b>←</b> ft | 0° 20° 40° 6     | soo oo       | 20° 4           |        | O°   | 20°  |                   | 60°  | O°   | 20°        | _    | 60°  | O°       |      |              | 60°        | O°   | 20°          |      | െ∘   | O°           |      | 40° 60    | •   |
| 14          | 71.5             | 0            | 20 4            | 0 00   | U    | 20   | 40                | 00   | U    | 20         | 40   | 00   | U        | 20   | 40           | 00         | U    | 20           | 40   | 00   |              | 20   | 40 00     | 14  |
| 15          | 71.2             |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 15  |
| 16          | 69.9             |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 16  |
| 17          | 68.4             |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 17  |
| 18          | 66.7             |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 18  |
| 20          | 63.5             |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 20  |
| 22          | 60.7             |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 22  |
| 24          | 58               |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 24  |
| 26          | 55.5             |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 26  |
| 28          | 53.1 45.4        |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 28  |
| 30          | 50.8 44.4        |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 30  |
| 32          | 48.6 42.7        | 69.          | 4               |        |      |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 32  |
| 34          | 46.6 41.1        | 67.          |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 34  |
| 36          | 44.6 39.6        | 65.          |                 |        | 62.8 |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 36  |
| 38          | 42.8 38.2 34     | 64.          |                 |        | 61.5 |      |                   |      | 52.5 |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 38  |
| 40          | 41.1 36.9 33.5   | 62.          |                 |        | 60.1 |      |                   |      | 52.5 |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 40  |
| 42          | 39.6 35.7 32.5   | 61           |                 |        | 58.9 |      |                   |      | 52.3 |            |      |      |          |      |              |            |      |              |      |      |              |      |           | 42  |
| 44          | 38.2 34.5 31.6   |              | 6 45.4          |        | 57.6 |      |                   |      | 52.1 |            |      |      | 41.5     |      |              |            |      |              |      |      |              |      |           | 44  |
| 46          | 36.9 33.4 30.8 2 |              | 2 44.6          |        | 56.4 |      |                   |      | 51.8 |            |      |      | 41.4     |      |              |            |      |              |      |      |              |      |           | 46  |
| 48          | 35.7 32.5 30 2   | 27   56.     | 8 43.7          |        | 55.3 |      |                   |      | 51   |            |      |      | 41.2     |      |              |            |      |              |      |      |              |      |           | 48  |
| 50          | 34.5 31.6 29.3 2 | 27   55.     | 5 42.8          |        | 54.2 | 42.3 |                   |      | 50.1 |            |      |      | 41       |      |              |            | 32.8 |              |      |      |              |      |           | 50  |
| 55          | 31.8 29.4 27.6 2 | 26.9 52.     | 4 40.8 33       | 3.8    | 51.6 | 40.7 | 33                |      | 47.8 | 39.4       |      |      | 39.9     |      |              |            | 32.4 |              |      |      | 26.1         |      |           | 55  |
| 60          | 29.4 27.5 26.1 2 | 26.6 49.     | 4 38.9 32       | 2.6 27 | 49.2 | 38.9 | 32.6              |      | 45.2 | 38.1       |      |      | 38.3     |      |              |            | 31.8 |              |      |      | 25.8         |      |           | 60  |
| 65          | 27.4 25.9 24.8 2 | 26   46.     | 5 37.2 3        | 1.5 27 | 46.8 | 37.3 | 31.6              | 27   | 42.9 | 36.7       | 31.1 |      | 36.4     | 35.1 |              |            | 30.7 |              |      |      | 25.3         |      |           | 65  |
| 70          | 25.7 24.5 23.8 2 |              |                 |        | 44.6 | 35.9 | 30.6              | 27   | 40.6 | 35.4       | 30.3 | 27   | 34.7     | 34   | 29.4         |            | 29.5 | 29.3         |      |      | 24.6         | 23   |           | 70  |
| 75          | 24.3 23.4 23     |              | 8 34.2 29       |        | _    | 34.5 |                   |      | 38.5 | 34.1       | 29.5 | 27   | 32.9     | 32.8 | 28.8         | 27         | 28.2 | 28.2         | 26.6 |      | 23.8         |      |           | 75  |
| 80          | 23 22.4 21.4     |              | 6 32.8 28       |        |      | 33.2 |                   |      |      | 33         |      |      |          |      |              | 26.9       |      |              |      |      | 23           |      |           | 80  |
| 85          |                  |              | 8 31.6 27       |        | 38.7 |      |                   | 27   |      | 31.9       |      |      |          |      |              | 26.6       |      |              |      |      | 22.1         |      |           | 85  |
| 90          |                  |              |                 |        |      | 31   |                   |      |      | 30.9       |      | 26.7 |          |      |              |            |      |              |      |      |              |      | 19.7 19.7 |     |
| 95          |                  |              | 4 29.4 26       |        | _    | 30   |                   |      |      | 29.9       |      |      |          |      |              |            |      |              |      |      |              |      | 19.1 19.  |     |
| 100         |                  |              | 28.5 25         |        | 33.4 |      |                   |      | i    | 28.8       |      |      | 25.4     |      |              |            |      |              |      | 22.6 |              |      | 18.5 18.0 |     |
| 105         |                  |              | 6 27.6 25       |        | 31.7 |      |                   |      |      | 27.7       |      |      | 24.1     |      |              |            |      | 21.7         |      |      |              |      | 17.9 18   | 105 |
| 110         |                  |              | 4 26.7 24       |        | 30   |      |                   |      | i    | 26.4       |      |      | 22.8     |      |              |            |      | 20.6         |      |      |              |      | 17.4 17.  |     |
| 115         |                  |              | 2 26 24         | 4.2    | _    | 26.7 |                   |      |      | 25.1       |      |      | 21.7     |      |              |            |      | 19.6         |      |      |              | 17.1 |           | 115 |
| 120         |                  |              | 2 25.2          |        |      | 25.9 |                   |      |      | 23.8       |      |      | 20.6     |      |              |            |      | 18.6         |      |      |              |      | 16.4      | 120 |
| 125         |                  |              | 1 24.6          |        |      | 25.1 |                   |      |      | 22.5       |      |      |          | 19.9 |              |            |      | 17.7         |      |      |              | 15.7 |           | 125 |
| 130         |                  |              | 3 24            |        |      | 24.2 | 23.5              |      | i    | 21.3       |      |      |          |      | 19.2         |            |      | 16.8         |      |      |              |      | 15.2      | 130 |
| 135         |                  |              | 4 23.5          |        | 22.7 |      |                   |      |      | 20.1<br>19 |      |      |          | 17.8 |              |            |      | 15.9         |      |      |              | 14.3 |           | 135 |
| 140<br>145  |                  |              | 6 23<br>9 22.5  |        | 21.4 |      |                   |      |      | 19<br>17.9 | 19.4 |      |          | 16.8 |              |            |      | 15           |      |      |              | 13.7 |           | 140 |
| 150         |                  |              | 3 22.2          |        | 19.1 |      |                   |      |      | 16.9       |      |      |          |      | 16.2<br>15.2 |            |      | 14.2<br>13.4 |      |      | 12.3<br>11.7 |      |           | 145 |
| 155         |                  | 22.          |                 |        | 18.1 |      |                   |      |      | 15.9       |      |      | 13.5     |      | 13.2         |            |      | 12.6         |      |      | 11.7         |      |           | 150 |
| 160         |                  | 22.          |                 |        | 17.3 |      |                   |      | 14.6 |            |      |      | 12.7     |      |              |            |      | 11.8         |      |      |              |      | 11.3      | 160 |
| 165         |                  | 20.          |                 |        | 16.5 | 17.0 |                   |      | 13.7 |            |      |      | 11.9     |      |              |            | 10.7 |              | 12.2 |      |              | 10.4 |           | 165 |
| 170         |                  | 20.          |                 |        | 15.7 |      |                   |      |      | 13.2       |      |      | 11.1     |      |              |            | 10.7 |              |      |      |              | 9.7  |           | 170 |
| 175         |                  |              |                 |        | 15.7 |      |                   |      | _    | 12.5       |      |      | 10.4     |      |              |            |      | 9.7          |      |      |              | 9.1  |           | 175 |
| 180         |                  |              |                 |        | 10.1 |      |                   |      | 11.6 |            |      |      |          | 10.0 |              |            |      | 9.1          |      |      | 8            | 8.6  | 0.4       | 180 |
| 185         |                  |              |                 |        |      |      |                   |      | 11   |            |      |      |          | 9.5  |              |            |      | 8.5          |      |      | 7.5          |      |           | 185 |
| 190         |                  |              |                 |        |      |      |                   |      | 10.5 |            |      |      |          | 8.9  |              |            | 7.8  |              |      |      |              | 7.5  |           | 190 |
| 195         |                  |              |                 |        |      |      |                   |      | 10.5 |            |      |      | 8.2      |      |              |            |      | 7.6          |      |      | 6.4          |      |           | 195 |
| 200         |                  |              |                 |        |      |      |                   |      |      |            |      |      | 7.8      |      |              |            |      | 7.2          |      |      |              | 6.5  |           | 200 |
| 205         |                  |              |                 |        |      |      |                   |      |      |            |      |      | 7.4      |      |              |            |      | 6.8          |      |      |              | 6    |           | 205 |
| 210         |                  |              |                 |        |      |      |                   |      |      |            |      |      | 7.4      |      |              |            | 6.2  | 0.0          |      |      | 5            | 5.6  |           | 210 |
| 215         |                  |              |                 |        |      |      |                   |      |      |            |      |      | ,        |      |              |            | 5.8  |              |      |      |              | 5.1  |           | 215 |
| 220         |                  |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            | 5.5  |              |      |      |              | 4.6  |           | 220 |
| 225         |                  |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            | 5.2  |              |      |      | 3.7          | 1.0  |           | 225 |
| 230         |                  |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            | 4.9  |              |      |      | 3.3          |      |           | 230 |
| 235         |                  |              |                 |        |      |      |                   |      |      |            |      |      |          |      |              |            |      |              |      |      | 2.9          |      |           | 235 |

|      | TI   | B                      |       | A    | 59 ft | Ţf    | 7     | Ţ    |          |      |      | 0500 |      | 85    | %     |      |      |       |       |            |      |      |      |      |      |      |        |      |                   |
|------|------|------------------------|-------|------|-------|-------|-------|------|----------|------|------|------|------|-------|-------|------|------|-------|-------|------------|------|------|------|------|------|------|--------|------|-------------------|
|      |      | T                      | 8 ft' |      | F     | 132 + | Q fi  | .*   | 1        | 49 + | Q ft | *    |      | 165 - | Q fl  | .*   | 1    | 182 - | Ωf    | <b>!</b> * | 4    | 98 + | Q ft | *    | l 0  | 15 . | - 8 ft | *    | •                 |
| 70   | -    | + <del>9 +</del><br>59 |       |      |       |       | ft ft |      | <u>'</u> | 59   |      |      |      |       | ft ft | _    |      |       | ft ft |            | '    | 59   |      |      |      | 59   |        |      |                   |
| → ft | O°   |                        |       | 60°  | ٥°    | 20°   |       | 60°  | O°       | 20°  |      | 60°  | O°   | 20°   |       | 60°  | O°   |       |       | 60°        | ٥°   | 20°  |      | 60°  | Ο°   |      | 40°    | 60°  | $\longrightarrow$ |
| 18   | 52.4 | 20                     | 70    | 00   |       | 20    | 70    | 00   |          | 20   | 70   | 00   |      | 20    | 70    | 00   |      | 20    | 40    | 00         |      | 20   | 70   | 00   |      | 20   | 70     | 00   | 18                |
| 20   | 51.5 |                        |       |      |       |       |       |      |          |      |      |      |      |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 20                |
| 22   | 49.4 |                        |       |      |       |       |       |      |          |      |      |      |      |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 22                |
| 24   | 47.5 |                        |       |      |       |       |       |      |          |      |      |      |      |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 24                |
| 26   | 45.5 |                        |       |      |       |       |       |      |          |      |      |      |      |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 26                |
| 28   | 43.8 |                        |       |      |       |       |       |      |          |      |      |      |      |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 28                |
| 30   | 42.2 |                        |       |      |       |       |       |      |          |      |      |      |      |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 30                |
| 32   | 40.6 |                        |       |      |       |       |       |      |          |      |      |      |      |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 32                |
| 34   | 39.1 |                        |       |      |       |       |       |      |          |      |      |      |      |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 34                |
| 36   | 37.7 |                        |       |      | 51.3  |       |       |      |          |      |      |      |      |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 36                |
| 38   | 36.3 | 30.8                   |       |      | 50.1  |       |       |      | 47.2     |      |      |      |      |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 38                |
| 40   | 35   |                        |       |      | 48.9  |       |       |      | 46.7     |      |      |      |      |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 40                |
| 42   | 33.8 |                        |       |      | 47.7  |       |       |      | 45.7     |      |      |      |      |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 42                |
| 44   | 32.6 |                        |       |      | 46.6  |       |       |      | 44.8     |      |      |      | 41.4 |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 44                |
| 46   | 31.4 |                        |       |      | 45.5  |       |       |      | 43.9     |      |      |      | 40.9 |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 46                |
| 48   | 30.4 |                        |       |      | 44.5  |       |       |      | 43       |      |      |      | 40.2 |       |       |      |      |       |       |            |      |      |      |      |      |      |        |      | 48                |
| 50   | 29.3 |                        |       |      | 43.5  |       |       |      | 42.2     |      |      |      | 39.6 |       |       |      | 34   |       |       |            | 25.6 |      |      |      |      |      |        |      | 50                |
| 55   | 27   |                        | 22.4  |      |       | 30.4  |       |      | 40.2     | 29.5 |      |      | 38   |       |       |      | 33.7 |       |       |            | 25.6 |      |      |      | 20.3 |      |        |      | 55                |
| 60   | 24.9 |                        |       |      | 39    | 29.4  |       |      | 38.3     |      |      |      | 36.5 |       |       |      | 33.1 |       |       |            | 25.4 |      |      |      | 20.3 |      |        |      | 60                |
| 65   | 23.1 |                        |       |      |       |       |       |      | 36.6     |      |      |      | 35   |       |       |      | 31.9 |       |       |            | 25.1 |      |      |      | 20.1 |      |        |      | 65                |
| 70   | 21.6 |                        |       |      |       |       | 22.6  |      | 35       |      |      |      |      | 26.7  |       |      |      | 25.5  |       |            | 24.5 |      |      |      | 19.8 |      |        |      | 70                |
| 75   | 20.2 | 18.6                   | 18.1  | 15.3 | 33.2  | 25.7  | 22.1  | 16   | 33.4     | 25.8 | 21.9 |      | 32.4 | 26.1  | 21.2  |      | 29.3 | 25    |       |            | 23.8 | 22.8 |      |      | 19.3 |      |        |      | 75                |
| 80   | 18.9 | 17.6                   | 17.3  | 15.2 | 31.5  | 24.7  | 21.4  | 15.9 | 31.9     | 24.8 | 21.4 |      | 31.2 | 25.2  | 21    |      | 27.9 | 24.2  |       |            | 23.1 | 22.5 |      |      | 18.9 |      |        |      | 80                |
| 85   | 17.8 | 16.7                   | 16.5  | 15   | 29.9  | 23.7  | 20.7  | 15.7 | 30.5     | 23.9 | 20.7 | 15.7 | 30   | 24.3  | 20.5  |      | 26.6 | 23.4  | 20    |            | 22.3 | 21.9 |      |      | 18.4 | 17.4 |        |      | 85                |
| 90   | 16.8 | 15.9                   | 15.9  |      | 28.5  | 22.8  | 20.1  | 15.6 | 29.2     | 23.1 | 20.2 | 15.6 | 28.8 | 23.5  | 20    | 15.5 | 25.4 | 22.7  | 19.5  | 15.4       | 21.5 | 21.2 |      |      | 17.8 | 16.9 |        |      | 90                |
| 95   | 16   | 15.3                   |       |      | 27.2  | 22    | 19.5  |      | 27.9     | 22.3 | 19.7 | 15.4 | 27.6 | 22.8  | 19.5  | 15.4 | 24.2 | 22.1  | 19.1  | 15.4       | 20.6 | 20.4 | 18.4 | 15.2 | 17.3 | 16.3 | 15     |      | 95                |
| 100  |      |                        |       |      | 26    | 21.2  | 19    |      | 26.6     | 21.5 | 19.2 | 15.4 | 26.5 | 22.1  | 19.1  | 15.4 | 23   | 21.5  | 18.7  | 15.3       | 19.8 | 19.7 | 18   | 15.2 | 16.7 | 15.8 | 14.9   |      | 100               |
| 105  |      |                        |       |      | 24.8  | 20.5  | 18.5  |      | 25.6     | 20.8 | 18.7 |      | 25.4 | 21.4  | 18.6  | 15.3 | 21.9 | 20.9  | 18.3  | 15.2       | 18.9 | 19   | 17.7 | 15.2 | 16.1 | 15.3 | 14.6   |      | 10                |
| 110  |      |                        |       |      | 23.8  | 19.8  | 18.1  |      | 24.6     | 20.2 | 18.3 |      | 24.3 | 20.8  | 18.2  | 15.2 | 20.9 | 20.3  | 17.9  | 15.2       | 18.1 | 18.3 | 17.4 | 15.2 | 15.5 | 14.8 | 14.2   | 13.9 | 110               |
| 115  |      |                        |       |      | 22.8  | 19.2  | 17.6  |      | 23.6     | 19.6 | 17.9 |      | 23.1 | 20.2  | 17.9  |      | 19.8 | 19.8  | 17.6  | 15.2       | 17.2 | 17.6 | 17   | 15.2 | 14.9 | 14.3 | 13.8   | 13.7 | 11:               |
| 120  |      |                        |       |      | 21.9  | 18.6  | 17.2  |      | 22.7     | 19   | 17.5 |      | 22   | 19.6  | 17.5  |      | 18.8 | 19.2  | 17.3  |            | 16.4 | 16.9 | 16.6 | 15.2 | 14.3 | 13.9 | 13.4   | 13.4 | 120               |
| 125  |      |                        |       |      | 21    | 18    | 16.9  |      | 21.9     | 18.5 | 17.1 |      | 20.8 | 19.1  | 17.2  |      | 17.9 | 18.5  | 17    |            |      | 16.3 |      |      | 13.7 | 13.4 | 13     | 13.1 | 12                |
| 130  |      |                        |       |      | 20.3  | 17.5  | 16.5  |      | 21.1     | 18   | 16.8 |      | 19.7 | 18.6  | 16.9  |      | 17   | 17.7  | 16.7  |            | 14.9 | 15.6 | 15.6 |      | 13.1 | 13   | 12.6   | 12.7 | 13                |
| 135  |      |                        |       |      | 19.6  | 17    | 16.2  |      | 20.4     | 17.5 | 16.5 |      | 18.7 | 18.1  | 16.6  |      | 16.2 | 16.9  | 16.4  |            | 14.1 | 14.9 | 15   |      | 12.5 | 12.6 | 12.2   |      | 13                |
| 140  |      |                        |       |      |       | 16.6  |       |      | 19.6     | 17.1 | 16.2 |      |      | 17.6  |       |      |      | 16    |       |            | 13.5 | 14.2 | 14.5 |      | 11.9 | 12.2 | 11.9   |      | 140               |
| 145  |      |                        |       |      | 18.2  | 16.2  |       |      | 18.9     | 16.7 | 16   |      | 16.7 | 17    | 16    |      | 14.4 | 15.2  | 15.6  |            | 12.8 | 13.5 | 13.9 |      | 11.3 | 11.7 | 11.6   |      | 14                |
| 150  |      |                        |       |      |       | 15.8  |       |      |          | 16.3 | 15.7 |      |      | 16.3  |       |      |      | 14.4  |       |            |      | 12.8 |      |      |      | 11.3 |        |      | 150               |
| 155  |      |                        |       |      |       | 15.5  |       |      | 17.4     | 15.9 |      |      |      | 15.6  |       |      |      | 13.6  |       |            |      | 12.1 |      |      |      | 10.8 |        |      | 15                |
| 160  |      |                        |       |      |       | 15.2  |       |      |          | 15.6 |      |      |      | 14.8  | 15    |      |      | 12.9  |       |            |      | 11.5 |      |      |      | 10.3 |        |      | 160               |
| 165  |      |                        |       |      |       | 14.9  |       |      | 15.8     |      |      |      | 13.2 |       |       |      |      | 12.1  |       |            |      | 10.8 |      |      |      | 9.8  |        |      | 16                |
| 170  |      |                        |       |      |       | 14.6  |       |      |          | 14.9 |      |      |      | 13.2  |       |      |      | 11.5  |       |            | 9.6  | 10.2 |      |      |      | 9.3  |        |      | 170               |
| 175  |      |                        |       |      | 15.2  |       |       |      | 14.1     |      |      |      |      | 12.4  |       |      |      | 10.8  |       |            | 9    | 9.6  |      |      |      | 8.7  |        |      | 17                |
| 180  |      |                        |       |      | 14.8  |       |       |      | 13.3     | 13.7 |      |      |      | 11.7  |       |      |      | 10.1  |       |            |      | 9    | 9.4  |      |      | 8.2  |        |      | 180               |
| 185  |      |                        |       |      | 14    |       |       |      | 12.7     |      |      |      | 10.3 |       |       |      |      | 9.5   |       |            |      | 8.4  |      |      | 7.1  |      | 8.1    |      | 18                |
| 190  |      |                        |       |      |       |       |       |      | 12.1     |      |      |      | 1    | 10.3  |       |      |      | 8.8   |       |            |      | 7.9  |      |      |      | 7.3  |        |      | 190               |
| 195  |      |                        |       |      |       |       |       |      | 11.6     |      |      |      |      | 9.7   |       |      |      | 8.2   |       |            |      | 7.4  |      |      |      |      | 7.2    |      | 19                |
| 200  |      |                        |       |      |       |       |       |      |          |      |      |      | 8.6  |       |       |      |      | 7.7   |       |            |      | 6.9  |      |      |      | 6.3  |        |      | 200               |
| 205  |      |                        |       |      |       |       |       |      |          |      |      |      | 8.2  |       |       |      |      | 7.2   |       |            |      | 6.4  |      |      |      | 5.9  |        |      | 20                |
| 210  |      |                        |       |      |       |       |       |      |          |      |      |      | 7.7  |       |       |      |      | 6.7   |       |            | 5.8  | 6    |      |      | 4.8  | 5.4  |        |      | 210               |
| 215  |      |                        |       |      |       |       |       |      |          |      |      |      | 7.4  |       |       |      | 6.2  |       |       |            | 5.4  | 5.7  |      |      | 4.4  | 5    |        |      | 21                |
| 220  |      |                        |       |      |       |       |       |      |          |      |      |      |      |       |       |      | 5.8  |       |       |            | 5.1  | 5.4  |      |      | 4    | 4.5  |        |      | 220               |
| 225  |      |                        |       |      |       |       |       |      |          |      |      |      |      |       |       |      | 5.5  |       |       |            |      | 5    |      |      | 3.6  | 4.1  |        |      | 22                |
| 230  |      |                        |       |      |       |       |       |      |          |      |      |      |      |       |       |      | 5.2  |       |       |            | 4.5  |      |      |      |      | 3.6  |        |      | 230               |
| 235  |      |                        |       |      |       |       |       |      |          |      |      |      |      |       |       |      |      |       |       |            | 4.2  |      |      |      | 2.8  | 3.2  |        |      | 23                |
| 240  |      |                        |       |      |       |       |       |      |          |      |      |      |      |       |       |      |      |       |       |            | 3.8  |      |      |      |      | 2.8  |        |      | 240               |

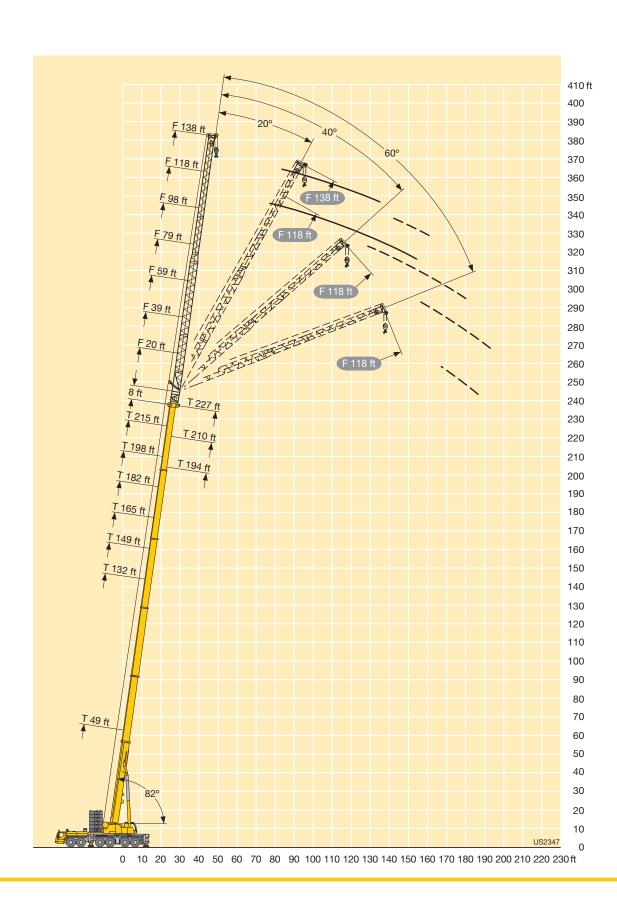
|          | II   |      |      | A   | •<br>F | Ţr   | 7    | Ţ   | <b>(</b> , |      |        |     |      | 85   | %    |     |      |      |        |     |      |      |      |     |      |      |        |     |    |
|----------|------|------|------|-----|--------|------|------|-----|------------|------|--------|-----|------|------|------|-----|------|------|--------|-----|------|------|------|-----|------|------|--------|-----|----|
| <b>A</b> |      |      | 8 ft | *   |        | 32 + |      | *   | 1          |      | - 8 ft | .*  | 1    | 65 + |      | *   | 1    |      | - 8 ft | *   | 1    | 98 + |      | *   | 2    | 15 + | - 8 ft | *   |    |
|          |      |      | ft   |     |        | 79   |      |     |            | 79   |        |     |      | 79   |      |     |      | 79   |        |     |      | 79   |      |     |      | 79   |        |     |    |
| π        |      | 20°  | 40°  | 60° | 0°     | 20°  | 40°  | 60° | 0°         | 20°  | 40°    | 60° | 0°   | 20°  | 40°  | 60° | 0°   | 20°  | 40°    | 60° | 0°   | 20°  | 40°  | 60° | 0°   | 20°  | 40°    | 60° | -  |
| 22       | 39.6 |      |      |     |        |      |      |     |            |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 2  |
| 24       | 38.8 |      |      |     |        |      |      |     |            |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 2  |
| 26       | 37.6 |      |      |     |        |      |      |     |            |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 2  |
| 28       | 36.2 |      |      |     |        |      |      |     |            |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 2  |
| 30       | 34.9 |      |      |     |        |      |      |     |            |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 3  |
| 32       | 33.7 |      |      |     |        |      |      |     |            |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 3  |
| 34       | 32.6 |      |      |     |        |      |      |     |            |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 3  |
| 36       | 31.5 |      |      |     |        |      |      |     |            |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 3  |
| 38       | 30.5 |      |      |     | 39.5   |      |      |     |            |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 3  |
| 40       | 29.5 |      |      |     | 38.9   |      |      |     |            |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 4  |
| 42       | 28.6 |      |      |     | 38     |      |      |     | 35.9       |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 4  |
| 44       | 27.7 |      |      |     | 37.2   |      |      |     | 35.5       |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 4  |
| 46       | 26.8 |      |      |     | 36.3   |      |      |     | 34.8       |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 4  |
| 48       | 26   |      |      |     | 35.5   |      |      |     | 34.2       |      |        |     |      |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 4  |
| 50       | 25.2 | 22.4 |      |     | 34.8   |      |      |     | 33.5       |      |        |     | 31.1 |      |      |     |      |      |        |     |      |      |      |     |      |      |        |     | 5  |
| 55       | 23.2 | 21.2 |      |     | 32.9   |      |      |     | 31.9       |      |        |     | 30   |      |      |     | 26.5 |      |        |     | 21.2 |      |      |     |      |      |        |     | 5  |
| 60       | 21.4 | 19.6 |      |     | 31.2   |      |      |     | 30.4       |      |        |     | 28.8 |      |      |     | 26.1 |      |        |     | 21.1 |      |      |     |      |      |        |     | 6  |
| 65       | 19.8 | 18.3 |      |     | 29.7   | 22.9 |      |     | 29.1       |      |        |     | 27.7 |      |      |     | 25.6 |      |        |     | 21   |      |      |     | 16.5 |      |        |     | 6  |
| 70       | 18.4 | 17.1 |      |     | 28.3   | 22   |      |     | 27.8       | 21.6 |        |     | 26.6 |      |      |     | 25   |      |        |     | 20.6 |      |      |     | 16.3 |      |        |     | 7  |
| 75       | 17.1 | 16   | 14.6 |     | 26.9   | 21   |      |     | 26.6       | 21   |        |     | 25.6 | 20.2 |      |     | 24.3 |      |        |     | 20.2 |      |      |     | 16   |      |        |     | 7  |
| 80       | 16   | 15.1 | 14   |     | 25.6   | 20.1 |      |     | 25.5       | 20.1 |        |     | 24.7 | 19.7 |      |     | 23.6 |      |        |     | 19.7 |      |      |     | 15.7 |      |        |     | 8  |
| 85       | 15   | 14.2 | 13.3 | 9.4 | 24.4   | 19.3 | 15.3 |     | 24.5       | 19.3 |        |     | 23.7 | 19   |      |     | 22.8 | 18.3 |        |     | 19.1 |      |      |     | 15.3 |      |        |     | 8  |
| 90       | 14.1 | 13.4 | 12.6 | 9.3 | 23.2   | 18.5 | 15   |     | 23.4       | 18.6 | 14.9   |     | 22.9 | 18.3 |      |     | 22.1 | 17.7 |        |     | 18.5 | 16.5 |      |     | 14.8 |      |        |     | 9  |
| 95       | 13.3 | 12.7 | 12.1 | 9.1 | 22     | 17.8 | 14.6 | 9.6 | 22.4       | 17.9 | 14.6   |     | 22   | 17.7 | 14.5 |     | 21.3 | 17.1 |        |     | 17.8 | 16.1 |      |     | 14.4 | 13   |        |     | 9  |
| 00       | 12.5 | 12.1 | 11.5 | 9.1 | 21     | 17.1 | 14.3 | 9.5 | 21.4       | 17.2 | 14.3   | 9.5 |      |      |      | 9.4 | 20.5 | 16.6 | 13.8   |     | 17.2 | 15.7 |      |     | 14   | 12.7 |        |     | 10 |
| 05       | 11.8 | 11.4 | 11.1 | 9   | 20     | 16.4 | 13.9 | 9.4 | 20.5       | 16.6 | 14     | 9.4 | 20.4 | 16.5 | 13.9 | 9.4 | 19.6 | 16.1 | 13.6   |     | 16.5 | 15.3 |      |     | 13.6 | 12.4 |        |     | 10 |
| 10       | 11.2 | 10.9 | 10.7 |     | 19.1   | 15.8 | 13.5 | 9.3 | 19.6       | 16.1 | 13.6   | 9.3 | 19.7 | 16   | 13.5 | 9.3 | 18.7 | 15.6 | 13.3   | 9.2 | 15.9 | 14.9 | 12.8 |     | 13.2 | 12   |        |     | 11 |
| 15       | 10.7 | 10.5 |      |     |        | 15.3 |      |     | 18.8       | 15.6 | 13.2   |     |      |      |      |     | 17.9 | 15.2 | 13     | 9.2 | 15.2 | 14.5 | 12.5 | 9.1 | 12.7 | 11.7 | 10.3   |     | 11 |
| 20       |      |      |      |     |        | 14.8 |      |     | 18.1       |      |        |     |      | 15   |      |     | 17.1 |      |        |     |      | 14.1 |      |     | 12.2 | 11.3 | 10.1   |     | 12 |
| 25       |      |      |      |     |        | 14.3 |      |     | 17.4       |      |        |     |      | 14.6 |      |     | 16.3 |      |        |     | 13.9 |      |      |     | 11.8 |      | 9.9    |     | 12 |
| 30       |      |      |      |     | 16.1   | 13.8 | 12.2 |     | 16.6       | 14.1 | 12.3   |     | 16.9 | 14.2 | 12.3 | 9.1 | 15.5 | 13.9 | 12.1   | 9   | 13.3 | 13.4 | 11.8 | 9   | 11.3 | 10.6 | 9.7    | 8.9 | 13 |
| 35       |      |      |      |     | 15.4   | 13.4 | 11.9 |     | 16         | 13.7 | 12     |     | 16.3 | 13.8 | 12   |     | 14.7 | 13.6 | 11.9   | 9   | 12.7 | 13   | 11.6 | 9   | 10.9 | 10.3 | 9.5    | 8.9 | 13 |
| 40       |      |      |      |     | 14.8   | 12.9 | 11.6 |     | 15.5       |      |        |     |      | 13.4 |      |     | 14   |      |        |     |      | 12.6 |      |     | 10.4 | 9.9  | 9.3    | 8.9 | 14 |
| 45       |      |      |      |     |        | 12.5 |      |     | 14.9       | 12.9 | 11.5   |     | 15.1 | 13   | 11.6 |     | 13.4 |      |        |     | 11.4 | 12.1 | 11.2 |     | 9.9  | 9.6  | 9.1    | 8.9 | 14 |
| 50       |      |      |      |     |        | 12.2 |      |     | 14.4       | 12.5 | 11.3   |     | 14.4 | 12.7 | 11.4 |     | 12.7 |      |        |     | 10.8 | 11.6 | 11.1 |     | 9.4  | 9.3  | 8.9    | 8.9 | 15 |
| 55       |      |      |      |     |        | 11.8 |      |     | 13.9       | 12.2 | 11.1   |     |      | 12.4 |      |     | 12   |      |        |     | 10.3 |      |      |     | 9    | 9    | 8.7    |     | 15 |
| 60       |      |      |      |     |        | 11.5 |      |     | 13.4       |      |        |     |      | 12.1 |      |     | 11.4 |      |        |     |      | 10.6 |      |     |      | 8.7  |        |     | 16 |
| 65       |      |      |      |     |        | 11.2 |      |     | 13         |      |        |     |      | 11.8 |      |     |      | 11.3 |        |     |      | 10.1 |      |     | 8    |      | 8.2    |     | 16 |
| 70       |      |      |      |     |        | 10.9 |      |     | 12.6       |      |        |     |      | 11.5 |      |     | 10.1 |      |        |     |      | 9.5  |      |     | 7.6  | 8.1  |        |     | 17 |
| 75       |      |      |      |     |        | 10.7 |      |     | 12.2       |      |        |     |      | 11.2 |      |     |      | 10.2 |        |     |      |      | 9.5  |     | 7.1  |      | 7.7    |     | 17 |
| 80       |      |      |      |     |        | 10.5 |      |     | 11.8       |      |        |     |      | 10.8 |      |     |      | 9.6  |        |     |      | 8.5  |      |     |      |      |        |     | 18 |
| 85       |      |      |      |     |        | 10.3 |      |     | 11.4       |      |        |     |      | 10.4 |      |     |      | 9.1  |        |     | 7.1  | 8    | 8.5  |     | 6.2  |      | 7.3    |     | 18 |
| 90       |      |      |      |     | 10.5   |      |      |     | 11         |      |        |     |      | 9.9  |      |     |      | 8.5  |        |     |      | 7.5  |      |     | 5.8  | 6.6  |        |     | 19 |
| 95       |      |      |      |     | 10.2   |      |      |     | 10.5       |      |        |     | 8.5  |      |      |     | 7.3  |      |        |     |      | 7    |      |     | 5.4  |      | 6.8    |     | 19 |
| 200      |      |      |      |     | 10     |      |      |     |            | 10.1 |        |     | 8    | 8.8  |      |     |      | 7.5  |        |     |      | 6.5  |      |     | 5    |      | 6.4    |     | 20 |
| 205      |      |      |      |     |        |      |      |     | 9.4        |      |        |     | 7.5  |      |      |     |      | 7    |        |     |      |      |      |     | 4.6  | 5.4  |        |     | 20 |
| 210      |      |      |      |     |        |      |      |     | 9          |      |        |     |      | 7.6  |      |     |      | 6.5  |        |     | 5    | 5.6  |      |     | _    | 4.9  |        |     | 21 |
| 215      |      |      |      |     |        |      |      |     | 8.6        |      |        |     |      | 7.2  |      |     | 5.5  |      |        |     |      | 5.1  |      |     |      |      |        |     | 21 |
| 220      |      |      |      |     |        |      |      |     | 0.0        |      |        |     | 6.4  |      |      |     | 5.2  |      |        |     | 4.3  | 4.8  |      |     | 3.4  | 4.1  | J      |     | 22 |
| 25       |      |      |      |     |        |      |      |     |            |      |        |     | 6.1  |      |      |     | 4.9  |      |        |     | 4    | 4.4  |      |     | 3    | 3.7  |        |     | 22 |
| 230      |      |      |      |     |        |      |      |     |            |      |        |     | 5.7  |      |      |     |      | 4.9  |        |     | 3.6  | 4    |      |     | J    | 3.3  |        |     | 23 |
| 235      |      |      |      |     |        |      |      |     |            |      |        |     | 5.5  |      |      |     | 4.2  | 7.0  |        |     |      | 3.7  |      |     |      | 2.8  |        |     | 23 |
| 240      |      |      |      |     |        |      |      |     |            |      |        |     | 0.0  |      |      |     | 3.9  |      |        |     | 3.3  | 3.4  |      |     |      | 2.0  |        |     | 24 |
| 245      |      |      |      |     |        |      |      |     |            |      |        |     |      |      |      |     | 3.6  |      |        |     | 0    | 3    |      |     |      |      |        |     | 24 |

|            | I        | T. T. |       | Ą   | °<br>F | ŢF           | 7    | Ţ       | <b>(</b> ,   |      |        |     |      | 85         | %    |     |              |          |        |     |              |            |        |     |              |      |            |     |            |
|------------|----------|-------|-------|-----|--------|--------------|------|---------|--------------|------|--------|-----|------|------------|------|-----|--------------|----------|--------|-----|--------------|------------|--------|-----|--------------|------|------------|-----|------------|
| <u> </u>   | 4        | 19 +  | 8 ft* |     |        | 32 +         | 8 ft | L<br>:* | 1            | 49 + | - 8 fl | *   | [    | 65 +       | 8 ft | *   | 1            | 82 +     | ⊦ 8 fl | *   | 1            | 98 +       | - 8 fl | *   | 2            | 15 - | - 8 ft     | *   |            |
|            |          | 98    |       |     |        | 98           |      |         |              | 98   | ft     |     |      | 98         |      |     |              |          | ft     |     |              | 98         |        |     |              |      | ft         |     |            |
| 26         | 0°<br>27 | 20°   | 40°   | 60° | 0°     | 20°          | 40°  | 60°     | 0°           | 20°  | 40°    | 60° | 0°   | 20°        | 40°  | 60° | 0°           | 20°      | 40°    | 60° | 0°           | 20°        | 40°    | 60° | 0°           | 20°  | 40°        | 60° | 26         |
| 28         | 27       |       |       |     |        |              |      |         |              |      |        |     |      |            |      |     |              |          |        |     |              |            |        |     |              |      |            |     | 28         |
| 30         | 27       |       |       |     |        |              |      |         |              |      |        |     |      |            |      |     |              |          |        |     |              |            |        |     |              |      |            |     | 30         |
| 32         | 27       |       |       |     |        |              |      |         |              |      |        |     |      |            |      |     |              |          |        |     |              |            |        |     |              |      |            |     | 32         |
| 34         | 27       |       |       |     |        |              |      |         |              |      |        |     |      |            |      |     |              |          |        |     |              |            |        |     |              |      |            |     | 34         |
| 36         | 26.9     |       |       |     |        |              |      |         |              |      |        |     |      |            |      |     |              |          |        |     |              |            |        |     |              |      |            |     | 36         |
| 38         | 26.4     |       |       |     |        |              |      |         |              |      |        |     |      |            |      |     |              |          |        |     |              |            |        |     |              |      |            |     | 38         |
| 40         | 25.7     |       |       |     |        |              |      |         |              |      |        |     |      |            |      |     |              |          |        |     |              |            |        |     |              |      |            |     | 40         |
| 42         | 25       |       |       |     | 27     |              |      |         |              |      |        |     |      |            |      |     |              |          |        |     |              |            |        |     |              |      |            |     | 42         |
| 44         | 24.2     |       |       |     | 27     |              |      |         | 27           |      |        |     |      |            |      |     |              |          |        |     |              |            |        |     |              |      |            |     | 44         |
| 46         | 23.5     |       |       |     | 27     |              |      |         | 27           |      |        |     |      |            |      |     |              |          |        |     |              |            |        |     |              |      |            |     | 46         |
| 48         | 22.9     |       |       |     | 27     |              |      |         | 26.9         |      |        |     |      |            |      |     |              |          |        |     |              |            |        |     |              |      |            |     | 48         |
| 50         | 22.2     |       |       |     | 27     |              |      |         | 26.9         |      |        |     | 25   |            |      |     |              |          |        |     |              |            |        |     |              |      |            |     | 50         |
| 55         | 20.7     |       |       |     | 26.8   |              |      |         | 26.3         |      |        |     | 24.5 |            |      |     | 21.3         |          |        |     |              |            |        |     |              |      |            |     | 55         |
| 60         | 19.3     |       |       |     | 26.2   |              |      |         | 25.4         |      |        |     | 23.8 |            |      |     | 21.1         |          |        |     |              |            |        |     |              |      |            |     | 60         |
| 65         | 17.9     |       |       |     | 25.1   |              |      |         | 24.3         |      |        |     | 22.9 |            |      |     | 20.7         |          |        |     | 17.2         |            |        |     |              |      |            |     | 65         |
| 70         | 16.6     |       |       |     | 23.9   |              |      |         | 23.3         |      |        |     | 22   |            |      |     | 20.2         |          |        |     | 17           |            |        |     | 13.1         |      |            |     | 70         |
| 75         | 15.4     |       |       |     | 22.8   |              |      |         | 22.3         |      |        |     | 21.2 |            |      |     | 19.6         |          |        |     | 16.8         |            |        |     | 12.9         |      |            |     | 75         |
| 80         | 14.4     |       |       |     | 21.8   |              |      |         | 21.4         |      |        |     | 20.4 |            |      |     | 19           |          |        |     | 16.6         |            |        |     | 12.8         |      |            |     | 80         |
| 85         | 13.4     |       |       |     | 20.8   |              |      |         | 20.5         |      |        |     | 19.7 | 440        |      |     | 18.4         |          |        |     | 16.2         |            |        |     | 12.5         |      |            |     | 85         |
| 90         | 12.5     |       |       |     | 19.9   |              |      |         | 19.7         |      |        |     | 19   |            |      |     | 17.8         | 40 -     |        |     | 15.8         |            |        |     | 12.2         |      |            |     | 90         |
| 95         | 11.7     |       |       |     | 19     |              | 100  |         | 18.9         |      |        |     | 18.3 |            |      |     | 17.3         |          |        |     | 15.3         | 101        |        |     | 11.9         |      |            |     | 95         |
| 100        | 11       |       |       |     |        | 13.8         |      |         | 18.2         |      |        |     | 17.7 |            |      |     | 16.7         |          |        |     | 14.8         |            |        |     | 11.5         |      |            |     | 100        |
| 105        | 10.4     |       |       |     |        | 13.3<br>12.8 |      |         | 17.4<br>16.7 |      | 0.7    |     | 17.1 | 12.7       | 0.6  |     | 16.2<br>15.7 |          |        |     | 14.3<br>13.9 |            |        |     | 11.1<br>10.8 | 0.4  |            |     | 105<br>110 |
| 110<br>115 |          | 8.6   |       |     |        | 12.0         |      | 6 1     | 16.7         |      |        |     |      | 12.7       |      |     | 15.7         |          |        |     | 13.4         |            |        |     | 10.5         |      |            |     | 115        |
| 120        |          |       |       |     |        | 11.8         |      |         | 15.3         |      |        | 6.1 | 15.3 |            |      |     | 14.7         |          |        |     | 12.8         |            |        |     | 10.3         |      |            |     | 120        |
| 125        |          |       |       |     |        | 11.4         |      |         | 14.7         |      |        |     | 14.7 |            |      |     | 14.2         |          |        |     | 12.3         |            |        |     |              | 8.6  |            |     | 125        |
| 130        |          | 7.5   |       | 0.0 |        | 10.9         |      |         | 14.1         |      |        |     |      | 11.1       |      |     | 13.7         |          |        | 5.9 | 11.8         |            | 8.6    |     |              | 8.3  |            |     | 130        |
| 135        |          | 7.2   |       |     |        | 10.6         |      |         | 13.5         |      |        |     | 13.6 |            |      |     | 13.1         |          |        |     | 11.3         |            |        | 5.8 |              | 8.1  | 7.2        |     | 135        |
| 140        | 1.0      |       |       |     |        | 10.2         |      |         | 12.9         |      |        |     |      |            |      |     | 12.6         |          |        |     | 10.8         |            |        |     |              | 7.9  |            |     | 140        |
| 145        |          |       |       |     |        | 9.8          |      |         | 12.4         |      |        |     |      |            |      |     | 12.1         |          |        |     | 10.3         |            |        |     |              | 7.7  |            |     | 145        |
| 150        |          |       |       |     | 11.4   | 9.5          | 8.1  |         | 12           |      | 8.2    |     |      |            |      |     | 11.5         |          |        |     |              | 9.4        |        |     |              |      | 6.8        | 5.7 | 150        |
| 155        |          |       |       |     | 11     | 9.2          |      |         | 11.5         | 9.4  | 8.1    |     | 11.7 | 9.5        | 8.1  |     | 11           | 9.4      | 8.1    | 5.8 |              | 9.1        |        | 5.8 | 7.8          | 7.3  | 6.6        | 5.7 | 155        |
| 160        |          |       |       |     | 10.6   | 8.9          | 7.9  |         | 11.1         |      |        |     |      | 9.3        |      |     | 10.4         |          |        |     |              | 8.9        |        |     |              |      | 6.5        |     | 160        |
| 165        |          |       |       |     | 10.2   | 8.6          | 7.8  |         | 10.6         | 8.9  | 7.9    |     | 10.9 | 9          | 7.9  |     | 9.9          | 8.9      | 7.8    |     | 8.2          | 8.6        | 7.7    |     | 7            | 6.9  | 6.4        | 5.7 | 165        |
| 170        |          |       |       |     | 9.7    | 8.4          | 7.6  |         | 10.3         | 8.6  | 7.8    |     | 10.5 | 8.7        | 7.8  |     | 9.3          | 8.7      | 7.7    |     | 7.8          | 8.4        | 7.6    |     | 6.6          | 6.7  | 6.3        | 5.7 | 170        |
| 175        |          |       |       |     |        | 8.1          | 7.5  |         |              | 8.4  |        |     |      | 8.5        |      |     |              | 8.5      |        |     |              | 8.1        |        |     |              | 6.5  |            |     | 175        |
| 180        |          |       |       |     | 9      | 7.9          |      |         |              | 8.2  |        |     |      | 8.3        |      |     |              | 8.3      |        |     |              | 7.8        |        |     |              | 6.3  |            |     | 180        |
| 185        |          |       |       |     |        | 7.7          |      |         |              | 8    |        |     |      | 8.1        |      |     |              | 8        |        |     |              |            |        |     |              | 6.1  |            |     | 185        |
| 190        |          |       |       |     |        | 7.5          |      |         | 1            | 7.8  | 7.3    |     |      | 7.9        |      |     |              | 7.8      |        |     | 6            |            | 7.3    |     | 5            |      | 5.8        |     | 190        |
| 195        |          |       |       |     |        | 7.4          |      |         |              | 7.6  |        |     |      | 7.7        |      |     |              | 7.5      |        |     | 5.5          | 6.6        |        |     |              | 5.7  |            |     | 195        |
| 200        |          |       |       |     |        | 7.2          |      |         |              | 7.5  |        |     |      | 7.6        | 7.2  |     |              | 7.1      |        |     |              |            |        |     |              | 5.3  |            |     | 200        |
| 205        |          |       |       |     |        | 7.1          |      |         |              | 7.3  |        |     |      | 7.4        |      |     |              | 6.8      |        |     |              | 5.7        |        |     |              | 4.9  |            |     | 205        |
| 210        |          |       |       |     | 7.4    |              |      |         |              | 7.2  |        |     |      | 7.2        |      |     |              | 6.3      |        |     | 4.3          |            |        |     |              | 4.5  |            |     | 210        |
| 215        |          |       |       |     | 7.3    |              |      |         | 7.7          |      |        |     |      | 6.9        |      |     | 5            | 5.9      |        |     |              | 4.9        |        |     | 3.2          | 4.2  |            |     | 215        |
| 220        |          |       |       |     | 7.1    |              |      |         | 7.4          | 1    |        |     |      | 6.6        |      |     |              | 5.4      |        |     |              | 4.5<br>4.1 | 5.1    |     |              |      | 4.5        |     | 220        |
| 225<br>230 |          |       |       |     |        |              |      |         | 7.2          |      |        |     |      | 6.2<br>5.8 |      |     | 4.2          | 5<br>4.5 |        |     | 3.3          |            |        |     |              | 3.4  |            |     | 225        |
| 235        |          |       |       |     |        |              |      |         | 6.6          |      |        |     |      | 5.8        |      |     |              | 4.5      |        |     |              | 3.7        |        |     |              |      | 3.7<br>3.3 |     | 230<br>235 |
| 240        |          |       |       |     |        |              |      |         | 0.0          |      |        |     | 4.9  | 5.4        |      |     |              | 3.7      |        |     |              | 2.9        |        |     |              |      | ა.ა        |     | 240        |
| 245        |          |       |       |     |        |              |      |         |              |      |        |     | 4.0  |            |      |     | 3            |          |        |     |              | 2.5        |        |     |              |      |            |     | 240        |
| 250        |          |       |       |     |        |              |      |         |              |      |        |     | 4.4  |            |      |     | J            | 3.1      |        |     |              |            |        |     |              |      |            |     | 250        |
| 255        |          |       |       |     |        |              |      |         |              |      |        |     | 3.8  |            |      |     |              | 0.1      |        |     |              |            |        |     |              |      |            |     | 255        |

|            | 49-2       | 30 ft  | 11:   | 8 ft |            | ! (        | 360°  | 220 | 500 lbs    | 85         | %       |     |            |            |            |          |            |            |         |        |                         |
|------------|------------|--------|-------|------|------------|------------|-------|-----|------------|------------|---------|-----|------------|------------|------------|----------|------------|------------|---------|--------|-------------------------|
| <u> </u>   |            | T 49 + | 8 ft* | F    |            | 132 +      | 8 ft* |     |            | 149 +      | - 8 ft* |     |            | 165 +      | 8 ft*      |          |            | 182 -      | + 8 ft* |        | <b>A</b>                |
|            |            | 118    |       |      |            | 118        |       |     |            | 118        |         |     |            | 118        |            |          |            |            | 8 ft    |        |                         |
| 28         | 0°<br>24.2 | 20°    | 40°   | 60°  | 0°         | 20°        | 40°   | 60° | 0°         | 20°        | 40°     | 60° | 0°         | 20°        | 40°        | 60°      | 0°         | 20°        | 40°     | 60°    | 28                      |
| 30         | 24.2       |        |       |      |            |            |       |     |            |            |         |     |            |            |            |          |            |            |         |        | 30                      |
| 32         | 23.6       |        |       |      |            |            |       |     |            |            |         |     |            |            |            |          |            |            |         |        | 32                      |
| 34         | 23.1       |        |       |      |            |            |       |     |            |            |         |     |            |            |            |          |            |            |         |        | 34                      |
| 36         | 22.4       |        |       |      |            |            |       |     |            |            |         |     |            |            |            |          |            |            |         |        | 36                      |
| 38         | 21.9       |        |       |      |            |            |       |     |            |            |         |     |            |            |            |          |            |            |         |        | 38                      |
| 40         | 21.3       |        |       |      |            |            |       |     |            |            |         |     |            |            |            |          |            |            |         |        | 40                      |
| 42         | 20.8       |        |       |      |            |            |       |     |            |            |         |     |            |            |            |          |            |            |         |        | 42                      |
| 44         | 20.3       |        |       |      | 24.1       |            |       |     |            |            |         |     |            |            |            |          |            |            |         |        | 44                      |
| 46         | 19.8       |        |       |      | 23.9       |            |       |     |            |            |         |     |            |            |            |          |            |            |         |        | 46                      |
| 48         | 19.3       |        |       |      | 23.6       |            |       |     |            |            |         |     |            |            |            |          |            |            |         |        | 48                      |
| 50         | 18.8       |        |       |      | 23.2       |            |       |     | 21.7       |            |         |     |            |            |            |          |            |            |         |        | 50                      |
| 55         | 17.7       |        |       |      | 22.2       |            |       |     | 21.2       |            |         |     | 19.3       |            |            |          |            |            |         |        | 55                      |
| 60         | 16.6       |        |       |      | 21.3       |            |       |     | 20.4       |            |         |     | 19         |            |            |          |            |            |         |        | 60                      |
| 65         | 15.6       |        |       |      | 20.4       |            |       |     | 19.6       |            |         |     | 18.3       |            |            |          | 16.6       |            |         |        | 65                      |
| 70         | 14.5       | 12     |       |      | 19.6       |            |       |     | 18.9       |            |         |     | 17.7       |            |            |          | 16.2       |            |         |        | 70                      |
| 75         | 13.5       |        |       |      | 18.8       |            |       |     | 18.2       |            |         |     | 17.2       |            |            |          | 15.8       |            |         |        | 75                      |
| 80         | 12.6       |        |       |      | 18         |            |       |     | 17.5       |            |         |     | 16.6       |            |            |          | 15.3       |            |         |        | 80                      |
| 85         |            | 10.2   |       |      | 17.3       |            |       |     | 16.9       |            |         |     | 16         |            |            |          | 14.9       |            |         |        | 85                      |
| 90         | 10.9       | 9.6    |       |      | 16.5       | 11.8       |       |     | 16.2       |            |         |     | 15.5       |            |            |          | 14.4       |            |         |        | 90                      |
| 95         | 10.2       | 9      |       |      | 15.8       |            |       |     | 15.6       | 11.3       |         |     | 15         |            |            |          | 14         |            |         |        | 95                      |
| 100        | 9.5        | 8.5    | 6.9   |      | 15.1       |            |       |     | 15         | 10.9       |         |     | 14.4       | 10.6       |            |          | 13.6       |            |         |        | 100                     |
| 105        | 8.9        | 8.1    | 6.7   |      | 14.4       |            |       |     | 14.4       |            |         |     | 14         | 10.3       |            |          | 13.1       |            |         |        | 105                     |
| 110        | 8.3        | 7.7    | 6.4   |      | 13.8       | 10.1       |       |     | 13.8       | 10.1       |         |     | 13.5       | 9.9        |            |          | 12.7       | 9.5        |         |        | 110                     |
| 115        | 7.9        | 7.3    | 6.2   |      | 13.1       | 9.7        | 6.9   |     | 13.2       | 9.7        |         |     | 13         | 9.5        |            |          | 12.3       | 9.2        |         |        | 115                     |
| 120        | 7.4        | 6.9    | 6     | 3.4  | 12.5       | 9.3        | 6.9   |     | 12.7       | 9.4        | 6.7     |     | 12.5       | 9.2        |            |          | 11.9       | 8.9        |         |        | 120                     |
| 125        | 7          | 6.6    | 5.8   | 3.3  | 11.9       | 9          | 6.7   |     | 12.1       | 9          | 6.7     |     | 12         | 8.9        |            |          | 11.6       | 8.6        |         |        | 125                     |
| 130        | 6.7        | 6.3    | 5.6   | 3.2  | 11.4       | 8.6        | 6.5   |     | 11.6       | 8.7        | 6.5     |     | 11.6       | 8.6        | 6.5        |          | 11.2       | 8.3        |         |        | 130                     |
| 135        | 6.3        | 6      | 5.4   | 3.2  | 10.8       | 8.3        | 6.3   | 3.6 | 11.1       | 8.4        | 6.4     |     | 11.1       | 8.3        | 6.3        |          | 10.8       | 8.1        | 6.2     |        | 135                     |
| 140        | 6          | 5.7    | 5.3   | 3.2  | 10.3       | 8.1        | 6.2   | 3.6 | 10.7       | 8.1        | 6.2     | 3.6 | 10.7       | 8.1        | 6.2        |          | 10.4       | 7.9        | 6.1     |        | 140                     |
| 145        | 5.7        | 5.5    | 5.2   | 3.1  | 9.8        | 7.8        | 6.1   | 3.6 | 10.2       | 7.9        | 6.1     | 3.6 | 10.2       | 7.8        | 6.1        | 3.6      | 10         | 7.6        | 6       |        | 145                     |
| 150        | 5.5        | 5.3    | 5.2   |      | 9.4        | 7.5        | 5.9   | 3.6 | 9.8        | 7.6        | 6       | 3.6 | 9.9        | 7.6        | 6          | 3.6      | 9.6        | 7.4        | 5.9     | 3.6    | 150                     |
| 155        | 5.2        | 5.1    |       |      | 9          | 7.3        | 5.8   |     | 9.3        | 7.4        | 5.8     | 3.6 | 9.5        | 7.4        |            | 3.6      |            | 7.3        | 5.8     | 3.6    | 155                     |
| 160        |            |        |       |      | 8.6        | 7.1        | 5.7   |     | 9          | 7.2        | 5.7     | 3.6 | 9.1        | 7.2        | 5.7        | 3.6      | 8.9        | 7.1        | 5.7     | 3.6    | 160                     |
| 165        |            |        |       |      | 8.2        | 6.9        | 5.6   |     | 8.6        | 7          | 5.6     |     | 8.8        | 7          | 5.7        | 3.6      | 8.5        | 6.9        | 5.6     | 3.6    | 165                     |
| 170        |            |        |       |      | 7.9        | 6.7        | 5.5   |     | 8.3        | 6.8        | 5.5     |     | 8.4        | 6.9        | 5.6        | 3.6      |            | 6.8        | 5.5     | 3.6    | 170                     |
| 175        |            |        |       |      | 7.6        |            | 5.4   |     | 7.9        |            | 5.5     |     | 8.1        |            | 5.5        |          |            | 6.6        | 5.5     | 3.6    | 175                     |
| 180        |            |        |       |      | 7.3        | 6.3        |       |     | 7.7        |            |         |     | 7.9        |            |            |          |            | 6.5        |         |        | 180                     |
| 185        |            |        |       |      | 7.1        | 6.1        | 5.3   |     | 7.4        | 6.3        | 5.3     |     | 7.6        | 6.4        | 5.3        |          | 7          | 6.3        | 5.3     |        | 185                     |
| 190        |            |        |       |      | 6.8        | 5.9        | 5.2   |     | 7.2        | 6.1        | 5.3     |     | 7.3        | 6.2        |            |          | 6.6        | 6.2        | 5.3     |        | 190                     |
| 195        |            |        |       |      | 6.6        | 5.7        | 5.2   |     | 6.9        | 5.9        | 5.2     |     | 7.1        | 6          | 5.2        |          | 6.2        | 6.1        | 5.2     |        | 195                     |
| 200        |            |        |       |      | 6.4        | 5.6        |       |     | 6.7        | 5.8        | 5.2     |     | 6.8        | 5.9        | 5.2        |          | 5.8        | 5.9        | 5.2     |        | 200                     |
| 205<br>210 |            |        |       |      | 6.1        | 5.5        |       |     | 6.5        | 5.6        | 5.2     |     | 6.5        | 5.8        | 5.2        |          | 5.3        | 5.7        | 5.1     |        | 205                     |
| 210        |            |        |       |      | 5.9<br>5.8 | 5.3<br>5.2 |       |     | 6.3        | 5.5<br>5.4 |         |     | 6.2        | 5.6<br>5.5 | 5.1<br>5.1 |          | 5          | 5.5<br>5.3 | 5.1     |        | 210                     |
| 220        |            |        |       |      |            |            |       |     |            |            |         |     | 6          |            |            |          | 4.6        |            |         |        | 215                     |
| 225        |            |        |       |      | 5.6<br>5.4 | 5.1<br>5   |       |     | 5.9<br>5.7 | 5.3<br>5.2 |         |     | 5.6<br>5.3 | 5.4<br>5.3 | 5.1        |          | 4.2<br>3.8 | 5.1<br>4.8 | 5.1     |        | 220<br>225              |
| 230        |            |        |       |      | 5.4        | 5          |       |     | 5.6        | 5.2        |         |     | 4.9        | 5.3        |            |          | 3.8        | 4.8        | 3       |        | 230                     |
| 235        |            |        |       |      | 5.1        |            |       |     | 5.4        | 5.1        |         |     | 4.9        | 5.2        |            |          | 3.4        | 4.4        |         |        | 230                     |
| 240        |            |        |       |      | 5.1        |            |       |     | 5.4        | 4.9        |         |     | 4.5        | 5<br>4.8   |            |          | 3          | 3.6        |         |        | 235                     |
| 245        |            |        |       |      | J          |            |       |     | 5.3        | 4.9        |         |     | 3.8        | 4.6        |            |          |            | 3.2        |         |        | 240                     |
| 250        |            |        |       |      |            |            |       |     | 5.2        |            |         |     | 3.5        | 4.5        |            |          |            | 5.2        |         |        | 250                     |
| 255        |            |        |       |      |            |            |       |     | 4.9        |            |         |     | 3.2        | 3.7        |            |          |            |            |         |        | 255                     |
| 260        |            |        |       |      |            |            |       |     | 4.9        |            |         |     | 2.9        | 3.7        |            |          |            |            |         |        | 260                     |
|            | e d'adap   | toto   |       |      |            |            |       |     |            |            |         |     | 2.9        | + 100 5    | 1605 0     | 00.000.7 | E160E (    | 00.000     | / E1045 | 00.000 | / 51665_00 <sub>_</sub> |

|                 | 49-2 | 230 ft     | 1     | 18 ft<br>• | Ţ    | Ţ        | 36         | ) [2 | 220500 |            | <b>35</b> % | )   |     |            |          |        |            |            |         |        |                |                |
|-----------------|------|------------|-------|------------|------|----------|------------|------|--------|------------|-------------|-----|-----|------------|----------|--------|------------|------------|---------|--------|----------------|----------------|
|                 |      | 194 -      | Q fl* |            |      | 198 -    | Q f+*      |      |        | 210 +      | Q fl*       |     |     | 215 +      | Q fl*    |        |            | 227 -      | Q fl*   |        | 230 +<br>8 ft* |                |
|                 |      |            | 8 ft  |            |      | 11       |            |      |        | 11         |             |     |     |            | 8 ft     |        |            |            | 8 ft    |        | 118 ft         |                |
| ← ft            | 0°   | 20°        | 40°   | 60°        | 0°   | 20°      | 40°        | 60°  | 0°     |            | 40°         | 60° | 0°  | 20°        |          | 60°    | 0°         |            | 40°     | 60°    | 0°             | ↔ ft           |
| 70              | 11.2 |            |       |            | 13.7 |          |            |      |        |            |             |     |     |            |          |        |            |            |         |        |                | 70             |
| 75              | 11   |            |       |            | 13.5 |          |            |      | 9.9    |            |             |     | 9.6 |            |          |        |            |            |         |        |                | 75             |
| 80              | 10.6 |            |       |            | 13.3 |          |            |      | 9.8    |            |             |     | 9.5 |            |          |        | 6.3        |            |         |        | 5.5            | 80             |
| 85              | 10.3 |            |       |            | 13.1 |          |            |      | 9.6    |            |             |     | 9.4 |            |          |        | 6.4        |            |         |        | 5.5            | 85             |
| 90              | 10   |            |       |            | 12.8 |          |            |      | 9.4    |            |             |     | 9.3 |            |          |        | 6.4        |            |         |        | 5.5            | 90             |
| 95              | 9.6  |            |       |            | 12.5 |          |            |      | 9.2    |            |             |     | 9.2 |            |          |        | 6.4        |            |         |        | 5.5            | 95             |
| 100             | 9.3  |            |       |            | 12.2 |          |            |      | 8.8    |            |             |     | 9   |            |          |        | 6.3        |            |         |        | 5.5            | 100            |
| 105             | 8.9  |            |       |            | 11.9 |          |            |      | 8.5    |            |             |     | 8.9 |            |          |        | 6.2        |            |         |        | 5.5            | 105            |
| 110             | 8.5  |            |       |            | 11.6 |          |            |      | 8      |            |             |     | 8.8 |            |          |        | 6.1        |            |         |        | 5.4            | 110            |
| 115             | 8.1  | 6.9        |       |            | 11.3 | 8.5      |            |      | 7.6    |            |             |     | 8.5 |            |          |        | 6          |            |         |        | 5.4            | 115            |
| 120             | 7.6  | 6.7        |       |            | 10.9 | 8.3      |            |      | 7.2    | 6.5        |             |     | 8.2 | 6.9        |          |        | 5.9        |            |         |        | 5.3            | 120            |
| 125             | 7.2  | 6.5        |       |            | 10.6 | 8.1      |            |      | 6.8    | 6.4        |             |     | 8   | 6.8        |          |        | 5.7        |            |         |        | 5.3            | 125            |
| 130             | 6.7  | 6.3        |       |            |      | 7.8      |            |      | 6.4    | 6.2        |             |     | 7.7 | 6.6        |          |        | 5.6        | 6          |         |        | 5.2            | 130            |
| 135             | 6.2  | 6.1        |       |            | 9.8  | 7.6      |            |      | 6      | 6          |             |     | 7.4 | 6.5        |          |        | 5.3        | 5.8        |         |        | 5              | 135            |
| 140             | 5.8  | 5.9        |       |            | 9.4  | 7.5      | 5.9        |      | 5.6    | 5.9        |             |     | 7.2 | 6.3        |          |        | 5.1        | 5.7        |         |        | 4.8            | 140            |
| 145             | 5.4  | 5.7        | 4.0   |            | 9    | 7.3      | 5.9        |      | 5.3    | 5.7        |             |     | 6.9 | 6.1        |          |        | 4.8        | 5.5        |         |        | 4.5            | 145            |
| 150             | 4.9  | 5.6        | 4.9   |            | 8.6  | 7.1      | 5.8        |      | 4.9    | 5.5        | 4 7         |     | 6.7 | 5.9        |          |        | 4.4        | 5.4        |         |        | 4.2            | 150            |
| 155             | 4.5  | 5.4<br>5.2 | 4.7   |            | 8.2  | 7<br>6.8 | 5.7        | 0.5  | 4.5    | 5.3<br>5.1 | 4.7         |     | 6.4 | 5.8<br>5.6 | _        |        | 4.1<br>3.7 | 5.1        |         |        | 3.8            | 155<br>160     |
| 160<br>165      | 3.5  | 5.2<br>4.9 | 4.6   | 3.5        | 7.7  | 6.7      | 5.6<br>5.5 | 3.5  | 3.7    | 4.9        | 4.6<br>4.5  |     | 5.9 | 5.5        | 5<br>4.8 |        | 3.7        | 4.9<br>4.6 |         |        | 3.5            | 165            |
| 170             | 3.5  | 4.9        | 4.5   | 3.5        | 6.9  | 6.6      | 5.5        | 3.6  | 3.2    | 4.9        | 4.5         |     | 5.6 | 5.3        | 4.6      |        | 2.8        | 4.6        | 4.3     |        | 2.7            | 170            |
| 175             | ٦    | 4.3        | 4.3   | 3.6        | 6.5  | 6.4      | 5.4        | 3.6  | 2.8    | 4.3        | 4.3         | 3.6 | 5.3 | 5.2        | 4.6      | 3.6    | 2.0        | 4.3        | 4.2     |        | 2.1            | 175            |
| 180             |      | 3.9        | 4.2   | 3.0        | 6.1  | 6.3      | 5.3        | 3.6  | 2.0    | 3.9        | 4.2         | 3.6 | 5   | 5.1        | 4.5      | 3.6    |            | 3.6        | 4.1     | 3.6    |                | 180            |
| 185             |      | 3.4        | 4     |            | 5.7  | 6.1      | 5.3        | 0.0  |        | 3.5        | 4.1         | 0.0 | 4.7 | 4.9        | 4.4      | 3.6    |            | 3.2        | 4       | 3.6    |                | 185            |
| 190             |      | 3          | 3.9   |            | 5.3  | 6        | 5.2        |      |        | 3.1        | 3.9         |     | 4.3 | 4.8        | 4.3      | 3.6    |            | 2.8        | 3.9     | 3.6    |                | 190            |
| 195             |      |            | 3.7   |            | 4.9  | 5.8      | 5.2        |      |        | 0          | 3.8         |     | 4   | 4.6        | 4.3      | 0.0    |            |            | 3.6     | 0.0    |                | 195            |
| 200             |      |            | 3.4   |            | 4.5  | 5.6      | 5.1        |      |        |            | 3.5         |     | 3.6 | 4.4        | 4.2      |        |            |            | 3.3     |        |                | 200            |
| 205             |      |            |       |            | 4.1  | 5.3      | 5.1        |      |        |            | 3.1         |     | 3.3 | 4.2        | 4.1      |        |            |            | 2.3     |        |                | 205            |
| 210             |      |            |       |            | 3.8  | 4.9      | 5          |      |        |            |             |     |     | 4          | 4        |        |            |            |         |        |                | 210            |
| 215             |      |            |       |            | 3.4  | 4.6      | 4.9        |      |        |            |             |     |     | 3.8        | 4        |        |            |            |         |        |                | 215            |
| 220             |      |            |       |            | 3    | 4.2      | 4.8        |      |        |            |             |     |     | 3.4        | 3.8      |        |            |            |         |        |                | 220            |
| 225             |      |            |       |            |      | 3.8      | 4.5        |      |        |            |             |     |     | 3.1        | 3.7      |        |            |            |         |        |                | 225            |
| 230             |      |            |       |            |      | 3.4      | 4.2        |      |        |            |             |     |     |            | 3.5      |        |            |            |         |        |                | 230            |
| 235             |      |            |       |            |      | 3.1      | 3.8        |      |        |            |             |     |     |            | 3.2      |        |            |            |         |        |                | 235            |
| 240             |      |            |       |            |      |          | 3.4        |      |        |            |             |     |     |            | 2.8      |        |            |            |         |        |                | 240            |
| * Adapter · ada | pter |            |       |            |      |          |            |      |        |            |             |     |     | t_         | 180_51   | 605_00 | _000 / 5   | 1625_0     | 0_000 / | 51645_ | 000_000        | / 51665_00_000 |

|             | 49-  | 227 ft             |     | 138  |                   | Ţ <b>F</b> | Ţ    | (      | 360 | 2    | 20500         | Ibs | 85   | %             |     |     |             |      |               |     |             |     |     |             |     |             |          |
|-------------|------|--------------------|-----|------|-------------------|------------|------|--------|-----|------|---------------|-----|------|---------------|-----|-----|-------------|------|---------------|-----|-------------|-----|-----|-------------|-----|-------------|----------|
| <b>B</b>    |      | T<br>+ 8<br>138 ft |     | 13   | F 2 + 8<br>138 ft |            |      | 9 + 8  |     |      | 5 + 8         | ft* |      | 2+8           |     | _   | - 8 ft*     |      | 120 ft        |     | 210 -<br>13 |     |     | +8 ft*      |     |             | <b>A</b> |
| <b>→</b> ft |      |                    | 40° | 0°   | 138 π<br>20°      |            | 0°   | 138 ft | 40° | 0°   | 138 ft<br>20° |     | 0°   | 138 ft<br>20° |     | _   | 8 ft<br>20° | 0°   | 138 ft<br>20° |     | 0°          |     |     | 8 ft<br>20° | 0°  | 8 ft<br>20° | -        |
| 32          | 18.7 | 20                 | 40  | U    | 20                | 40         | U    | 20     | 40  | U    | 20            | 40  | U    | 20            | 40  | U   | 20          | U    | 20            | 40  | U           | 20  | U   | 20          | U   | 20          | 3        |
|             |      |                    |     |      |                   |            |      |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 1        |
| 34          | 18.6 |                    |     |      |                   |            |      |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 3        |
| 36          | 18.4 |                    |     |      |                   |            |      |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 3        |
| 38          | 17.9 |                    |     |      |                   |            |      |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 3        |
| 40          | 17.5 |                    |     |      |                   |            |      |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 4        |
| 42          | 17.1 |                    |     |      |                   |            |      |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 4        |
| 44          | 16.6 |                    |     |      |                   |            |      |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 4        |
|             |      |                    |     |      |                   |            |      |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             |          |
| 46          | 16.2 |                    |     |      |                   |            |      |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 4        |
| 48          | 15.9 |                    |     |      |                   |            |      |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 4        |
| 50          | 15.5 |                    |     | 18.5 |                   |            |      |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 5        |
| 55          | 14.6 |                    |     | 17.9 |                   |            | 16.8 |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 5        |
| 60          | 13.8 |                    |     | 17.2 |                   |            | 16.4 |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 6        |
| 65          | 13   |                    |     | 16.4 |                   |            | 15.7 |        |     | 14.6 |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 6        |
|             |      |                    |     |      |                   |            |      |        |     |      |               |     | 12.0 |               |     |     |             |      |               |     |             |     |     |             |     |             |          |
| 70          | 12.3 |                    |     | 15.8 |                   |            | 15.1 |        |     | 14.1 |               |     | 12.8 |               |     | 0.0 |             | 100  |               |     |             |     |     |             |     |             | 7        |
| 75          | 11.5 |                    |     | 15.1 |                   |            | 14.5 |        |     | 13.7 |               |     | 12.5 |               |     | 8.6 |             | 10.8 |               |     |             |     |     |             |     |             | 7        |
| 80          | 10.8 |                    |     | 14.5 |                   |            | 14   |        |     | 13.2 |               |     | 12.1 |               |     | 8.4 |             | 10.7 |               |     |             |     |     |             |     |             | 8        |
| 85          | 10.1 | 8.4                |     | 13.9 |                   |            | 13.5 |        |     | 12.8 |               |     | 11.7 |               |     | 8.2 |             | 10.5 |               |     | 7.4         |     | 7.1 |             | 3.6 |             | 8        |
| 90          | 9.5  | 7.9                |     | 13.4 |                   |            | 13   |        |     | 12.3 |               |     | 11.4 |               |     | 7.9 |             | 10.2 |               |     | 7.3         |     | 7   |             | 3.6 |             | 9        |
| 95          | 8.9  |                    |     | 12.9 |                   |            | 12.5 |        |     | 11.9 |               |     | 11.1 |               |     | 7.6 |             | 9.9  |               |     | 7.1         |     | 6.9 |             | 3.5 |             | 9        |
|             | 8.3  |                    |     | 12.3 | 9.6               |            | 12.1 | 0.2    |     | 11.6 |               |     | 10.8 |               |     | 7.3 |             | i    |               |     | 6.9         |     |     |             |     |             | 10       |
| 100         |      |                    |     |      |                   |            |      |        |     |      |               |     |      |               |     |     |             | 9.6  |               |     |             |     | 6.8 |             | 3.5 |             |          |
| 105         | 7.8  |                    |     | 11.8 |                   |            | 11.6 |        |     | 11.2 |               |     | 10.4 |               |     | 7.1 |             | 9.4  |               |     | 6.7         |     | 6.7 |             | 3.5 |             | 10       |
| 110         | 7.3  |                    |     | 11.3 |                   |            | 11.2 |        |     | 10.8 |               |     | 10.1 |               |     | 6.8 |             | 9.1  |               |     | 6.5         |     | 6.6 |             | 3.5 |             | 11       |
| 115         | 6.9  | 6                  | 4.6 | 10.8 | 7.6               |            | 10.7 | 7.6    |     | 10.4 | 7.4           |     | 9.8  | 6.9           |     | 6.5 |             | 8.8  |               |     | 6.3         |     | 6.5 |             | 3.5 |             | 11       |
| 120         | 6.5  | 5.7                | 4.5 | 10.3 | 7.4               |            | 10.3 | 7.3    |     | 10   | 7.2           |     | 9.5  | 6.9           |     | 6.3 |             | 8.6  |               |     | 6           |     | 6.4 |             | 3.5 |             | 12       |
| 125         | 6.1  |                    | 4.3 | 9.8  |                   |            | 9.9  |        |     |      | 6.9           |     |      | 6.7           |     | 6   |             | 8.3  |               |     | 5.7         |     | 6.2 |             | 3.4 |             | 12       |
| 130         | 5.8  |                    | 4   |      | 6.8               |            | 9.5  |        |     |      | 6.7           |     |      | 6.5           |     | 5.6 |             | 8.1  | 61            |     | 5.3         |     | 6   |             | 3.4 |             | 13       |
|             |      |                    |     |      |                   | 4.0        |      |        |     |      |               |     |      |               |     |     | 17          |      |               |     |             | 1 E |     |             |     |             |          |
| 135         | 5.5  |                    | 3.8 | 9    | 6.6               | 4.8        | 9.1  |        |     | 9    | 6.5           |     |      | 6.3           |     | 5.3 | 4.7         |      | 5.9           |     | 5           | 4.5 | 5.8 |             | 3.3 |             | 13       |
| 140         | 5.2  |                    | 3.6 |      | 6.4               | 4.7        |      | 6.4    | 4.6 |      | 6.3           | 4.5 | 8.2  |               |     | 4.9 | 4.6         | 7.6  |               |     | 4.6         | 4.3 | 5.7 | 4.8         | 3.2 |             | 14       |
| 145         | 4.9  |                    | 3.5 | 8.2  | 6.1               | 4.5        | 8.4  | 6.2    | 4.5 | 8.3  | 6.1           | 4.5 | 7.9  | 5.9           |     | 4.5 | 4.4         | 7.4  | 5.6           |     | 4.3         | 4.2 | 5.5 | 4.6         | 3.1 |             | 14       |
| 150         | 4.6  | 4.3                | 3.3 | 7.8  | 5.9               | 4.4        | 8    | 6      | 4.4 | 8    | 5.9           | 4.4 | 7.7  | 5.7           |     | 4   | 4.2         | 7.2  | 5.5           |     | 3.8         | 4   | 5.3 | 4.5         | 2.9 | 3.7         | 15       |
| 155         | 4.4  | 4                  | 3.2 | 7.5  | 5.7               | 4.3        | 7.7  | 5.8    | 4.3 | 7.7  | 5.7           | 4.3 | 7.5  | 5.6           | 4.2 | 3.5 | 4           | 6.9  | 5.3           |     | 3.4         | 3.9 | 5   | 4.3         |     | 3.6         | 15       |
| 160         | 4.2  | 3.8                | 3.1 |      | 5.5               | 4.2        | 7.4  |        | 4.2 | 7.4  | 5.6           | 4.2 |      | 5.4           | 4.1 | 3.1 | 3.9         | 6.7  |               |     | 3           | 3.7 | 4.8 | 4.2         |     | 3.4         | 16       |
| 165         | 3.9  |                    | 3.1 |      | 5.4               | 4.1        |      | 5.4    | 4.1 |      | 5.4           | 4.1 | 7    | 5.3           | 4   | 0   | 3.7         |      | 5.1           |     |             | 3.5 | 4.6 | 4.1         |     | 3.3         | 16       |
|             |      |                    |     |      | 5.2               |            |      |        |     |      |               |     |      |               |     |     |             |      |               | 2.0 |             |     |     |             |     |             | 1        |
| 170         | 3.8  |                    | 3   |      |                   | 4          |      | 5.3    | 4   |      | 5.3           | 4   |      | 5.1           | 3.9 |     | 3.6         | 6    | 4.9           | 3.9 |             | 3.4 | 4.4 | 3.9         |     | 3.2         | 17       |
| 175         | 3.6  | 3.4                |     | 6.3  | 5                 | 3.9        | 6.6  |        | 3.9 | 6.7  |               | 3.9 | 6.5  |               | 3.9 |     | 3.4         | 5.7  | 4.8           | 3.8 |             | 3.2 | 4.2 | 3.8         |     | 3           | 17       |
| 180         |      |                    |     | 6.1  | 4.9               | 3.8        | 6.3  |        | 3.8 | 6.5  |               | 3.8 | 6.2  |               | 3.8 |     | 3.1         | 5.3  | 4.7           | 3.7 |             | 3   | 4   | 3.7         |     |             | 18       |
| 185         |      |                    |     | 5.9  | 4.8               | 3.7        | 6.1  | 4.8    | 3.7 | 6.2  | 4.8           | 3.7 | 6    | 4.8           | 3.7 |     |             | 5    | 4.6           | 3.6 |             |     | 3.8 | 3.6         |     |             | 18       |
| 190         |      |                    |     | 5.6  | 4.6               | 3.6        | 5.9  | 4.7    | 3.7 | 6    | 4.7           | 3.7 | 5.7  | 4.6           | 3.7 |     |             | 4.6  | 4.5           | 3.6 |             |     | 3.5 | 3.4         |     |             | 19       |
| 195         |      |                    |     |      | 4.5               | 3.6        |      |        | 3.6 |      | 4.6           | 3.6 |      |               | 3.6 |     |             |      | 4.4           | 3.5 |             |     |     | 3.3         |     |             | 19       |
| 200         |      |                    |     |      | 4.4               | 3.5        |      |        | 3.5 |      | 4.5           |     |      |               | 3.5 |     |             |      |               | 3.5 |             |     |     | 3.2         |     |             | 20       |
| 205         |      |                    |     |      |                   | 3.5        |      |        | 3.5 |      |               | 3.5 |      |               | 3.5 |     |             |      |               |     |             |     | 2.0 |             |     |             | 20       |
|             |      |                    |     | 5    |                   |            |      | 4.3    |     |      | 4.4           |     |      | 4.3           |     |     |             |      | 4.2           | 3.4 |             |     |     | 3           |     |             |          |
| 210         |      |                    |     |      | 4.1               | 3.4        |      | 4.2    | 3.4 |      | 4.3           | 3.5 |      | 4.2           | 3.4 |     |             |      | 4.1           | 3.4 |             |     |     | 2.9         |     |             | 21       |
| 215         |      |                    |     | 4.6  | 4                 | 3.4        | 4.9  |        | 3.4 | 5    | 4.2           | 3.4 | 4    | 4.1           | 3.4 |     |             | 2.8  | 4             | 3.4 |             |     |     | 2.7         |     |             | 21       |
| 220         |      |                    |     | 4.5  | 3.9               |            | 4.7  | 4      | 3.4 | 4.8  | 4.1           | 3.4 | 3.7  | 4             | 3.4 |     |             |      | 3.8           | 3.3 |             |     |     |             |     |             | 22       |
| 225         |      |                    |     | 4.3  | 3.8               |            | 4.6  | 3.9    | 3.4 | 4.5  |               | 3.3 | 3.3  | 3.9           | 3.3 |     |             |      | 3.5           | 3.3 |             |     |     |             |     |             | 22       |
| 230         |      |                    |     | 4.1  |                   |            | 4.4  |        |     |      | 3.9           | 3.3 |      | 3.7           |     |     |             |      | 3.1           | 3.3 |             |     |     |             |     |             | 23       |
| 235         |      |                    |     | 4    | 3.6               |            | 4.3  |        |     |      | 3.8           |     |      | 3.6           |     |     |             |      | 2.8           | 3.2 |             |     |     |             |     |             | 23       |
|             |      |                    |     |      |                   |            |      |        |     |      |               |     |      |               |     |     |             |      | 2.0           |     |             |     |     |             |     |             |          |
| 240         |      |                    |     |      | 3.5               |            | 4.1  |        |     |      | 3.7           | 3.3 |      | 3.4           |     |     |             |      |               | 3.1 |             |     |     |             |     |             | 24       |
| 245         |      |                    |     |      | 3.4               |            | 4    | 3.6    |     |      | 3.6           |     |      | 3.1           | 3.3 |     |             |      |               | 2.9 |             |     |     |             |     |             | 24       |
| 250         |      |                    |     | 3.6  |                   |            | 3.9  | 3.5    |     | 3.1  | 3.5           |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 25       |
| 255         |      |                    |     | 3.5  |                   |            | 3.8  | 3.4    |     | 2.8  | 3.4           |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 25       |
| 260         |      |                    |     | 3.4  |                   |            | 3.6  |        |     |      | 3.2           |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 26       |
| 265         |      |                    |     | 0.7  |                   |            | 3.5  | 0.4    |     |      | 2.9           |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 26       |
|             |      |                    |     |      |                   |            |      |        |     |      | 2.5           |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             |          |
| 270<br>275  |      |                    |     |      |                   |            | 3.4  |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 27<br>27 |
|             |      |                    |     |      |                   |            | 3.3  |        |     |      |               |     |      |               |     |     |             |      |               |     |             |     |     |             |     |             | 1 77     |



|            | 132-21         | 5ft<br>T Y   |            | -AU            | 1.5 ft<br>V | E            |       | 20 f         | Ţ <b>F</b>   | ٦Ţ           |              | 60°          | 08600 lbs    | 85           | 5%           |              |              |              |             |
|------------|----------------|--------------|------------|----------------|-------------|--------------|-------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| <u> </u>   | 13             | 2 + 20       | ft*        | 14             | 9 + 20      | ft*          | 16    | 5 + 20       | ft*          | 18           | 2 + 20       | ft*          | 19           | 8 + 20       | ft*          | 21           | 5 + 20       | ft*          | <u> </u>    |
|            |                | 20 ft        |            |                | 20 ft       |              |       | 20 ft        |              |              | 20 ft        |              |              | 20 ft        |              |              | 20 ft        |              |             |
| ↔ ft       | 0°             | 20°          | 40°        | 0°             | 20°         | 40°          | 0°    | 20°          | 40°          | 0°           | 20°          | 40°          | 0°           | 20°          | 40°          | 0°           | 20°          | 40°          | <b>↔</b> ft |
| 32         | 127.3          |              |            |                |             |              |       |              |              |              |              |              |              |              |              |              |              |              | 32          |
| 34         | 127.3          |              |            | 122.1          |             |              | 104.3 |              |              |              |              |              |              |              |              |              |              |              | 34          |
| 36<br>38   | 127.3<br>127.3 | 02 5         |            | 121.4<br>120.6 | 0.4         |              | 106.4 |              |              | 93.7         |              |              |              |              |              |              |              |              | 36<br>38    |
| 40         | -              | 82.9         |            | 119.6          |             |              | 110.5 |              |              | 93.7         |              |              |              |              |              |              |              |              | 40          |
| 45         | 122            | 80.6         | 62.8       | 116.2          |             | 63.4         | 108.1 | 82.6         | 63.6         | 96           | 82.5         |              | 83.2         |              |              |              |              |              | 45          |
| 50         | 115.4          |              | 61.9       | 111.2          |             | 62.4         | 104.3 | 81           | 62.7         | 94           | 81.6         | 63           | 81.8         | 78.9         |              | 69.8         |              |              | 50          |
| 55         | 109.5          | 75.9         | 61         | 103.3          |             | 61.6         | 99.9  | 78.9         | 61.9         | 91.2         | 79.9         | 62.2         | 80.5         | 77.7         | 63.2         | 68.6         | 68.8         |              | 55          |
| 60         | 102.9          | 73.8         | 60.2       | 96.3           | 75.8        | 60.8         | 94.8  | 77           | 61.2         | 88           | 78.1         | 61.5         | 78.3         | 76.9         | 62.5         | 67.5         | 67.8         | 62.1         | 60          |
| 65         | 96.5           | 71.9         | 59.6       | 90.3           | 73.9        | 60.1         | 89    | 75.2         | 60.5         | 83.1         | 76.4         | 60.8         | 76           | 75.3         | 61.9         | 66.4         | 66.7         | 61.5         | 65          |
| 70         | 90.4           |              | 58.9       | 84.9           |             | 59.5         | 83.9  | 73.5         | 59.9         | 78.2         | 74.3         | 60.2         | 73           | 72.8         | 61.3         | 64.9         | 65.3         | 61           | 70          |
| 75         | 84.6           | 68.4         | 58.3       | 79.9           |             | 58.9         |       | 71.9         | 59.3         | 73.8         | 72.1         | 59.7         | 68.9         | 69.9         | 60.8         | 63           | 63.5         | 60.4         | 75          |
| 80         |                | 66.9         | 57.9       | 74.9           | 69          | 58.4         | 75.1  | 70.2         | 58.8         | 69.9         | 69.9         | 59.2         | 65.1         | 66           | 60.3         | 60.6         | 61.2         | 59.9         | 80          |
| 85         | 73.7           |              | 57.5       | 70.5           |             | 58           | 71    | 68.3         | 58.3         | 66.3         | 66.4         | 58.7         | 61.8         | 62.5         | 59.8         | 57.4         | 57.9         | 58.2         | 85          |
| 90<br>95   | 68             | 64.2<br>62.7 | 57.2<br>57 | 66.4<br>62.2   | 66.1        | 57.6<br>57.2 | 67.1  | 66.6<br>64   | 57.9<br>57.6 | 62.8<br>59.3 | 63.1<br>60   | 58.3<br>57.6 | 58.6<br>55.7 | 59.5<br>56.6 | 58.9<br>56.6 | 54.5<br>51.7 | 54.8<br>52.1 | 55.3<br>52.5 | 90<br>95    |
| 100        | 58.1           | 59.7         | 56.8       | 57.8           |             | 57.2         |       | 60.7         | 57.0         | 56.2         | 56.8         | 56.5         | 52.7         | 53.8         | 54.2         | 49.1         | 49.5         | 49.9         | 100         |
| 105        |                | 55.4         | 55.8       | 53.6           |             | 55.7         |       | 57.6         | 56.6         | 53.3         | 53.9         | 54.4         | 49.9         | 51.1         | 51.6         | 46.5         | 47.1         | 47.5         | 105         |
| 110        | 50.5           | 51.4         | 00.0       | 49.7           |             | 52           | 52.9  | 54.1         | 54.9         | 50.5         | 51.1         | 51.6         | 47.2         | 48.4         | 49           | 43.9         | 44.7         | 45.3         | 110         |
| 115        | 46.6           |              |            | 46.1           |             | 48.3         | 49.5  | 50.6         | 51.3         | 47.6         | 48.5         | 49.1         | 44.8         | 45.9         | 46.5         | 41.6         | 42.3         | 43           | 115         |
| 120        | 43.1           | 44.4         |            | 42.7           | 44.2        | 44.8         | 46.3  | 47.3         | 47.9         | 44.7         | 45.9         | 46.5         | 42.5         | 43.6         | 44.1         | 39.4         | 40.1         | 40.7         | 120         |
| 125        | 40.1           | 41.2         |            | 39.6           | 41          |              | 43.3  | 44.2         | 44.8         | 42           | 43.1         | 43.9         | 40.3         | 41.4         | 41.9         | 37.3         | 38           | 38.6         | 125         |
| 130        | 37.2           | 38.3         |            | 36.8           |             |              | 40.5  | 41.4         | 41.9         | 39.3         | 40.4         | 41.2         | 37.8         | 39.2         | 39.9         | 35.4         | 36           | 36.6         | 130         |
| 135        |                | 35.4         |            | 34             | 35.2        |              | 37.8  | 38.7         | 39.2         | 36.8         | 37.8         | 38.4         | 35.5         | 36.8         | 37.6         | 33.4         | 34.2         | 34.7         | 135         |
| 140        | 31.7           | 32.6         |            | 31.4           |             |              |       | 36.2         |              | 34.4         | 35.2         | 35.8         | 33.2         | 34.6         | 35.3         | 31.4         | 32.3         | 32.9         | 140         |
| 145        | 28.1           |              |            | 29.1           | 30          |              | 33    | 33.8         |              | 31.9         | 32.9         | 33.4         | 31           | 32.4         | 33           | 29.3         | 30.3         | 31           | 145         |
| 150<br>155 | 23.8           |              |            | 26.8<br>24.7   | 27.7        |              | 30.8  | 31.6<br>29.4 |              | 29.8<br>27.6 | 30.6<br>28.5 |              | 28.9         | 30.2<br>28   | 30.7<br>28.5 | 27.3<br>25.4 | 28.3<br>26.4 | 29<br>27     | 150<br>155  |
| 160        | 11.9           |              |            | 21.6           |             |              |       | 27.3         |              | 25.7         | 26.4         |              | 25           | 26           | 20.5         | 23.4         | 24.6         | 25.2         | 160         |
| 165        | 11.5           |              |            | 18             |             |              | 24.9  | 25.4         |              | 23.9         | 24.6         |              | 23.2         | 24.2         |              | 22           | 22.8         | 23.3         | 165         |
| 170        |                |              |            | 13.8           |             |              | 23    | 23.6         |              | 22.2         | 22.7         |              | 21.4         | 22.4         |              | 20.3         | 21.1         |              | 170         |
| 175        |                |              |            | 8.5            |             |              | 20.2  | 21.2         |              | 20.5         | 21.1         |              | 19.8         | 20.7         |              | 18.8         | 19.5         |              | 175         |
| 180        |                |              |            |                |             |              | 17.1  |              |              | 19           | 19.5         |              | 18.3         | 19.2         |              | 17.1         | 17.9         |              | 180         |
| 185        |                |              |            |                |             |              | 13.6  |              |              | 17.3         | 18           |              | 16.9         | 17.7         |              | 15.8         | 16.4         |              | 185         |
| 190        |                |              |            |                |             |              | 9.3   |              |              | 14.9         |              |              | 15.5         | 16.2         |              | 14.4         | 15           |              | 190         |
| 195        |                |              |            |                |             |              |       |              |              | 12.3         |              |              | 14.2         | 14.9         |              | 13.1         | 13.6         |              | 195         |
| 200        |                |              |            |                |             |              |       |              |              | 9.4          |              |              | 12.6         | 13.5         |              | 11.8         | 12.4         |              | 200         |
| 205        |                |              |            |                |             |              |       |              |              | 6            |              |              | 10.5         |              |              | 10.6         | 11.1         |              | 205         |
| 210<br>215 |                |              |            |                |             |              |       |              |              |              |              |              | 8.4<br>5.9   |              |              | 9.5          | 9.9<br>8.7   |              | 210<br>215  |
| 220        |                |              |            |                |             |              |       |              |              |              |              |              | 0.0          |              |              | 6.1          | 0.7          |              | 220         |

t\_180\_61101\_00\_000 / 61121\_00\_000 / 61141\_00\_000

| <u> </u>    | 1            | 32 + | 20 ft | *    | 1     | 49 + | 20 ft        | *    | 1             | 65 + | 20 ft | *    | 1    | 182 +        | 20 ft | *    | 1    | 198 +        | 20 ft | *    | 2    | 215 +        | 20 ft | *    | Δ             |
|-------------|--------------|------|-------|------|-------|------|--------------|------|---------------|------|-------|------|------|--------------|-------|------|------|--------------|-------|------|------|--------------|-------|------|---------------|
| 70          |              |      | ft    |      |       |      | ft           |      |               |      | ft    |      |      |              | ft    |      |      |              | ) ft  |      |      | 20           |       |      | 10            |
| <b>↔</b> ft | 0°           | 20°  | 40°   | 60°  | 0°    | 20°  | 40°          | 60°  | 0°            | 20°  | 40°   | 60°  | 0°   | 20°          | 40°   | 60°  | 0°   | 20°          | 40°   | 60°  | 0°   | 20°          |       | 60°  | $\rightarrow$ |
| 28          | 127.3        |      |       |      |       |      |              |      |               |      |       |      |      |              |       |      |      |              |       |      |      |              |       |      | 28            |
| 30          | 127.3        |      |       |      | 121.5 |      |              |      |               |      |       |      |      |              |       |      |      |              |       |      |      |              |       |      | 30            |
| 32          | 127.3        |      |       |      | 122.1 |      |              |      |               |      |       |      |      |              |       |      |      |              |       |      |      |              |       |      | 32            |
| 34          | 127.3        |      |       |      | 122.1 |      |              |      | 106.5         |      |       |      |      |              |       |      |      |              |       |      |      |              |       |      | 34            |
| 36          | 127.3        |      |       |      | 121.4 |      |              |      | 110.3         |      |       |      |      |              |       |      |      |              |       |      |      |              |       |      | 36            |
| 38          | 127.3        |      |       |      | 120.6 |      |              |      | 110.5         |      |       |      | 96.5 |              |       |      |      |              |       |      |      |              |       |      | 38            |
| 40          | 127.1        |      |       | F0   | 119.6 |      | 00.4         | F0   | 110.1         | 00.0 | 00.0  |      | 97   | 00.5         |       |      | 00.0 |              |       |      |      |              |       |      | 40            |
| 45          | 122<br>115.4 |      |       |      | 116.2 |      |              |      | 108.1         |      | 63.6  | EE O | 96   | 82.5         | 60    |      | 83.2 | 70.0         |       |      | 60.0 |              |       |      | 45            |
| 50<br>55    | 109.5        |      |       | 55.7 | 111.2 |      | 62.4<br>61.6 |      | 104.3<br>99.9 |      | 61.9  | 55.8 | 94   | 81.6<br>79.9 |       | 55 G |      | 78.9<br>77.7 | 62.2  |      | 69.8 | 68.8         |       |      | 50<br>55      |
| 60          |              |      | 60.2  |      |       |      | 60.8         |      | 99.9          |      |       | 55.6 | 88   | 79.9         | 61.5  |      |      |              | 62.5  | 56.2 |      | 67.8         | 62 1  |      | 60            |
| 65          |              | 71.9 |       | 55.4 |       |      | 60.1         |      |               |      | 60.5  |      |      | 76.1         |       |      | 76.3 |              | 61.9  |      |      | 66.7         |       | 56.1 | 65            |
| 70          | 83           | 70.1 |       |      |       | 72.1 |              | 00.0 |               |      | 59.9  |      |      | 74.3         |       |      | 73   |              | 61.3  |      |      | 65.3         |       | 56.1 | 70            |
| 75          |              | 68.4 |       |      | 73    | 70.4 |              |      |               | 71.2 |       | 00.1 |      | 72.1         |       |      |      |              | 60.8  |      | 63   | 63.5         |       | 56.1 | 75            |
| 80          |              | 66.9 |       |      | 66.7  |      | 58.4         |      | 68.8          |      | 58.8  |      |      | 67.8         |       |      |      |              | 60.3  |      |      | 61.2         |       | 56.1 | 80            |
| 85          |              | 64.7 |       |      |       | 63.5 | 58           |      | 63.5          |      | 58.3  |      |      | 62.6         |       |      | 58   |              | 59.5  |      | 55.1 |              | 58.2  | 56.1 | 85            |
| 90          | 58           | 60.1 | 57.2  |      | 56.2  | 58.4 | 57.4         |      | 58.6          | 60.4 | 57.8  |      | 56   | 57.8         | 58    |      | 53.6 | 55.8         | 57.3  | 56.2 | 50.9 | 52.8         | 54.4  | 55.6 | 90            |
| 95          | 53           | 54.9 | 55.3  |      | 51.6  | 53.7 | 55.1         |      | 54.2          | 55.9 | 56.2  |      | 51.7 | 53.4         | 54.7  |      |      | 51.6         |       |      | 46.9 | 48.7         | 50.2  | 51.3 | 95            |
| 100         | 48.5         | 50.2 | 51.2  |      | 47.4  | 49.4 | 50.6         |      | 50.1          | 51.7 | 53    |      | 47.9 | 49.4         | 50.8  |      | 45.6 | 47.6         | 49.1  |      | 43.2 | 44.9         | 46.4  |      | 100           |
| 105         | 44.3         | 46   | 46.8  |      | 43.5  | 45.4 | 46.5         |      | 46.5          | 47.9 | 49.1  |      | 44.3 | 45.7         | 47    |      |      | 44.1         |       |      | 39.9 | 41.5         | 42.8  |      | 105           |
| 110         | 40.4         |      |       |      | 40    | 41.7 |              |      | 43            |      |       |      |      | 42.3         |       |      | 38.9 | 40.8         |       |      |      | 38.3         |       |      | 110           |
| 115         | 37.1         |      |       |      |       | 38.2 |              |      | 39.9          |      | 42.1  |      |      | 39.2         |       |      | 36   |              | 38.9  |      |      | 35.3         |       |      | 115           |
| 120         | 33.8         |      |       |      |       | 34.9 | 35.6         |      | 37            | 38.2 | 39    |      | 35   | 36.2         |       |      |      | 34.9         |       |      |      | 32.7         |       |      | 120           |
| 125         | 30.9         |      |       |      | 30.6  |      |              |      | 34.2          |      | 36    |      | -    | 33.6         |       |      |      | 32.3         |       |      |      | 30.1         |       |      | 125           |
| 130         | 28.2         |      |       |      | 27.9  |      |              |      |               | 32.6 | 33.1  |      | 30   | 31.1         |       |      |      | 29.9         |       |      |      | 27.8         |       |      | 130           |
| 135         | 25.7         |      |       |      | 25.4  |      |              |      |               | 30   | 30.5  |      |      | 28.8         |       |      | -    | 27.6         |       |      |      | 25.6         |       |      | 135           |
| 140<br>145  | 23.4         | 24.2 |       |      | 23.1  | 21.9 |              |      | 26.9<br>24.7  |      |       |      |      | 26.6<br>24.6 |       |      |      | 25.5<br>23.6 |       |      |      | 23.6<br>21.6 |       |      | 140<br>145    |
| 150         | 19.2         |      |       |      | 19    | 19.9 |              |      | 22.8          |      |       |      |      | 22.6         | 20.1  |      |      | 21.7         |       |      |      | 19.8         |       |      | 150           |
| 155         | 17.3         |      |       |      | 17.1  | 13.3 |              |      | 20.9          |      |       |      | 19.9 |              |       |      |      | 19.9         |       |      |      | 18.1         |       |      | 155           |
| 160         | 11.9         |      |       |      | 15.4  |      |              |      | 19.1          |      |       |      |      | 18.9         |       |      |      | 18.3         | 20.0  |      |      | 16.5         |       |      | 160           |
| 165         |              |      |       |      | 13.8  |      |              |      | 17.5          |      |       |      |      | 17.3         |       |      |      | 16.8         |       |      | 14.1 |              | 15.5  |      | 165           |
| 170         |              |      |       |      | 12.2  |      |              |      | 16            | 16.5 |       |      |      | 15.6         |       |      |      | 15.2         |       |      |      | 13.5         |       |      | 170           |
| 175         |              |      |       |      | 8.5   |      |              |      | 14.5          |      |       |      |      | 14.2         |       |      | 12.9 | 13.8         |       |      | 11.5 |              |       |      | 175           |
| 180         |              |      |       |      |       |      |              |      | 13.2          |      |       |      | 12.3 | 12.7         |       |      | 11.5 | 12.4         |       |      | 10.2 | 10.9         |       |      | 180           |
| 185         |              |      |       |      |       |      |              |      | 11.9          |      |       |      | 11   | 11.4         |       |      | 10.3 | 11           |       |      | 9    | 9.7          |       |      | 185           |
| 190         |              |      |       |      |       |      |              |      | 9.2           |      |       |      | 9.8  |              |       |      | 9.1  | 9.8          |       |      | 7.8  | 8.5          |       |      | 190           |
| 195         |              |      |       |      |       |      |              |      |               |      |       |      | 8.6  |              |       |      | 8    | 8.6          |       |      | 6.7  | 7.3          |       |      | 195           |
| 200         |              |      |       |      |       |      |              |      |               |      |       |      | 7.6  |              |       |      | 6.9  | 7.5          |       |      | 5.6  | 6.2          |       |      | 200           |
| 205         |              |      |       |      |       |      |              |      |               |      |       |      | 5.8  |              |       |      | 5.7  |              |       |      | 4.5  | 5            |       |      | 205           |
| 210         |              |      |       |      |       |      |              |      |               |      |       |      |      |              |       |      | 4.6  |              |       |      | 3.4  | 3.9          |       |      | 210           |

132 – 215 ft 20 ft 360° 220500 lbs

\* adapter · pièce d'adaptateur

3.6 2.7 215 t\_180\_61105\_00\_000 / 61125\_00\_000 / 61145\_00\_000 / 61165\_00\_000

|             | Ti   | T    | Y         |      | Ą    |      | V E         |      | 3    | A    | F           | Ĭ    | 7    | 7         |      |      |      |      | 85%  | 6    |      |       |           |      |          |
|-------------|------|------|-----------|------|------|------|-------------|------|------|------|-------------|------|------|-----------|------|------|------|------|------|------|------|-------|-----------|------|----------|
| <b>P</b>    | 1    |      | 20 ft     | *    | 1    | 49 + |             | *    | 1    |      | 20 ft       | *    | -    | 182 +     |      | *    | 1    | 98 + |      | *    | 2    | 215 + |           | *    | A        |
| <b>→</b> ft | 0°   |      | ft<br>40° | eo.  | 0°   | 39   | θ ft<br>40° | 60°  | 0°   |      | 9 ft<br>40° | eo.  | 0°   | 39<br>20° |      | 60°  | 00   | 20°  | ft   | eo.  | 0°   |       | ft<br>40° | co°  |          |
| 36          | 85.5 | 20   | 40        | 00   | 87   | 20   | 40          | 00   | U    | 20   | 40          | 60°  | U    | 20        | 40   | 60   | U    | 20   | 40   | 60°  | U    | 20    | 40°       | 00   | 36       |
| 38          | 83.4 |      |           |      | 85   |      |             |      |      |      |             |      |      |           |      |      |      |      |      |      |      |       |           |      | 38       |
| 40          | 81.4 |      |           |      | 83.1 |      |             |      | 82.6 |      |             |      |      |           |      |      |      |      |      |      |      |       |           |      | 40       |
| 45          | 76.7 |      |           |      | 78.7 |      |             |      | 79   |      |             |      | 79   |           |      |      |      |      |      |      |      |       |           |      | 45       |
| 50          | 72.7 | 16.1 |           |      | 74.7 | 17.2 |             |      | 75.3 |      |             |      | 75.6 |           |      |      | 71.2 |      |      |      |      |       |           |      | 50       |
| 55          | 68.8 |      |           |      | 71.1 |      |             |      | 71.9 | 16 1 |             |      |      | 47.3      |      |      | 69.5 |      |      |      | 62.1 |       |           |      | 55       |
| 60          |      |      | 33.4      | 25.1 |      | 44.2 | 22.7        |      |      | 44.8 |             |      | 69.5 |           |      |      | 68.2 |      |      |      | 61.2 |       |           |      | 60       |
|             | 62.2 |      |           |      |      |      |             | 24.0 |      |      | 22.0        |      |      |           | 22.0 |      |      | 44 E |      |      |      | 42.0  |           |      |          |
| 65          |      |      |           | 24.9 |      | 42.9 |             |      | 66   | 43.5 |             | 247  |      | 44.8      |      | 247  | 66.2 |      | 22.0 |      |      | 43.9  |           |      | 65       |
| 70<br>75    |      |      | 32.3      |      |      | 41.7 |             |      |      |      | 32.7        |      |      | 43.7      | 33.4 | 24.7 | 64   | 43.4 |      | 24.4 | 59.2 |       | 20.7      |      | 70<br>75 |
|             |      |      | 31.8      |      |      | 40.6 |             |      |      |      | 32.2        |      | 62   | 42.6      |      |      |      | 42.4 |      |      |      | 42.1  |           | 05.4 |          |
| 80          |      |      | 31.3      | 24.3 |      | 39.5 |             |      |      |      | 31.8        |      |      | 41.6      |      |      |      | 41.4 |      |      |      | 41.2  |           |      | 80       |
| 85          |      | 37.4 |           |      |      | 38.5 |             | 24.2 |      |      | 31.4        |      |      | 40.6      |      |      |      | 40.5 |      | 24.1 |      | 40.3  |           |      | 85       |
| 90          |      | 36.4 |           |      |      | 37.5 |             |      |      | 38.3 |             | 24.1 |      | 39.7      |      |      | 55   |      | 31.7 |      |      | 39.5  |           |      | 90       |
| 95          |      | 35.5 |           |      |      | 36.6 |             |      |      | 37.4 |             |      |      | 38.8      |      | 24   |      | 38.9 |      |      |      | 38.8  |           | -    | 95       |
| 100         |      | 34.7 |           |      |      | 35.8 |             |      |      | 36.6 |             |      | 51.8 |           | 31.1 |      |      | 38.2 |      | 23.8 | 46.9 |       | 31        | 24.9 | 100      |
| 105         | 43.7 |      | 29.5      |      | 46.5 |      | 29.9        |      |      | 35.8 |             |      |      | 37.3      |      |      |      | 37.4 |      |      |      | 37.3  |           |      | 105      |
| 110         |      | 33.3 |           |      | _    | 34.3 |             |      |      | 35.1 |             |      |      | 36.5      |      |      |      | 36.7 |      | 23.7 | -    | 36.7  |           | -    | 110      |
| 115         |      | 32.6 |           |      |      | 33.7 |             |      |      | 34.4 |             |      |      | 35.8      |      |      |      | 36.1 |      |      |      | 36.1  |           | 24.7 | 115      |
| 120         | 39.3 |      | 29        |      | 41.9 |      | 29.2        |      |      | 33.8 |             |      |      | 35.2      |      |      |      | 35.4 |      |      |      | 35.5  |           |      | 120      |
| 125         |      | 31.5 | 28.8      |      |      | 32.4 |             |      |      | 33.2 |             |      |      | 34.6      |      |      |      | 34.8 |      |      | 36.2 |       | 29.8      |      | 125      |
| 130         | 36.9 |      |           |      |      | 31.9 |             |      |      | 32.7 |             |      | 39.5 |           | 29.6 |      |      | 34.3 |      |      |      | 34.4  |           |      | 130      |
| 135         | 35.6 |      |           |      |      | 31.4 | 28.7        |      | 39   | 32.2 |             |      | -    | 33.5      |      |      |      | 33.8 |      |      | -    | 33.5  |           |      | 135      |
| 140         | 33.9 |      |           |      | 33.8 |      |             |      |      | 31.7 |             |      | 35   | 33        | 29.2 |      | 33.7 |      | 29.3 |      | 31   | 32.2  |           |      | 140      |
| 145         | 31.9 |      |           |      | 31.3 |      |             |      |      | 31.1 |             |      |      | 32.3      |      |      |      | 32.4 |      |      |      | 30.5  |           |      | 145      |
| 150         | 29.6 |      |           |      | 29.1 |      |             |      |      | 30.6 | 28.5        |      |      | 31.7      |      |      |      | 31.3 |      |      | 27.5 |       | 29        |      | 150      |
| 155         | 27.5 |      |           |      | 26.9 |      |             |      | 30.2 |      |             |      | 28.9 |           | 29   |      | _    | 29.6 |      |      |      | 27.5  |           |      | 155      |
| 160         | 25.1 | 26.7 |           |      | 25.1 |      |             |      | 28.1 |      |             |      | 27   | 28.9      |      |      |      | 27.8 |      |      | 24   | 25.8  |           |      | 160      |
| 165         | 21.7 |      |           |      | 23.2 |      |             |      | 26.3 |      |             |      |      | 26.9      | 27.8 |      | 24.4 |      | 27.2 |      |      | 24.1  |           |      | 165      |
| 170         | 18   |      |           |      | 21.5 | 22.6 |             |      | 24.6 |      |             |      |      | 25.2      |      |      |      | 24.3 |      |      |      | 22.5  |           |      | 170      |
| 175         | 13.6 |      |           |      | 19.2 |      |             |      | 23   | 24.1 |             |      | 21.9 |           |      |      |      | 22.7 | 23.6 |      | 19.4 |       | 22.1      |      | 175      |
| 180         | 7.8  |      |           |      | 16.4 |      |             |      | 21.4 |      |             |      | 20.3 |           |      |      | 19.7 |      |      |      | -    | 19.5  |           |      | 180      |
| 185         |      |      |           |      | 13.3 |      |             |      | 19.9 |      |             |      |      | 20.3      |      |      | 18.3 |      |      |      |      | 18.2  | 19.1      |      | 185      |
| 190         |      |      |           |      | 9.6  |      |             |      | 17.8 | 19.3 |             |      |      | 18.8      |      |      | 16.9 |      |      |      |      | 16.8  |           |      | 190      |
| 195         |      |      |           |      | 5.3  |      |             |      | 15.4 |      |             |      | -    | 17.4      |      |      | 15.6 |      |      |      | 14.1 | 15.5  |           |      | 195      |
| 200         |      |      |           |      |      |      |             |      | 12.7 |      |             |      | 14.9 |           |      |      |      | 15.4 |      |      | 13   | 14.2  |           |      | 200      |
| 205         |      |      |           |      |      |      |             |      | 9.6  |      |             |      | 13   | 14.7      |      |      |      | 14.2 |      |      |      | 12.9  |           |      | 205      |
| 210         |      |      |           |      |      |      |             |      | 6.2  |      |             |      | 10.9 |           |      |      |      | 12.9 |      |      |      | 11.8  |           |      | 210      |
| 215         |      |      |           |      |      |      |             |      |      |      |             |      | 8.6  |           |      |      | 10.9 | 11.8 |      |      | 9.6  | 10.6  |           |      | 215      |
| 220         |      |      |           |      |      |      |             |      |      |      |             |      | 6.2  |           |      |      | 9.2  | 10.6 |      |      | 8.5  | 9.5   |           |      | 220      |
| 225         |      |      |           |      |      |      |             |      |      |      |             |      |      |           |      |      | 7.3  |      |      |      | 7.4  | 8.4   |           |      | 225      |
| 230         |      |      |           |      |      |      |             |      |      |      |             |      |      |           |      |      | 5.3  |      |      |      | 6.2  | 7.3   |           |      | 230      |
| 235         |      |      |           |      |      |      |             |      |      |      |             |      |      |           |      |      |      |      |      |      | 4.7  | 6.1   |           |      | 235      |
| 240         |      |      |           |      |      |      |             |      |      |      |             |      |      |           |      |      |      |      |      |      | 3    |       |           |      | 240      |

|            |      | T    | Y           |      |      |      | V E      |      |              |      | F        | <u> </u> |        | Ľ          |      |      |      |      |          |      |      |       |       |      |            |
|------------|------|------|-------------|------|------|------|----------|------|--------------|------|----------|----------|--------|------------|------|------|------|------|----------|------|------|-------|-------|------|------------|
|            | 1    |      | 20 ft       | *    | 1    |      | 20 ft    | *    | 1            |      | 20 ft    | *        | 1      | 82 +<br>39 |      | *    | 1    |      | 20 ft    | *    | 2    | 215 + | 20 ft | *    | <b>A</b>   |
| oft ft     | 0°   |      | 9 ft<br>40° | 60°  | O°   |      | π<br>40° | 60°  | O°           | 39   | π<br>40° | 60°      | O°     | 20°        |      | 60°  | O۰   |      | π<br>40° | 60°  | 0°   | 20°   |       | 60°  |            |
| 32         | 90   | 20   | 40          | 00   | U    | 20   | 40       | 00   | U            | 20   | 40       | 00       | U      | 20         | 40   | 00   | U    | 20   | 40       | 00   | U    | 20    | 40    | 00   | 32         |
| 34         | 87.7 |      |             |      | 88.6 |      |          |      |              |      |          |          |        |            |      |      |      |      |          |      |      |       |       |      | 34         |
| 36         | 85.5 |      |             |      | 87   |      |          |      |              |      |          |          |        |            |      |      |      |      |          |      |      |       |       |      | 36         |
| 38         | 83.4 |      |             |      | 85   |      |          |      |              |      |          |          |        |            |      |      |      |      |          |      |      |       |       |      | 38         |
| 40         | 81.4 |      |             |      | 83.1 |      |          |      | 82.6         |      |          |          |        |            |      |      |      |      |          |      |      |       |       |      | 40         |
| 45         | 1    | 48.1 |             |      | 78.7 |      |          |      | 79           |      |          |          | 79     |            |      |      |      |      |          |      |      |       |       |      | 45         |
| 50         | -    | 46.4 |             |      | 74.7 | 47.2 |          |      | 75.3         |      |          |          | 75.6   |            |      |      | 71.2 |      |          |      |      |       |       |      | 50         |
| 55         |      | 44.8 | 34 1        |      | 71.1 |      |          |      | 71.9         | 46 1 |          |          |        | 47.3       |      |      | 69.5 |      |          |      | 62.1 |       |       |      | 55         |
| 60         |      |      | 33.4        | 25.1 |      | 44.2 | 33.7     |      | 68.9         |      |          |          | 69.5   |            |      |      | 68.2 |      |          |      | 61.2 |       |       |      | 60         |
| 65         | 62.2 |      |             | 24.9 |      |      | 33.1     | 24.9 | 66           | 43.5 | 33.2     |          |        | 44.8       | 33.9 |      |      | 44.5 |          |      | -    | 43.9  |       |      | 65         |
| 70         | -    |      | 32.3        | -    |      |      | 32.5     |      |              | 42.3 | 32.7     | 247      |        | 43.7       |      | 247  | 64   | 43.4 | 33.2     |      | 59.2 |       |       |      | 70         |
| 75         |      |      | 31.8        |      |      |      | 32.1     |      |              |      | 32.2     |          | 62     | 42.6       |      | 24.6 | -    |      | 32.8     | 24.4 |      | 42.1  | 32.7  |      | 75         |
| 80         |      |      | 31.3        |      |      |      | 31.6     |      |              |      | 31.8     |          |        | 41.6       |      |      |      |      | 32.4     |      |      | 41.2  |       | 25.4 | 80         |
| 85         |      | 37.4 |             | 24.0 |      |      | 31.2     |      |              |      | 31.4     |          |        | 40.6       |      |      |      | 40.5 |          | 24.1 |      | 40.3  |       |      | 85         |
| 90         |      | 36.4 |             |      |      | 37.5 |          | 27.2 |              | 38.3 |          | 24.1     |        | 39.7       |      |      |      |      | 31.7     |      |      | 39.5  |       |      | 90         |
| 95         |      | 35.5 |             |      |      | 36.6 |          |      |              | 37.4 |          | 24.1     |        | 38.8       |      |      |      |      | 31.3     |      |      | 38.8  |       |      | 95         |
| 100        |      | 34.7 |             |      |      | 35.8 |          |      |              | 36.6 |          |          | 47.6   |            | 31.1 | 24   |      | 38.2 |          | 23.8 | 42.6 |       | 31.3  | 24.9 | 100        |
| 105        | 43.7 |      | 29.5        |      | 44.6 |      | 29.9     |      |              | 35.8 |          |          |        | 37.3       |      |      |      |      | 30.7     |      | 1    | 37.3  |       |      | 105        |
| 110        | 42   | 33.3 |             |      |      | 34.3 |          |      |              | 35.1 |          |          |        | 36.5       |      |      |      |      | 30.5     |      |      | 36.7  |       |      | 110        |
| 115        |      | 32.6 |             |      | 38   | 33.7 |          |      |              | 34.4 |          |          | 38     |            | 30.3 |      |      | 35.8 |          | 23.1 |      | 35.5  |       |      | 115        |
| 120        | 36.2 |      | 29.2        |      | 35.1 |      | 29.4     |      |              | 33.8 |          |          |        | 35.1       |      |      |      | 35.1 |          |      |      | 33.8  |       | 24.1 | 120        |
| 125        |      | 31.5 |             |      |      | 32.4 |          |      |              | 33.2 |          |          |        | 34.2       |      |      |      | 33.5 |          |      | 1    | 31.5  |       |      | 125        |
| 130        | 30.7 |      | 20.0        |      | 30   | 31.6 |          |      |              | 32.5 |          |          | 30.4   |            | 29.7 |      | 29   | 31.3 |          |      |      | 29.1  |       |      | 130        |
| 135        |      | 29.9 |             |      |      | 29.6 |          |      |              | 31.5 |          |          |        | 30.6       |      |      |      | 29.1 |          |      | 24.6 |       | 28.4  |      | 135        |
| 140        |      | 27.6 |             |      | 25.4 |      | 20.1     |      | 28           | 29.9 |          |          |        | 28.5       |      |      | 24.9 |      | 28.2     |      |      | 24.9  |       |      | 140        |
| 145        |      |      |             |      |      |      |          |      | 26           | 27.8 |          |          |        | 26.5       |      |      | 23   | 25   | 26.5     |      | 20.9 |       | 24.7  |      | 140        |
| 150        | 21.8 | 25.3 |             |      | 23.2 |      |          |      | -            | 25.7 |          |          | _      | 24.6       |      |      | -    | 23.2 |          |      |      | 21.3  |       |      |            |
|            | 19.9 |      |             |      | 19.3 |      |          |      | 22.3         |      | 20.7     |          | -      | 22.8       |      |      |      | 21.4 |          |      | _    | 19.5  |       |      | 150<br>155 |
| 155<br>160 |      | 19.2 |             |      | 17.6 |      |          |      | 20.6         |      |          |          |        | 21.1       |      |      |      | 19.8 |          |      | 1    | 17.9  |       |      | 160        |
| 165        | 16.5 | 19.2 |             |      | 17.6 |      |          |      |              |      |          |          |        | 19.5       |      |      |      | 18.2 |          |      |      | 16.4  |       |      | 165        |
| 170        | 14.9 |      |             |      | 14.4 |      |          |      | 18.9<br>17.4 |      |          |          | 16.3   |            | 20.4 |      |      | 16.8 |          |      | 13.4 |       | 16.1  |      | 170        |
| 170        | 13.4 |      |             |      | 13.4 | 10.0 |          |      |              |      |          |          | 14.9   |            |      |      |      | 15.4 |          |      |      | 13.6  |       |      | 170        |
| 180        | 7.8  |      |             |      | 11.6 |      |          |      | 16<br>14.6   | 17   |          |          |        |            |      |      | 14   |      | 10.3     |      |      | 12.3  |       |      |            |
| 185        | 7.8  |      |             |      | 10.3 |      |          |      | 13.3         |      |          |          | 13.5   | 13.6       |      |      |      | 12.9 |          |      |      |       |       |      | 180<br>185 |
|            |      |      |             |      |      |      |          |      |              |      |          |          | _      |            |      |      |      |      |          |      |      |       | 12    |      |            |
| 190        |      |      |             |      | 9.1  |      |          |      | 12.1         | 12.9 |          |          |        | 12.3       |      |      |      | 11.6 |          |      | 8.7  | 9.9   |       |      | 190        |
| 195        |      |      |             |      | 5.3  |      |          |      | 11           |      |          |          |        | 11.1       |      |      |      | 10.4 |          |      | 7.6  | 8.9   |       |      | 195        |
| 200        |      |      |             |      |      |      |          |      | 9.9          |      |          |          | 8.8    | 9.9        |      |      | 8.3  | 9.2  |          |      | 6.6  | 7.8   |       |      | 200        |
| 205        |      |      |             |      |      |      |          |      | 8.9          |      |          |          | 7.9    | 8.8        |      |      | 7.3  | 8.2  |          |      | 5.6  | 6.7   |       |      | 205        |
| 210        |      |      |             |      |      |      |          |      | 6.1          |      |          |          | 7      |            |      |      | 6.3  | 7.2  |          |      | 4.6  | 5.7   |       |      | 210        |
| 215        |      |      |             |      |      |      |          |      |              |      |          |          | 6<br>5 |            |      |      | 5.2  | 6.2  |          |      |      | 4.7   |       |      | 215        |
| 220        |      |      |             |      |      |      |          |      |              |      |          |          | ) )    |            |      |      | 4.3  | 5    |          |      |      |       |       |      | 220        |

3.3 225 t\_180\_61205\_00\_000 / 61225\_00\_000 / 61245\_00\_000 / 61265\_00\_000

|            | 132- | 215 ft<br><b>%</b><br>T | Y     |      | Ą    | 11.5         | ft<br>V E |      |            | À            | 59 ft<br>• | ŗF  | וָר  | Ç            | 360   | 30   | 08600 |              | <b>85</b> % | 6   |      |              |       |      |             |
|------------|------|-------------------------|-------|------|------|--------------|-----------|------|------------|--------------|------------|-----|------|--------------|-------|------|-------|--------------|-------------|-----|------|--------------|-------|------|-------------|
| <u> </u>   | 1    | 32 +                    | 20 ft | *    | 1    | 49 +         | 20 ft     | *    | 1          | 65 +         | 20 ft      | *   | 1    | 182 +        | 20 ft | *    | -     | 198 +        | 20 ft       | *   | 2    | 215 +        | 20 ft | *    | <u> </u>    |
|            |      | 59                      | ft    |      |      | 59           | ) ft      |      |            | 59           | ft         |     |      | 59           | ft    |      |       | 59           | ft          |     |      | 59           | ft    |      |             |
| ← ft       | 0°   | 20°                     | 40°   | 60°  | 0°   | 20°          | 40°       | 60°  | 0°         | 20°          | 40°        | 60° | 0°   | 20°          | 40°   | 60°  | 0°    | 20°          | 40°         | 60° | 0°   | 20°          | 40°   | 60°  | <b>↔</b> ft |
| 36         | 63.5 |                         |       |      |      |              |           |      |            |              |            |     |      |              |       |      |       |              |             |     |      |              |       |      | 36          |
| 38         | 61.9 |                         |       |      | 62.6 |              |           |      |            |              |            |     |      |              |       |      |       |              |             |     |      |              |       |      | 38          |
| 40         | 60.4 |                         |       |      | 61.2 |              |           |      |            |              |            |     |      |              |       |      |       |              |             |     |      |              |       |      | 40          |
| 45         | 56.8 |                         |       |      | 57.8 |              |           |      | 57.8       |              |            |     | 57.2 |              |       |      |       |              |             |     |      |              |       |      | 45          |
| 50         | 53.6 |                         |       |      | 54.8 |              |           |      | 55         |              |            |     | 55.1 |              |       |      | 53    |              |             |     |      |              |       |      | 50          |
| 55         | 50.9 |                         |       |      | 52.1 |              |           |      | 52.5       |              |            |     | 52.7 |              |       |      | 51.6  |              |             |     | 50.2 |              |       |      | 55          |
| 60         | 48.2 |                         |       |      | 49.7 |              |           |      | 50.2       |              |            |     | 50.5 |              |       |      | 49.7  |              |             |     | 48.6 |              |       |      | 60          |
| 65         | 46.1 |                         | 00.1  |      | 47.3 |              |           |      | 48         | 31.1         |            |     |      | 31.4         |       |      | 47.8  | 00.0         |             |     | 47   |              |       |      | 65          |
| 70<br>75   |      | 29.3                    |       |      | 45.4 |              | 21.0      |      | 46         | 30.2         | 01.0       |     |      | 30.5         |       |      | 46    | 30.9         |             |     | 45.5 | 20           |       |      | 70          |
| 75<br>80   |      | 28.3                    | 21.0  | 1/12 | 43.4 |              | 21.8      | 1/12 |            | 29.3<br>28.5 |            |     | 44.8 | 28.8         | 21.5  |      |       | 30.1 29.4    |             |     | 44   | 30<br>29.3   |       |      | 75<br>80    |
| 85         |      |                         | 20.6  |      |      |              | 20.8      |      |            | 27.7         |            | 14  |      | 28.1         |       |      |       | 28.6         | 21 7        |     |      | 28.6         |       |      | 85          |
| 90         |      |                         | 20.2  |      |      |              | 20.4      |      |            | 26.9         |            |     |      |              | 20.7  | 13.9 | 40.2  |              | 21.4        |     | 40.2 | 28           | 21.3  |      | 90          |
| 95         |      |                         | 19.7  |      |      | 25.8         |           | 13.8 | 38         |              | 20.2       |     |      |              | 20.3  |      |       |              | 21.1        | 144 | 39   | 27.4         |       |      | 95          |
| 100        |      |                         | 19.4  |      |      |              | 19.7      |      |            | 25.6         |            |     | 37.5 |              |       | 13.7 |       |              | 20.8        |     | 38   |              | 20.8  | 14.2 | 100         |
| 105        |      | 23.8                    |       |      |      |              | 19.3      |      | 35.4       |              | 19.5       |     | 36.4 |              |       |      |       |              | 20.5        |     |      |              | 20.5  |      | 105         |
| 110        |      | 23.2                    |       |      |      | 23.9         |           |      |            | 24.4         |            |     |      |              | 19.4  |      |       |              | 20.2        |     |      |              | 20.2  |      | 110         |
| 115        |      | 22.6                    |       |      |      | 23.3         |           |      | 33         | 23.8         | 18.9       |     | 34.1 | 24.3         | 19.1  | 13.4 | 34.5  | 25           | 19.9        | 14  | 35   | 25.2         | 20    | 14   | 115         |
| 120        | 28.4 | 22.1                    | 18.1  |      | 30.2 | 22.8         | 18.4      |      | 31.8       | 23.3         | 18.6       |     | 33.1 | 23.8         | 18.8  |      | 33.5  | 24.5         | 19.7        | 14  | 34.1 | 24.8         | 19.7  | 14   | 120         |
| 125        | 27.4 | 21.6                    | 17.9  |      |      | 22.3         |           |      | 30.7       | 22.8         | 18.4       |     | 32.1 | 23.3         | 18.5  |      |       | 24.1         |             |     | 33.2 | 24.3         | 19.5  | 13.9 | 125         |
| 130        |      | 21.1                    |       |      |      | 21.8         |           |      |            | 22.4         |            |     | 31   | 22.8         |       |      |       | 23.6         |             |     |      |              | 19.3  |      | 130         |
| 135        |      | 20.6                    |       |      |      | 21.4         |           |      |            | 21.9         |            |     | 30   | 22.4         |       |      |       | 23.2         |             |     |      |              | 19.1  | 13.8 | 135         |
| 140        |      | 20.2                    |       |      |      | 20.9         |           |      |            | 21.5         |            |     | 29.2 |              | 17.9  |      | 30    | 22.8         |             |     |      | 23.1         |       |      | 140         |
| 145        |      | 19.7                    | 17.1  |      |      | 20.5         |           |      | 27         | 21.1         |            |     |      | 21.6         |       |      |       | 22.4         |             |     |      | 22.7         |       |      | 145         |
| 150<br>155 | 23.2 |                         |       |      |      | 20.1<br>19.7 |           |      |            | 20.7         |            |     |      | 21.2 20.8    |       |      | 27.9  | 21.7         | 18.4        |     | 26.3 | 22.3         |       |      | 150<br>155  |
| 160        | 21.8 |                         |       |      | 23.4 |              | 17.1      |      |            | 19.9         |            |     |      | 20.6         |       |      |       | 21.7         |             |     |      | 21.6         | 18.3  |      | 160         |
| 165        | 21.1 |                         |       |      | 22.8 |              |           |      |            | 19.5         |            |     |      |              | 17.2  |      | 24.8  |              | 17.9        |     |      | 21.3         |       |      | 165         |
| 170        | 20.4 |                         |       |      | 22.1 |              |           |      | 23.2       |              | 17         |     |      | 19.7         |       |      |       | 20.7         |             |     | 21.6 |              | 17.9  |      | 170         |
| 175        | 19.7 |                         |       |      | 21.1 |              |           |      | 22.6       |              |            |     |      | 19.4         |       |      |       | 20.4         |             |     |      | 20.7         |       |      | 175         |
| 180        | 19   |                         |       |      | 20.2 |              |           |      | 22         | 18.6         |            |     | 21.7 |              |       |      |       | 20.1         |             |     |      | 20.3         |       |      | 180         |
| 185        | 16.9 |                         |       |      | 18.8 | 17.9         |           |      | 21.2       | 18.3         |            |     | 20.2 | 18.7         |       |      | 19.2  | 19.8         | 17.5        |     | 17.6 | 19.7         | 17.6  |      | 185         |
| 190        | 13.6 |                         |       |      | 17.2 | 17.6         |           |      | 20         | 18           |            |     | 18.9 | 18.4         |       |      | 17.9  | 19.4         | 17.5        |     | 16.4 | 18.4         | 17.5  |      | 190         |
| 195        | 9.7  |                         |       |      | 14.9 |              |           |      | 18.8       | 17.8         |            |     | 17.6 | 18.2         |       |      | 16.6  | 18.8         | 17.4        |     | 15.2 | 17.2         | 17.4  |      | 195         |
| 200        |      |                         |       |      | 12.4 |              |           |      | 17.5       |              |            |     |      | 17.4         |       |      |       | 17.5         |             |     | 14.2 |              | 17.2  |      | 200         |
| 205        |      |                         |       |      | 9.7  |              |           |      | 15.9       |              |            |     | 15.2 |              |       |      |       | 16.2         |             |     |      | 14.8         | 16    |      | 205         |
| 210        |      |                         |       |      | 6.6  |              |           |      | 14         | 13.5         |            |     |      | 15.4         |       |      | 13.1  |              |             |     | 12   | 13.7         |       |      | 210         |
| 215        |      |                         |       |      |      |              |           |      | 11.8       |              |            |     |      | 14.2         |       |      |       | 13.8         |             |     |      | 12.6         |       |      | 215         |
| 220<br>225 |      |                         |       |      |      |              |           |      | 9.4<br>6.8 |              |            |     |      | 13.1<br>11.8 |       |      |       | 12.7         |             |     |      | 11.5<br>10.4 |       |      | 220<br>225  |
| 230        |      |                         |       |      |      |              |           |      | 3.6        |              |            |     | 9.8  | 11.0         |       |      |       | 11.6<br>10.5 |             |     | 8.9  | 9.4          |       |      | 230         |
| 235        |      |                         |       |      |      |              |           |      | 3.0        |              |            |     | 6    |              |       |      |       | 9.5          |             |     | 7.1  | 8.4          |       |      | 235         |
| 240        |      |                         |       |      |      |              |           |      |            |              |            |     | 3.6  |              |       |      |       | 8.3          |             |     | 6.1  | 7.4          |       |      | 240         |
| 245        |      |                         |       |      |      |              |           |      |            |              |            |     | 0.0  |              |       |      | 5.2   | 5.5          |             |     | 5.1  |              |       |      | 245         |
| 250        |      |                         |       |      |      |              |           |      |            |              |            |     |      |              |       |      |       |              |             |     |      | 5.4          |       |      | 250         |
| 255        |      |                         |       |      |      |              |           |      |            |              |            |     |      |              |       |      |       |              |             |     |      | 4.2          |       |      | 255         |

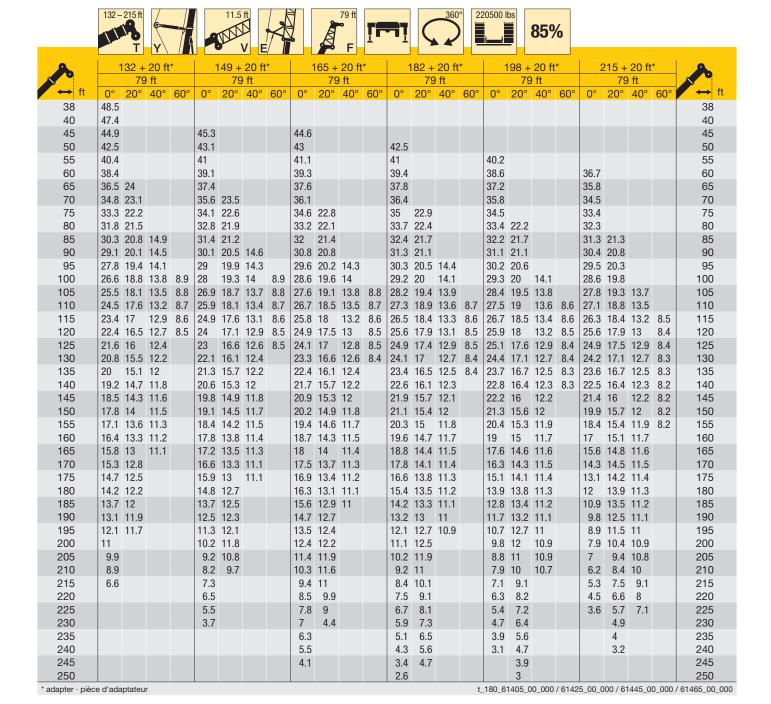
4.2 255 t\_180\_61301\_00\_000 / 61321\_00\_000 / 61341\_00\_000 / 61361\_00\_000

|            |      | 8            | <b>_</b>    |       | ۵          |           |      | A     |      | Ä            | <b>10</b> | ŢF   | 71   |              |      |      |            |              | <b>85</b> % | 6    |            |            |      |      |            |
|------------|------|--------------|-------------|-------|------------|-----------|------|-------|------|--------------|-----------|------|------|--------------|------|------|------------|--------------|-------------|------|------------|------------|------|------|------------|
|            |      | Ť            | Y           | _// h |            | · ·       | V E  |       |      |              | F         | _    |      | 7            |      | ŀĿ   | <u>  </u>  |              |             |      |            |            |      |      |            |
| <b>A</b>   | 1    |              | 20 ft       | *     | 1          | 149 +     |      | *     | 1    | 165 +        |           | *    | 1    | 182 +        |      | *    | 1          | 198 +        |             | *    | 2          | 215 +      |      | *    | <b>A</b>   |
| ft         | 00   |              | 9 ft<br>40° | CO°   | O°         | 59<br>20° | ft   | CO°   | O°   | 59<br>20°    | ft<br>40° | co°  | O°   | 59<br>20°    |      | 60°  | O°         | 59           |             | CO°  | 00         | 59<br>20°  |      | eo.  | ft         |
| 34         | 64.9 | 20-          | 40-         | 60°   | U          | 20-       | 40-  | 60-   | U    | 20-          | 40-       | 60-  | U    | 20-          | 40-  | 60-  | U          | 20°          | 40-         | 60°  | U          | 20-        | 40-  | 60-  | 34         |
| 36         | 63.5 |              |             |       |            |           |      |       |      |              |           |      |      |              |      |      |            |              |             |      |            |            |      |      | 36         |
| 38         | 61.9 |              |             |       | 62.6       |           |      |       |      |              |           |      |      |              |      |      |            |              |             |      |            |            |      |      | 38         |
| 40         | 60.4 |              |             |       | 61.2       |           |      |       |      |              |           |      |      |              |      |      |            |              |             |      |            |            |      |      | 40         |
| 45         | 56.8 |              |             |       | 57.8       |           |      |       | 57.8 |              |           |      | 57.2 |              |      |      |            |              |             |      |            |            |      |      | 45         |
| 50         | 53.6 |              |             |       | 54.8       |           |      |       | 55   |              |           |      | 55.1 |              |      |      | 53         |              |             |      |            |            |      |      | 50         |
| 55         |      | 32.6         |             |       | 52.1       |           |      |       | 52.5 |              |           |      | 52.7 |              |      |      | 51.6       |              |             |      | 50.2       |            |      |      | 55         |
| 60         |      | 31.4         |             |       | 49.7       |           |      |       |      | 32.1         |           |      | 50.5 | 04.4         |      |      | 49.7       |              |             |      | 48.6       |            |      |      | 60         |
| 65         |      | 30.3         | 00.1        |       |            | 30.9      |      |       | 48   | 31.1         |           |      |      | 31.4<br>30.5 |      |      | 47.8<br>46 | 20.0         |             |      | 47<br>45.5 |            |      |      | 65<br>70   |
| 70<br>75   |      | 29.3<br>28.3 |             |       | 43.4       | 29.9      | 21.8 |       | 46   | 29.3         | 21.0      |      |      | 29.6         |      |      | 44.4       | 30.9         |             |      | 45.5       | 30         |      |      | 75         |
| 80         |      |              | 21.0        | 1/1 2 |            | 28.1      |      | 1/1 2 |      | 28.5         |           |      |      | 28.8         | 21 5 |      |            | 29.4         |             |      | 42.6       | 29.3       |      |      | 80         |
| 85         |      |              | 20.6        |       |            | 27.3      |      |       |      | 27.7         |           | 14   |      | 28.1         |      |      |            | 28.6         | 21 7        |      | 41.4       | 28.6       |      |      | 85         |
| 90         |      |              | 20.2        |       |            | 26.5      |      |       |      | 26.9         |           |      |      | 27.4         |      | 13.9 | 40.2       |              | 21.4        |      | 40.2       |            | 21.3 |      | 90         |
| 95         |      |              | 19.7        |       |            | 25.8      |      | 13.8  | 38   |              | 20.2      |      | -    | 26.7         |      |      | -          | 27.3         |             | 14.4 | 39         | 27.4       |      |      | 95         |
| 100        |      |              | 19.4        |       |            | 25.1      |      |       | 36.7 | 25.6         | 19.8      | 13.7 | 37.5 | 26.1         | 20   | 13.7 |            | 26.7         |             |      | 38         | 26.8       | 20.8 | 14.2 | 100        |
| 105        | 32   | 23.8         | 19          |       | 34         | 24.5      | 19.3 | 13.6  | 35.4 | 25           | 19.5      | 13.6 | 36.4 | 25.5         | 19.7 | 13.6 | 36.6       | 26.1         | 20.5        | 14.2 | 36.9       | 26.3       | 20.5 | 14.2 | 105        |
| 110        | 30.6 | 23.2         | 18.7        |       | 32.7       | 23.9      | 19   |       | 34.2 | 24.4         | 19.2      | 13.5 | 35.2 | 24.9         | 19.4 | 13.5 | 35.5       | 25.6         | 20.2        | 14.1 | 35.6       | 25.7       | 20.2 | 14.1 | 110        |
| 115        |      | 22.6         |             |       | -          | 23.3      |      |       | 33   |              | 18.9      |      |      | 24.3         |      | 13.4 | 34         |              | 19.9        |      |            | 25.2       |      | 14   | 115        |
| 120        |      | 22.1         |             |       |            | 22.8      |      |       |      | 23.3         |           |      |      | 23.8         |      |      | 33         |              | 19.7        | 14   |            | 24.8       |      |      | 120        |
| 125        |      | 21.6         |             |       |            | 22.3      |      |       |      | 22.8         |           |      |      | 23.3         |      |      | -          | 24.1         |             |      |            | 24.3       |      |      | 125        |
| 130        |      | 21.1         |             |       |            | 21.8      |      |       |      | 22.4         |           |      |      | 22.8         |      |      |            | 23.6         |             |      |            | 23.9       |      |      | 130        |
| 135        |      | 20.6         |             |       |            | 21.4      |      |       |      | 21.9         |           |      |      | 22.4         |      |      | 27         | 23.2         |             |      |            | 23.5       |      | 13.8 | 135        |
| 140<br>145 | 24.6 | 20.2         | 17.3        |       |            | 20.9      |      |       |      | 21.5<br>21.1 |           |      | 26.9 | 21.6         | 17.9 |      |            | 22.8<br>22.4 |             |      |            | 23.1 22.7  |      |      | 140<br>145 |
| 150        | 23   | 19.7         | 17.1        |       | 23         |           | 17.3 |       |      | 20.7         |           |      |      | 21.0         |      |      | 21.7       |              | 18.4        |      | 20         | 22.7       |      |      | 150        |
| 155        | 21.7 |              |             |       |            | 19.7      |      |       | -    | 20.2         |           |      |      | 20.7         |      |      |            | 21.7         |             |      | -          | 21.2       |      |      | 155        |
| 160        |      | 18.6         |             |       |            | 19.3      |      |       |      | 19.8         |           |      |      | 20.3         |      |      |            | 21.3         |             |      |            | 19.6       |      |      | 160        |
| 165        |      | 18.4         |             |       |            | 18.7      |      |       |      | 19.4         |           |      |      | 19.9         |      |      |            | 19.9         |             |      |            | 18.2       |      |      | 165        |
| 170        | 17.1 | 17.9         |             |       | 16.4       | 18        |      |       | 18.9 | 19.1         |           |      | 17.3 | 19.2         | 17   |      | 15.8       | 18.5         | 17.8        |      | 14.3       | 16.7       | 17.9 |      | 170        |
| 175        | 15.6 | 17           |             |       | 14.9       | 16.8      |      |       | 17.5 | 18.5         |           |      | 16   | 18           | 16.9 |      | 14.5       | 17.1         | 17.7        |      | 13         | 15.4       | 16.9 |      | 175        |
| 180        | 14.3 |              |             |       | 13.5       | 15.2      |      |       | 16.1 | 17.5         |           |      | 14.8 | 16.7         |      |      | 13.3       | 15.8         | 17          |      | 11.8       | 14.1       | 15.8 |      | 180        |
| 185        | 13   |              |             |       |            | 13.8      |      |       |      | 16.4         |           |      |      | 15.4         |      |      |            | 14.5         |             |      |            | 12.8       |      |      | 185        |
| 190        | 11.7 |              |             |       |            | 12.4      |      |       |      | 15.1         |           |      |      | 14.2         |      |      |            | 13.3         |             |      | 9.6        | 11.7       |      |      | 190        |
| 195        | 9.6  |              |             |       | 9.9        |           |      |       |      | 13.8         |           |      |      | 12.9         |      |      | 10         | 12.2         | 13.4        |      | 8.6        | 10.5       |      |      | 195        |
| 200        |      |              |             |       | 8.8        |           |      |       |      | 12.6         |           |      |      | 11.7         |      |      |            | 11.1         |             |      | 7.7        |            | 10.7 |      | 200        |
| 205<br>210 |      |              |             |       | 7.8<br>6.5 |           |      |       | 9.3  | 11.4<br>7.8  |           |      | 8.3  | 10.6<br>9.5  |      |      | 8.2<br>7.2 | 9            |             |      | 6.7<br>5.8 | 8.5<br>7.5 | 9.6  |      | 205<br>210 |
| 210        |      |              |             |       | 0.5        |           |      |       | 8.4  | 7.6          |           |      | 7.4  | 9.5          |      |      | 6.4        | 8.1          |             |      | 4.9        | 6.6        |      |      | 210        |
| 220        |      |              |             |       |            |           |      |       | 7.6  |              |           |      | 6.6  | 7.6          |      |      | 5.5        | 7.1          |             |      | 4.9        | 5.6        |      |      | 220        |
| 225        |      |              |             |       |            |           |      |       | 6.7  |              |           |      | 5.7  | 6.7          |      |      | 4.6        | 6.2          |             |      | 3.1        | 4.7        |      |      | 225        |
| 230        |      |              |             |       |            |           |      |       | 3.6  |              |           |      | 4.8  | 5.,          |      |      | 3.7        | 5.2          |             |      | 5.1        | 3.8        |      |      | 230        |
| 235        |      |              |             |       |            |           |      |       |      |              |           |      | 3.9  |              |      |      | 2.7        | 4.3          |             |      |            | 2.8        |      |      | 235        |
| 240        |      |              |             |       |            |           |      |       |      |              |           |      | 3    |              |      |      |            | 3.2          |             |      |            |            |      |      | 240        |

\* adapter · pièce d'adaptateur

t\_180\_61305\_00\_000 / 61325\_00\_000 / 61345\_00\_000 / 61365\_00\_000 / 61365\_00\_000

|             | 132- | 215 ft<br>T | <b>6</b> - |     | Ą    | 11.5  | T<br>V E |     |      | A    | 79 ft<br><b>►</b> F | ŗF  | ٦Ţ   | Ç    | 360   |     | 08600 |       | <b>85</b> % | 6   |      |       |       |     |          |
|-------------|------|-------------|------------|-----|------|-------|----------|-----|------|------|---------------------|-----|------|------|-------|-----|-------|-------|-------------|-----|------|-------|-------|-----|----------|
| <u> </u>    | 1    | 32 +        | 20 ft      | *   | 1    | 149 + | 20 ft    | *   |      | 65 + | 20 ft               | *   |      | 82 + | 20 ft | *   | 1     | 198 + | 20 ft       | *   | 2    | 215 + | 20 ft | *   |          |
|             |      |             | ft         |     |      | 79    | ft       |     |      | 79   | ) ft                |     |      | 79   | ft    |     |       | 79    | ft          |     |      | 79    | ) ft  |     |          |
| <b>↔</b> ft | 0°   | 20°         | 40°        | 60° | 0°   | 20°   | 40°      | 60° | 0°   | 20°  | 40°                 | 60° | 0°   | 20°  | 40°   | 60° | 0°    | 20°   | 40°         | 60° | 0°   | 20°   | 40°   | 60° | <b>→</b> |
| 40          | 47.4 |             |            |     |      |       |          |     |      |      |                     |     |      |      |       |     |       |       |             |     |      |       |       |     | 40       |
| 45          | 44.9 |             |            |     | 45.3 |       |          |     | 44.6 |      |                     |     |      |      |       |     |       |       |             |     |      |       |       |     | 45       |
| 50          | 42.5 |             |            |     | 43.1 |       |          |     | 43   |      |                     |     | 42.5 |      |       |     |       |       |             |     |      |       |       |     | 50       |
| 55          | 40.4 |             |            |     | 41   |       |          |     | 41.1 |      |                     |     | 41   |      |       |     | 40.2  |       |             |     |      |       |       |     | 55       |
| 60          | 38.4 |             |            |     | 39.1 |       |          |     | 39.3 |      |                     |     | 39.4 |      |       |     | 38.6  |       |             |     | 36.7 |       |       |     | 60       |
|             | 36.5 | 0.4         |            |     |      |       |          |     |      |      |                     |     |      |      |       |     |       |       |             |     |      |       |       |     | 1        |
| 65          |      |             |            |     | 37.4 | 00.5  |          |     | 37.6 |      |                     |     | 37.8 |      |       |     | 37.2  |       |             |     | 35.8 |       |       |     | 65       |
| 70          | 34.8 |             |            |     |      | 23.5  |          |     | 36.1 |      |                     |     | 36.4 |      |       |     | 35.8  |       |             |     | 34.5 |       |       |     | 70       |
| 75          | 33.3 |             |            |     |      | 22.6  |          |     | 34.6 |      |                     |     | 35   | 22.9 |       |     | 34.5  |       |             |     | 33.4 |       |       |     | 75       |
| 80          | 31.8 |             |            |     |      | 21.9  |          |     | 33.2 |      |                     |     |      | 22.4 |       |     |       | 22.2  |             |     | 32.3 |       |       |     | 80       |
| 85          |      | 20.8        |            |     | 31.4 |       |          |     |      | 21.4 |                     |     | 32.4 |      |       |     |       | 21.7  |             |     | 31.3 |       |       |     | 85       |
| 90          | 29.1 | 20.1        | 14.5       |     | 30.1 | 20.5  |          |     | 30.8 |      |                     |     | 31.3 |      |       |     | 31.1  |       |             |     | 30.4 |       |       |     | 90       |
| 95          | 27.8 | 19.4        | 14.1       |     | 29   | 19.9  |          |     | 29.6 | 20.2 | 14.3                |     |      | 20.5 | 14.4  |     |       | 20.6  |             |     | 29.5 | 20.3  |       |     | 95       |
| 100         | 26.6 | 18.8        | 13.8       | 8.9 | 28   | 19.3  | 14       | 8.9 | 28.6 | 19.6 | 14                  |     | 29.2 | 20   | 14.1  |     | 29.3  |       | 14.1        |     | 28.6 | 19.8  |       |     | 100      |
| 105         | 25.5 | 18.1        | 13.5       | 8.8 | 26.9 | 18.7  | 13.7     | 8.8 | 27.6 | 19.1 | 13.8                | 8.8 | 28.2 | 19.4 | 13.9  |     | 28.4  | 19.5  | 13.8        |     | 27.8 | 19.3  | 13.7  |     | 105      |
| 110         | 24.5 | 17.6        | 13.2       | 8.7 | 25.9 | 18.1  | 13.4     | 8.7 | 26.7 | 18.5 | 13.5                | 8.7 | 27.3 | 18.9 | 13.6  | 8.7 | 27.5  | 19    | 13.6        | 8.6 | 27.1 | 18.8  | 13.5  |     | 110      |
| 115         | 23.4 | 17          | 12.9       | 8.6 | 24.9 | 17.6  | 13.1     | 8.6 | 25.8 | 18   | 13.2                | 8.6 | 26.5 | 18.4 | 13.3  | 8.6 | 26.7  | 18.5  | 13.4        | 8.6 | 26.3 | 18.4  | 13.2  | 8.5 | 115      |
| 120         | 22.4 | 16.5        | 12.7       | 8.5 |      |       | 12.9     |     |      | 17.5 |                     | 8.5 |      | 17.9 |       |     | 25.9  | 18    | 13.2        | 8.5 | 25.6 | 17.9  | 13    | 8.4 | 120      |
| 125         | 21.6 |             | 12.4       |     | 23   |       | 12.6     |     | 24.1 |      | 12.8                |     |      | 17.4 |       |     |       |       | 12.9        |     |      |       | 12.9  |     | 125      |
| 130         |      | 15.5        |            |     |      | 16.1  |          |     |      |      | 12.6                |     | 24.1 |      | 12.7  |     |       |       | 12.7        |     |      |       | 12.7  |     | 130      |
| 135         |      | 15.1        |            |     |      | 15.7  |          |     |      | 16.1 |                     | 0.1 |      | 16.5 |       |     |       |       | 12.5        |     |      |       | 12.5  |     | 135      |
| 140         |      | 14.7        |            |     |      | 15.3  |          |     |      | 15.7 |                     |     |      | 16.1 |       | 0.1 |       |       | 12.3        |     |      |       | 12.3  |     | 140      |
| 145         |      | 14.3        |            |     | l .  | 14.9  |          |     |      | 15.3 |                     |     |      | 15.7 |       |     | 22.4  |       | 12.2        | 0.0 | 22.4 |       | 12.2  |     | 145      |
| 150         |      | 14.0        |            |     |      | 14.5  |          |     |      | 14.9 |                     |     |      | 15.4 |       |     |       | 15.6  |             |     | 21.8 |       |       | 8.2 | 150      |
| 155         |      | 13.6        |            |     |      | 14.2  |          |     |      | 14.6 |                     |     | 20.6 |      | 11.8  |     |       | 15.3  |             |     | l l  |       | 11.9  |     | 155      |
| 160         |      | 13.3        |            |     |      | 13.8  |          |     |      | 14.3 |                     |     |      | 14.7 |       |     | 20.6  |       | 11.7        |     | 20.8 |       |       | 0.2 | 160      |
| 165         | 15.8 |             | 11.1       |     |      | 13.5  |          |     | 18.3 |      | 11.4                |     |      | 14.4 |       |     | 20.0  | 14.6  |             |     | 20.2 |       |       |     | 165      |
| 170         | 15.3 |             | 11.1       |     |      | 13.3  |          |     |      | 13.7 |                     |     |      |      |       |     |       | 14.3  |             |     |      |       |       |     |          |
|             |      |             |            |     |      |       |          |     |      |      |                     |     |      | 14.1 |       |     |       |       |             |     |      | 14.5  |       |     | 170      |
| 175         | 14.7 |             |            |     | 1    |       | 11.1     |     |      | 13.4 |                     |     |      | 13.8 |       |     |       | 14.1  |             |     |      | 14.2  |       |     | 175      |
| 180         |      | 12.2        |            |     |      | 12.7  |          |     |      | 13.1 |                     |     |      | 13.5 |       |     |       | 13.8  |             |     |      | 13.9  |       |     | 180      |
| 185         | 13.7 |             |            |     |      | 12.5  |          |     | 16   | 12.9 | 11                  |     | 17   | 13.3 |       |     |       | 13.6  |             |     |      | 13.7  |       |     | 185      |
| 190         | 13.2 |             |            |     |      | 12.3  |          |     | 15.5 |      |                     |     | 16.4 |      | 11    |     |       | 13.3  |             |     |      | 13.5  |       |     | 190      |
| 195         | 12.8 | 11.7        |            |     |      | 12.1  |          |     |      | 12.5 |                     |     |      | 12.8 | 10.9  |     |       | 13.1  |             |     |      | 13.2  |       |     | 195      |
| 200         | 12.4 |             |            |     |      | 11.9  |          |     |      | 12.2 |                     |     |      | 12.6 |       |     |       | 12.9  |             |     | 14.2 |       | 10.9  |     | 200      |
| 205         | 12   |             |            |     | 13.1 |       |          |     | 14.1 |      |                     |     | 15   | 12.4 |       |     |       | 12.6  |             |     |      | 12.8  |       |     | 205      |
| 210         | 9.8  |             |            |     |      | 11.6  |          |     | 13.6 |      |                     |     |      | 12.2 |       |     |       | 12.4  | 10.8        |     |      | 12.6  |       |     | 210      |
| 215         | 6.7  |             |            |     | 11.2 |       |          |     | 13.3 |      |                     |     | 13.8 |      |       |     |       | 12.2  |             |     |      | 12.4  |       |     | 215      |
| 220         |      |             |            |     | 9    |       |          |     | 12.9 |      |                     |     | 12.9 |      |       |     | 12.1  |       |             |     |      | 12.1  |       |     | 220      |
| 225         |      |             |            |     | 6.7  |       |          |     |      | 11.5 |                     |     | 12   | 11.7 |       |     |       | 11.9  |             |     |      | 11.5  |       |     | 225      |
| 230         |      |             |            |     | 3.9  |       |          |     |      | 9.6  |                     |     |      | 11.6 |       |     |       | 11.3  |             |     |      | 10.6  |       |     | 230      |
| 235         |      |             |            |     |      |       |          |     | 8.6  |      |                     |     | 9.9  | 11.4 |       |     | 9.2   | 10.7  |             |     | 7.8  | 9.7   |       |     | 235      |
| 240         |      |             |            |     |      |       |          |     | 6.7  |      |                     |     | 8.5  | 10.5 |       |     | 8.3   | 9.9   |             |     | 6.9  | 8.7   |       |     | 240      |
| 245         |      |             |            |     |      |       |          |     | 4.3  |      |                     |     | 6.9  | 9.3  |       |     | 7.4   | 9     |             |     | 6.1  | 7.8   |       |     | 245      |
| 250         |      |             |            |     |      |       |          |     |      |      |                     |     | 5.3  |      |       |     | 6.3   | 8.1   |             |     | 5.3  | 6.9   |       |     | 250      |
| 255         |      |             |            |     |      |       |          |     |      |      |                     |     | 3.4  |      |       |     | 5     | 7.1   |             |     | 4.4  | 6.1   |       |     | 255      |
| 260         |      |             |            |     |      |       |          |     |      |      |                     |     |      |      |       |     | 3.6   | 5.9   |             |     | 3.4  | 5.2   |       |     | 260      |
| 265         |      |             |            |     |      |       |          |     |      |      |                     |     |      |      |       |     |       |       |             |     |      | 4.3   |       |     | 265      |
| 270         |      |             |            |     |      |       |          |     |      |      |                     |     |      |      |       |     |       |       |             |     |      | 3.3   |       |     | 270      |



t\_180\_61501\_00\_000 / 61521\_00\_000 / 61541\_00\_000 / 61561\_00\_000

|            | 132- | 215ft<br><b>%</b><br>T | e Y        |     | Ą         | 11.5       | ft<br>V_E  |     |           |            | 98 ft<br>• | ŗF  | ٦Ţ   | Ç        | 360   | 3(  | 08600 |              | 85%   | 6   |      |            |       |            |             |
|------------|------|------------------------|------------|-----|-----------|------------|------------|-----|-----------|------------|------------|-----|------|----------|-------|-----|-------|--------------|-------|-----|------|------------|-------|------------|-------------|
| <u> </u>   | 1    | 32 +                   | 20 ft      | *   | 1         | 49 +       | 20 ft      | *   | 1         | 65 +       | 20 ft      | *   | 1    | 82 +     | 20 ft | *   | 1     | 98 +         | 20 ft | *   | 2    | 215 +      | 20 ft | *          |             |
|            |      |                        | ft         |     |           | 98         |            |     |           | 98         |            |     |      | 98       |       |     |       | 98           |       |     |      | 98         |       |            |             |
| ← ft       | 0°   | 20°                    | 40°        | 60° | 0°        | 20°        | 40°        | 60° | 0°        | 20°        | 40°        | 60° | 0°   | 20°      | 40°   | 60° | 0°    | 20°          | 40°   | 60° | 0°   | 20°        | 40°   | 60°        | <b>↔</b> ft |
| 45         | 35   |                        |            |     | 34.9      |            |            |     |           |            |            |     |      |          |       |     |       |              |       |     |      |            |       |            | 45          |
| 50         | 33.2 |                        |            |     | 33.2      |            |            |     | 32.7      |            |            |     |      |          |       |     |       |              |       |     |      |            |       |            | 50          |
| 55         | 31.5 |                        |            |     | 31.6      |            |            |     | 31.5      |            |            |     | 31.3 |          |       |     |       |              |       |     |      |            |       |            | 55          |
| 60         | 29.9 |                        |            |     | 30.1      |            |            |     | 30.1      |            |            |     | 30.1 |          |       |     | 29.5  |              |       |     |      |            |       |            | 60          |
| 65         | 28.6 |                        |            |     | 28.8      |            |            |     | 28.8      |            |            |     | 28.9 |          |       |     | 28.4  |              |       |     | 26.9 |            |       |            | 65          |
| 70         | 27.2 |                        |            |     | 27.6      |            |            |     | 27.6      |            |            |     | 27.7 |          |       |     | 27.4  |              |       |     | 26.4 |            |       |            | 70          |
| 75         | 26   | 17.6                   |            |     | 26.4      |            |            |     | 26.6      |            |            |     | 26.7 |          |       |     | 26.4  |              |       |     | 25.5 |            |       |            | 75          |
| 80         | 25   | 16.9                   |            |     | 25.3      |            |            |     | 25.6      | 40.5       |            |     | 25.8 |          |       |     | 25.4  |              |       |     | 24.7 |            |       |            | 80          |
| 85         | 23.9 |                        |            |     | 24.4      |            |            |     | 24.6      |            |            |     | 24.8 | 101      |       |     | 24.6  |              |       |     | 23.9 |            |       |            | 85          |
| 90<br>95   | 22.9 | 14.9                   |            |     | 23.4 22.5 |            |            |     | 23.7 22.9 |            |            |     | 23.9 |          |       |     | 23.8  | 155          |       |     | 23.2 |            |       |            | 90<br>95    |
| 100        |      | 14.9                   | 10         |     |           | 14.6       |            |     | 22.9      |            |            |     | 22.4 |          |       |     | 22.3  | 15.5         |       |     | 21.8 | 1/1 8      |       |            | 100         |
| 105        | 20.2 |                        | 9.7        |     |           | 14.1       | 0.8        |     | 21.3      |            |            |     | 21.7 |          |       |     | 21.6  |              |       |     | 21.2 |            |       |            | 105         |
| 110        |      | 13.3                   | 9.5        |     |           | 13.6       |            |     |           | 13.9       | 9.5        |     |      | 14.1     | 9.6   |     | 21    | 14.1         |       |     | 20.6 |            |       |            | 110         |
| 115        |      | 12.9                   |            | 5.8 |           | 13.2       |            |     |           | 13.4       |            |     |      | 13.7     |       |     |       | 13.7         | 9.3   |     |      | 13.6       |       |            | 115         |
| 120        | 17.8 |                        | 9          | 5.7 |           | 12.8       |            | 5.7 | 19.2      |            | 9.1        |     |      | 13.3     |       |     |       | 13.3         |       |     |      | 13.2       | 9     |            | 120         |
| 125        | 17   | 12                     | 8.7        | 5.7 | 18        | 12.3       | 8.9        | 5.7 | 18.5      | 12.6       | 8.9        | 5.6 | 19   | 12.9     | 9     | 5.6 | 19.1  | 13           | 8.9   |     | 18.9 | 12.9       | 8.8   |            | 125         |
| 130        | 16.3 | 11.6                   | 8.6        | 5.6 | 17.2      | 12         | 8.7        | 5.6 | 17.9      | 12.2       | 8.7        | 5.6 | 18.3 | 12.5     | 8.8   | 5.6 | 18.5  | 12.6         | 8.8   | 5.5 | 18.3 | 12.5       | 8.7   |            | 130         |
| 135        | 15.6 | 11.2                   | 8.4        | 5.6 | 16.5      | 11.6       | 8.5        | 5.6 | 17.3      | 11.9       | 8.5        | 5.5 | 17.8 | 12.2     | 8.6   | 5.5 | 18    | 12.3         | 8.6   | 5.5 | 17.8 | 12.2       | 8.5   | 5.4        | 135         |
| 140        |      | 10.9                   | 8.2        | 5.5 |           | 11.2       |            | 5.5 |           | 11.6       |            | 5.5 |      | 11.8     |       | 5.5 | 17.4  |              | 8.5   | 5.4 |      | 11.9       |       | 5.4        | 140         |
| 145        |      | 10.6                   | 8          |     |           | 10.9       |            | 5.5 |           | 11.2       |            | 5.4 |      | 11.5     |       | 5.4 |       | 11.7         |       | 5.4 |      | 11.6       |       | 5.3        | 145         |
| 150        |      | 10.3                   | 7.9        |     |           | 10.6       |            |     |           | 10.9       |            | 5.4 |      | 11.2     |       | 5.4 |       | 11.4         |       | 5.4 |      | 11.3       |       | 5.3        | 150         |
| 155        | 13.2 |                        | 7.7        |     |           | 10.3       |            |     |           | 10.6       |            |     |      |          | 8     | 5.4 |       | 11.1         |       | 5.3 |      | 11.1       |       | 5.3        | 155         |
| 160<br>165 | 12.6 | 9.7<br>9.4             | 7.6<br>7.5 |     | 13.5      | 10.1       | 7.7<br>7.6 |     |           | 10.3       |            |     |      | 10.6     |       |     |       | 10.8<br>10.5 |       | 5.3 |      | 10.8       |       | 5.3<br>5.3 | 160<br>165  |
| 170        | 11.6 | 9.4                    | 7.3        |     | 12.6      | 9.5        |            |     | 13.3      | 10.1       |            |     |      | 10.4     |       |     |       | 10.3         |       |     |      | 10.0       |       | 5.2        | 170         |
| 175        | 11.1 | 8.9                    | 7.4        |     | 12.1      |            | 7.4        |     | 12.9      | 9.6        |            |     | 13.6 | 9.9      |       |     | 14.1  |              | 7.6   |     |      | 10.3       |       | 5.2        | 175         |
| 180        | 10.7 | 8.7                    | 7.3        |     | 11.7      |            | 7.4        |     | 12.4      | 9.4        |            |     | 13.2 | 9.6      |       |     | 13.7  |              | 7.6   |     | 13.9 | 9.9        |       | 0.2        | 180         |
| 185        | 10.3 | 8.5                    | 7.2        |     | 11.2      |            | 7.3        |     | 12        |            | 7.4        |     | 12.7 | 9.4      |       |     | 13.3  |              | 7.5   |     | 13.5 | 9.7        |       |            | 185         |
| 190        | 9.9  | 8.3                    |            |     | 10.8      |            | 7.3        |     | 11.6      | 8.9        |            |     | 12.3 | 9.2      |       |     | 12.8  |              | 7.4   |     | 13.1 | 9.5        | 7.4   |            | 190         |
| 195        | 9.6  | 8.1                    |            |     | 10.4      | 8.5        | 7.2        |     | 11.2      | 8.7        | 7.2        |     | 12   | 9        | 7.3   |     | 12.4  | 9.2          | 7.3   |     | 12.8 | 9.3        | 7.3   |            | 195         |
| 200        | 9.2  | 8                      |            |     | 10.1      | 8.3        |            |     | 10.8      | 8.6        | 7.2        |     | 11.6 | 8.8      | 7.2   |     | 12.1  | 9            | 7.2   |     | 12.4 | 9.1        | 7.3   |            | 200         |
| 205        | 8.9  | 7.9                    |            |     | 9.7       | 8.1        |            |     | 10.5      | 8.4        | 7.1        |     | 11.2 | 8.6      |       |     | 11.7  |              | 7.2   |     | 12   |            | 7.2   |            | 205         |
| 210        | 8.6  | 7.7                    |            |     | 9.4       | 8          |            |     | 10.1      | 8.2        |            |     | 10.8 | 8.5      |       |     | 11.4  | 8.7          |       |     | 11.7 | 8.8        |       |            | 210         |
| 215        | 8.3  | 7.6                    |            |     | 9.1       | 7.8        |            |     | 9.8       | 8.1        |            |     | 10.5 | 8.3      | 7.1   |     | 10.9  |              | 7.1   |     | 11.2 |            | 7.1   |            | 215         |
| 220        | 8    |                        |            |     | 8.8       | 7.7        |            |     | 9.5       | 7.9        |            |     | 10.2 | 8.2      |       |     | 10.6  | 8.3          |       |     | 10.6 | 8.4        |       |            | 220         |
| 225<br>230 | 7.7  |                        |            |     | 8.5       | 7.6<br>7.5 |            |     | 9.2       | 7.8<br>7.7 |            |     | 9.8  | 8<br>7.9 |       |     | 10.3  | 8.2<br>8.1   |       |     | 9.8  | 8.3<br>8.2 |       |            | 225<br>230  |
| 235        | 4.2  |                        |            |     | 7.5       | 7.5        |            |     |           | 7.6        |            |     |      | 7.8      |       |     |       | 7.9          | 1     |     | 8.2  | 8          |       |            | 235         |
| 240        | 7.2  |                        |            |     | 6.3       |            |            |     | 8.3       |            |            |     | 8.9  | 7.7      |       |     | 9.1   | 7.8          |       |     | 7.4  | 7.9        |       |            | 240         |
| 245        |      |                        |            |     | 4.2       |            |            |     | 8.1       |            |            |     |      | 7.6      |       |     | 8.3   | 7.7          |       |     | 6.7  | 7.7        |       |            | 245         |
| 250        |      |                        |            |     |           |            |            |     |           | 7.2        |            |     |      | 7.5      |       |     | 7.5   | 7.6          |       |     | 5.9  | 7.4        |       |            | 250         |
| 255        |      |                        |            |     |           |            |            |     | 6.2       |            |            |     | 7.1  | 7.4      |       |     | 6.6   | 7.5          |       |     | 5.2  | 7.1        |       |            | 255         |
| 260        |      |                        |            |     |           |            |            |     | 4.2       |            |            |     | 5.8  | 7.4      |       |     | 5.8   | 7.1          |       |     | 4.5  | 6.5        |       |            | 260         |
| 265        |      |                        |            |     |           |            |            |     |           |            |            |     | 4.4  | 6.9      |       |     | 4.8   | 6.7          |       |     | 3.8  | 5.7        |       |            | 265         |
| 270        |      |                        |            |     |           |            |            |     |           |            |            |     |      |          |       |     | 3.7   |              |       |     | 2.9  | 4.9        |       |            | 270         |
| 275        |      |                        |            |     |           |            |            |     |           |            |            |     |      |          |       |     |       | 5            |       |     |      | 4.2        |       |            | 275         |
| 280        |      |                        |            |     |           |            |            |     |           |            |            |     |      |          |       |     |       | 3.9          |       |     |      | 3.4        |       |            | 280         |

|             | 132-    | 215ft<br><b>%</b><br>T | Y          |     | Ą            | 11.5 | ft<br>V_E |     |              |              | 98 ft<br>• | ŗF  | <b>-</b> ]   | Ç          | 360   | 2:  | 20500 |              | 85%   | 6          |              |              |       |            |             |
|-------------|---------|------------------------|------------|-----|--------------|------|-----------|-----|--------------|--------------|------------|-----|--------------|------------|-------|-----|-------|--------------|-------|------------|--------------|--------------|-------|------------|-------------|
| <u> </u>    | 1       | 32 +                   | 20 ft      | *   | 1            | 49 + | 20 ft     | *   | 1            | 165 +        | 20 ft      | *   | 1            | 82 +       | 20 ft | *   | 1     | 198 +        | 20 ft | *          | 2            | 215 +        | 20 ft | *          | <u> </u>    |
|             |         | 98                     |            |     |              | 98   |           |     |              | 98           |            |     |              | 98         |       |     |       | 98           |       |            |              | 98           |       |            |             |
| <b>↔</b> ft | 0°      | 20°                    | 40°        | 60° | 0°           | 20°  | 40°       | 60° | 0°           | 20°          | 40°        | 60° | 0°           | 20°        | 40°   | 60° | 0°    | 20°          | 40°   | 60°        | 0°           | 20°          | 40°   | 60°        | <b>↔</b> ft |
| 40          | 36.9    |                        |            |     |              |      |           |     |              |              |            |     |              |            |       |     |       |              |       |            |              |              |       |            | 40          |
| 45          | 35      |                        |            |     | 34.9         |      |           |     |              |              |            |     |              |            |       |     |       |              |       |            |              |              |       |            | 45          |
| 50          | 33.2    |                        |            |     | 33.2         |      |           |     | 32.7         |              |            |     |              |            |       |     |       |              |       |            |              |              |       |            | 50          |
| 55          | 31.5    |                        |            |     | 31.6         |      |           |     | 31.5         |              |            |     | 31.3         |            |       |     |       |              |       |            |              |              |       |            | 55          |
| 60          | 29.9    |                        |            |     | 30.1         |      |           |     | 30.1         |              |            |     | 30.1         |            |       |     | 29.5  |              |       |            |              |              |       |            | 60          |
| 65          | 28.6    |                        |            |     | 28.8         |      |           |     | 28.8         |              |            |     | 28.9         |            |       |     | 28.4  |              |       |            | 26.9         |              |       |            | 65          |
| 70          | 27.2    | 17.0                   |            |     | 27.6         |      |           |     | 27.6         |              |            |     | 27.7         |            |       |     | 27.4  |              |       |            | 26.4         |              |       |            | 70          |
| 75          |         | 17.6<br>16.9           |            |     | 26.4         | 17   |           |     | 26.6<br>25.6 |              |            |     | 26.7<br>25.8 |            |       |     | 26.4  |              |       |            | 25.5<br>24.7 |              |       |            | 75<br>80    |
| 80<br>85    | 25 23.9 |                        |            |     | 25.3<br>24.4 |      |           |     | 24.6         | 16.5         |            |     | 24.8         |            |       |     | 24.6  |              |       |            | 23.9         |              |       |            | 85          |
| 90          | 22.9    |                        |            |     | 23.4         |      |           |     | 23.7         |              |            |     | 23.9         | 16.1       |       |     | 23.8  |              |       |            | 23.2         |              |       |            | 90          |
| 95          |         | 14.9                   |            |     | 22.5         |      |           |     | 22.9         |              |            |     | 23.2         |            |       |     |       | 15.5         |       |            | 22.5         |              |       |            | 95          |
| 100         |         | 14.4                   | 10         |     | 21.7         |      |           |     | 22.1         |              |            |     | 22.4         |            |       |     | 22.3  |              |       |            | 21.8         | 14.8         |       |            | 100         |
| 105         | 20.2    |                        | 9.7        |     |              | 14.1 | 9.8       |     | 21.3         |              |            |     | 21.7         |            |       |     | 21.6  |              |       |            |              | 14.4         |       |            | 105         |
| 110         | 19.4    | 13.3                   | 9.5        |     | 20.2         | 13.6 | 9.5       |     | 20.6         | 13.9         | 9.5        |     |              | 14.1       | 9.6   |     | 21    | 14.1         |       |            | 20.6         | 14           |       |            | 110         |
| 115         | 18.6    | 12.9                   | 9.2        | 5.8 | 19.4         | 13.2 | 9.3       |     | 19.9         | 13.4         | 9.3        |     | 20.3         | 13.7       | 9.4   |     |       | 13.7         | 9.3   |            | 20           | 13.6         |       |            | 115         |
| 120         | 17.8    | 12.4                   | 9          | 5.7 | 18.7         | 12.8 | 9.1       | 5.7 | 19.2         | 13           | 9.1        |     | 19.6         | 13.3       | 9.2   |     | 19.7  | 13.3         | 9.1   |            | 19.4         | 13.2         | 9     |            | 120         |
| 125         | 17      | 12                     | 8.7        | 5.7 | 18           | 12.3 | 8.9       | 5.7 | 18.5         | 12.6         | 8.9        | 5.6 | 19           | 12.9       | 9     | 5.6 | 19.1  | 13           | 8.9   |            | 18.9         | 12.9         | 8.8   |            | 125         |
| 130         | 16.3    | 11.6                   | 8.6        | 5.6 | 17.2         |      | 8.7       | 5.6 |              | 12.2         |            | 5.6 |              | 12.5       |       | 5.6 | 18.5  | 12.6         | 8.8   | 5.5        | 18.3         | 12.5         | 8.7   |            | 130         |
| 135         |         | 11.2                   |            | 5.6 |              | 11.6 |           | 5.6 |              | 11.9         |            | 5.5 |              | 12.2       |       | 5.5 |       | 12.3         |       | 5.5        |              | 12.2         |       | 5.4        | 135         |
| 140         |         | 10.9                   |            | 5.5 |              | 11.2 |           | 5.5 |              | 11.6         |            | 5.5 |              | 11.8       |       | 5.5 | 17.4  |              | 8.5   | 5.4        |              | 11.9         |       | 5.4        | 140         |
| 145         | 14.3    |                        | 8          |     |              | 10.9 |           | 5.5 |              | 11.2         |            | 5.4 |              | 11.5       |       | 5.4 |       | 11.7         |       | 5.4        |              | 11.6         |       | 5.3        | 145         |
| 150         | 13.7    |                        | 7.9        |     |              | 10.6 |           |     |              | 10.9         |            | 5.4 |              | 11.2       |       | 5.4 |       | 11.4         |       | 5.4        | 1            | 11.3         |       | 5.3        | 150         |
| 155<br>160  | 13.2    | 9.7                    | 7.7<br>7.6 |     |              | 10.3 |           |     |              | 10.6<br>10.3 |            |     |              | 10.9       |       | 5.4 |       | 11.1<br>10.8 |       | 5.3<br>5.3 |              | 11.1         |       | 5.3<br>5.3 | 155<br>160  |
| 165         | 12.0    | 9.4                    | 7.5        |     | 13.5         | 9.8  | 7.6       |     |              | 10.3         |            |     |              | 10.6       |       |     | 15.5  | 10.6         |       | 5.5        | 15.4         | 10.8<br>10.6 |       | 5.3        | 165         |
| 170         | 11.6    | 9.2                    | 7.4        |     | 12.6         | 9.5  | 7.5       |     | 13.3         | 9.8          |            |     |              | 10.4       |       |     |       | 10.3         |       |            |              | 10.3         |       | 5.2        | 170         |
| 175         | 11.1    | 8.9                    | 7.4        |     | 12.1         | 9.3  |           |     | 12.9         | 9.6          |            |     | 13.6         |            | 7.6   |     | 13.9  |              | 7.6   |            |              | 10.1         |       | 5.2        | 175         |
| 180         | 10.7    | 8.7                    | 7.3        |     | 11.7         |      | 7.4       |     | 12.4         | 9.4          |            |     | 13.1         |            | 7.5   |     | 13.5  |              | 7.6   |            | 12.1         | 9.9          |       | 0.2        | 180         |
| 185         | 10.3    | 8.5                    | 7.2        |     | 11.2         | 8.9  | 7.3       |     | 12           |              | 7.4        |     | 12.6         |            | 7.4   |     | 12.9  | 9.6          | 7.5   |            | 11.1         |              | 7.5   |            | 185         |
| 190         | 9.9     | 8.3                    |            |     | 10.8         | 8.6  | 7.3       |     | 11.5         | 8.9          | 7.3        |     | 12.1         | 9.2        | 7.4   |     | 11.9  | 9.4          | 7.4   |            | 10.1         | 9.5          | 7.4   |            | 190         |
| 195         | 9.6     | 8.1                    |            |     | 10.4         | 8.5  | 7.2       |     | 11.1         | 8.7          |            |     | 11.8         | 9          | 7.3   |     | 10.9  | 9.2          | 7.3   |            | 9.1          | 9.3          | 7.3   |            | 195         |
| 200         | 9.2     | 8                      |            |     | 10.1         | 8.3  |           |     | 10.7         | 8.6          | 7.2        |     | 11.2         |            | 7.2   |     | 10    | 9            | 7.2   |            | 8.2          | 9.1          | 7.3   |            | 200         |
| 205         | 8.9     | 7.9                    |            |     | 9.6          | 8.1  |           |     | 10.3         | 8.4          | 7.1        |     | 10.4         |            | 7.2   |     | 9.1   |              | 7.2   |            | 7.3          | 8.9          | 7.2   |            | 205         |
| 210         | 8.6     | 7.7                    |            |     | 9.1          | 8    |           |     | 10           | 8.2          |            |     | 9.6          |            | 7.1   |     | 8.2   | 8.6          | 7.1   |            | 6.4          | 8.7          |       |            | 210         |
| 215         | 8.3     | 7.6                    |            |     | 8.4          | 7.8  |           |     | 9.6          | 8.1          |            |     | 8.8          |            | 7.1   |     | 7.4   |              | 7.1   |            | 5.6          | 8.2          |       |            | 215         |
| 220         | 8       |                        |            |     | 7.6          | 7.7  |           |     | 9            | 7.9          |            |     | 8            | 8.1        |       |     | 6.6   | 8.3          |       |            | 4.8          | 7.5          |       |            | 220         |
| 225         | 7.5     |                        |            |     |              | 7.6  |           |     |              | 7.8          |            |     |              | 8          |       |     |       | 7.9          |       |            | 4            |              | 7     |            | 225         |
| 230<br>235  | 6.8     |                        |            |     | 6<br>5.1     | 7.2  |           |     |              | 7.7          |            |     |              | 7.8        |       |     | 4.4   | 7.3<br>6.6   | 7     |            |              | 5.8          | 6.5   |            | 230<br>235  |
| 235         | 4.2     |                        |            |     | 4.2          |      |           |     |              | 7.6<br>7.5   |            |     | 5.7          | 7.4<br>6.7 |       |     |       | 5.8          |       |            |              |              | 5.9   |            | 235         |
| 240         |         |                        |            |     | 3.4          |      |           |     |              | 6.9          |            |     | 4.3          |            |       |     | 2.9   |              |       |            |              | 3.4          | 5.9   |            | 240         |
| 250         |         |                        |            |     | 0.7          |      |           |     | 4.9          | 0.0          |            |     |              | 5.3        |       |     | 2.0   | 4.3          |       |            |              | 0.7          |       |            | 250         |
| 255         |         |                        |            |     |              |      |           |     | 4.2          |              |            |     |              | 4.5        |       |     |       | 3.5          |       |            |              |              |       |            | 255         |
| 260         |         |                        |            |     |              |      |           |     | 3.5          |              |            |     |              | 3.7        |       |     |       | 2.7          |       |            |              |              |       |            | 260         |
| 265         |         |                        |            |     |              |      |           |     |              |              |            |     |              | 2.8        |       |     |       |              |       |            |              |              |       |            | 265         |

265 t\_180\_61505\_00\_000 / 61525\_00\_000 / 61545\_00\_000 / 61565\_00\_000



|      | SIN'S | N <sub>T</sub> | Y   |     | Ą                      | MI,        | V E |     |      | A          | F   | Ĭ   | 7            | Ç          |     |     |      |            | 85% | 6   |      |            |     |     |     |
|------|-------|----------------|-----|-----|------------------------|------------|-----|-----|------|------------|-----|-----|--------------|------------|-----|-----|------|------------|-----|-----|------|------------|-----|-----|-----|
| A    | 1     | 32 +           |     | *   | 149 + 20 ft*<br>118 ft |            |     |     | 1    | 65 +       |     | *   | 182 + 20 ft* |            |     |     | 1    | 198 +      |     | *   | 2    | <b>A</b>   |     |     |     |
| ← ft | 0°    | 118<br>20°     |     | 60° | 0°                     | 118<br>20° |     | 60° | 0°   | 118<br>20° |     | 60° | 0°           | 118<br>20° |     | 60° | O°   | 118<br>20° |     | 60° | 0°   | 118<br>20° |     | 60° | -   |
| 45   | 28.1  | _5             | ,5  | 00  |                        |            | ,5  | 00  |      | _5         | ,0  | 00  |              | _0         | ,5  | 00  |      |            | ,5  | 00  |      |            | , 5 | 00  | 45  |
| 50   | 26.7  |                |     |     | 27.7                   |            |     |     |      |            |     |     |              |            |     |     |      |            |     |     |      |            |     |     | 50  |
| 55   | 25.3  |                |     |     | 26.4                   |            |     |     | 26   |            |     |     |              |            |     |     |      |            |     |     |      |            |     |     | 55  |
| 60   | 24.1  |                |     |     | 25.2                   |            |     |     | 25   |            |     |     | 25           |            |     |     |      |            |     |     |      |            |     |     | 60  |
| 65   | 22.9  |                |     |     | 24.1                   |            |     |     | 24   |            |     |     | 24           |            |     |     | 23.5 |            |     |     |      |            |     |     | 65  |
| 70   | 21.9  |                |     |     | 23                     |            |     |     | 23   |            |     |     | 23           |            |     |     | 22.6 |            |     |     | 21.5 |            |     |     | 70  |
| 75   | 20.9  |                |     |     | 22                     |            |     |     | 22   |            |     |     | 22.1         |            |     |     | 21.8 |            |     |     | 21   |            |     |     | 75  |
| 80   | 20    |                |     |     | 21.1                   |            |     |     | 21.2 |            |     |     | 21.3         |            |     |     | 21   |            |     |     | 20.3 |            |     |     | 80  |
| 85   | 19.1  | 12.8           |     |     | 20.2                   |            |     |     | 20.4 |            |     |     | 20.5         |            |     |     | 20.3 |            |     |     | 19.7 |            |     |     | 85  |
| 90   | 18.4  |                |     |     | 19.5                   | 13.2       |     |     | 19.6 |            |     |     | 19.8         |            |     |     | 19.6 |            |     |     | 19.1 |            |     |     | 90  |
| 95   | 17.6  |                |     |     | 18.8                   |            |     |     | 18.9 | 12.9       |     |     | 19.1         |            |     |     | 19   |            |     |     | 18.4 |            |     |     | 95  |
| 100  | 16.8  |                |     |     |                        | 12.3       |     |     | 18.2 |            |     |     | 18.5         | 12.5       |     |     | 18.3 |            |     |     | 17.9 |            |     |     | 100 |
| 105  | 16.2  |                |     |     | 17.3                   |            |     |     | 17.6 |            |     |     | 17.9         |            |     |     | 17.7 | 12.1       |     |     | 17.4 |            |     |     | 105 |
| 110  | 15.5  |                |     |     | 16.7                   |            |     |     | 16.9 |            |     |     | 17.3         |            |     |     | 17.2 |            |     |     | 16.8 | 11.6       |     |     | 110 |
| 115  | 14.9  |                | 6.8 |     | 16.1                   |            |     |     | 16.4 |            |     |     | 16.7         |            |     |     |      | 11.4       |     |     | 16.4 |            |     |     | 115 |
| 120  | 14.2  | 9.6            | 6.7 |     |                        | 10.7       | 7.3 |     | 15.8 |            |     |     | 16.2         |            |     |     | 16.2 |            |     |     | 15.9 |            |     |     | 120 |
| 125  | 13.6  | 9.2            | 6.5 |     | 15                     | 10.3       | 7.1 |     |      | 10.5       | 7 1 |     | 15.6         |            |     |     |      | 10.8       |     |     |      | 10.6       |     |     | 125 |
| 130  | 13    | 8.8            | 6.3 |     | 14.4                   |            | 7   |     |      | 10.2       | 7   |     |              |            | 7   |     | 15.2 |            |     |     | 1    | 10.3       |     |     | 130 |
| 135  | 12.4  | 8.5            | 6.2 | 3.3 | 13.9                   | 9.6        | 6.8 |     | 14.3 | 9.8        | 6.8 |     | 14.7         |            | 6.9 |     |      | 10.1       | 6.0 |     |      | 10.1       |     |     | 135 |
| 140  | 11.8  | 8.2            | 6   | 3.2 | 13.4                   | 9.3        | 6.6 | 3.8 | 13.8 | 9.5        | 6.7 |     | 14.2         |            | 6.7 |     | 14.4 | 9.8        | 6.7 |     | 14.2 | 9.8        | 6.7 |     | 140 |
| 145  | 11.3  | 7.9            | 5.9 | 3.2 | 12.8                   | 9          | 6.5 | 3.8 | 13.4 | 9.2        | 6.6 | 3.8 | 13.8         | 9.4        | 6.6 | 3.8 | 14   | 9.5        | 6.6 |     | 13.8 |            | 6.6 |     | 145 |
| 150  | 10.8  | 7.6            | 5.8 | 3.2 | 12.3                   | 8.7        | 6.4 | 3.7 | 12.9 | 8.9        | 6.4 | 3.8 | 13.4         | 9.1        | 6.5 | 3.8 | 13.6 | 9.3        | 6.5 | 3.7 | 13.5 | 9.2        |     |     | 150 |
| 155  | 10.3  | 7.4            | 5.6 | 3.2 | 11.9                   | 8.4        |     | 3.7 | 12.4 | 8.6        | 6.3 | 3.7 | 13           |            | 6.4 | 3.8 | 13.2 | 9          | 6.4 | 3.7 | 13.1 | 9          | 6.3 | 3.7 | 155 |
| 160  | 9.9   | 7.2            | 5.5 | 3.2 | 11.4                   | 8.1        | 6.1 | 3.7 | 12.4 | 8.4        | 6.2 | 3.7 | 12.5         |            | 6.2 | 3.7 | 12.8 |            | 6.3 | 3.7 | 12.8 |            | 6.2 | 3.7 | 160 |
| 165  | 9.4   | 7              | 5.4 | 0.2 | 11                     | 7.9        | 6   | 3.7 | 11.6 | 8.1        | 6.1 | 3.7 | 12.1         | 8.4        | 6.1 | 3.7 | 12.4 | 8.5        | 6.2 | 3.7 | 12.4 | 8.5        | 6.1 | 3.7 | 165 |
| 170  | 9     | 6.8            | 5.3 |     | 10.5                   | 7.6        | 5.9 | 0.7 | 11.1 | 7.9        | 6   | 3.7 | 11.7         | 8.1        | 6   | 3.7 | 12.1 |            | 6.1 | 3.7 | 12.1 | 8.3        |     | 3.7 | 170 |
| 175  | 8.6   | 6.6            | 5.2 |     | 10.1                   | 7.4        | 5.8 |     | 10.7 | 7.7        | 5.9 | 0.7 | 11.3         | 7.9        | 5.9 | 3.7 | 11.7 | 8          | 6   | 3.7 | 11.8 | 8.1        | 6   | 3.7 | 175 |
| 180  | 8.3   | 6.5            | 5.1 |     | 9.7                    | 7.2        | 5.7 |     | 10.3 | 7.5        | 5.8 |     | 11           | 7.7        | 5.9 | 0.7 | 11.3 | 7.8        | 5.9 | 3.7 | 11.5 |            | 5.9 | 3.6 | 180 |
| 185  | 7.9   | 6.3            | 5   |     | 9.4                    | 7.1        | 5.6 |     | 9.9  | 7.3        | 5.7 |     | 10.6         |            | 5.8 |     | 11   | 7.6        | 5.8 | 0.7 | 11.1 | 7.7        | 5.8 | 3.6 | 185 |
| 190  | 7.6   | 6.1            | 5   |     | 9                      | 6.9        | 5.5 |     | 9.6  | 7.1        | 5.6 |     | 10.2         | 7.3        | 5.7 |     | 10.6 | 7.5        | 5.7 |     | 10.8 | 7.5        | 5.7 | 3.6 | 190 |
| 195  | 7.3   | 6              | 4.9 |     | 8.7                    | 6.7        | 5.4 |     | 9.2  | 6.9        | 5.5 |     | 9.9          | 7.2        |     |     | 10.3 | 7.3        | 5.7 |     | 10.5 | 7.3        | 5.6 | 5.0 | 195 |
| 200  | 7.1   | 5.8            | 4.9 |     | 8.3                    | 6.6        | 5.4 |     | 8.9  | 6.8        | 5.4 |     | 9.5          | 7          | 5.5 |     | 10.0 | 7.1        | 5.6 |     | 10.2 |            | 5.6 |     | 200 |
| 205  | 6.8   | 5.7            | 4.8 |     | 8                      | 6.4        | 5.3 |     | 8.6  |            | 5.4 |     | 9.2          |            | 5.5 |     | 9.6  | 7.1        | 5.5 |     | 9.9  | 7          | 5.5 |     | 205 |
| 210  | 6.6   | 5.6            | 7.0 |     | 7.7                    | 6.3        | 5.3 |     | 8.3  |            | 5.3 |     | 8.9          | 6.7        |     |     | 9.3  | 6.8        | 5.4 |     | 9.6  |            | 5.5 |     | 210 |
| 215  | 6.4   | 5.5            |     |     | 7.5                    | 6.1        | 5.2 |     | 7.9  | 6.3        | 5.3 |     | 8.6          |            | 5.3 |     | 9    | 6.7        | 5.4 |     | 9.3  |            | 5.4 |     | 215 |
| 220  | 6.2   | 5.4            |     |     | 7.2                    | 6          | 5.2 |     | 7.7  | 6.2        | 5.2 |     | 8.3          | 6.4        | 5.3 |     | 8.7  | 6.6        | 5.3 |     | 9    | 6.7        | 5.3 |     | 220 |
| 225  | 6     | 5.3            |     |     | 7                      | 5.9        |     |     | 7.5  | 6.1        |     |     | 8            | 6.3        |     |     | 8.5  | 6.4        |     |     | 8.7  |            | 5.3 |     | 225 |
| 230  | 5.8   | 5.2            |     |     | 6.7                    | 5.8        |     |     | 7.3  | 6          | 0.2 |     | 7.7          | 6.2        |     |     | 8.2  |            | 5.2 |     | 8.5  | 6.4        |     |     | 230 |
| 235  | 5.6   | 5.2            |     |     | 6.5                    | 5.7        |     |     | 7.5  | 5.9        |     |     | 7.5          | 6.1        |     |     | 8    |            | 5.2 |     | 8.2  | 6.3        |     |     | 235 |
| 240  | 5.4   | 0.2            |     |     | 6.3                    | 5.6        |     |     | 6.8  | 5.8        |     |     | 7.3          | 5.9        | 0.2 |     | 7.6  |            | 5.1 |     | 7.7  | 6.2        |     |     | 240 |
| 245  | 5.3   |                |     |     | 6.1                    | 5.5        |     |     | 6.6  | 5.7        |     |     | 7.1          | 5.8        |     |     | 7.4  | 6          | 5.1 |     | 7.2  | 6.1        |     |     | 245 |
| 250  | 4.6   |                |     |     | 5.7                    | 5.5        |     |     | 6.4  | 5.6        |     |     | 6.9          | 5.7        |     |     | 7.4  | 5.9        |     |     | 6.7  | 6          | 5.1 |     | 250 |
| 255  | 4.0   |                |     |     | 5.1                    | 0.0        |     |     | 6.2  | 5.5        |     |     | 6.7          | 5.7        |     |     | 7    | 5.8        | 0.1 |     | 6.1  | 5.9        |     |     | 255 |
| 260  |       |                |     |     | 4                      |            |     |     | 6    | 5.4        |     |     | 6.5          | 5.6        |     |     | 6.6  | 5.7        |     |     | 5.4  | 5.8        |     |     | 260 |
| 265  |       |                |     |     | 7                      |            |     |     | 5.8  | 5.4        |     |     | 6.3          | 5.5        |     |     | 6.1  | 5.6        |     |     | 4.8  | 5.7        | 0.1 |     | 265 |
| 270  |       |                |     |     |                        |            |     |     | 5.2  | 5.3        |     |     | 5.7          | 5.4        |     |     | 5.5  | 5.5        |     |     | 4.0  | 5.6        |     |     | 270 |
| 275  |       |                |     |     |                        |            |     |     | 4.1  | 0.0        |     |     | 4.8          | 5.4        |     |     | 4.7  | 5.5        |     |     | 3.5  | 5.4        |     |     | 275 |
| 280  |       |                |     |     |                        |            |     |     | 4.1  |            |     |     | 3.7          | 5.4        |     |     | 3.9  | 5.3        |     |     | 2.8  |            |     |     | 280 |
|      |       |                |     |     |                        |            |     |     |      |            |     |     | 3.7          |            |     |     |      |            |     |     | 2.0  | 4.8        |     |     |     |
| 285  |       |                |     |     |                        |            |     |     |      |            |     |     |              | 4.9        |     |     | 2.8  | 5.1        |     |     |      | 4.1        |     |     | 285 |
| 290  |       |                |     |     |                        |            |     |     |      |            |     |     |              |            |     |     |      | 4.4        |     |     |      | 3.5        |     |     | 290 |
| 295  |       |                |     |     |                        |            |     |     |      |            |     |     |              |            |     |     |      | 3.6        |     |     |      |            |     |     | 295 |

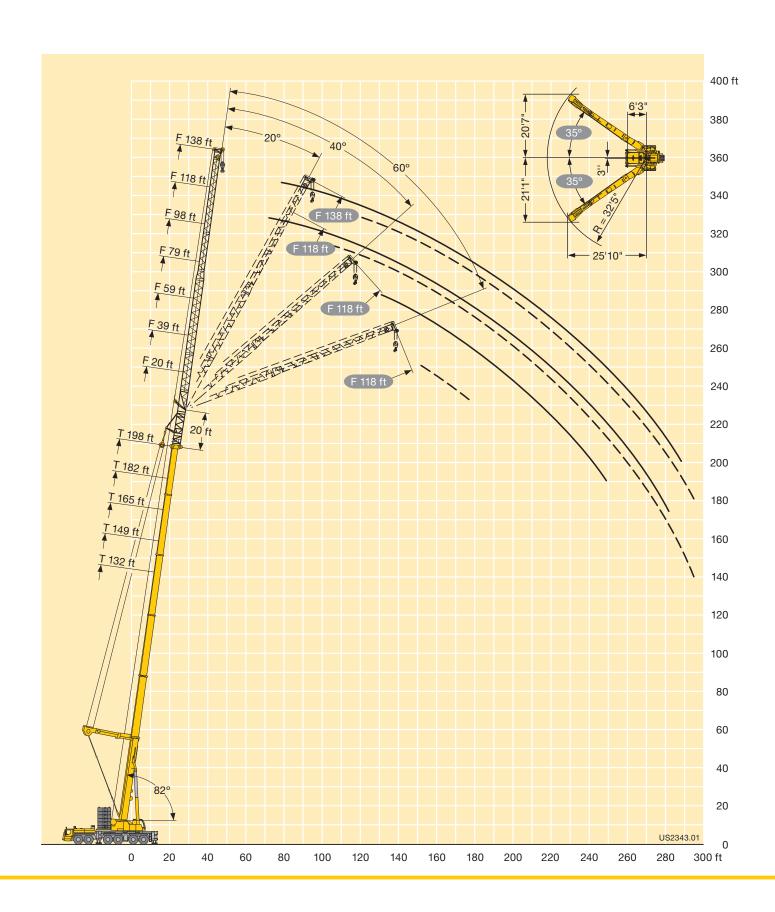
|             | 132-     | 215 ft | <b>_</b> |            | a        | 11.5 ft   118 ft   220500 lbs   85% |       |     |        |       |       |     |          |      |       |     |      |      |       |     |      |              |     |     |            |
|-------------|----------|--------|----------|------------|----------|-------------------------------------|-------|-----|--------|-------|-------|-----|----------|------|-------|-----|------|------|-------|-----|------|--------------|-----|-----|------------|
| Δ.          | 1        | T 32 + | 20 ft    | / <b>/</b> |          | 149 +                               | 20 ft | -/  |        | 165 + | 20 ft | *   | 1        | 82 + | 20 ft | *   |      | 98 + | 20 ft | *   |      |              |     |     |            |
|             | <u> </u> | 118    |          | ·          | <u> </u> | 118                                 |       |     | 118 ft |       |       |     | <u> </u> | 118  |       | ·   |      |      | 8 ft  | ·   |      | 215 +<br>118 |     |     |            |
| <b>↔</b> ft | 0°       |        | 40°      | 60°        | 0°       | 20°                                 |       | 60° | 0°     |       | 40°   | 60° | 0°       | 20°  |       | 60° | 0°   |      | 40°   | 60° | 0°   | _            |     | 60° | <b>/</b> ↔ |
| 45          | 28.1     |        |          |            |          |                                     |       |     |        |       |       |     |          |      |       |     |      |      |       |     |      |              |     |     | 45         |
| 50          | 26.7     |        |          |            | 27.7     |                                     |       |     |        |       |       |     |          |      |       |     |      |      |       |     |      |              |     |     | 50         |
| 55          | 25.3     |        |          |            | 26.4     |                                     |       |     | 26     |       |       |     |          |      |       |     |      |      |       |     |      |              |     |     | 55         |
| 60          | 24.1     |        |          |            | 25.2     |                                     |       |     | 25     |       |       |     | 25       |      |       |     |      |      |       |     |      |              |     |     | 60         |
| 65          | 22.9     |        |          |            | 24.1     |                                     |       |     | 24     |       |       |     | 24       |      |       |     | 23.5 |      |       |     |      |              |     |     | 65         |
| 70          | 21.9     |        |          |            | 23       |                                     |       |     | 23     |       |       |     | 23       |      |       |     | 22.6 |      |       |     | 21.5 |              |     |     | 70         |
| 75          | 20.9     |        |          |            | 22       |                                     |       |     | 22     |       |       |     | 22.1     |      |       |     | 21.8 |      |       |     | 21.3 |              |     |     | 75         |
|             |          |        |          |            |          |                                     |       |     |        |       |       |     |          |      |       |     | 21.0 |      |       |     |      |              |     |     |            |
| 80          | 20       | 10.0   |          |            | 21.1     |                                     |       |     | 21.2   |       |       |     | 21.3     |      |       |     |      |      |       |     | 20.3 |              |     |     | 80         |
| 85          | 19.1     |        |          |            | 20.2     | 12.0                                |       |     | 20.4   |       |       |     | 20.5     |      |       |     | 20.3 |      |       |     | 19.7 |              |     |     | 85         |
| 90          | 18.4     |        |          |            |          | 13.2                                |       |     | 19.6   | 10.0  |       |     | 19.8     |      |       |     | 19.6 |      |       |     | 19.1 |              |     |     | 90         |
| 95          | 17.6     |        |          |            |          | 12.8                                |       |     |        | 12.9  |       |     | 19.1     | 10.5 |       |     | 19   |      |       |     | 18.4 |              |     |     | 95         |
| 100         | 16.8     |        |          |            | 18       | 12.3                                |       |     |        | 12.4  |       |     | 18.5     |      |       |     | 18.3 | 10.1 |       |     | 17.9 |              |     |     | 100        |
| 105         | 16.2     |        |          |            |          | 11.9                                |       |     | 17.6   |       |       |     |          | 12.2 |       |     | 17.7 |      |       |     | 17.4 | 11.0         |     |     | 105        |
| 110         | 15.5     |        | 0.0      |            |          | 11.5                                |       |     |        | 11.6  |       |     | 17.3     |      |       |     | 17.2 |      |       |     |      | 11.6         |     |     | 110        |
| 115         | 14.9     |        | 6.8      |            | 16.1     |                                     | 7.0   |     | 1      | 11.3  |       |     | 16.7     |      |       |     |      | 11.4 |       |     |      | 11.3         |     |     | 115        |
| 120         | 14.2     | 9.6    | 6.7      |            |          | 10.7                                | 7.3   |     |        | 10.9  |       |     | 16.2     |      |       |     | 16.2 |      |       |     | 15.9 |              |     |     | 120        |
| 125         | 13.6     | 9.2    | 6.5      |            | 15       | 10.3                                | 7.1   |     |        |       | 7.1   |     | 15.6     |      | _     |     |      | 10.8 |       |     | 1    | 10.6         |     |     | 125        |
| 130         | 13       | 8.8    | 6.3      |            |          | 10                                  | 7     |     |        | 10.2  | 7     |     | 15.2     |      | 7     |     | 15.2 |      |       |     |      | 10.3         |     |     | 130        |
| 135         | 12.4     | 8.5    | 6.2      | 3.3        | 13.9     | 9.6                                 | 6.8   |     | 14.3   | 9.8   | 6.8   |     | 14.7     | 10.1 | 6.9   |     | 14.8 | 10.1 | 6.9   |     | 14.6 | 10.1         |     |     | 135        |
| 140         | 11.8     | 8.2    | 6        | 3.2        | 13.4     | 9.3                                 | 6.6   | 3.8 | 13.8   | 9.5   | 6.7   |     | 14.2     | 9.7  | 6.7   |     | 14.4 | 9.8  | 6.7   |     | 14.2 |              | 6.7 |     | 140        |
| 145         | 11.3     | 7.9    | 5.9      | 3.2        | 12.8     | 9                                   | 6.5   | 3.8 | 13.4   | 9.2   | 6.6   | 3.8 | 13.8     | 9.4  | 6.6   | 3.8 | 14   | 9.5  | 6.6   |     | 13.8 | 9.5          | 6.6 |     | 145        |
| 150         | 10.8     | 7.6    | 5.8      | 3.2        | 12.3     | 8.7                                 | 6.4   | 3.7 | 12.9   | 8.9   | 6.4   | 3.8 | 13.4     | 9.1  | 6.5   | 3.8 | 13.6 | 9.3  | 6.5   | 3.7 | 13.5 |              | 6.4 |     | 150        |
| 155         | 10.3     | 7.4    | 5.6      | 3.2        | 11.9     | 8.4                                 | 6.2   | 3.7 | 12.4   | 8.6   | 6.3   | 3.7 | 13       | 8.9  | 6.4   | 3.8 | 13.2 | 9    | 6.4   | 3.7 | 13.1 | 9            | 6.3 | 3.7 | 155        |
| 160         | 9.9      | 7.2    | 5.5      | 3.2        | 11.4     | 8.1                                 | 6.1   | 3.7 | 12     | 8.4   | 6.2   | 3.7 | 12.5     | 8.6  | 6.2   | 3.7 | 12.8 | 8.7  | 6.3   | 3.7 | 12.8 | 8.7          |     | 3.7 | 160        |
| 165         | 9.4      | 7      | 5.4      |            | 11       | 7.9                                 | 6     | 3.7 | 11.6   | 8.1   | 6.1   | 3.7 | 12.1     | 8.4  | 6.1   | 3.7 | 12.4 | 8.5  | 6.2   | 3.7 | 12.4 | 8.5          | 6.1 | 3.7 | 165        |
| 170         | 9        | 6.8    | 5.3      |            | 10.5     | 7.6                                 | 5.9   |     | 11.1   | 7.9   | 6     | 3.7 | 11.7     | 8.1  | 6     | 3.7 | 12.1 | 8.3  | 6.1   | 3.7 | 12.1 | 8.3          |     | 3.7 | 170        |
| 175         | 8.6      | 6.6    | 5.2      |            | 10.1     | 7.4                                 | 5.8   |     | 10.7   | 7.7   | 5.9   |     | 11.3     | 7.9  | 5.9   | 3.7 | 11.7 | 8    | 6     | 3.7 | 11.8 | 8.1          | 6   | 3.7 | 175        |
| 180         | 8.3      | 6.5    | 5.1      |            | 9.7      | 7.2                                 | 5.7   |     | 10.3   | 7.5   | 5.8   |     | 11       | 7.7  | 5.9   |     | 11.3 | 7.8  | 5.9   | 3.7 | 11.5 | 7.9          | 5.9 | 3.6 | 180        |
| 185         | 7.9      | 6.3    | 5        |            | 9.4      | 7.1                                 | 5.6   |     | 9.9    | 7.3   | 5.7   |     | 10.6     | 7.5  | 5.8   |     | 11   | 7.6  | 5.8   |     | 11.1 | 7.7          | 5.8 | 3.6 | 185        |
| 190         | 7.6      | 6.1    | 5        |            | 9        | 6.9                                 | 5.5   |     | 9.6    | 7.1   | 5.6   |     | 10.2     | 7.3  | 5.7   |     | 10.5 | 7.5  | 5.7   |     | 10.4 | 7.5          | 5.7 | 3.6 | 190        |
| 195         | 7.3      | 6      | 4.9      |            | 8.7      | 6.7                                 | 5.4   |     | 9.2    | 6.9   | 5.5   |     | 9.8      | 7.2  | 5.6   |     | 10.2 | 7.3  | 5.7   |     | 9.7  | 7.3          | 5.6 |     | 195        |
| 200         | 7.1      | 5.8    | 4.9      |            | 8.3      | 6.6                                 | 5.4   |     | 8.9    | 6.8   | 5.4   |     | 9.4      | 7    | 5.5   |     | 9.8  | 7.1  | 5.6   |     | 8.9  | 7.2          | 5.6 |     | 200        |
| 205         | 6.8      | 5.7    | 4.8      |            | 8        | 6.4                                 | 5.3   |     | 8.6    | 6.6   | 5.4   |     | 9.1      | 6.8  | 5.5   |     | 9.4  | 7    | 5.5   |     | 8    | 7            | 5.5 |     | 205        |
| 210         | 6.6      | 5.6    |          |            | 7.7      | 6.3                                 | 5.3   |     | 8.3    | 6.5   | 5.3   |     | 8.8      |      | 5.4   |     | 8.8  | 6.8  | 5.4   |     | 7.2  | 6.9          | 5.5 |     | 210        |
| 215         | 6.4      | 5.5    |          |            | 7.5      | 6.1                                 | 5.2   |     | 7.9    | 6.3   | 5.3   |     | 8.4      | 6.5  | 5.3   |     | 8.1  | 6.7  | 5.4   |     | 6.3  | 6.8          | 5.4 |     | 215        |
| 220         | 6.2      | 5.4    |          |            | 7.2      | 6                                   |       |     | 7.6    | 6.2   | 5.2   |     | 8.1      | 6.4  | 5.3   |     | 7.3  | 6.6  | 5.3   |     | 5.6  | 6.7          | 5.3 |     | 220        |
| 225         | 6        | 5.3    |          |            | 6.8      | 5.9                                 |       |     | 7.4    | 6.1   | 5.2   |     | 7.7      | 6.3  | 5.2   |     | 6.6  | 6.4  | 5.3   |     | 4.9  |              | 5.3 |     | 225        |
| 230         | 5.8      |        |          |            | 6.4      |                                     |       |     | 7.2    |       |       |     | 7.2      |      | 5.2   |     | 5.9  |      | 5.2   |     | 4.2  |              | 5.2 |     | 230        |
| 235         | 5.6      | 5.2    |          |            | 5.8      | 5.7                                 |       |     | 7      | 5.9   |       |     | 6.5      |      | 5.2   |     | 5.2  |      | 5.2   |     | 3.4  |              | 5.2 |     | 235        |
| 240         | 5.4      |        |          |            | 5.4      | 5.6                                 |       |     | 6.7    | 5.8   |       |     | 5.8      | 5.9  |       |     | 4.5  |      | 5.1   |     | 2.7  | 5.5          | 5.2 |     | 240        |
| 245         | 5.2      |        |          |            | 4.6      | 5.5                                 |       |     | 6.3    |       |       |     | 5.1      | 5.8  |       |     | 3.9  |      | 5.1   |     |      | 4.8          | 5.1 |     | 245        |
| 250         | 4.5      |        |          |            | 3.8      | 5.3                                 |       |     | 5.8    | 5.6   |       |     | 4.5      | 5.7  |       |     | 3.2  | 5.5  | 5.1   |     |      |              | 5.1 |     | 250        |
| 255         |          |        |          |            | 3.1      |                                     |       |     | 5.2    | 5.5   |       |     | 3.8      | 5.3  |       |     | 2.6  | 4.8  |       |     |      |              | 4.9 |     | 255        |
| 260         |          |        |          |            |          |                                     |       |     | 4.6    |       |       |     | 3.2      | 5    |       |     |      | 4.1  |       |     |      | 2.7          | 4.4 |     | 260        |
| 265         |          |        |          |            |          |                                     |       |     | 3.9    | 5.1   |       |     |          | 4.4  |       |     |      | 3.4  |       |     |      |              |     |     | 265        |
| 270         |          |        |          |            |          |                                     |       |     | 3.2    | 4.7   |       |     |          | 3.7  |       |     |      |      |       |     |      |              |     |     | 270        |
| 275         |          |        |          |            |          |                                     |       |     | 2.6    |       |       |     |          | 3    |       |     |      |      |       |     |      |              |     |     | 275        |

| Δ.          | 1    | 32 + 20 f | t*  | 1          | 49 + 20 f  | t*  | 10   | 65 + 20 f | t*         | 1:   | 82 + 20 f  | t*  | 198 + | 20 ft* | Δ.         |
|-------------|------|-----------|-----|------------|------------|-----|------|-----------|------------|------|------------|-----|-------|--------|------------|
| 70          |      | 138 ft    |     |            | 138 ft     |     |      | 138 ft    |            |      | 138 ft     |     | 130 + |        | 10         |
| <b>↔</b> ft | 0°   | 20°       | 40° | 0°         | 20°        | 40° | 0°   | 20°       | 40°        | 0°   | 20°        | 40° | 0°    | 20°    | <b>/</b> → |
| 50          | 22.4 |           |     |            |            |     |      |           |            |      |            |     |       |        | 50         |
| 55          | 21.3 |           |     | 21.1       |            |     |      |           |            |      |            |     |       |        | 55         |
| 60          | 20.3 |           |     | 20.2       |            |     | 20.2 |           |            | 19.9 |            |     |       |        | 60         |
| 65          | 19.3 |           |     | 19.3       |            |     | 19.4 |           |            | 19.3 |            |     |       |        | 65         |
| 70          | 18.5 |           |     | 18.5       |            |     | 18.6 |           |            | 18.5 |            |     | 18    |        | 70         |
| 75          | 17.7 |           |     | 17.7       |            |     | 17.8 |           |            | 17.8 |            |     | 17.3  |        | 75         |
| 80          | 16.9 |           |     | 17         |            |     | 17.1 |           |            | 17.1 |            |     | 16.7  |        | 80         |
| 85          | 16.1 |           |     | 16.3       |            |     | 16.4 |           |            | 16.4 |            |     | 16.1  |        | 85         |
| 90          | 15.5 |           |     | 15.6       |            |     | 15.8 |           |            | 15.9 |            |     | 15.6  |        | 90         |
| 95          | 14.8 | 10        |     | 15         |            |     | 15.2 |           |            | 15.3 |            |     | 15    |        | 95         |
| 100         | 14.2 | 9.6       |     | 14.5       | 9.7        |     | 14.6 |           |            | 14.7 |            |     | 14.5  |        | 100        |
| 105         | 13.6 | 9.2       |     | 13.9       | 9.3        |     | 14.1 | 9.5       |            | 14.2 |            |     | 14.1  |        | 105        |
| 110         | 13.1 | 8.9       |     | 13.3       | 9          |     | 13.6 | 9.1       |            | 13.8 | 9.2        |     | 13.6  |        | 110        |
| 115         | 12.6 | 8.5       |     | 12.8       | 8.7        |     | 13.1 | 8.8       |            | 13.3 | 8.9        |     | 13.1  | 8.8    | 115        |
| 120         | 12.1 | 8.2       |     | 12.4       | 8.3        |     | 12.6 | 8.5       |            | 12.8 | 8.6        |     | 12.7  | 8.5    | 120        |
| 125         | 11.6 | 7.9       |     | 11.9       | 8          |     | 12.2 | 8.2       |            | 12.4 | 8.3        |     | 12.3  | 8.3    | 125        |
| 130         | 11.1 | 7.5       |     | 11.5       | 7.7        |     | 11.8 | 7.9       |            | 12   | 8          |     | 11.9  | 8      | 130        |
| 135         | 10.7 | 7.3       | 5.1 | 11.1       | 7.4        | 5.1 | 11.4 | 7.6       |            | 11.6 | 7.7        |     | 11.6  | 7.7    | 135        |
| 140         | 10.2 | 7         | 5   | 10.7       | 7.2        | 5   | 11   | 7.4       | 5          | 11.2 | 7.5        |     | 11.2  | 7.5    | 140        |
| 145         | 9.7  | 6.8       | 4.8 | 10.3       | 7          | 4.9 | 10.6 | 7.1       | 4.9        | 10.9 | 7.3        | 4.9 | 10.9  | 7.2    | 145        |
| 150         | 9.3  | 6.5       | 4.7 | 9.9        | 6.7        | 4.7 | 10.3 | 6.9       | 4.8        | 10.5 | 7          | 4.8 | 10.5  | 7      | 150        |
| 155         | 8.9  | 6.3       | 4.6 | 9.4        | 6.5        | 4.6 | 9.9  | 6.7       | 4.7        | 10.2 | 6.8        | 4.7 | 10.2  | 6.9    | 155        |
| 160         | 8.5  | 6.1       | 4.5 | 9          | 6.3        | 4.5 | 9.5  | 6.5       | 4.6        | 9.8  | 6.6        | 4.6 | 9.9   | 6.7    | 160        |
| 165         | 8.2  | 5.9       | 4.3 | 8.7        | 6.1        | 4.4 | 9.2  | 6.3       | 4.4        | 9.5  | 6.4        | 4.5 | 9.6   | 6.5    | 165        |
| 170         | 7.8  | 5.7       | 4.2 | 8.3        | 5.9        | 4.3 | 8.8  | 6.1       | 4.3        | 9.2  | 6.3        | 4.4 | 9.3   | 6.3    | 170        |
| 175         | 7.4  | 5.5       | 4.1 | 8          | 5.7        | 4.2 | 8.5  | 5.9       | 4.3        | 8.9  | 6.1        | 4.3 | 9     | 6.1    | 175        |
| 180         | 7.2  | 5.4       | 4   | 7.7        | 5.6        | 4.1 | 8.2  | 5.8       | 4.2        | 8.6  | 5.9        | 4.2 | 8.7   | 6      | 180        |
| 185         | 6.9  | 5.2       | 3.9 | 7.4        | 5.4        | 4   | 7.9  | 5.6       | 4.1        | 8.3  | 5.7        | 4.1 | 8.5   | 5.8    | 185        |
| 190         | 6.6  | 5.1       | 3.9 | 7.1        | 5.2        | 3.9 | 7.6  | 5.4       | 4.1        | 8    | 5.6        | 4.1 | 8.2   | 5.7    | 190        |
| 195         | 6.4  | 4.9       | 3.8 | 6.8        | 5.1        | 3.8 | 7.3  | 5.3       | 3.9        | 7.7  | 5.4        | 4.1 | 7.9   | 5.5    | 195        |
| 200         | 6.1  | 4.5       | 3.7 | 6.6        | 5          | 3.8 | 7.3  | 5.1       | 3.8        | 7.5  | 5.3        | 3.9 | 7.6   | 5.4    | 200        |
| 205         | 5.8  | 4.7       | 3.6 | 6.4        | 4.8        | 3.7 | 6.8  | 5         | 3.8        | 7.3  | 5.2        | 3.8 | 7.6   | 5.3    | 205        |
| 210         | 5.6  | 4.5       | 3.6 |            |            | 3.6 | 6.6  | 4.9       | 3.7        | 6.9  | 5.2        | 3.8 | 7.4   | 5.1    | 210        |
| 215         | 5.4  | 4.5       | 3.5 | 6.1<br>5.9 | 4.7<br>4.6 | 3.6 | 6.4  | 4.9       | 3.6        | 6.7  | 4.9        | 3.7 | 7     | 5.1    | 210        |
| 213         | 5.4  | 4.4       | 3.5 | 5.7        | 4.4        | 3.5 | 6.1  | 4.7       | 3.6        | 6.5  | 4.8        | 3.7 | 6.7   | 4.9    | 220        |
| 220<br>225  | 5.2  | 4.2       | 3.4 | 5.7        | 4.4        | 3.5 | 5.9  | 4.5       | 3.5        | 6.3  | 4.0<br>4.7 | 3.6 | 6.5   | 4.8    | 225        |
| 230         | 4.8  | 4.1       | 0.4 | 5.3        | 4.3        | 3.4 | 5.9  | 4.5       | 3.5        | 6.1  | 4.7        | 3.5 | 6.3   | 4.6    | 230        |
| 230<br>235  | 4.6  | 3.9       |     | 5.1        | 4.2<br>4.1 | 3.4 | 5.7  | 4.4       | 3.5<br>3.5 | 5.9  | 4.5<br>4.5 | 3.5 | 6.1   | 4.7    | 235        |
| 240         | 4.5  | 3.9       |     | 4.9        | 4.1        | 5.4 | 5.3  | 4.3       | 3.4        | 5.9  | 4.5        | 3.5 | 6.1   | 4.5    | 240        |
|             |      |           |     |            |            |     | 1    |           |            |      |            | 3.5 |       |        |            |
| 245         | 4.3  | 3.8       |     | 4.7        | 3.9        |     | 5.2  | 4.1       | 3.4        | 5.5  | 4.3        |     | 5.8   | 4.3    | 245        |
| 250         | 4.1  | 3.7       |     | 4.6        | 3.9        |     | 5    | 4         |            | 5.4  | 4.2        | 3.4 | 5.6   | 4.3    | 250        |
| 255         | 4    | 3.6       |     | 4.4        | 3.8        |     | 4.8  | 3.9       |            | 5.2  | 4.1        | 3.4 | 5.4   | 4.2    | 255        |
| 260         | 3.8  |           |     | 4.3        | 3.7        |     | 4.6  | 3.8       |            | 5    | 4          |     | 5.2   | 4.1    | 260        |
| 265         | 3.7  |           |     | 4.1        | 3.6        |     | 4.5  | 3.8       |            | 4.9  | 3.9        |     | 5.1   | 4      | 265        |
| 270         |      |           |     | 3.9        |            |     | 4.3  | 3.7       |            | 4.7  | 3.8        |     | 4.9   | 3.9    | 270        |
| 275         |      |           |     | 3.6        |            |     | 4.2  | 3.6       |            | 4.5  | 3.8        |     | 4.7   | 3.9    | 275        |
| 280         |      |           |     |            |            |     | 4    | 3.6       |            | 4.4  | 3.7        |     | 4.5   | 3.8    | 280        |
| 285         |      |           |     |            |            |     | 3.7  |           |            | 4.2  | 3.6        |     | 4.2   | 3.7    | 285        |
| 290         |      |           |     |            |            |     | 3.4  |           |            | 3.5  | 3.6        |     | 3.5   | 3.7    | 290        |
| 295         |      |           |     |            |            |     |      |           |            | 2.8  | 3.5        |     |       | 3.4    | 295        |
| 300         |      |           |     |            |            |     |      |           |            |      | 3.5        |     |       |        | 300        |
| 305         |      |           |     |            |            |     |      |           |            |      | 2.6        |     |       |        | 305        |

\* adapter · pièce d'adaptateur

t\_180\_61705\_00\_000 / 61725\_00\_000 / 61745\_00\_000

|            | 132-198      | ft         |            | 11.5 ft      |            | 13         | 8 ft         | <b>7</b> ] | 360°       | 220500 lb    | 85         | %          |            |            |             |
|------------|--------------|------------|------------|--------------|------------|------------|--------------|------------|------------|--------------|------------|------------|------------|------------|-------------|
| •          | 1            | 32 + 20 f  | +*         |              | 49 + 20 f  | +*         |              | 65 + 20 f  | F+*        | 1            | 82 + 20 f  | <u>+</u> * | 108 4      | 20 ft*     |             |
|            | <u>'</u>     | 138 ft     |            |              | 138 ft     |            | '            | 138 ft     |            |              | 138 ft     |            |            | 8 ft       |             |
| ← ft       | 0°           | 20°        | 40°        | 0°           | 20°        | 40°        | 0°           | 20°        | 40°        | 0°           | 20°        | 40°        | 0°         | 20°        | <b>↔</b> ft |
| 50         | 22.4         |            |            |              |            |            |              |            |            |              |            |            |            |            | 50          |
| 55         | 21.3         |            |            | 21.1         |            |            | 00.0         |            |            | 10.0         |            |            |            |            | 55          |
| 60<br>65   | 20.3<br>19.3 |            |            | 20.2<br>19.3 |            |            | 20.2<br>19.4 |            |            | 19.9<br>19.3 |            |            |            |            | 60<br>65    |
| 70         | 18.5         |            |            | 18.5         |            |            | 18.6         |            |            | 18.5         |            |            | 18         |            | 70          |
| 75         | 17.7         |            |            | 17.7         |            |            | 17.8         |            |            | 17.8         |            |            | 17.3       |            | 75          |
| 80         | 16.9         |            |            | 17           |            |            | 17.1         |            |            | 17.1         |            |            | 16.7       |            | 80          |
| 85         | 16.1         |            |            | 16.3         |            |            | 16.4         |            |            | 16.4         |            |            | 16.1       |            | 85          |
| 90         | 15.5         | 40         |            | 15.6         |            |            | 15.8         |            |            | 15.9         |            |            | 15.6       |            | 90          |
| 95         | 14.8<br>14.2 | 10         |            | 15           | 0.7        |            | 15.2         |            |            | 15.3         |            |            | 15<br>14.5 |            | 95          |
| 100<br>105 | 13.6         | 9.6<br>9.2 |            | 14.5<br>13.9 | 9.7<br>9.3 |            | 14.6<br>14.1 | 9.5        |            | 14.7<br>14.2 |            |            | 14.5       |            | 100<br>105  |
| 110        | 13.1         | 8.9        |            | 13.3         | 9          |            | 13.6         | 9.1        |            | 13.8         | 9.2        |            | 13.6       |            | 110         |
| 115        | 12.6         | 8.5        |            | 12.8         | 8.7        |            | 13.1         | 8.8        |            | 13.3         | 8.9        |            | 13.1       | 8.8        | 115         |
| 120        | 12.1         | 8.2        |            | 12.4         | 8.3        |            | 12.6         | 8.5        |            | 12.8         | 8.6        |            | 12.7       | 8.5        | 120         |
| 125        | 11.6         | 7.9        |            | 11.9         | 8          |            | 12.2         | 8.2        |            | 12.4         | 8.3        |            | 12.3       | 8.3        | 125         |
| 130        | 11.1         | 7.5        | C 4        | 11.5         | 7.7        | - 1        | 11.8         | 7.9        |            | 12           | 8          |            | 11.9       | 8          | 130         |
| 135<br>140 | 10.7<br>10.2 | 7.3<br>7   | 5.1<br>5   | 11.1<br>10.7 | 7.4<br>7.2 | 5.1<br>5   | 11.4<br>11   | 7.6<br>7.4 | 5          | 11.6<br>11.2 | 7.7<br>7.5 |            | 11.6       | 7.7<br>7.5 | 135<br>140  |
| 145        | 9.7          | 6.8        | 4.8        | 10.7         | 7          | 4.9        | 10.6         | 7.4        | 4.9        | 10.9         | 7.3        | 4.9        | 10.9       | 7.2        | 145         |
| 150        | 9.3          | 6.5        | 4.7        | 9.9          | 6.7        | 4.7        | 10.3         | 6.9        | 4.8        | 10.5         | 7          | 4.8        | 10.5       | 7          | 150         |
| 155        | 8.9          | 6.3        | 4.6        | 9.4          | 6.5        | 4.6        | 9.9          | 6.7        | 4.7        | 10.2         | 6.8        | 4.7        | 10.2       | 6.9        | 155         |
| 160        | 8.5          | 6.1        | 4.5        | 9            | 6.3        | 4.5        | 9.5          | 6.5        | 4.6        | 9.8          | 6.6        | 4.6        | 9.9        | 6.7        | 160         |
| 165        | 8.2          | 5.9        | 4.3        | 8.7          | 6.1        | 4.4        | 9.2          | 6.3        | 4.4        | 9.5          | 6.4        | 4.5        | 9.6        | 6.5        | 165         |
| 170        | 7.8<br>7.4   | 5.7        | 4.2        | 8.3          | 5.9        | 4.3<br>4.2 | 8.8          | 6.1        | 4.3        | 9.2          | 6.3        | 4.4        | 9.3        | 6.3        | 170<br>175  |
| 175<br>180 | 7.4          | 5.5<br>5.4 | 4.1<br>4   | 8<br>7.7     | 5.7<br>5.6 | 4.2        | 8.5<br>8.2   | 5.9<br>5.8 | 4.3<br>4.2 | 8.9<br>8.6   | 6.1<br>5.9 | 4.3<br>4.2 | 9 8.7      | 6.1<br>6   | 180         |
| 185        | 6.9          | 5.2        | 3.9        | 7.4          | 5.4        | 4          | 7.9          | 5.6        | 4.1        | 8.3          | 5.7        | 4.1        | 8.5        | 5.8        | 185         |
| 190        | 6.6          | 5.1        | 3.9        | 7.1          | 5.2        | 3.9        | 7.6          | 5.4        | 4          | 8            | 5.6        | 4.1        | 8.2        | 5.7        | 190         |
| 195        | 6.4          | 4.9        | 3.8        | 6.8          | 5.1        | 3.8        | 7.3          | 5.3        | 3.9        | 7.7          | 5.4        | 4          | 7.9        | 5.5        | 195         |
| 200        | 6.1          | 4.7        | 3.7        | 6.6          | 5          | 3.8        | 7            | 5.1        | 3.8        | 7.5          | 5.3        | 3.9        | 7.6        | 5.4        | 200         |
| 205        | 5.8          | 4.6        | 3.6        | 6.4          | 4.8        | 3.7        | 6.8          | 5          | 3.8        | 7.2          | 5.2        | 3.8        | 7.4        | 5.3        | 205         |
| 210<br>215 | 5.6<br>5.4   | 4.5<br>4.4 | 3.6<br>3.5 | 6.1<br>5.9   | 4.7<br>4.6 | 3.6<br>3.6 | 6.6<br>6.4   | 4.9<br>4.7 | 3.7<br>3.6 | 6.9<br>6.7   | 5<br>4.9   | 3.8<br>3.7 | 7.1<br>6.9 | 5.1<br>5   | 210<br>215  |
| 220        | 5.2          | 4.2        | 3.5        | 5.7          | 4.4        | 3.5        | 6.1          | 4.6        | 3.6        | 6.5          | 4.8        | 3.7        | 6.6        | 4.9        | 220         |
| 225        | 5            | 4.1        | 3.4        | 5.5          | 4.3        | 3.5        | 5.9          | 4.5        | 3.5        | 6.2          | 4.7        | 3.6        | 6.4        | 4.8        | 225         |
| 230        | 4.8          | 4          |            | 5.3          | 4.2        | 3.4        | 5.7          | 4.4        | 3.5        | 6            | 4.5        | 3.5        | 6          | 4.7        | 230         |
| 235        | 4.6          | 3.9        |            | 5.1          | 4.1        | 3.4        | 5.4          | 4.3        | 3.5        | 5.8          | 4.5        | 3.5        | 5.4        | 4.5        | 235         |
| 240        | 4.5          | 3.9        |            | 4.9          | 4          |            | 5.3          | 4.2        | 3.4        | 5.6          | 4.4        | 3.5        | 4.8        | 4.4        | 240         |
| 245<br>250 | 4.3          | 3.8<br>3.7 |            | 4.7          | 3.9<br>3.9 |            | 5.1<br>4.9   | 4.1        | 3.4        | 5.2<br>4.7   | 4.3<br>4.2 | 3.4        | 4.2<br>3.5 | 4.3<br>4.2 | 245<br>250  |
| 250<br>255 | 4.1          | 3.7        |            | 4.5<br>4.2   | 3.9        |            | 4.9          | 3.9        |            | 4.7          | 4.2        | 3.4        | 2.9        | 4.2        | 250         |
| 260        | 3.8          | 5.0        |            | 3.6          | 3.7        |            | 4.5          | 3.8        |            | 3.7          | 4          | 0.4        |            | 3.6        | 260         |
| 265        | 3.7          |            |            | 2.9          | 3.6        |            | 4.2          | 3.8        |            | 3.1          | 3.9        |            |            | 2.9        | 265         |
| 270        |              |            |            |              |            |            | 3.9          | 3.7        |            | 2.5          | 3.6        |            |            |            | 270         |
| 275        |              |            |            |              |            |            | 3.4          | 3.6        |            |              | 3          |            |            |            | 275         |
| 280        |              |            |            |              |            |            | 2.8          | 3.6        |            |              |            |            |            |            | 280         |



| 49-149ft 39 ft 220 | 20500 lbs <b>85%</b> |
|--------------------|----------------------|
|--------------------|----------------------|

| 0        | 40             | + 11.5  | fl*   | 66    | + 11.5  | f+*   | 22    | + 11.5                       | fl*  | 00    | + 11.5                       | f+*  | 115   | + 11.                       | 5 f+* | 122  | + 11.                       | 5 ft* | 149+1 | 11 5 ft* |          |
|----------|----------------|---------|-------|-------|---------|-------|-------|------------------------------|------|-------|------------------------------|------|-------|-----------------------------|-------|------|-----------------------------|-------|-------|----------|----------|
|          |                | 39 ft** |       |       | 39 ft** |       |       | <del>+ 11.3</del><br>39 ft** |      |       | <del>+ 11.3</del><br>39 ft** |      |       | <del>* 11.</del><br>39 ft** |       |      | <del>+ 11.</del><br>39 ft** |       | 39    |          |          |
| → ft     | 82°            | 75°     | 68°   | 82°   | 75°     | 68°   | 82°   | 75°                          | 68°  | 82°   |                              | 68°  | 82°   | 75°                         | 68°   | 82°  | 75°                         | 68°   | 75°   | -        | → ft     |
|          |                | 75      | 00    | 02    | 75      | 00    | 02    | 75                           | 00   | 02    | 75                           | 00   | 02    | 75                          | 00    | 02   | 75                          | 00    | 75    | 68°      |          |
| 22<br>24 | 156.1<br>156.1 |         |       |       |         |       |       |                              |      |       |                              |      |       |                             |       |      |                             |       |       |          | 22<br>24 |
| 26       |                |         |       | 150 1 |         |       |       |                              |      |       |                              |      |       |                             |       |      |                             |       |       |          | 26       |
|          | 156.1          |         |       | 156.1 |         |       |       |                              |      |       |                              |      |       |                             |       |      |                             |       |       |          |          |
| 28       | 156.1          |         |       | 156.1 |         |       | 1400  |                              |      |       |                              |      |       |                             |       |      |                             |       |       |          | 28       |
| 30       | 155.6          |         |       | 155.8 |         |       | 142.3 |                              |      |       |                              |      |       |                             |       |      |                             |       |       |          | 30       |
| 32       | 153.5          |         |       | 154.6 |         |       | 143.2 |                              |      | 1170  |                              |      |       |                             |       |      |                             |       |       |          | 32       |
| 34       | 150.1          | 1 47 0  |       | 152.9 |         |       | 143.4 |                              |      | 117.6 |                              |      |       |                             |       |      |                             |       |       |          | 34       |
| 36       |                | 147.8   |       | 150.9 | 140.4   |       | 143   |                              |      | 117.9 |                              |      | 00.5  |                             |       | 75 4 |                             |       |       |          | 36       |
| 38       |                |         |       |       | 149.4   |       | 141.5 |                              |      | 118.1 |                              |      | 98.5  |                             |       | 75.1 |                             |       |       |          | 38       |
| 40       |                | 136.7   |       |       | 148.2   |       | 140   |                              |      | 118.3 |                              |      | 98.6  |                             |       | 75   |                             |       | F7.0  |          | 40       |
| 42       | 124.2          | 132.3   | 100.0 |       | 144.7   |       | 138.9 | 100.0                        |      | 118.7 |                              |      | 98.7  |                             |       | 74.9 |                             |       | 57.9  |          | 42       |
| 44       |                |         | 129.3 | 127.1 | 140.7   |       | 135.4 | 136.9                        |      | 119.3 |                              |      | 99    |                             |       | 74.9 |                             |       | 57.9  |          | 44       |
| 46       |                | 125.2   |       |       | 136.6   |       |       | 135.8                        |      | 119.9 |                              |      | 99.3  |                             |       | 74.9 |                             |       | 57.8  |          | 46       |
| 48       |                | 121     | 123.8 |       | 133.2   | 1071  |       | 132.9                        |      | 119.5 | 444                          |      | 99.8  |                             |       | 74.6 |                             |       | 57.8  |          | 48       |
| 50       |                |         | 119.5 |       | 129.9   |       |       | 130                          |      | 119.2 |                              |      | 100.3 | 04.0                        |       | 74.4 |                             |       | 57.8  |          | 50       |
| 55       |                |         |       |       |         | 119.2 |       | 120.9                        |      |       | 112                          |      |       | 94.6                        |       |      |                             |       | 57.8  |          | 55       |
| 60       |                |         |       |       |         | 109   |       |                              | 00.0 |       | 106.8                        |      |       | 93.9                        |       |      | CO 1                        |       |       |          | 60       |
| 65       |                |         |       |       |         |       |       |                              | 96.3 |       | 98.3                         | 040  |       | 93.2                        |       |      | 62.1                        |       |       | 40.4     | 65       |
| 70       |                |         |       |       |         |       |       |                              |      |       |                              | 84.8 |       |                             | 70.0  |      | 59                          |       |       | 49.4     | 70<br>75 |
| 75       |                |         |       |       |         |       |       |                              |      |       |                              | 79   |       |                             | 76.2  |      |                             |       |       | 47.5     | 75       |
| 80       |                |         |       |       |         |       |       |                              |      |       |                              |      |       |                             | 71.2  |      |                             | 45.0  |       |          | 80       |
| 85       |                |         |       |       |         |       |       |                              |      |       |                              |      |       |                             | 66.5  |      |                             | 45.8  |       |          | 85       |
| 90       |                |         |       |       |         |       |       |                              |      |       |                              |      |       |                             |       |      |                             | 43.3  |       |          | 90       |

<sup>\*</sup> adapter · pièce d'adaptateur

t\_180\_54105\_00\_000

<sup>\*\*</sup> Hookblock with deadweight of 6615 lbs necessary · Moufle à crochet de poids minimal de 6615 lbs nécessaire

| 40 015#    | 50.0       |     | 2222 | 220500 lbc |     |
|------------|------------|-----|------|------------|-----|
| 49-215π    | 59 π       |     | 360° | 220300 103 |     |
| A STATE OF |            | imi |      |            | 85% |
| T          | <b>₽</b> N |     |      |            |     |

|          |       |          |       |       |            |      |       |            | _    |      |          |      |      |          |      |          |
|----------|-------|----------|-------|-------|------------|------|-------|------------|------|------|----------|------|------|----------|------|----------|
| <u> </u> | 4     | 9 + 11.5 | ft*   | 6     | 6 + 11.5 t | ft*  | 8     | 2 + 11.5 1 | t*   | 9:   | 9 + 11.5 | ft*  | 11   | 5 + 11.5 | ft*  | <u> </u> |
|          |       | 59 ft*** |       |       | 59 ft***   |      |       | 59 ft***   |      |      | 59 ft*** |      |      | 59 ft*** |      |          |
| → ft     | 82°   | 75°      | 68°   | 82°   | 75°        | 68°  | 82°   | 75°        | 68°  | 82°  | 75°      | 68°  | 82°  | 75°      | 68°  | ↔ ft     |
| 28       | 130.7 |          |       |       |            |      |       |            |      |      |          |      |      |          |      | 28       |
| 30       | 130.1 |          |       |       |            |      |       |            |      |      |          |      |      |          |      | 30       |
| 32       | 128.4 |          |       | 121.7 |            |      |       |            |      |      |          |      |      |          |      | 32       |
| 34       | 126.6 |          |       | 121.6 |            |      |       |            |      |      |          |      |      |          |      | 34       |
| 36       | 124.7 |          |       | 121   |            |      | 108.4 |            |      |      |          |      |      |          |      | 36       |
| 38       | 122.7 |          |       | 119.6 |            |      | 108.3 |            |      | 90.5 |          |      |      |          |      | 38       |
| 40       | 120.7 |          |       | 118.1 |            |      | 108.3 |            |      | 90.5 |          |      |      |          |      | 40       |
| 42       | 119   |          |       | 116.6 |            |      | 108.3 |            |      | 90.5 |          |      | 76.9 |          |      | 42       |
| 44       | 117.2 |          |       | 115.2 |            |      | 107.8 |            |      | 90.5 |          |      | 76.9 |          |      | 44       |
| 46       | 115.6 | 115.5    |       | 114   |            |      | 107.2 |            |      | 90.5 |          |      | 76.9 |          |      | 46       |
| 48       | 114.3 | 113.3    |       | 113   |            |      | 106.4 |            |      | 90.5 |          |      | 76.9 |          |      | 48       |
| 50       | 113.1 | 111      |       | 112   | 111        |      | 105.6 |            |      | 90.5 |          |      | 76.9 |          |      | 50       |
| 55       | 109.5 | 105.4    |       | 110.2 | 107.6      |      | 104.2 | 103.1      |      | 90.5 |          |      | 76.9 |          |      | 55       |
| 60       | 104   | 100.1    | 100.2 | 107.5 | 104.2      |      | 103.3 | 100.4      |      | 90.5 | 87.7     |      | 76.9 |          |      | 60       |
| 65       |       | 97.3     | 93.7  | 98.3  | 101.9      | 99.2 | 102.6 | 98         |      | 90.5 | 88.1     |      | 76.9 | 74.6     |      | 65       |
| 70       |       |          | 89.4  |       | 96.3       | 92.7 |       | 93.3       |      | 90.5 | 87.5     |      | 76.9 | 74.5     |      | 70       |
| 75       |       |          |       |       |            | 86.3 |       | 87.6       | 82.6 |      | 84.2     |      |      | 74.3     |      | 75       |
| 80       |       |          |       |       |            | 80.6 |       |            | 77.2 |      | 79.1     | 73.2 |      | 73.7     |      | 80       |
| 85       |       |          |       |       |            |      |       |            | 72.5 |      | 74.1     | 68.6 |      | 72.2     | 04.0 | 85       |
| 90       |       |          |       |       |            |      |       |            |      |      |          | 64.4 |      |          | 61.8 | 90       |
| 95       |       |          |       |       |            |      |       |            |      |      |          | 60.5 |      |          | 58.1 | 95       |
| 100      |       |          |       |       |            |      |       |            |      |      |          |      |      |          | 54.6 | 100      |

\* adapter · pièce d'adaptateur
\*\*\* Hookblock with deadweight of 3200 lbs necessary · Moufle à crochet de poids minimal de 3200 lbs nécessaire

t\_180\_54205\_00\_000

|          | 49-215ft | 59 ft      | <u>i</u> | 360°        | 220500 lbs | 85%   |
|----------|----------|------------|----------|-------------|------------|-------|
| <u> </u> | 132      | + 11.5 ft* |          | 149 + 11.51 | t*         | 165 + |
|          | 50       | Q f+***    |          | 50 ft***    |            | 50    |

|                 |      |           | N    |      |           |      |      |           |      |       |          |       |          | 215+     |               |
|-----------------|------|-----------|------|------|-----------|------|------|-----------|------|-------|----------|-------|----------|----------|---------------|
| <u> </u>        | 13   | 32 + 11.5 | ft*  | 14   | 19 + 11.5 | ft*  | 16   | 65 + 11.5 | ft*  | 182 + | 11.5 ft* | 198 + | 11.5 ft* | 11.5 ft* | <u> </u>      |
|                 |      | 59 ft***  |      |      | 59 ft***  |      |      | 59 ft***  |      | 59 1  | ft***    | 59 1  | ft***    | 59 ft*** |               |
| → ft            | 82°  | 75°       | 68°  | 82°  | 75°       | 68°  | 82°  | 75°       | 68°  | 82°   | 75°      | 82°   | 75°      | 82°      | ↔ ft          |
| 44              | 59.7 |           |      |      |           |      |      |           |      |       |          |       |          |          | 44            |
| 46              | 59.7 |           |      |      |           |      |      |           |      |       |          |       |          |          | 46            |
| 48              | 59.6 |           |      |      |           |      |      |           |      |       |          |       |          |          | 48            |
| 50              | 59.6 |           |      | 45.8 |           |      | 34.7 |           |      |       |          |       |          |          | 50            |
| 55              | 59.6 |           |      | 45.7 |           |      | 34.6 |           |      | 25.4  |          | 18    |          |          | 55            |
| 60              | 59.5 |           |      | 45.7 |           |      | 34.5 |           |      | 25.3  |          | 18    |          |          | 60            |
| 65              | 59.4 |           |      | 45.7 |           |      | 34.4 |           |      | 25.3  |          | 17.9  |          | 11.9     | 65            |
| 70              | 58.8 | 54.1      |      | 45.7 |           |      | 34.4 |           |      | 25.2  |          | 17.9  |          | 11.8     | 70            |
| 75              |      | 52.7      |      | 45.7 | 42        |      | 34.4 |           |      | 25.2  |          | 17.9  |          | 11.7     | 75            |
| 80              |      | 50.6      |      |      | 41.3      |      |      |           |      |       |          | 17.9  |          | 11.6     | 80            |
| 85              |      | 48.5      |      |      | 40        |      |      | 30.9      |      |       |          | 17.9  |          | 11.5     | 85            |
| 90              |      | 46.7      |      |      | 38.7      |      |      | 30        |      |       | 22.4     |       |          |          | 90            |
| 95              |      |           | 40   |      | 37.5      |      |      | 29.1      |      |       | 22       |       |          |          | 95            |
| 100             |      |           | 38.3 |      |           | 31.7 |      |           |      |       | 21.4     |       | 15.8     |          | 100           |
| 105             |      |           | 36.5 |      |           | 30.9 |      |           |      |       |          |       | 15.4     |          | 105           |
| 110             |      |           | 35   |      |           | 29.5 |      |           | 22.3 |       |          |       | 15       |          | 110           |
| 115             |      |           |      |      |           |      |      |           | 21.6 |       |          |       |          |          | 115           |
| * adapter · piè |      |           |      |      |           |      |      |           |      |       |          |       |          | t_180    | _54205_00_000 |

<sup>\*</sup> adapter · pièce d'adaptateur
\*\*\* Hookblock with deadweight of 3200 lbs necessary · Moufle à crochet de poids minimal de 3200 lbs nécessaire

|                  | 49-215       | ft A     | 79 ft<br>N | <b>M</b> Į   | 3(       |      | 500 lbs      | 85%      |      |      |          |      |      |          |              |               |
|------------------|--------------|----------|------------|--------------|----------|------|--------------|----------|------|------|----------|------|------|----------|--------------|---------------|
| <b>A</b>         | 49           | + 11.5 1 | ft*        | 66           | 6 + 11.5 | ft*  | 82           | 2 + 11.5 | ft*  | 99   | 9 + 11.5 | ft*  | 11   | 5 + 11.5 | ft*          | <b>A</b>      |
|                  |              | 79 ft    |            |              | 79 ft    |      |              | 79 ft    |      |      | 79 ft    |      |      | 79 ft    |              |               |
| <b>→</b> π       | 82°          | 75°      | 68°        | 82°          | 75°      | 68°  | 82°          | 75°      | 68°  | 82°  | 75°      | 68°  | 82°  | 75°      | 68°          | ↔ ft          |
| 36               | 101.5        |          |            |              |          |      |              |          |      |      |          |      |      |          |              | 36            |
| 38               | 100.3        |          |            | 94.6         |          |      |              |          |      |      |          |      |      |          |              | 38            |
| 40               | 99.1         |          |            | 94.4         |          |      | 0.4.5        |          |      |      |          |      |      |          |              | 40            |
| 42<br>44         | 97.8<br>96.6 |          |            | 93.9<br>93.2 |          |      | 84.5<br>84.4 |          |      | 71.7 |          |      |      |          |              | 42<br>44      |
| 44               | 95.3         |          |            | 93.2         |          |      | 84.4         |          |      | 71.7 |          |      |      |          |              | 44            |
| 48               | 94.3         |          |            | 91.5         |          |      | 84.3         |          |      | 71.7 |          |      |      |          |              | 48            |
| 50               | 93.2         | 92.2     |            | 90.6         |          |      | 84.1         |          |      | 71.7 |          |      |      |          |              | 50            |
| 55               | 90.7         | 90.4     |            | 88.7         |          |      | 83.3         |          |      | 71.7 |          |      | 61.7 |          |              | 55            |
| 60               | 88.4         | 87.3     |            | 87           | 86.5     |      | 82           |          |      | 71.7 |          |      | 61.8 |          |              | 60            |
| 65               | 86.9         | 84.5     |            | 85.7         | 84.1     |      | 80.9         | 80       |      | 71.7 |          |      | 62   |          |              | 65            |
| 70               | 86.3         | 82.2     | 81.9       | 85.1         | 82.1     |      | 80.2         | 78.4     |      | 71.7 | 69.6     |      | 62.3 |          |              | 70            |
| 75               | 86.2         | 80.4     | 78.8       | 84.8         | 80.4     | 80   | 80           | 76.9     |      | 71.6 | 69.3     |      | 62.5 |          |              | 75            |
| 80               | 82.4         | 79.1     | 75.6       | 84.1         | 79.1     | 77.8 | 80           | 75.8     |      | 71.6 | 68.7     |      | 62.6 | 59.9     |              | 80            |
| 85               |              | 78.5     | 72.7       | 81.3         | 78.3     | 74.9 | 80           | 74.9     | 71.6 | 71.6 | 68.1     |      | 62.5 | 59.9     |              | 85            |
| 90               |              |          | 71.3       |              | 74       | 70.7 |              | 71.6     | 67.6 | 71.6 | 67.7     | 63.4 | 62.5 | 59.8     |              | 90            |
| 95               |              |          |            |              |          | 66.7 |              | 67.9     | 63.7 |      | 65.4     | 59.8 |      | 59.8     | 55.1         | 95            |
| 100              |              |          |            |              |          |      |              |          | 60   |      | 61.8     | 56.3 |      | 59       | 53.6         | 100           |
| 105              |              |          |            |              |          |      |              |          | 56.5 |      |          | 53.1 |      |          | 50.6         | 105           |
| 110              |              |          |            |              |          |      |              |          |      |      |          | 50.3 |      |          | 47.9         | 110           |
| 115<br>120       |              |          |            |              |          |      |              |          |      |      |          | 47.6 |      |          | 45.4<br>43.1 | 115<br>120    |
| * adapter · pièc | e diadanta   | tour     |            |              |          |      |              |          |      |      |          |      |      |          |              | 54305 00 000  |
| adapter · piet   | o u auapia   | toui     |            |              |          |      |              |          |      |      |          |      |      |          | 1_100        | _0+303_00_000 |

|                  | 49-21     | 5ft<br>T | 79 ft<br>N | ŢF           | ij (         | 360° | 22050    |          | 85%  |              |          |      |              |          |     |       |          |               |
|------------------|-----------|----------|------------|--------------|--------------|------|----------|----------|------|--------------|----------|------|--------------|----------|-----|-------|----------|---------------|
| <u> </u>         | 13        | 2 + 11.5 | ft*        | 149          | 9 + 11.5     | ft*  | 16       | 5 + 11.5 | ft*  | 18           | 2 + 11.5 | ft*  | 198          | 3 + 11.5 | ft* | 215 + | 11.5 ft* | <u> </u>      |
|                  |           | 79 ft    |            |              | 79 ft        |      |          | 79 ft    |      |              | 79 ft    |      |              | 79 ft    |     | 79    |          |               |
| ↔ ft             | 82°       | 75°      | 68°        | 82°          | 75°          | 68°  | 82°      | 75°      | 68°  | 82°          | 75°      | 68°  | 82°          | 75°      | 68° | 82°   | 75°      | <b>←</b> ft   |
| 50               | 48        |          |            |              |              |      |          |          |      |              |          |      |              |          |     |       |          | 50            |
| 55               | 47.9      |          |            | 36.7         |              |      | 27       |          |      |              |          |      |              |          |     |       |          | 55            |
| 60               | 47.8      |          |            | 36.5         |              |      | 27       |          |      |              |          |      |              |          |     |       |          | 60            |
| 65               | 47.7      |          |            | 36.3         |              |      | 27       |          |      | 19.9         |          |      | 13.8         |          |     |       |          | 65            |
| 70               | 47.6      |          |            | 36.3         |              |      | 27       |          |      | 19.8         |          |      | 13.7         |          |     | 7.6   |          | 70            |
| 75               | 47.6      |          |            | 36.3         |              |      | 27       |          |      | 19.7         |          |      | 13.6         |          |     | 7.6   |          | 75            |
| 80               | 47.6      | 4.4      |            | 36.3         | 040          |      | 27       |          |      | 19.7         |          |      | 13.4         |          |     | 7.5   |          | 80            |
| 85<br>90         | 47.4      | 44       |            | 36.3<br>36.3 | 34.9         |      | 27<br>27 |          |      | 19.7         |          |      | 13.3<br>13.3 |          |     | 7.4   |          | 85<br>90      |
|                  | 47.1      | 42.8     |            |              | 34.4         |      | 27       | 25       |      | 19.7<br>19.7 |          |      | 13.3         |          |     |       |          |               |
| 95<br>100        |           | 41.5     | 35.4       | 36.3         | 33.6<br>32.7 |      | 21       | 24.4     |      | 19.7         | 18       |      | 13.2         |          |     | 7.3   |          | 95<br>100     |
| 105              |           | 38.9     | 35.4       |              | 31.8         |      |          | 23.8     |      |              | 17.7     |      | 13.2         |          |     | 7.3   |          | 105           |
| 110              |           | 37.8     | 33.5       |              | 31.0         |      |          | 23.3     |      |              | 17.7     |      |              | 11.7     |     |       |          | 110           |
| 115              |           | 07.0     | 32.1       |              | 30.3         | 26.7 |          | 22.7     |      |              | 16.9     |      |              | 11.6     |     |       | 5.9      | 115           |
| 120              |           |          | 30.8       |              | 00.0         | 25.7 |          | 22.1     | 18.5 |              | 16.5     |      |              | 11.6     |     |       | 5.9      | 120           |
| 125              |           |          | 00.0       |              |              | 24.7 |          |          | 18.2 |              | 10.0     |      |              | 11.4     |     |       | 5.9      | 125           |
| 130              |           |          |            |              |              | 23.7 |          |          | 17.4 |              |          |      |              | 11.2     |     |       | 5.9      | 130           |
| 135              |           |          |            |              |              |      |          |          | 16.8 |              |          | 11.9 |              |          |     |       |          | 135           |
| 140              |           |          |            |              |              |      |          |          |      |              |          | 11.5 |              |          | 7.4 |       |          | 140           |
| 145              |           |          |            |              |              |      |          |          |      |              |          |      |              |          | 7.3 |       |          | 145           |
| 150              |           |          |            |              |              |      |          |          |      |              |          |      |              |          | 7   |       |          | 150           |
| * adapter · pièc | e d'adapt | tateur   |            |              |              |      |          |          |      |              |          |      |              |          |     |       | t_180    | _54305_00_000 |

|             | 49-215 |            | 98 ft<br>N | M    |          | 220  | 500 lbs | 85%      |      |      |          |      |      |          |      |          |
|-------------|--------|------------|------------|------|----------|------|---------|----------|------|------|----------|------|------|----------|------|----------|
| <u> </u>    | 49     | 9 + 11.5 1 | ft*        | 6    | 6 + 11.5 | ft*  | 8       | 2 + 11.5 | ft*  | 9    | 9 + 11.5 | ft*  | 11   | 5 + 11.5 | ft*  | <u>A</u> |
|             |        | 98 ft      |            |      | 98 ft    |      |         | 98 ft    |      |      | 98 ft    |      |      | 98 ft    |      |          |
| <b>↔</b> ft | 82°    | 75°        | 68°        | 82°  | 75°      | 68°  | 82°     | 75°      | 68°  | 82°  | 75°      | 68°  | 82°  | 75°      | 68°  | <b>→</b> |
| 42          | 78.7   |            |            |      |          |      |         |          |      |      |          |      |      |          |      | 42       |
| 44          | 78.1   |            |            |      |          |      |         |          |      |      |          |      |      |          |      | 44       |
| 46          | 77.4   |            |            | 73.3 |          |      |         |          |      |      |          |      |      |          |      | 46       |
| 48          | 76.8   |            |            | 73   |          |      |         |          |      |      |          |      |      |          |      | 48       |
| 50          | 76.1   |            |            | 72.8 |          |      | 65.9    |          |      | 56.9 |          |      |      |          |      | 50       |
| 55          | 74.5   |            |            | 71.9 |          |      | 65.8    |          |      | 56.7 |          |      | 49.2 |          |      | 55       |
| 60          | 73     |            |            | 70.7 |          |      | 65.7    |          |      | 56.5 |          |      | 49.2 |          |      | 60       |
| 65          | 71.6   | 70.5       |            | 69.7 | 68.7     |      | 65.2    |          |      | 56.3 |          |      | 49   |          |      | 65       |
| 70          | 70.4   | 68.8       |            | 68.7 | 67.5     |      | 64.6    | 63.4     |      | 56.3 |          |      | 48.9 |          |      | 70       |
| 75          | 69.4   | 67.3       |            | 67.9 | 66.2     |      | 64      | 62.7     |      | 56.2 |          |      | 48.9 |          |      | 75       |
| 80          | 68.9   | 66         | 65.2       | 67.4 | 65.1     |      | 63.5    | 61.8     |      | 56.2 | 54.7     |      | 48.9 |          |      | 80       |
| 85          | 68.7   | 64.8       | 63.5       | 67.3 | 64.1     | 63.3 | 63.3    | 60.9     |      | 56.2 | 54.7     |      | 48.9 | 47.2     |      | 85       |
| 90          | 68.7   | 64.1       | 62.1       | 67.2 | 63.4     | 62.1 | 63.3    | 60.3     |      | 56.2 | 54.5     |      | 48.9 | 47.2     |      | 90       |
| 95          | 65.2   | 63.9       | 61         | 67.2 | 63       | 60.9 | 63.3    | 59.8     | 58.6 | 56.2 | 54.1     |      | 48.9 | 47.2     |      | 95       |
| 100         |        | 63.9       | 60.1       | 64.8 | 62.7     | 59.9 | 63.3    | 59.5     | 57.4 | 56.2 | 53.9     | 52.7 | 48.9 | 47.2     |      | 100      |
| 105         |        | 63.9       | 59.7       |      | 62.2     | 58.9 |         | 59.4     | 55.9 | 56.2 | 53.7     | 52.1 | 48.9 | 47.2     |      | 105      |
| 110         |        |            | 57.9       |      | 59       | 55.8 |         | 56.8     | 52.9 |      | 53.6     | 49.4 | 48.9 | 47.2     | 45.7 | 110      |
| 115         |        |            |            |      |          | 52.9 |         | 54       | 50.2 |      | 51.7     | 46.8 |      | 47.2     | 44.4 | 115      |
| 120         |        |            |            |      |          |      |         |          | 47.6 |      | 49       | 44.4 |      | 46.7     | 42.4 | 120      |
| 125         |        |            |            |      |          |      |         |          | 45.2 |      |          | 42.2 |      |          | 40.3 | 125      |
| 130         |        |            |            |      |          |      |         |          |      |      |          | 40.2 |      |          | 38.4 | 130      |
| 135         |        |            |            |      |          |      |         |          |      |      |          | 38.3 |      |          | 36.6 | 135      |
| 140         |        |            |            |      |          |      |         |          |      |      |          |      |      |          | 34.9 | 140      |

| Δ.          | 12   | 2 + 11.5     | N N          | 1/1  | 9 + 11.5     | ft*          | 16   | 5 + 11.5     | ft*  | 12   | 2 + 11.5     | ft*  | 10  | 8 + 11.5   | ff* | 215 +<br>11.5 ft* |            |
|-------------|------|--------------|--------------|------|--------------|--------------|------|--------------|------|------|--------------|------|-----|------------|-----|-------------------|------------|
|             | 10   | 98 ft        | IL           | 14   | 98 ft        | IL           | 10   | 98 ft        | TC . | 10   | 98 ft        | TC . | 19  | 98 ft      | 111 | 98 ft             |            |
| <b>↔</b> ft | 82°  | 75°          | 68°          | 82°  | 75°          | 68°          | 82°  | 75°          | 68°  | 82°  | 75°          | 68°  | 82° | 75°        | 68° | 82°               | <b>/</b> ↔ |
| 55          | 39   |              |              | -    |              |              |      |              |      |      |              |      |     |            |     |                   | 55         |
| 60          | 38.9 |              |              |      |              |              |      |              |      |      |              |      |     |            |     |                   | 60         |
| 65          | 38.7 |              |              | 29   |              |              | 22.2 |              |      |      |              |      |     |            |     |                   | 65         |
| 70          | 38.6 |              |              | 28.9 |              |              | 22.1 |              |      | 15.8 |              |      | 9.4 |            |     |                   | 70         |
| 75          | 38.5 |              |              | 28.7 |              |              | 22   |              |      | 15.7 |              |      | 9.3 |            |     | 4.1               | 75         |
| 80          | 38.4 |              |              | 28.6 |              |              | 21.8 |              |      | 15.6 |              |      | 9.2 |            |     | 4                 | 80         |
| 85          | 38.4 |              |              | 28.6 |              |              | 21.7 |              |      | 15.5 |              |      | 9.1 |            |     | 4                 | 85         |
| 90          | 38.4 | 36.9         |              | 28.6 |              |              | 21.7 |              |      | 15.4 |              |      | 9   |            |     | 3.9               | 90         |
| 95          | 38.4 | 36.4         |              | 28.6 | 27.8         |              | 21.7 |              |      | 15.3 |              |      | 8.9 |            |     | 3.8               | 95         |
| 100         | 38.4 | 35.8         |              | 28.6 | 27.8         |              | 21.7 | 20.7         |      | 15.2 |              |      | 8.8 |            |     | 3.8               | 100        |
| 105         | 38.4 | 35.1         |              | 28.6 | 27.6         |              | 21.7 | 20.5         |      | 15.2 |              |      | 8.8 |            |     | 3.7               | 105        |
| 110         | 38.4 | 34.2         |              | 28.6 | 27.2         |              | 21.7 | 20.1         |      | 15.2 | 13.9         |      | 8.7 |            |     | 3.7               | 110        |
| 115         |      | 33.4         | 29.6         | 28.6 | 26.7         | 00.7         | 21.7 | 19.7         |      | 15.2 | 13.8         |      | 8.7 | 7.5        |     | 3.7               | 115        |
| 120         |      | 32.6         | 28.9         |      | 26.1         | 22.7         |      | 19.3         |      |      | 13.7         |      | 8.7 | 7.5        |     | 3.7               | 120        |
| 125<br>130  |      | 31.9<br>31.2 | 27.7<br>26.7 |      | 25.6<br>25.1 | 22.6<br>21.8 |      | 18.9<br>18.5 |      |      | 13.6<br>13.3 |      |     | 7.5<br>7.4 |     |                   | 125<br>130 |
| 135         |      | 31.2         | 25.8         |      | 25.1         | 21.8         |      | 18.1         | 15   |      | 13.3         |      |     | 7.4        |     |                   | 130        |
| 140         |      |              | 25.6         |      | 24.1         | 20.3         |      | 10.1         | 14.6 |      | 12.7         | 9.7  |     | 7.4        |     |                   | 140        |
| 145         |      |              | 20           |      |              | 19.6         |      |              | 14.0 |      | 12.7         | 9.6  |     | 7.4        |     |                   | 145        |
| 150         |      |              |              |      |              | 19.0         |      |              | 13.5 |      |              | 9.2  |     | 7.3        |     |                   | 150        |
| 155         |      |              |              |      |              |              |      |              | 13   |      |              | 8.8  |     | 7.0        | 5.5 |                   | 155        |
| 160         |      |              |              |      |              |              |      |              |      |      |              | 8.4  |     |            | 5.4 |                   | 160        |
| 165         |      |              |              |      |              |              |      |              |      |      |              |      |     |            | 5.2 |                   | 165        |
| 170         |      |              |              |      |              |              |      |              |      |      |              |      |     |            | 4.9 |                   | 170        |

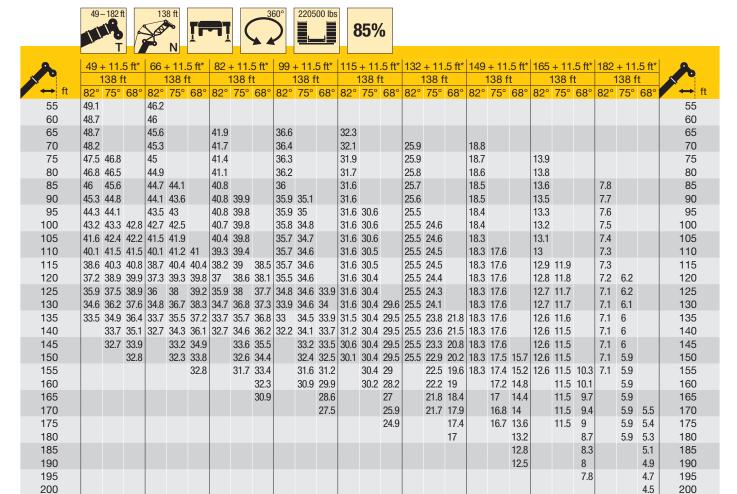


49 – 199 ft 118 ft 360° 220500 lbs

| <u> </u>   | 49           | 9 + 11.5     | ft*          | 6            | 3 + 11.5 t   | ft*          | 82           | 2 + 11.5 1   | ft*          | 99           | 9 + 11.5     | ft*          | 11           | 5 + 11.5     | ft*          | <u> </u>   |
|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
|            |              | 118 ft       |              |              | 118 ft       |              |              | 118 ft       |              |              | 118 ft       |              |              | 118 ft       |              |            |
| ↔ ft       | 82°          | 75°          | 68°          | 82°          | 75°          | 68°          | 82°          | 75°          | 68°          | 82°          | 75°          | 68°          | 82°          | 75°          | 68°          | → ft       |
| 50<br>55   | 61.8<br>61.3 |              |              | 57.6<br>57.3 |              |              | 52.3         |              |              | 45.4         |              |              | 39.8         |              |              | 50<br>55   |
| 60<br>65   | 60.3<br>59.2 |              |              | 57<br>57     |              |              | 52<br>51.7   |              |              | 45.3<br>45.1 |              |              | 39.8<br>39.5 |              |              | 60<br>65   |
| 70<br>75   | 58.1<br>57.2 | 57.4<br>56.5 |              | 56.3<br>55.6 | 54.9         |              | 51.5<br>51.4 |              |              | 45<br>44.8   |              |              | 39.4<br>39.3 |              |              | 70<br>75   |
| 80<br>85   | 56.4<br>55.6 | 55.4<br>54.3 |              | 55<br>54.3   | 54.1<br>53.3 |              | 51.3<br>51.1 | 50.2<br>50.1 |              | 44.7<br>44.7 | 43.4         |              | 39.2<br>39.2 |              |              | 80<br>85   |
| 90<br>95   | 55.1<br>54.2 | 53.4<br>52.5 | 52.7<br>51.8 | 53.9<br>53.5 | 52.4<br>51.7 | 51           | 50.7<br>50.4 | 49.6<br>49   |              | 44.7<br>44.7 | 43.2<br>43.1 |              | 39.1<br>39.1 | 38<br>37.9   |              | 90<br>95   |
| 100<br>105 | 52.9<br>51.3 | 51.8<br>51.3 | 50.7<br>49.8 | 52.6<br>51.1 | 51.1<br>50.6 | 50.4<br>49.5 | 49.8<br>48.8 | 48.5<br>48.1 | 47.6<br>47.3 | 44.7<br>44.7 | 43.1<br>43.1 |              | 39.1<br>39.1 | 37.8<br>37.7 |              | 100<br>105 |
| 110<br>115 | 49.7<br>48   | 50.6<br>49.6 | 49<br>48.5   | 49.6<br>48.1 | 50.3<br>49.6 | 48.7<br>48.1 | 47.4<br>46.1 | 47.7<br>47.5 | 46.6<br>46   | 44.6<br>44.2 | 43.1<br>43.1 | 42.4<br>42.2 | 39.1<br>39.1 | 37.7<br>37.7 |              | 110<br>115 |
| 120<br>125 |              | 48.3<br>46.8 | 48.1<br>47.8 | 46.7         | 48.5<br>47.3 | 47.7<br>47.2 | 44.8         | 47<br>45.8   | 45.5<br>44.9 | 43.4<br>42.6 | 43.1<br>43.1 | 41.8<br>41.4 | 39.1<br>39.1 | 37.7<br>37.7 | 36.9<br>37.1 | 120<br>125 |
| 130<br>135 |              |              | 46.8         |              | 46           | 45<br>42.9   |              | 44.6<br>43.5 | 42.8<br>40.8 |              | 43<br>41.9   | 39.7<br>38   | 39.1         | 37.7<br>37.7 | 37.2<br>35.9 | 130<br>135 |
| 140<br>145 |              |              |              |              |              |              |              |              | 39<br>37.2   |              | 40.2         | 36.2<br>34.6 |              | 37.6         | 34.3<br>32.7 | 140<br>145 |
| 150<br>155 |              |              |              |              |              |              |              |              |              |              |              | 33.1<br>31.7 |              |              | 31.3<br>30   | 150<br>155 |
| 160        |              |              |              |              |              |              |              |              |              |              |              |              |              |              | 28.7         | 160        |

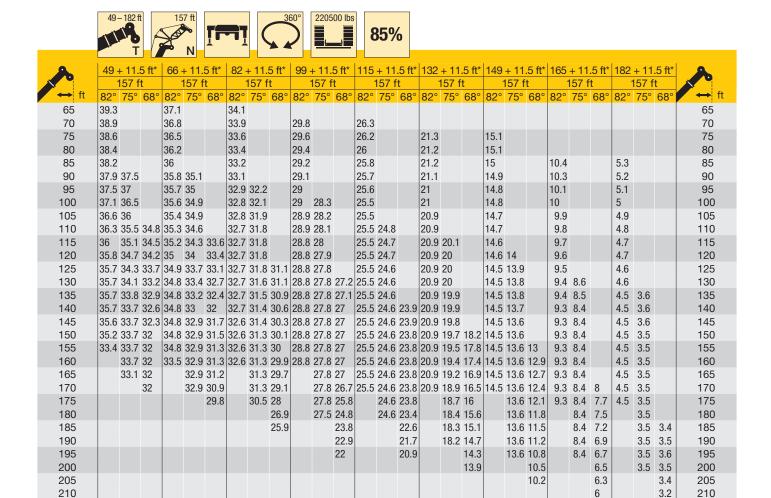
\* adapter · pièce d'adaptateur t\_180\_54505\_00\_000

|                  | N. S. S. |              | N    | L İ          | 4            |      |              | 85%          |      |              |           |     |            |           |     |                      |
|------------------|----------|--------------|------|--------------|--------------|------|--------------|--------------|------|--------------|-----------|-----|------------|-----------|-----|----------------------|
| <u> </u>         | 13       | 2 + 11.5     | ft*  | 14           | 9 + 11.5     | ft*  | 16           | 5 + 11.5     | ft*  | 18           | 32 + 11.5 | ft* | 19         | 98 + 11.5 | ft* | <b>A</b>             |
|                  |          | 118 ft       |      |              | 118 ft       |      |              | 118 ft       |      |              | 118 ft    |     |            | 118 ft    |     |                      |
| <b>→</b> ft      | 82°      | 75°          | 68°  | 82°          | 75°          | 68°  | 82°          | 75°          | 68°  | 82°          | 75°       | 68° | 82°        | 75°       | 68° | <b>↔</b> ft          |
| 65               | 31.8     |              |      |              |              |      |              |              |      |              |           |     |            |           |     | 65                   |
| 70               | 31.7     |              |      | 23.2         |              |      | 17.9         |              |      |              |           |     |            |           |     | 70                   |
| 75               | 31.5     |              |      | 23.1         |              |      | 17.8         |              |      | 11.6         |           |     | 5.9        |           |     | 75                   |
| 80               | 31.4     |              |      | 23           |              |      | 17.7         |              |      | 11.5         |           |     | 5.8        |           |     | 80                   |
| 85               | 31.3     |              |      | 22.9         |              |      | 17.6         |              |      | 11.3         |           |     | 5.7        |           |     | 85                   |
| 90               | 31.3     |              |      | 22.8         |              |      | 17.6         |              |      | 11.2         |           |     | 5.6        |           |     | 90                   |
| 95               | 31.3     | 30.1         |      | 22.8         |              |      | 17.5         |              |      | 11.1         |           |     | 5.5        |           |     | 95                   |
| 100              | 31.3     | 30.1         |      | 22.8         | 00.4         |      | 17.5         |              |      | 11           |           |     | 5.5        |           |     | 100                  |
| 105              | 31.3     | 30           |      | 22.8         | 22.1         |      | 17.4         | 10.0         |      | 10.9         |           |     | 5.4        |           |     | 105                  |
| 110<br>115       | 31.3     | 29.7<br>29.4 |      | 22.8<br>22.8 | 22.1<br>22.2 |      | 17.4<br>17.3 | 16.3<br>16.2 |      | 10.9<br>10.8 | 9.7       |     | 5.4<br>5.3 |           |     | 110<br>115           |
| 120              | 31.3     | 29.4<br>29   |      | 22.8         | 22.2         |      | 17.3         | 16.2         |      | 10.8         | 9.7       |     | 5.3        | 4.2       |     | 120                  |
| 125              | 31.3     | 28.5         |      | 22.8         | 22.1         |      | 17.3         | 16.1         |      | 10.7         | 9.6       |     | 5.3        | 4.2       |     | 125                  |
| 130              | 31.3     | 28           | 25.1 | 22.8         | 21.7         |      | 17.3         | 15.9         |      | 10.7         | 9.5       |     | 5.3        | 4.1       |     | 130                  |
| 135              | 01.0     | 27.4         | 24.3 | 22.8         | 21.4         | 18.9 | 17.3         | 15.7         |      | 10.7         | 9.4       |     | 5.3        | 4.1       |     | 135                  |
| 140              |          | 26.9         | 23.4 |              | 21.1         | 18.5 |              | 15.4         |      |              | 9.4       |     | 5.3        | 4.1       |     | 140                  |
| 145              |          | 26.4         | 22.6 |              | 20.7         | 17.9 |              | 15.1         |      |              | 9.4       |     |            | 4.1       |     | 145                  |
| 150              |          | 26           | 21.9 |              | 20.4         | 17.4 |              | 14.8         | 12.2 |              | 9.4       |     |            | 4         |     | 150                  |
| 155              |          |              | 21.2 |              | 20.2         | 16.8 |              | 14.5         | 11.8 |              | 9.4       | 7.5 |            | 4         |     | 155                  |
| 160              |          |              | 20.6 |              |              | 16.3 |              |              | 11.3 |              | 9.4       | 7.3 |            | 4         |     | 160                  |
| 165              |          |              |      |              |              | 15.8 |              |              | 10.9 |              |           | 7   |            | 4         |     | 165                  |
| 170              |          |              |      |              |              | 15.4 |              |              | 10.5 |              |           | 6.7 |            | 4         |     | 170                  |
| 175              |          |              |      |              |              |      |              |              | 10.1 |              |           | 6.4 |            |           | 3.5 | 175                  |
| 180              |          |              |      |              |              |      |              |              |      |              |           | 6.2 |            |           | 3.5 | 180                  |
| 185              |          |              |      |              |              |      |              |              |      |              |           |     |            |           | 3.4 | 185                  |
| * adapter · pièc |          |              |      |              |              |      |              |              |      |              |           |     |            |           | 3.2 | 190<br>0 54505 00 00 |



\* adapter · pièce d'adaptateur t\_180\_54605\_00\_000

215



 220
 2.8
 220

 \* adapter · pièce d'adaptateur
 t\_180\_54705\_00\_000

5.9

3

215

49-165ft 177 ft 360° 220500 lbs

| <u> </u>    | 49   | + 11.5 | 5 ft* | 66 - | + 11. | 5 ft* | 82 - | + 11.5 | 5 ft* | 99   | + 11.5 | 5 ft* | 115  | + 11.  | 5 ft* | 132  | + 11.  | 5 ft* | 149  | + 11. | .5 ft* | 165 | + 11. | .5 ft* |     |
|-------------|------|--------|-------|------|-------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|--------|-------|------|-------|--------|-----|-------|--------|-----|
| 7.          |      | 177 f  | t     |      | 177 f | t     | -    | 177 f  | t     |      | 177 ft | t     |      | 177 ft |       |      | 177 ft |       | -    | 177 f | t      |     | 177 f | t      |     |
| <b>↔</b> ft | 82°  | 75°    | 68°   | 82°  | 75°   | 68°   | 82°  | 75°    | 68°   | 82°  | 75°    | 68°   | 82°  | 75°    | 68°   | 82°  | 75°    | 68°   | 82°  | 75°   | 68°    | 82° | 75°   | 68°    | -   |
| 70          | 31.8 |        |       | 29.9 |       |       | 27   |        |       |      |        |       |      |        |       |      |        |       |      |       |        |     |       |        | 70  |
| 75          | 31.5 |        |       | 29.7 |       |       | 27   |        |       | 24.2 |        |       | 21.4 |        |       |      |        |       |      |       |        |     |       |        | 75  |
| 80          | 31.2 |        |       | 29.5 |       |       | 27   |        |       | 24.1 |        |       | 21.3 |        |       |      |        |       |      |       |        |     |       |        | 80  |
| 85          | 30.9 |        |       | 29.3 |       |       | 26.9 |        |       | 23.9 |        |       | 21.2 |        |       | 17.2 |        |       | 11.7 |       |        |     |       |        | 85  |
| 90          | 30.6 |        |       | 29.1 |       |       | 26.8 |        |       | 23.7 |        |       | 21   |        |       | 17.1 |        |       | 11.6 |       |        | 6.8 |       |        | 90  |
| 95          | 30.5 | 30.1   |       | 28.9 |       |       | 26.7 |        |       | 23.6 |        |       | 20.9 |        |       | 17.1 |        |       | 11.4 |       |        | 6.7 |       |        | 95  |
| 100         | 30.4 | 30     |       | 28.7 | 28.3  |       | 26.5 | 26     |       | 23.4 |        |       | 20.7 |        |       | 17   |        |       | 11.3 |       |        | 6.6 |       |        | 100 |
| 105         | 30.3 | 30     |       | 28.5 | 28    |       | 26.4 | 26     |       | 23.4 |        |       | 20.6 |        |       | 16.9 |        |       | 11.2 |       |        | 6.5 |       |        | 105 |
| 110         | 30   | 29.6   |       | 28.5 | 27.8  |       | 26.3 | 25.8   |       | 23.3 | 22.8   |       | 20.6 |        |       | 16.8 |        |       | 11   |       |        | 6.4 |       |        | 110 |
| 115         | 29.7 | 29.3   |       | 28.5 | 27.8  |       | 26.2 | 25.7   |       | 23.3 | 22.7   |       | 20.5 | 19.9   |       | 16.7 |        |       | 10.9 |       |        | 6.3 |       |        | 115 |
| 120         | 29.5 | 28.9   | 28.2  | 28.4 | 27.8  |       | 26.1 | 25.5   |       | 23.2 | 22.6   |       | 20.5 | 19.9   |       | 16.6 | 15.8   |       | 10.8 |       |        | 6.2 |       |        | 120 |
| 125         | 29.3 | 28.6   | 28    | 28.4 | 27.7  |       | 26   | 25.4   |       | 23.2 | 22.5   |       | 20.5 | 19.9   |       | 16.5 | 15.7   |       | 10.7 |       |        | 6.1 |       |        | 125 |
| 130         | 29.1 | 28.3   | 27.8  | 28.3 | 27.6  | 27.1  | 25.9 | 25.3   |       | 23.2 | 22.5   |       | 20.5 | 19.8   |       | 16.4 | 15.6   |       | 10.6 | 9.9   |        | 6   |       |        | 130 |
| 135         | 28.9 | 28     | 27.5  | 28.2 | 27.4  | 26.9  | 25.9 | 25.3   |       | 23.2 | 22.4   |       | 20.5 | 19.8   |       | 16.3 | 15.5   |       | 10.5 | 9.8   |        | 6   | 5.2   |        | 135 |
| 140         | 28.8 | 27.7   | 27.1  | 28.1 | 27.2  | 26.7  | 25.9 | 25.3   | 24.8  | 23.2 | 22.3   | 21.9  | 20.5 | 19.8   |       | 16.2 | 15.4   |       | 10.4 | 9.7   |        | 5.9 | 5.1   |        | 140 |
| 145         | 28.8 | 27.5   | 26.8  | 28.1 | 27    | 26.4  | 25.9 | 25.3   | 24.8  | 23.2 | 22.3   | 21.8  | 20.5 | 19.7   |       | 16.2 | 15.3   |       | 10.4 | 9.7   |        | 5.8 | 5.1   |        | 145 |
| 150         | 28.8 | 27.3   | 26.5  | 28   | 26.9  | 26.2  | 25.9 | 25.3   | 24.8  | 23.2 | 22.3   | 21.7  | 20.5 | 19.7   | 19.2  | 16.2 | 15.3   |       | 10.4 | 9.6   |        | 5.8 | 5.1   |        | 150 |
| 155         | 28.8 | 27.2   | 26.2  | 27.9 | 26.8  | 26    | 25.9 | 25.3   | 24.6  | 23.2 | 22.3   | 21.6  | 20.5 | 19.7   | 19.2  | 16.2 | 15.3   |       | 10.4 | 9.6   |        | 5.8 | 5.1   |        | 155 |
| 160         | 28.8 | 27.2   | 26    | 27.9 | 26.7  | 25.8  | 25.9 | 25.3   | 24.5  | 23.2 | 22.3   | 21.6  | 20.5 | 19.7   | 19.1  | 16.2 | 15.3   | 14.8  | 10.4 | 9.6   |        | 5.8 | 5.1   |        | 160 |
| 165         | 28.8 | 27.2   | 25.9  | 27.9 | 26.7  | 25.6  | 25.9 | 25.2   | 24.3  | 23.2 | 22.3   | 21.6  | 20.5 | 19.7   | 19.1  | 16.2 | 15.3   | 14.7  | 10.4 | 9.6   |        | 5.8 | 5.1   |        | 165 |
| 170         | 28.8 | 27.2   | 25.8  | 27.9 | 26.7  | 25.4  | 25.9 | 25.2   | 24.2  | 23.2 | 22.3   | 21.6  | 20.5 | 19.7   | 19.1  | 16.2 | 15.3   | 14.5  | 10.4 | 9.6   |        | 5.8 | 5.1   |        | 170 |
| 175         | 27.3 | 27.2   | 25.8  | 27.9 | 26.7  | 25.4  | 25.9 |        |       |      |        |       | 20.5 | 19.7   | 19.1  | 16.2 | 15.3   | 14.2  | 10.4 | 9.6   | 9.6    | 5.8 | 5.1   |        | 175 |
| 180         |      |        |       | 26.9 |       | 25.3  | 25.9 |        | 24.1  | 23.2 | 22.3   |       |      | 19.7   |       |      | 15.3   |       | 10.4 | 9.6   | 9.7    | 5.8 | 5.1   |        | 180 |
| 185         |      | 26.7   |       |      |       | 25.3  |      | 25.2   |       |      | 22.3   |       |      | 19.7   |       |      | 15.3   |       |      | 9.6   | 9.6    | 5.8 | 5.1   | 5.1    | 185 |
| 190         |      |        | 25.8  |      | 26.7  | 25.3  |      | 25.2   |       |      | 22.3   |       | 20.5 |        |       | 16.2 | 15.3   |       | 10.4 |       | 9.4    | 5.8 | 5.1   | 5.2    | 190 |
| 195         |      |        |       |      |       | 24.8  |      | 25.2   | 23.5  |      | 22.3   |       |      | 19.7   |       |      | 15.2   | -     |      | 9.6   | 9.2    | 5.8 | 5.1   | 5.2    | 195 |
| 200         |      |        |       |      |       |       |      |        | 22.7  |      | 22.3   |       |      | 19.7   |       |      | 15.1   |       |      | 9.6   | 9      |     | 5.1   | 5.2    | 200 |
| 205         |      |        |       |      |       |       |      |        |       |      |        | 20    |      |        | 18.6  |      | 15     | 12.1  |      | 9.6   | 8.7    |     | 5.1   | 5.1    | 205 |
| 210         |      |        |       |      |       |       |      |        |       |      |        | 19.2  |      |        | 17.9  |      |        | 11.7  |      | 9.6   | 8.5    |     | 5.1   | 4.9    | 210 |
| 215         |      |        |       |      |       |       |      |        |       |      |        |       |      |        | 17.3  |      |        | 11.3  |      | 9.6   | 8.2    |     | 5.1   | 4.8    | 215 |
| 220         |      |        |       |      |       |       |      |        |       |      |        |       |      |        |       |      |        | 11    |      |       | 8      |     |       | 4.6    | 220 |
| 225         |      |        |       |      |       |       |      |        |       |      |        |       |      |        |       |      |        |       |      |       | 7.7    |     |       | 4.4    | 225 |
| 230         |      |        |       |      |       |       |      |        |       |      |        |       |      |        |       |      |        |       |      |       |        |     |       | 4.2    | 230 |
| 235         |      |        |       |      |       |       |      |        |       |      |        |       |      |        |       |      |        |       |      |       |        |     |       | 4      | 235 |

|             | 49-  | 165 ft<br><b>S</b> |       | 197 ft<br>N | ŢF     | Ţ     | <b>C</b> | 360°   | 2205 | 00 lbs | 85     | 5%    |      |        |       |      |        |       |     |       |       | 105 .             |            |
|-------------|------|--------------------|-------|-------------|--------|-------|----------|--------|------|--------|--------|-------|------|--------|-------|------|--------|-------|-----|-------|-------|-------------------|------------|
| <u> </u>    | 49   | + 11.5             | 5 ft* | 66          | + 11.5 | 5 ft* | 82       | + 11.5 | ft*  | 99     | + 11.5 | 5 ft* | 115  | + 11.  | 5 ft* | 132  | + 11.  | 5 ft* | 149 | + 11. | 5 ft* | 165 +<br>11.5 ft* |            |
|             |      | 197 ft             |       |             | 197 ft |       |          | 197 ft |      |        | 197 ft |       |      | 197 ft |       |      | 197 ft |       |     | 197   | 7 ft  |                   |            |
| <b>↔</b> ft | 82°  | 75°                | 68°   | 82°         | 75°    | 68°   | 82°      | 75°    | 68°  | 82°    | 75°    | 68°   | 82°  | 75°    | 68°   | 82°  | 75°    | 68°   | 82° | 75°   | 68°   | 82°               | <b>→</b> f |
| 75          | 25.4 |                    |       | 23.9        |        |       |          |        |      |        |        |       |      |        |       |      |        |       |     |       |       |                   | 75         |
| 80          | 25.1 |                    |       | 23.8        |        |       | 22.1     |        |      |        |        |       |      |        |       |      |        |       |     |       |       |                   | 80         |
| 85          | 24.9 |                    |       | 23.6        |        |       | 21.9     |        |      | 19.4   |        |       | 17   |        |       |      |        |       |     |       |       |                   | 85         |
| 90          | 24.7 |                    |       | 23.4        |        |       | 21.7     |        |      | 19.2   |        |       | 16.9 |        |       | 12.9 |        |       | 7.6 |       |       |                   | 90         |
| 95          | 24.4 |                    |       | 23.2        |        |       | 21.5     |        |      | 19.1   |        |       | 16.8 |        |       | 12.7 |        |       | 7.5 |       |       | 3.3               | 95         |
| 100         | 24.2 |                    |       | 23.1        |        |       | 21.3     |        |      | 18.9   |        |       | 16.7 |        |       | 12.5 |        |       | 7.3 |       |       | 3.2               | 100        |
| 105         | 24   | 23.8               |       | 22.9        |        |       | 21.2     |        |      | 18.8   |        |       | 16.6 |        |       | 12.4 |        |       | 7.2 |       |       | 3.2               | 105        |
| 110         | 23.9 | 23.6               |       | 22.7        |        |       | 21.1     |        |      | 18.7   |        |       | 16.5 |        |       | 12.2 |        |       | 7.1 |       |       | 3.1               | 110        |
| 115         | 23.7 |                    |       | 22.6        | 22.3   |       | 21       | 20.6   |      | 18.6   | 18.1   |       | 16.4 |        |       | 12.1 |        |       | 7   |       |       | 3                 | 115        |
| 120         | 23.6 |                    |       |             | 22.1   |       | 20.9     | 20.5   |      | 18.5   | 18.1   |       | 16.3 |        |       | 12   |        |       | 6.9 |       |       | 3                 | 120        |
| 125         | 23.5 | 23.3               |       | 22.4        | 21.9   |       | 20.8     | 20.4   |      | 18.5   | 18     |       | 16.3 | 15.9   |       | 11.8 |        |       | 6.8 |       |       | 3                 | 125        |
| 130         | 23.4 | 23.1               | 22.4  | 22.3        | 21.8   |       | 20.7     | 20.3   |      | 18.4   | 18     |       | 16.2 | 15.8   |       | 11.8 | 11.1   |       | 6.7 |       |       | 2.9               | 130        |
| 135         | 23.3 |                    | 22.3  | 22.2        | 21.7   |       | 20.6     | 20.2   |      |        | 17.9   |       | 16.2 |        |       | 11.7 |        |       | 6.7 | 6     |       | 2.9               | 135        |
| 140         | 23.2 | 22.6               | 22.1  | 22.1        | 21.7   | 21.3  | 20.6     | 20     |      | 18.3   | 17.8   |       | 16.2 | 15.7   |       | 11.6 | 10.9   |       | 6.7 | 6     |       | 2.9               | 140        |
| 145         | 23   | 22.4               | 22    |             | 21.6   | 21.3  | 20.5     | 19.9   |      |        | 17.8   |       | 16.2 |        |       | 11.6 | 10.8   |       | 6.7 | 5.9   |       | 2.9               | 145        |
| 150         | 22.9 | 22.2               | 21.8  | 22.1        | 21.6   | 21.3  | 20.5     | 19.9   | 19.5 | 18.3   | 17.7   |       | 16.2 | 15.6   |       | 11.6 | 10.8   |       | 6.6 | 5.9   |       | 2.9               | 150        |
| 155         | 22.8 | 22                 | 21.6  | 22.1        | 21.5   | 21.2  | 20.4     |        | 19.4 |        | 17.7   | 17.3  | 16.2 |        |       | 11.6 | 10.8   |       | 6.6 | 5.9   |       | 2.9               | 155        |
| 160         | 22.8 | 21.9               | 21.3  | 22          | 21.4   | 21    | 20.4     | 19.9   | 19.4 | 18.3   | 17.6   | 17.2  | 16.2 | 15.6   |       | 11.6 | 10.8   |       | 6.6 | 5.9   |       | 2.9               | 160        |
| 165         | 22.8 | 21.8               | 21.1  | 22          | 21.4   | 20.8  | 20.4     | 19.9   | 19.4 | 18.3   | 17.6   | 17.2  | 16.2 | 15.6   | 15.1  | 11.6 | 10.8   |       | 6.6 | 5.9   |       | 2.9               | 165        |
| 170         | 22.8 | 21.7               | 20.8  | 21.9        | 21.3   | 20.7  | 20.4     | 19.9   | 19.4 | 18.3   | 17.6   | 17.1  | 16.2 | 15.6   | 15.1  | 11.6 | 10.8   |       | 6.6 | 5.9   |       | 2.9               | 170        |
| 175         | 22.8 | 21.7               | 20.7  |             | 21.2   | 20.5  | 20.4     | 19.9   | 19.4 | 18.3   | 17.6   | 17    | 16.2 | 15.6   | 15.1  | 11.6 | 10.8   | 10.8  | 6.6 | 5.9   |       | 2.9               | 175        |
| 180         | 22.8 | 21.7               | 20.6  |             |        | 20.4  | 20.4     | 19.9   | 19.4 |        | 17.6   | 17    | 16.2 | 15.6   | 15    | 11.6 | 10.8   | 10.9  | 6.6 | 5.9   |       | 2.9               | 180        |
| 185         | 22.8 | 21.7               | 20.5  | 21.9        | 21.2   | 20.3  | 20.4     | 19.9   | 19.4 | 18.3   | 17.6   | 17    | 16.2 | 15.6   | 15    | 11.6 | 10.8   | 11    | 6.6 | 5.9   | 6     | 2.9               | 185        |
| 190         | 22.7 | 21.7               | 20.5  | 21.9        | 21.2   | 20.3  | 20.4     | 19.9   | 19.3 | 18.3   | 17.6   | 17    | 16.2 | 15.6   | 15    | 11.6 | 10.8   | 11    | 6.6 | 5.9   | 6.2   | 2.9               | 190        |
| 195         | 21.3 |                    | 20.5  |             |        | 20.3  | 20.4     |        | 19.3 |        |        | 17    |      |        | 15    | 11.6 |        | 11    | 6.6 | 5.9   | 6.3   | 2.9               | 195        |
| 200         |      | 21.7               | 20.5  | 21.1        | 21.2   | 20.3  | 20.4     |        | 19.3 | 18.3   | 17.6   | 17    |      | 15.6   | 15    | 11.6 | 10.8   | 10.8  | 6.6 | 5.9   | 6.4   | 2.9               | 200        |
| 205         |      |                    | 20.5  |             | 21.2   |       |          |        | 19.3 |        |        | 17    | 16.2 |        | 15    | 11.6 | 10.8   | 10.5  | 6.6 | 5.9   | 6.5   | 2.9               | 205        |
| 210         |      |                    | 20.5  |             |        | 20.3  |          |        | 19.3 |        |        | 17    |      | 15.6   |       |      | 10.8   | 10.3  |     | 5.9   | 6.6   | 2.9               | 210        |
| 215         |      |                    |       |             |        | 20.3  |          | 19.9   | 19.3 |        | 17.6   | 17    |      | 15.6   | 15    |      | 10.8   | 10    |     | 5.9   | 6.6   | 2.9               | 215        |
| 220         |      |                    |       |             |        |       |          |        | 18.9 |        | 17.6   | 16.9  |      | 15.6   | 15    |      | 10.8   | 9.7   |     | 5.9   | 6.6   |                   | 220        |
| 225         |      |                    |       |             |        |       |          |        |      |        |        | 16.6  |      |        | 14.9  |      | 10.8   | 9.4   |     | 5.9   | 6.4   |                   | 225        |
| 230         |      |                    |       |             |        |       |          |        |      |        |        | 15.9  |      |        | 14.7  |      |        | 9     |     | 5.9   | 6.3   |                   | 230        |
| 235         |      |                    |       |             |        |       |          |        |      |        |        |       |      |        | 14.2  |      |        | 8.7   |     | 5.9   | 6.1   |                   | 235        |
| 240         |      |                    |       |             |        |       |          |        |      |        |        |       |      |        |       |      |        | 8.5   |     |       | 5.9   |                   | 240        |
| 245         |      |                    |       |             |        |       |          |        |      |        |        |       |      |        |       |      |        |       |     |       | 5.7   |                   | 245        |

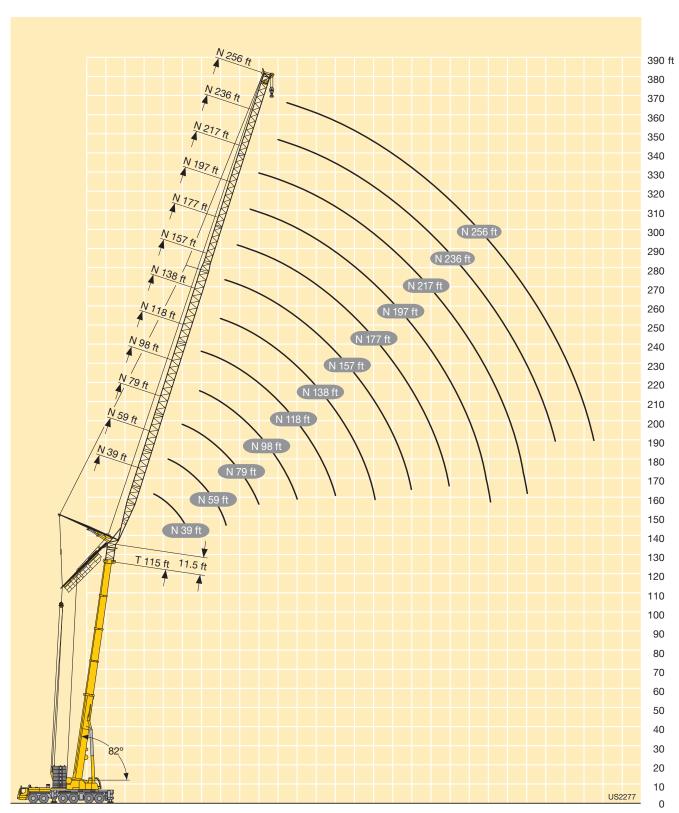
|             | 49-  | <b>%</b> | A September 1 | 17 ft N | Ţ      | Ţ    |      | 50°    | 20500 |      | <b>35</b> % |      |      |        |       |     |        |       |     |        |       |               |
|-------------|------|----------|---------------|---------|--------|------|------|--------|-------|------|-------------|------|------|--------|-------|-----|--------|-------|-----|--------|-------|---------------|
| A           | 49   | + 11.5   | ft*           | 66      | + 11.5 | ft*  | 82   | + 11.5 | ft*   | 99   | + 11.5      | ft*  | 115  | + 11.  | 5 ft* |     | + 11.  | 5 ft* | 149 | + 11.  | 5 ft* | <u>A</u>      |
|             |      | 217 ft   |               |         | 217 ft |      |      | 217 ft |       |      | 217 ft      |      |      | 217 ft |       |     | 217 ft |       |     | 217 ft |       |               |
| <b>↔</b> ft | 82°  | 75°      | 68°           | 82°     | 75°    | 68°  | 82°  | 75°    | 68°   | 82°  | 75°         | 68°  | 82°  | 75°    | 68°   | 82° | 75°    | 68°   | 82° | 75°    | 68°   | $\rightarrow$ |
| 85          | 20.3 |          |               | 19.3    |        |      | 17.9 |        |       |      |             |      |      |        |       |     |        |       |     |        |       | 85            |
| 90          | 20.2 |          |               | 19.1    |        |      | 17.7 |        |       | 15.6 |             |      | 13.4 |        |       |     |        |       |     |        |       | 90            |
| 95          | 20   |          |               | 18.9    |        |      | 17.5 |        |       | 15.5 |             |      | 13.4 |        |       | 9.1 |        |       | 4.4 |        |       | 95            |
| 100         | 19.8 |          |               | 18.7    |        |      | 17.4 |        |       | 15.4 |             |      | 13.3 |        |       | 8.9 |        |       | 4.3 |        |       | 100           |
| 105         | 19.6 |          |               | 18.6    |        |      | 17.2 |        |       | 15.2 |             |      | 13.1 |        |       | 8.8 |        |       | 4.2 |        |       | 105           |
| 110         | 19.4 |          |               | 18.5    |        |      | 17   |        |       | 15.1 |             |      | 13   |        |       | 8.6 |        |       | 4.1 |        |       | 110           |
| 115         | 19.2 | 19       |               | 18.3    |        |      | 16.9 |        |       | 15   |             |      | 12.8 |        |       | 8.5 |        |       | 4   |        |       | 115           |
| 120         | 19.1 | 18.9     |               | 18.2    | 18     |      | 16.8 |        |       | 14.9 |             |      | 12.7 |        |       | 8.4 |        |       | 3.9 |        |       | 120           |
| 125         | 19   | 18.7     |               | 18.1    | 17.8   |      | 16.8 | 16.5   |       | 14.8 |             |      | 12.5 |        |       | 8.3 |        |       | 3.8 |        |       | 125           |
| 130         | 18.9 | 18.6     |               | 18      | 17.7   |      | 16.7 | 16.4   |       | 14.7 | 14.4        |      | 12.4 | 11.9   |       | 8.2 |        |       | 3.8 |        |       | 130           |
| 135         | 18.8 | 18.5     |               | 17.8    | 17.5   |      | 16.6 | 16.3   |       | 14.6 | 14.3        |      | 12.3 | 11.8   |       | 8.1 | 7.5    |       | 3.7 |        |       | 135           |
| 140         | 18.7 | 18.4     |               | 17.7    | 17.4   |      | 16.5 | 16.2   |       | 14.6 | 14.2        |      | 12.3 | 11.7   |       | 8.1 | 7.4    |       | 3.6 | 3      |       | 140           |
| 145         | 18.6 | 18.3     | 17.9          | 17.6    | 17.3   |      | 16.4 | 16.1   |       | 14.6 | 14.2        |      | 12.3 | 11.7   |       | 8.1 | 7.3    |       | 3.6 | 3      |       | 145           |
| 150         | 18.6 | 18.2     | 17.8          | 17.5    | 17.1   | 16.8 | 16.4 | 16     |       | 14.5 | 14.1        |      | 12.3 | 11.7   |       | 8.1 | 7.3    |       | 3.6 | 3      |       | 150           |
| 155         | 18.5 | 18       | 17.7          | 17.5    | 17.1   | 16.8 | 16.3 | 15.9   |       | 14.5 | 14.1        |      | 12.3 | 11.7   |       | 8.1 | 7.3    |       | 3.6 | 3.1    |       | 155           |
| 160         | 18.4 | 17.9     | 17.6          | 17.5    | 17.1   | 16.8 | 16.3 | 15.8   | 15.6  | 14.5 | 14          |      | 12.3 | 11.7   |       | 8.1 | 7.3    |       | 3.6 | 3.2    |       | 160           |
| 165         | 18.3 | 17.8     | 17.5          | 17.4    | 17.1   | 16.8 | 16.2 | 15.8   | 15.5  | 14.5 | 14          | 13.7 | 12.3 | 11.7   |       | 8.1 | 7.3    |       | 3.6 | 3.3    |       | 165           |
| 170         | 18.3 | 17.6     | 17.3          | 17.4    | 17.1   | 16.8 | 16.2 | 15.7   | 15.4  | 14.5 | 14          | 13.6 | 12.3 | 11.7   |       | 8.1 | 7.3    |       | 3.6 | 3.3    |       | 170           |
| 175         | 18.3 | 17.5     | 17.1          | 17.4    | 17.1   | 16.7 | 16.2 | 15.6   | 15.3  | 14.5 | 13.9        | 13.5 | 12.3 | 11.7   | 11.7  | 8.1 | 7.3    |       | 3.6 | 3.4    |       | 175           |
| 180         | 18.2 | 17.4     | 17            | 17.4    | 17     | 16.7 | 16.2 | 15.6   | 15.3  | 14.5 | 13.9        | 13.5 | 12.3 | 11.7   | 11.7  | 8.1 | 7.3    |       | 3.6 | 3.5    |       | 180           |
| 185         | 18.2 | 17.4     | 16.8          | 17.4    | 17     | 16.6 | 16.2 | 15.6   | 15.3  | 14.5 | 13.9        | 13.4 | 12.3 | 11.7   | 11.7  | 8.1 | 7.3    | 7.5   | 3.6 | 3.6    |       | 185           |
| 190         | 18.1 | 17.4     | 16.7          | 17.4    | 17     | 16.5 | 16.2 | 15.6   | 15.3  | 14.5 | 13.9        | 13.4 |      | 11.7   | 11.7  | 8.1 | 7.3    | 7.5   | 3.6 | 3.6    |       | 190           |
| 195         | 18.1 | 17.4     | 16.6          | 17.4    | 17     | 16.4 | 16.2 | 15.6   | 15.3  | 14.5 | 13.9        | 13.4 | 12.3 | 11.7   | 11.7  | 8.1 | 7.3    | 7.5   | 3.6 | 3.7    | 3.3   | 195           |
| 200         | 18.1 | 17.4     | 16.5          | 17.4    | 17     | 16.3 | 16.2 | 15.6   | 15.3  | 14.5 | 13.9        | 13.4 | 12.3 | 11.7   | 11.6  | 8.1 | 7.3    | 7.5   | 3.6 | 3.8    | 3.3   | 200           |
| 205         | 18.1 | 17.4     | 16.5          | 17.4    | 17     | 16.3 | 16.2 | 15.6   | 15.3  | 14.5 | 13.9        | 13.4 | 12.3 | 11.7   | 11.6  | 8.1 | 7.3    | 7.5   | 3.6 | 3.8    | 3.4   | 205           |
| 210         | 18.1 | 17.4     | 16.5          | 17.4    | 17     | 16.2 | 16.2 | 15.6   | 15.3  | 14.5 | 13.9        | 13.4 | 12.3 | 11.7   | 11.6  | 8.1 | 7.3    | 7.5   | 3.6 | 3.8    | 3.6   | 210           |
| 215         | 17.5 | 17.4     | 16.5          |         | 17     | 16.2 | 16.2 | 15.6   | 15.3  | 14.5 | 13.9        | 13.4 | 12.3 |        | 11.6  | 8.1 | 7.3    | 7.5   | 3.6 | 3.7    | 3.7   | 215           |
| 220         |      | 17.4     | 16.5          | 17.2    |        | 16.2 | 16.2 | 15.6   | 15.3  | 14.5 |             | 13.4 |      | 11.7   | 11.6  | 8.1 | 7.3    | 7.5   | 3.6 | 3.7    | 3.7   | 220           |
| 225         |      |          | 16.5          |         | 17     | 16.2 |      | 15.6   | 15.3  |      | 13.9        | 13.4 | 12.3 | 11.7   | 11.6  | 8.1 | 7.3    | 7.5   | 3.6 | 3.7    | 3.8   | 225           |
| 230         |      |          | 16.5          |         |        | 16.2 |      | 15.6   | 15.3  |      | 13.9        | 13.4 |      | 11.7   | 11.6  |     | 7.3    | 7.5   |     | 3.7    | 3.8   | 230           |
| 235         |      |          |               |         |        | 16.2 |      | 15.6   | 15.3  |      | 13.9        | 13.4 |      | 11.7   | 11.6  |     | 7.3    | 7.5   |     | 3.7    | 3.8   | 235           |
| 240         |      |          |               |         |        |      |      |        | 15.3  |      | 13.9        | 13.4 |      | 11.7   | 11.6  |     | 7.3    | 7.3   |     | 3.7    | 3.7   | 240           |
| 245         |      |          |               |         |        |      |      |        |       |      |             | 13.3 |      |        | 11.6  |     | 7.3    | 7.1   |     | 3.7    | 3.7   | 245           |
| 250         |      |          |               |         |        |      |      |        |       |      |             |      |      |        | 11.6  |     |        | 6.9   |     | 3.7    | 3.7   | 250           |
| 255         |      |          |               |         |        |      |      |        |       |      |             |      |      |        | 11.5  |     |        | 6.7   |     | 3.7    | 3.7   | 255           |
| 260         |      |          |               |         |        |      |      |        |       |      |             |      |      |        |       |     |        | 6.5   |     |        | 3.7   | 260           |
| 265         |      |          |               |         |        |      |      |        |       |      |             |      |      |        |       |     |        |       |     |        | 3.7   | 265           |



|            |            | T /          | <b>™</b> N |            |              |      |            |        |      |              |            |      |     |          |     |            |          |     |            |
|------------|------------|--------------|------------|------------|--------------|------|------------|--------|------|--------------|------------|------|-----|----------|-----|------------|----------|-----|------------|
| <u> </u>   | 49         | + 11.5       | ft*        | 66         | + 11.5       | ft*  | 82         | + 11.5 | ft*  | 99           | + 11.5     | ft*  |     | 5 + 11.5 | ft* | 13         | 2 + 11.5 | ft* | <b>A</b>   |
|            |            | 236 ft       |            |            | 236 ft       |      |            | 236 ft |      |              | 236 ft     |      | _   | 236 ft   |     |            | 236 ft   |     |            |
| ↔ ft       | 82°        | 75°          | 68°        | 82°        | 75°          | 68°  | 82°        | 75°    | 68°  | 82°          | 75°        | 68°  | 82° | 75°      | 68° | 82°        | 75°      | 68° | → ft       |
| 90         | 15.9       |              |            |            |              |      |            |        |      |              |            |      |     |          |     |            |          |     | 90         |
| 95         | 15.8       |              |            | 15.1       |              |      | 13.9       |        |      | 12.2         |            |      | 10  |          |     | 0.0        |          |     | 95         |
| 100        | 15.7       |              |            | 15         |              |      | 13.9       |        |      | 12.1         |            |      | 10  |          |     | 6.2        |          |     | 100        |
| 105        | 15.6       |              |            | 14.8       |              |      | 13.7       |        |      | 12           |            |      | 9.8 |          |     | 6          |          |     | 105        |
| 110        | 15.4       |              |            | 14.6       |              |      | 13.6       |        |      | 11.9         |            |      | 9.7 |          |     | 5.9        |          |     | 110        |
| 115        | 15.3       |              |            | 14.5       |              |      | 13.4       |        |      | 11.8         |            |      | 9.5 |          |     | 5.8        |          |     | 115        |
| 120        | 15.1       | 445          |            | 14.4       | 40.7         |      | 13.3       |        |      | 11.7         |            |      | 9.4 |          |     | 5.7        |          |     | 120        |
| 125        | 15<br>14.8 | 14.5         |            | 14.2       | 13.7         |      | 13.2       |        |      | 11.6         |            |      | 9.3 |          |     | 5.6        |          |     | 125        |
| 130<br>135 | 14.8       | 14.5<br>14.5 |            | 14.1<br>14 | 13.7<br>13.7 |      | 13<br>12.9 | 12.7   |      | 11.5<br>11.4 |            |      | 9.1 |          |     | 5.5<br>5.4 |          |     | 130<br>135 |
|            | 14.7       |              |            | 13.9       | 13.7         |      | 12.9       | 12.7   |      | 11.3         | 11         |      | 8.9 |          |     |            |          |     | 140        |
| 140<br>145 | 14.5       | 14.4<br>14.3 |            | 13.8       | 13.7         |      | 12.9       | 12.6   |      | 11.3         | 11<br>10.9 |      | 8.8 | 8.5      |     | 5.4<br>5.3 |          |     | 140        |
| 150        | 14.5       | 14.3         |            | 13.7       | 13.5         |      | 12.7       | 12.5   |      | 11.2         | 10.9       |      | 8.8 | 8.5      |     | 5.3        |          |     | 150        |
| 155        | 14.3       | 14.1         |            | 13.6       | 13.4         |      | 12.7       | 12.3   |      | 11.2         | 10.8       |      | 8.8 | 8.6      |     | 5.3        | 4.9      |     | 155        |
| 160        | 14.2       | 14.1         | 13.6       | 13.5       | 13.3         |      | 12.6       | 12.3   |      | 11.1         | 10.8       |      | 8.8 | 8.6      |     | 5.3        | 4.9      |     | 160        |
| 165        | 14.1       | 13.9         | 13.6       | 13.4       | 13.2         | 12.8 | 12.5       | 12.2   |      | 11.1         | 10.7       |      | 8.8 | 8.6      |     | 5.3        | 5        |     | 165        |
| 170        | 14.1       | 13.8         | 13.6       | 13.4       | 13.1         | 12.8 | 12.5       | 12.2   |      | 11.1         | 10.7       |      | 8.8 | 8.6      |     | 5.3        | 5        |     | 170        |
| 175        | 14.1       | 13.7         | 13.6       | 13.3       | 13.1         | 12.8 | 12.5       | 12.1   | 11.8 | 11           | 10.7       |      | 8.8 | 8.6      |     | 5.3        | 5.1      |     | 175        |
| 180        | 14.1       | 13.6         | 13.5       | 13.3       | 13           | 12.8 | 12.4       | 12.1   | 11.8 | 11           | 10.6       | 10.3 | 8.8 | 8.6      |     | 5.3        | 5.2      |     | 180        |
| 185        | 14         | 13.6         | 13.3       | 13.2       | 12.9         | 12.7 | 12.4       | 12     | 11.8 | 11           | 10.6       | 10.3 | 8.8 | 8.6      | 8.6 | 5.3        | 5.3      |     | 185        |
| 190        | 14         | 13.5         | 13.2       | 13.2       | 12.9         | 12.7 | 12.4       | 11.9   | 11.7 | 11           | 10.5       | 10.3 | 8.8 | 8.6      | 8.6 | 5.3        | 5.3      |     | 190        |
| 195        | 14         | 13.5         | 13.1       | 13.2       | 12.9         | 12.7 | 12.4       | 11.9   | 11.6 | 11           | 10.5       | 10.2 | 8.8 | 8.6      | 8.6 | 5.3        | 5.3      | 5   | 195        |
| 200        | 14         | 13.4         | 13         | 13.2       | 12.9         | 12.7 | 12.4       | 11.9   | 11.6 | 11           | 10.5       | 10.1 | 8.8 | 8.6      | 8.6 | 5.3        | 5.4      | 5.1 | 200        |
| 205        | 14         | 13.4         | 12.9       | 13.2       | 12.9         | 12.7 | 12.4       | 11.9   | 11.6 | 11           | 10.4       | 10.1 | 8.8 | 8.6      | 8.6 | 5.3        | 5.4      | 5.2 | 205        |
| 210        | 14         | 13.4         | 12.8       | 13.2       | 12.9         | 12.6 | 12.4       | 11.9   | 11.6 | 11           | 10.4       | 10   | 8.8 | 8.6      | 8.6 | 5.3        | 5.4      | 5.3 | 210        |
| 215        | 14         | 13.4         | 12.7       | 13.2       | 12.9         | 12.6 | 12.4       | 11.9   | 11.6 | 11           | 10.4       | 10   | 8.8 | 8.6      | 8.6 | 5.3        | 5.4      | 5.3 | 215        |
| 220        | 14         | 13.4         | 12.7       | 13.2       | 12.9         | 12.6 | 12.4       | 11.9   | 11.6 | 11           | 10.4       | 10   | 8.8 | 8.6      | 8.6 | 5.3        | 5.4      | 5.4 | 220        |
| 225        | 14         | 13.4         | 12.7       | 13.2       | 12.9         | 12.6 | 12.4       | 11.9   | 11.6 | 11           | 10.4       | 10   | 8.8 | 8.6      | 8.6 | 5.3        | 5.4      | 5.4 | 225        |
| 230        | 14         | 13.4         | 12.7       | 13.2       | 12.9         | 12.6 | 12.4       | 11.9   | 11.6 | 11           | 10.4       | 10   | 8.8 | 8.6      | 8.6 | 5.3        | 5.3      | 5.4 | 230        |
| 235        | 13.9       | 13.4         | 12.7       | 13.2       | 12.9         | 12.6 | 12.4       | 11.9   | 11.6 | 11           | 10.4       | 10   | 8.8 | 8.6      | 8.6 | 5.3        | 5.3      | 5.4 | 235        |
| 240        |            | 13.4         | 12.7       | 13         | 12.9         | 12.6 | 12.4       | 11.9   | 11.6 | 11           | 10.4       | 10   | 8.8 | 8.6      | 8.6 | 5.3        | 5.3      | 5.3 | 240        |
| 245        |            |              | 12.7       |            | 12.9         | 12.6 |            | 11.9   | 11.6 |              | 10.4       | 10   | 8.8 | 8.6      | 8.6 | 5.3        | 5.3      | 5.3 | 245        |
| 250        |            |              | 12.7       |            |              | 12.6 |            | 11.9   | 11.6 |              | 10.4       | 10   |     | 8.6      | 8.6 |            | 5.3      | 5.3 | 250        |
| 255        |            |              |            |            |              | 12.6 |            | 11.9   | 11.6 |              | 10.4       | 10   |     | 8.6      | 8.6 |            | 5.3      | 5.3 | 255        |
| 260        |            |              |            |            |              |      |            |        | 11.6 |              |            | 10   |     | 8.6      | 8.6 |            | 5.3      | 5.3 | 260        |
| 265        |            |              |            |            |              |      |            |        |      |              |            | 10   |     |          | 8.6 |            | 5.3      | 5.3 | 265        |
| 270        |            |              |            |            |              |      |            |        |      |              |            |      |     |          | 8.6 |            |          | 5.1 | 270        |
| 275        |            |              |            |            |              |      |            |        |      |              |            |      |     |          | 8.6 |            |          | 4.9 | 275        |
| 280        |            |              |            |            |              |      |            |        |      |              |            |      |     |          |     |            |          | 4.8 | 280        |



|             | 1            |              | N    |            |              |     |            |            |     |          |            |     |            |          |     |            |
|-------------|--------------|--------------|------|------------|--------------|-----|------------|------------|-----|----------|------------|-----|------------|----------|-----|------------|
| <u> </u>    | 49           | 9 + 11.5     | ft*  | 6          | 6 + 11.5     | ft* | 82         | 2 + 11.5 1 | ft* | 99       | 9 + 11.5 1 | ft* | 11         | 5 + 11.5 | ft* | <u> </u>   |
|             |              | 256 ft       |      |            | 256 ft       |     |            | 256 ft     |     |          | 256 ft     |     |            | 256 ft   |     |            |
| <b>←</b> ft | 82°          | 75°          | 68°  | 82°        | 75°          | 68° | 82°        | 75°        | 68° | 82°      | 75°        | 68° | 82°        | 75°      | 68° | ↔ ft       |
| 95          | 12.5         |              |      |            |              |     |            |            |     |          |            |     |            |          |     | 95         |
| 100         | 12.4         |              |      | 11.7       |              |     | 10.7       |            |     | 9        |            |     | 6.6        |          |     | 100        |
| 105         | 12.4         |              |      | 11.7       |              |     | 10.7       |            |     | 8.9      |            |     | 6.5        |          |     | 105        |
| 110         | 12.3         |              |      | 11.6       |              |     | 10.6       |            |     | 8.7      |            |     | 6.4        |          |     | 110        |
| 115         | 12.1         |              |      | 11.5       |              |     | 10.6       |            |     | 8.6      |            |     | 6.3        |          |     | 115        |
| 120         | 12           |              |      | 11.3       |              |     | 10.5       |            |     | 8.4      |            |     | 6.1        |          |     | 120        |
| 125         | 11.9         |              |      | 11.2       |              |     | 10.4       |            |     | 8.3      |            |     | 6          |          |     | 125        |
| 130         | 11.7         | 11.0         |      | 11.1       |              |     | 10.2       |            |     | 8.2      |            |     | 5.9        |          |     | 130        |
| 135<br>140  | 11.6<br>11.5 | 11.2<br>11.2 |      | 11<br>10.9 | 10.5         |     | 10.1<br>10 | 9.5        |     | 8.1<br>8 |            |     | 5.8<br>5.7 |          |     | 135<br>140 |
|             | 11.5         | 11.2         |      | 10.9       |              |     | 9.9        |            |     | 8        | 7.6        |     | 5.7        |          |     |            |
| 145<br>150  | 11.3         | 11.2         |      | 10.6       | 10.5<br>10.5 |     | 9.9        | 9.6<br>9.6 |     | 7.9      | 7.6<br>7.6 |     | 5.7        |          |     | 145<br>150 |
| 155         | 11.2         | 11           |      | 10.7       | 10.5         |     | 9.8        | 9.5        |     | 7.9      | 7.7        |     | 5.7        | 5.4      |     | 155        |
| 160         | 11.2         | 10.9         |      | 10.5       | 10.3         |     | 9.7        | 9.5        |     | 7.9      | 7.7        |     | 5.7        | 5.5      |     | 160        |
| 165         | 10.9         | 10.8         | 10   | 10.3       | 10.4         |     | 9.6        | 9.4        |     | 7.9      | 7.8        |     | 5.7        | 5.5      |     | 165        |
| 170         | 10.8         | 10.5         | 10.2 | 10.4       | 10.3         |     | 9.6        | 9.3        |     | 7.9      | 7.8        |     | 5.7        | 5.6      |     | 170        |
| 175         | 10.8         | 10.7         | 10.2 | 10.4       | 10.2         | 9.4 | 9.5        | 9.3        |     | 7.9      | 7.8        |     | 5.7        | 5.6      |     | 175        |
| 180         | 10.7         | 10.6         | 10.3 | 10.2       | 10.1         | 9.5 | 9.5        | 9.2        | 8.5 | 7.9      | 7.8        |     | 5.7        | 5.7      |     | 180        |
| 185         | 10.7         | 10.5         | 10.4 | 10.2       | 10           | 9.6 | 9.5        | 9.1        | 8.6 | 7.9      | 7.8        | 7.3 | 5.7        | 5.7      |     | 185        |
| 190         | 10.7         | 10.5         | 10.3 | 10.1       | 9.9          | 9.7 | 9.4        | 9.1        | 8.6 | 7.9      | 7.8        | 7.4 | 5.7        | 5.8      |     | 190        |
| 195         | 10.6         | 10.4         | 10.3 | 10.1       | 9.8          | 9.6 | 9.4        | 9          | 8.7 | 7.9      | 7.8        | 7.5 | 5.7        | 5.8      |     | 195        |
| 200         | 10.6         | 10.4         | 10.2 | 10.1       | 9.8          | 9.5 | 9.4        | 8.9        | 8.6 | 7.9      | 7.7        | 7.5 | 5.7        | 5.8      | 5.6 | 200        |
| 205         | 10.6         | 10.3         | 10   | 10.1       | 9.7          | 9.4 | 9.4        | 8.9        | 8.6 | 7.9      | 7.7        | 7.5 | 5.7        | 5.9      | 5.7 | 205        |
| 210         | 10.6         | 10.3         | 9.9  | 10.1       | 9.7          | 9.4 | 9.4        | 8.8        | 8.6 | 7.9      | 7.7        | 7.5 | 5.7        | 5.9      | 5.8 | 210        |
| 215         | 10.6         | 10.2         | 9.8  | 10.1       | 9.7          | 9.4 | 9.4        | 8.8        | 8.6 | 7.9      | 7.7        | 7.4 | 5.7        | 5.9      | 5.8 | 215        |
| 220         | 10.5         | 10.2         | 9.7  | 10         | 9.7          | 9.4 | 9.4        | 8.8        | 8.5 | 7.9      | 7.7        | 7.4 | 5.7        | 5.9      | 5.8 | 220        |
| 225         | 10.4         | 10.2         | 9.7  | 10         | 9.7          | 9.4 | 9.4        | 8.8        | 8.5 | 7.9      | 7.7        | 7.4 | 5.7        | 5.8      | 5.8 | 225        |
| 230         | 10.3         | 10.1         | 9.6  | 9.9        | 9.7          | 9.4 | 9.3        | 8.8        | 8.5 | 7.9      | 7.7        | 7.4 | 5.7        | 5.8      | 5.8 | 230        |
| 235         | 10.3         | 10.1         | 9.6  | 9.9        | 9.7          | 9.4 | 9.3        | 8.8        | 8.5 | 7.9      | 7.7        | 7.4 | 5.7        | 5.8      | 5.8 | 235        |
| 240         | 10.3         | 10.1         | 9.6  | 9.9        | 9.7          | 9.4 | 9.3        | 8.8        | 8.5 | 7.9      | 7.7        | 7.4 | 5.7        | 5.8      | 5.8 | 240        |
| 245         | 10.3         | 10.1         | 9.6  | 9.9        | 9.7          | 9.4 | 9.2        | 8.8        | 8.5 | 7.9      | 7.7        | 7.4 | 5.7        | 5.8      | 5.8 | 245        |
| 250         | 10.3         | 10.1         | 9.6  | 9.9        | 9.7          | 9.4 | 9.2        | 8.8        | 8.5 | 7.9      | 7.7        | 7.4 | 5.7        | 5.8      | 5.8 | 250        |
| 255         | 10.3         | 10.1         | 9.6  | 9.9        | 9.7          | 9.4 | 9.2        | 8.8        | 8.5 | 7.9      | 7.7        | 7.4 | 5.7        | 5.8      | 5.8 | 255        |
| 260         |              | 10.1         | 9.6  |            | 9.7          | 9.4 | 9.2        | 8.8        | 8.5 | 7.9      | 7.7        | 7.4 | 5.7        | 5.8      | 5.8 | 260        |
| 265         |              |              | 9.6  |            | 9.7          | 9.4 |            | 8.8        | 8.5 |          | 7.7        | 7.4 | 5.7        | 5.8      | 5.8 | 265        |
| 270         |              |              | 9.6  |            |              | 9.4 |            | 8.8        | 8.5 |          | 7.7        | 7.4 |            | 5.8      | 5.8 | 270        |
| 275         |              |              |      |            |              | 9.4 |            | 8.8        | 8.5 |          | 7.7        | 7.4 |            | 5.8      | 5.8 | 275        |
| 280         |              |              |      |            |              |     |            |            | 8.5 |          |            | 7.4 |            | 5.8      | 5.8 | 280        |
| 285         |              |              |      |            |              |     |            |            |     |          |            | 7.4 |            |          | 5.8 | 285        |
| 290         |              |              |      |            |              |     |            |            |     |          |            |     |            |          | 5.8 | 290        |
| 295         |              |              |      |            |              |     |            |            |     |          |            |     |            |          | 5.8 | 295        |



0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 ft



|             | 115 – 149 ft | 99 ft N | 360° 264600 lbs | 85%          |             |
|-------------|--------------|---------|-----------------|--------------|-------------|
| <u> </u>    |              | 23 ft*  | 132 + 23 ft*    | 149 + 23 ft* | <b>A</b>    |
|             | 39           | ft**    | 39 ft**         | 39 ft**      |             |
| <b>↔</b> ft | 82°          | 75°     | 82°             | 82°          | <b>↔</b> ft |
| 40          | 122.3        |         |                 |              | 40          |
| 42          | 124.9        |         |                 |              | 42          |
| 44          | 124.8        |         |                 |              | 44          |
| 46          | 123.3        |         | 109.9           |              | 46          |
| 48          | 120.3        |         | 109.2           |              | 48          |
| 50          | 117.4        |         | 108.5           | 97.6         | 50          |
| 55          |              |         | 104.5           | 96.3         | 55          |
| 60          |              |         |                 |              | 60          |
| 65          |              | 100.1   |                 |              | 65          |
| 70          |              | 93.2    |                 |              | 70          |

<sup>\*</sup> adapter 11.5 ft + telescopic boom extension 11.5 ft · pièce d'adaptateur 11.5 ft + rallonge de flèche télescopique 11.5 ft \*\* Hookblock with deadweight of 6615 lbs necessary · Moufle à crochet de poids minimal de 6615 lbs nécessaire

t\_180\_64103\_00\_000

|   |          | 115 – 149 ft | V E N S N | 360° 220500 lbs | 85%      |
|---|----------|--------------|-----------|-----------------|----------|
|   | <u> </u> | 115 +        | 23 ft*    | 132 + 23 ft*    | 149 + 23 |
|   |          | 39           | ft**      | 39 ft**         | 39 ft**  |
| ı | → ft     | 82°          | 75°       | 82°             | 82°      |

| <u> </u>          | 115 +   | 23 ft*                                     | 132 + 23 ft*             | 149 + 23 ft* | <b>A</b>        |
|-------------------|---|--|--------------------------|--------------|-----------------|
|                   | 39  | ft**                                       | 39 ft**                  | 39 ft**      |                 |
| ← ft              | 82°   | 75°  | 82°                      | 82°          | ←→ ft           |
| 40                | 122.3   |  |                          |              | 40              |
| 42                | 124.9   |  |                          |              | 42              |
| 44                | 124.8   |  |                          |              | 44              |
| 46                | 123.3   |  | 109.9                    |              | 46              |
| 48                | 120.3   |  | 109.2                    |              | 48              |
| 50                | 117.4   |  | 108.5                    | 97.6         | 50              |
| 55                |   |  | 104.5                    | 96.3         | 55              |
| 60                |   |  |                          |              | 60              |
| 65                |   | 93.9                                       |                          |              | 65              |
| 70                |   | 87.1                                       |                          |              | 70              |
| * adapter 11.5 ft | + telescopic boom extension 11.5 ft $\cdot$ p | èce d'adaptateur 11.5 ft + rallonge de flè | che télescopique 11.5 ft | t_18         | 80_64105_00_000 |

<sup>\*</sup> adapter 11.5 ft + telescopic boom extension 11.5 ft · pièce d'adaptateur 11.5 ft + rallonge de flèche télescopique 11.5 ft \* Hookblock with deadweight of 6615 lbs necessary · Moufle à crochet de poids minimal de 6615 lbs nécessaire

|             | 115 – 2 | 15 ft<br><b>%</b><br>T | е <b>—</b> .<br>Y |      | 11      | .5 ft<br>V |      |         | 59<br><b>Serv</b> | ft<br>N |         | Ţ    | 360  | 28      | 86600 lb |      | 5%      |      |      |        |      |          |
|-------------|---------|------------------------|-------------------|------|---------|------------|------|---------|-------------------|---------|---------|------|------|---------|----------|------|---------|------|------|--------|------|----------|
| <u> </u>    | 115     | 5 + 23                 | ft*               | 132  | 2 + 23  | ft*        | 149  | 9 + 23  | ft*               | 16      | 5 + 23  | ft*  | 18   | 2 + 23  | ft*      | 198  | 3 + 23  | ft*  | 215  | 5 + 23 | ft*  | <u> </u> |
|             | 5       | 59 ft**                | *                 | 5    | 59 ft** | *          | Ę    | 59 ft** | *                 | į       | 59 ft** | *    | ļ    | 59 ft** | *        | Ę    | 59 ft** | *    | 5    | 9 ft** | *    |          |
| <b>↔</b> ft | 82°     | 75°                    | 68°               | 82°  | 75°     | 68°        | 82°  | 75°     | 68°               | 82°     | 75°     | 68°  | 82°  | 75°     | 68°      | 82°  | 75°     | 68°  | 82°  | 75°    | 68°  | ↔ ft     |
| 46          | 83.5    |                        |                   |      |         |            |      |         |                   |         |         |      |      |         |          |      |         |      |      |        |      | 46       |
| 48          | 85.8    |                        |                   |      |         |            |      |         |                   |         |         |      |      |         |          |      |         |      |      |        |      | 48       |
| 50          | 88.2    |                        |                   |      |         |            |      |         |                   |         |         |      |      |         |          |      |         |      |      |        |      | 50       |
| 55          | 93.4    |                        |                   | 89.3 |         |            |      |         |                   | 72.2    |         |      |      |         |          |      |         |      |      |        |      | 55       |
| 60          | 97.2    |                        |                   | 90.1 |         |            | 81.7 |         |                   | 71.8    |         |      |      |         |          |      |         |      |      |        |      | 60       |
| 65          | 97.5    |                        |                   | 88.6 |         |            | 80.9 |         |                   | 70.7    |         |      | 62   |         |          | 53.6 |         |      |      |        |      | 65       |
| 70          | 93.3    | 92.8                   |                   | 84.5 |         |            | 79.8 |         |                   | 69.6    |         |      | 61.2 |         |          | 52.9 |         |      | 46.7 |        |      | 70       |
| 75          |         | 88.5                   |                   | 80.4 | 77.6    |            | 77.6 |         |                   | 68      |         |      | 60.3 |         |          | 52.1 |         |      | 46.2 |        |      | 75       |
| 80          |         | 83                     |                   |      | 74.9    |            |      |         |                   |         |         |      | 59.4 |         |          | 51.3 |         |      | 45.3 |        |      | 80       |
| 85          |         | 77.9                   |                   |      | 70.1    |            |      | 64.6    |                   |         |         |      | 58.5 |         |          | 50.5 |         |      | 44.3 |        |      | 85       |
| 90          |         | 73.4                   |                   |      | 66.3    |            |      | 60.9    |                   |         | 58.9    |      |      |         |          |      |         |      |      |        |      | 90       |
| 95          |         |                        | 61.9              |      |         |            |      | 57.5    |                   |         | 56.7    |      |      | 53.2    |          |      |         |      |      |        |      | 95       |
| 100         |         |                        | 58.7              |      |         | 47.7       |      |         |                   |         | 54.5    |      |      | 52      |          |      | 41.1    |      |      |        |      | 100      |
| 105         |         |                        |                   |      |         | 45.1       |      |         |                   |         |         |      |      |         |          |      | 40.6    |      |      |        |      | 105      |
| 110         |         |                        |                   |      |         | 42.6       |      |         | 37                |         |         |      |      |         |          |      | 39.5    |      |      | 34.7   |      | 110      |
| 115         |         |                        |                   |      |         |            |      |         | 35.3              |         |         | 40.7 |      |         |          |      |         |      |      | 33.6   |      | 115      |
| 120         |         |                        |                   |      |         |            |      |         |                   |         |         | 39.6 |      |         |          |      |         |      |      |        |      | 120      |
| 125         |         |                        |                   |      |         |            |      |         |                   |         |         |      |      |         |          |      |         |      |      |        |      | 125      |
| 130         |         |                        |                   |      |         |            |      |         |                   |         |         |      |      |         | 32.5     |      |         |      |      |        |      | 130      |
| 135         |         |                        |                   |      |         |            |      |         |                   |         |         |      |      |         |          |      |         | 18.1 |      |        |      | 135      |
| 140         |         |                        |                   |      |         |            |      |         |                   |         |         |      |      |         |          |      |         |      |      |        | 17.8 | 140      |

\* adapter 11.5 ft + telescopic boom extension 11.5 ft · pièce d'adaptateur 11.5 ft + rallonge de flèche télescopique 11.5 ft

\*\*\* Hookblock with deadweight of 3200 lbs necessary · Moufle à crochet de poids minimal de 3200 lbs nécessaire

17.8 140 t\_180\_64202\_00\_000

|               | 115 – 2     | 215 ft<br><b>S</b><br>T | <b>Y</b> |          | 11       | .5 ft<br>V |        |          | 59<br>Sur  | n ft    | M        | Ţ (      | 360          | ) 22    | 20500 lb |              | 5%      |      |      |         |       |              |
|---------------|-------------|-------------------------|----------|----------|----------|------------|--------|----------|------------|---------|----------|----------|--------------|---------|----------|--------------|---------|------|------|---------|-------|--------------|
| <u> </u>      |             | 5 + 23                  |          | _        | 2 + 23   |            |        | 9 + 23   |            |         | 5 + 23   |          |              | 2 + 23  |          |              | 8 + 23  |      |      | 5 + 23  |       | <u> </u>     |
|               |             | 59 ft**                 |          |          | 9 ft**   |            | _      | 59 ft**  |            |         | 59 ft**  |          |              | 59 ft** |          |              | 59 ft** |      |      | 59 ft** |       |              |
| <b>↔</b> #t   | 82°         | 75°                     | 68°      | 82°      | 75°      | 68°        | 82°    | 75°      | 68°        | 82°     | 75°      | 68°      | 82°          | 75°     | 68°      | 82°          | 75°     | 68°  | 82°  | 75°     | 68°   | <b>↔</b> #   |
| 46            | 83.5        |                         |          |          |          |            |        |          |            |         |          |          |              |         |          |              |         |      |      |         |       | 46           |
| 48            | 85.8        |                         |          |          |          |            |        |          |            |         |          |          |              |         |          |              |         |      |      |         |       | 48           |
| 50            | 88.2        |                         |          |          |          |            |        |          |            |         |          |          |              |         |          |              |         |      |      |         |       | 50           |
| 55            | 93.4        |                         |          | 89.3     |          |            |        |          |            | 72.2    |          |          |              |         |          |              |         |      |      |         |       | 55           |
| 60            | 97.2        |                         |          | 90.1     |          |            | 81.7   |          |            | 71.8    |          |          | 00           |         |          | F0.0         |         |      |      |         |       | 60           |
| 65            | 97.5        | 040                     |          | 88.6     |          |            | 80.9   |          |            | 70.7    |          |          | 62           |         |          | 53.6         |         |      | 10.7 |         |       | 65           |
| 70<br>75      | 93.3        |                         |          | 84.5     | 70.0     |            | 79.8   |          |            | 69.6    |          |          | 61.2         |         |          | 52.9         |         |      | 46.7 |         |       | 70<br>75     |
| 75            |             | 80.4<br>75.2            |          | 80.4     | 73.9     |            | 77.6   |          |            | 68      |          |          | 60.3         |         |          | 52.1<br>51.3 |         |      | 46.2 |         |       | 75<br>80     |
| 80<br>85      |             | 70.5                    |          |          | 66.6     |            |        | 62.8     |            |         |          |          | 59.4<br>58.5 |         |          | 50.5         |         |      | 44.3 |         |       | 85           |
| 90            |             | 66.4                    | 57.7     |          | 62.8     |            |        | 59.6     |            |         | 55.6     |          | 36.3         |         |          | 50.5         |         |      | 44.3 |         |       | 90           |
| 95            |             | 00.4                    | 54.9     |          | 02.0     |            |        | 56.4     |            |         | 52.7     |          |              | 46      |          |              |         |      |      |         |       | 95           |
| 100           |             |                         | 51.8     |          |          | 47         |        | 50.4     |            |         | 50       |          |              | 44.5    |          |              | 41.1    |      |      |         |       | 100          |
| 105           |             |                         | 51.0     |          |          | 44.4       |        |          |            |         | 50       |          |              | 77.0    |          |              | 40.6    |      |      |         |       | 105          |
| 110           |             |                         |          |          |          | 42         |        |          | 37         |         |          |          |              |         |          |              | 39      |      |      | 34.7    |       | 110          |
| 115           |             |                         |          |          |          |            |        |          | 35.3       |         |          | 32.3     |              |         |          |              |         |      |      | 33.6    |       | 115          |
| 120           |             |                         |          |          |          |            |        |          | 30.3       |         |          | 31.4     |              |         |          |              |         |      |      | 30.3    |       | 120          |
| 125           |             |                         |          |          |          |            |        |          |            |         |          |          |              |         |          |              |         |      |      |         |       | 125          |
| 130           |             |                         |          |          |          |            |        |          |            |         |          |          |              |         | 24.1     |              |         |      |      |         |       | 130          |
| 135           |             |                         |          |          |          |            |        |          |            |         |          |          |              |         |          |              |         | 18.1 |      |         |       | 135          |
| 140           |             |                         |          |          |          |            |        |          |            |         |          |          |              |         |          |              |         |      |      |         | 17.3  | 140          |
| * adapter 11. | 5 ft + tele | escopic                 | boom e   | xtension | n 11.5 f | t · pièce  | d'adap | tateur 1 | 1.5 ft + ı | allonge | de flèci | ne téles | copique      | 11.5 ft |          |              |         |      |      |         | t_180 | _64205_00_00 |

<sup>\*</sup> adapter 11.5 ft + telescopic boom extension 11.5 ft · pièce d'adaptateur 11.5 ft + rallonge de flèche télescopique 11.5 ft

<sup>\*\*\*</sup> Hookblock with deadweight of 3200 lbs necessary · Moufle à crochet de poids minimal de 3200 lbs nécessaire

| 115 – 215 ft | 11.5 ft      | A S          | i i i        | 360° 308600 lb |            |
|--------------|--------------|--------------|--------------|----------------|------------|
| 115 ± 23 ft* | 132 ± 23 ft* | 149 ± 23 ft* | 165 ± 23 ft* | 182 ± 23 ft*   | 198 ± 23 f |

| <u> </u> | 115  | 115 + 23 ft* 132 + 23 ft* |      |      |       |      | 149  | 9 + 23 | ft*  | 16   | 5 + 23 | ft*  | 18:  | 2 + 23 | ft*  | 198  | 3 + 23 | ft*  | 215  | 5 + 23 | ft*  | A.     |
|----------|------|---------------------------|------|------|-------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|--------|
|          |      | 79 ft                     |      |      | 79 ft |      |      | 79 ft  |      |      | 79 ft  |      |      | 79 ft  |      |      | 79 ft  |      |      | 79 ft  |      |        |
| → ft     | 82°  | 75°                       | 68°  | 82°  | 75°   | 68°  | 82°  | 75°    | 68°  | 82°  | 75°    | 68°  | 82°  | 75°    | 68°  | 82°  | 75°    | 68°  | 82°  | 75°    | 68°  | ←   ft |
| 55       | 70.3 |                           |      |      |       |      |      |        |      |      |        |      |      |        |      |      |        |      |      |        |      | 55     |
| 60       | 74   |                           |      | 71.4 |       |      |      |        |      |      |        |      |      |        |      |      |        |      |      |        |      | 60     |
| 65       | 78.2 |                           |      | 74.6 |       |      |      |        |      | 61   |        |      |      |        |      |      |        |      |      |        |      | 65     |
| 70       | 80   |                           |      | 74.4 |       |      | 67.5 |        |      | 60.3 |        |      | 52.5 |        |      | 46.1 |        |      |      |        |      | 70     |
| 75       | 79.8 | 78.9                      |      | 73   |       |      | 67.2 |        |      | 59.5 |        |      | 52.1 |        |      | 45.6 |        |      | 40.2 |        |      | 75     |
| 80       | 77.8 | 77.6                      |      | 70.7 |       |      | 66.4 |        |      | 58.7 |        |      | 51.4 |        |      | 45   |        |      | 39.9 |        |      | 80     |
| 85       | 74.4 | 74.7                      |      | 67.6 | 66.2  |      | 65.5 |        |      | 57.8 |        |      | 50.7 |        |      | 44.3 |        |      | 39.3 |        |      | 85     |
| 90       | 71.2 | 71.9                      |      | 64.7 | 63.9  |      | 64.2 |        |      | 56.8 |        |      | 49.9 |        |      | 43.6 |        |      | 38.7 |        |      | 90     |
| 95       |      | 69.2                      |      | 61.9 | 61.5  |      | 62.1 | 61     |      | 55   | 52.4   |      | 49.2 |        |      | 43   |        |      | 37.9 |        |      | 95     |
| 100      |      | 66.6                      | 58.4 |      | 59.3  |      |      | 58.8   |      |      | 51.1   |      | 48.5 | 46.4   |      | 42.3 |        |      | 36.9 |        |      | 100    |
| 105      |      | 63.9                      | 57   |      | 57.1  |      |      | 56.7   |      |      | 49.3   |      |      | 46.3   |      |      |        |      |      |        |      | 105    |
| 110      |      | 60.9                      | 54.3 |      | 55    | 48.9 |      | 54.2   |      |      | 47.5   |      |      | 44.8   |      |      | 38.5   |      |      |        |      | 110    |
| 115      |      |                           | 51.7 |      |       | 46.8 |      | 51.8   |      |      | 45.9   |      |      | 43.4   |      |      | 37.8   |      |      | 30.5   |      | 115    |
| 120      |      |                           | 49.4 |      |       | 44.3 |      |        | 38.2 |      | 44.2   |      |      | 42     |      |      | 36.8   |      |      | 29.9   |      | 120    |
| 125      |      |                           |      |      |       | 42.1 |      |        | 36.5 |      |        |      |      |        |      |      | 35.6   |      |      | 28.9   |      | 125    |
| 130      |      |                           |      |      |       | 40.1 |      |        | 34.6 |      |        | 36.5 |      |        |      |      | 34.4   |      |      | 28     |      | 130    |
| 135      |      |                           |      |      |       |      |      |        | 32.9 |      |        | 35   |      |        | 31.9 |      |        |      |      | 27     |      | 135    |
| 140      |      |                           |      |      |       |      |      |        |      |      |        | 33.5 |      |        | 30.9 |      |        |      |      |        |      | 140    |
| 145      |      |                           |      |      |       |      |      |        |      |      |        |      |      |        | 29.7 |      |        | 15.8 |      |        |      | 145    |
| 150      |      |                           |      |      |       |      |      |        |      |      |        |      |      |        | 28.5 |      |        | 15.9 |      |        |      | 150    |
| 155      |      |                           |      |      |       |      |      |        |      |      |        |      |      |        |      |      |        | 15.9 |      |        |      | 155    |
| 160      |      |                           |      |      |       |      |      |        |      |      |        |      |      |        |      |      |        |      |      |        | 15.8 | 160    |

t\_180\_64301\_00\_000

|          | 115 – 2    | 215 ft<br><b>%</b><br>T | <b>е—</b> .<br>Y |            | 11     | .5 ft<br>V_I |      |        | 75   | oft<br>N |        | Ţ    | 360  | 22     | 20500 lb |      | 5%     |      |      |        |      |          |
|----------|------------|-------------------------|------------------|------------|--------|--------------|------|--------|------|----------|--------|------|------|--------|----------|------|--------|------|------|--------|------|----------|
| <b>♣</b> | 115        | 5 + 23                  | ft*              | 132        | 2 + 23 |              | 149  | 9 + 23 | ft*  | 16       | 5 + 23 | ft*  | 18:  | 2 + 23 | ft*      | 198  | 3 + 23 | ft*  | 215  | 5 + 23 | ft*  | <b>≯</b> |
| ft.      | 000        | 79 ft                   | CO0              | 000        | 79 ft  |              | 000  | 79 ft  | CO0  | 000      | 79 ft  | CO 0 | 000  | 79 ft  | C00      | 000  | 79 ft  | C00  | 000  | 79 ft  | CO0  | ft.      |
|          | 82°        | 75°                     | 68°              | 82°        | 75°    | 68°          | 82°  | 75°    | 68°  | 82°      | 75°    | 68°  | 82°  | 75°    | 68°      | 82°  | 75°    | 68°  | 82°  | 75°    | 68°  |          |
| 55       | 70.3       |                         |                  | 74 4       |        |              |      |        |      |          |        |      |      |        |          |      |        |      |      |        |      | 55       |
| 60       | 74<br>78.2 |                         |                  | 71.4       |        |              |      |        |      | 61       |        |      |      |        |          |      |        |      |      |        |      | 60<br>65 |
| 65<br>70 | 80         |                         |                  | 74.6       |        |              | 67.5 |        |      | 60.3     |        |      | 52.5 |        |          | 46.1 |        |      |      |        |      | 70       |
| 70<br>75 |            | 77.8                    |                  | 74.4<br>73 |        |              | 67.2 |        |      | 59.5     |        |      | 52.5 |        |          | 45.6 |        |      | 40.2 |        |      | 70<br>75 |
| 80       |            | 74.7                    |                  | 70.7       |        |              | 66.4 |        |      | 58.7     |        |      | 51.4 |        |          | 45.0 |        |      | 39.9 |        |      | 80       |
| 85       | 74.4       |                         |                  | 67.6       | 66     |              | 65.5 |        |      | 57.8     |        |      | 50.7 |        |          | 44.3 |        |      | 39.3 |        |      | 85       |
| 90       | 71.2       |                         |                  | -          | 62.4   |              | 64.2 |        |      | 56.8     |        |      | 49.9 |        |          | 43.6 |        |      | 38.7 |        |      | 90       |
| 95       | 7 1.2      | 62.4                    |                  | 61.9       |        |              | 62.1 | 54.5   |      | 55       | 49.4   |      | 49.2 |        |          | 43   |        |      | 37.9 |        |      | 95       |
| 100      |            | 59.1                    | 49.7             | 0          | 55.7   |              | 02   | 51.7   |      |          | 47.8   |      | -    | 42.3   |          | 42.3 |        |      | 36.9 |        |      | 100      |
| 105      |            | 56                      | 48.3             |            | 52.6   |              |      | 49.2   |      |          | 45.4   |      |      | 41.2   |          |      |        |      |      |        |      | 105      |
| 110      |            | 53.1                    | 45.8             |            | 49.9   | 41           |      | 46.9   |      |          | 43.3   |      |      | 39.3   |          |      | 36.7   |      |      |        |      | 110      |
| 115      |            |                         | 43.5             |            |        | 39.3         |      | 44.7   |      |          | 41.4   |      |      | 37.6   |          |      | 35.3   |      |      | 30.5   |      | 115      |
| 120      |            |                         | 41.3             |            |        | 37.3         |      |        | 33.7 |          | 39.6   |      |      | 36     |          |      | 33.8   |      |      | 29.9   |      | 120      |
| 125      |            |                         |                  |            |        | 35.5         |      |        | 32.2 |          |        |      |      |        |          |      | 32.3   |      |      | 28.9   |      | 125      |
| 130      |            |                         |                  |            |        | 33.8         |      |        | 30.9 |          |        | 26.8 |      |        |          |      | 31     |      |      | 27.8   |      | 130      |
| 135      |            |                         |                  |            |        |              |      |        | 29.6 |          |        | 25.7 |      |        | 21.8     |      |        |      |      | 26.7   |      | 135      |
| 140      |            |                         |                  |            |        |              |      |        |      |          |        | 24.7 |      |        | 21.2     |      |        |      |      |        |      | 140      |
| 145      |            |                         |                  |            |        |              |      |        |      |          |        |      |      |        | 20.3     |      |        | 15.8 |      |        |      | 145      |
| 150      |            |                         |                  |            |        |              |      |        |      |          |        |      |      |        | 19.5     |      |        | 15.9 |      |        |      | 150      |
| 155      |            |                         |                  |            |        |              |      |        |      |          |        |      |      |        |          |      |        | 15.9 |      |        | 13.6 | 155      |
| 160      |            |                         |                  |            |        |              |      |        |      |          |        |      |      |        |          |      |        |      |      |        | 13   | 160      |

\* adapter 11.5 ft + telescopic boom extension 11.5 ft · pièce d'adaptateur 11.5 ft + rallonge de flèche télescopique 11.5 ft

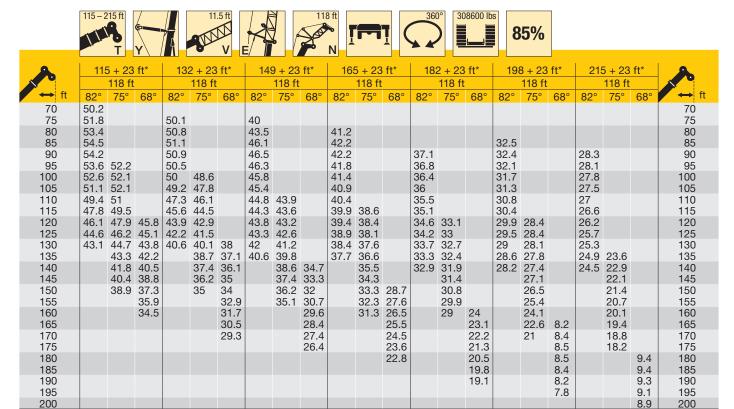
t\_180\_64305\_00\_000



| <u> </u> | 115  | 115 + 23 ft* 132 + 23 ft* |      |      |       |      | 149  | 9 + 23 | ft*  | 16   | 5 + 23 | ft*  | 18   | 2 + 23 | ft*  | 198  | 3 + 23 | ft*  | 215  | 5 + 23 | ft*  | <u> </u> |
|----------|------|---------------------------|------|------|-------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|----------|
|          |      | 98 ft                     |      |      | 98 ft |      |      | 98 ft  |      |      | 98 ft  |      |      | 98 ft  |      |      | 98 ft  |      |      | 98 ft  |      |          |
| → ft     | 82°  | 75°                       | 68°  | 82°  | 75°   | 68°  | 82°  | 75°    | 68°  | 82°  | 75°    | 68°  | 82°  | 75°    | 68°  | 82°  | 75°    | 68°  | 82°  | 75°    | 68°  | ↔ ft     |
| 60       | 58.9 |                           |      |      |       |      |      |        |      |      |        |      |      |        |      |      |        |      |      |        |      | 60       |
| 65       | 61.1 |                           |      |      |       |      |      |        |      |      |        |      |      |        |      |      |        |      |      |        |      | 65       |
| 70       | 63.7 |                           |      | 61.8 |       |      |      |        |      | 51.2 |        |      |      |        |      |      |        |      |      |        |      | 70       |
| 75       | 65.7 |                           |      | 62.2 |       |      | 56.3 |        |      | 51.2 |        |      | 44.7 |        |      | 39.3 |        |      |      |        |      | 75       |
| 80       | 66.9 |                           |      | 61.9 |       |      | 56.1 |        |      | 50.6 |        |      | 44.5 |        |      | 39.1 |        |      |      |        |      | 80       |
| 85       | 66.6 |                           |      | 61.2 |       |      | 55.6 |        |      | 50   |        |      | 44   |        |      | 38.6 |        |      | 34   |        |      | 85       |
| 90       | 65.6 |                           |      | 60   |       |      | 54.9 |        |      | 49.4 |        |      | 43.4 |        |      | 38   |        |      | 33.6 |        |      | 90       |
| 95       |      | 63.6                      |      | 58   | 57.2  |      | 54.2 |        |      | 48.7 |        |      | 42.9 |        |      | 37.5 |        |      | 33   |        |      | 95       |
| 100      | 60.9 |                           |      | 55.5 |       |      | 53.4 |        |      | 48.1 |        |      | 42.3 |        |      | 36.9 |        |      | 32.5 |        |      | 100      |
| 105      | 58.3 |                           |      |      | 52.8  |      | 52.5 |        |      | 47.4 |        |      | 41.7 |        |      | 36.4 |        |      | 31.9 |        |      | 105      |
| 110      | 55.8 | 56.9                      |      | 51   | 50.8  |      | 50.5 |        |      |      | 45.7   |      | 41.1 |        |      | 35.8 |        |      | 31.4 |        |      | 110      |
| 115      |      |                           | 50.9 | 48.8 | 48.9  |      | 48.6 |        |      | 45.5 | 44.5   |      |      | 39.2   |      | 35.2 |        |      | 30.8 |        |      | 115      |
| 120      |      |                           | 48.5 |      | 47.1  |      |      | 46.4   |      |      | 42.9   |      | 39.9 | 38.6   |      | 34.7 | 33.6   |      | 30.2 |        |      | 120      |
| 125      |      | 50.8                      |      |      |       | 42.6 |      | 44.8   |      |      | 41.4   |      |      | 38     |      |      | 33.1   |      |      | 28     |      | 125      |
| 130      |      | 48.8                      | 44.4 |      | 43.7  |      |      |        | 38.7 |      | 40     |      |      | 37.2   |      |      | 32.3   |      |      | 26.9   |      | 130      |
| 135      |      |                           | 42.5 |      |       | 39.1 |      | 41.8   | 37.3 |      | 38.7   |      |      | 36.1   |      |      | 31.4   |      |      | 26     |      | 135      |
| 140      |      |                           | 40.8 |      |       | 37.4 |      |        | 35.7 |      | 37.4   |      |      | 34.9   |      |      | 30.5   |      |      | 25     |      | 140      |
| 145      |      |                           |      |      |       | 35.9 |      |        | 34.2 |      |        | 31.1 |      |        |      |      | 29.4   |      |      | 24.1   |      | 145      |
| 150      |      |                           |      |      |       | 34.6 |      |        | 32.9 |      |        | 29.9 |      |        | 27.1 |      | 28.3   |      |      | 23.3   |      | 150      |
| 155      |      |                           |      |      |       |      |      |        | 31.6 |      |        | 28.7 |      |        | 26.1 |      |        | 14.2 |      | 22.5   |      | 155      |
| 160      |      |                           |      |      |       |      |      |        |      |      |        | 27.6 |      |        | 25.1 |      |        | 14.2 |      |        |      | 160      |
| 165      |      |                           |      |      |       |      |      |        |      |      |        |      |      |        | 24.1 |      |        | 14.1 |      |        | 10.6 | 165      |
| 170      |      |                           |      |      |       |      |      |        |      |      |        |      |      |        | 23.2 |      |        | 13.8 |      |        | 10.8 | 170      |
| 175      |      |                           |      |      |       |      |      |        |      |      |        |      |      |        |      |      |        | 13.4 |      |        | 10.9 | 175      |
| 180      |      |                           |      |      |       |      |      |        |      |      |        |      |      |        |      |      |        |      |      |        | 10.8 | 180      |

t\_180\_64401\_00\_000

|                     |      | <b>%</b> | <b>(-</b> |      |        | V E  |      |        | <b>Ser</b> | N I  |        | Ţ (  | * *  |        |      | 8    | 5%     |      |      |        |      |                 |
|---------------------|------|----------|-----------|------|--------|------|------|--------|------------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|-----------------|
| <b>A</b>            | 115  | 5 + 23   | ft*       | 132  | 2 + 23 | ft*  | 149  | 9 + 23 | ft*        | 16   | 5 + 23 | ft*  | 18   | 2 + 23 | ft*  | 198  | 3 + 23 | ft*  | 215  | 5 + 23 | ft*  | <u> </u>        |
|                     |      | 98 ft    |           |      | 98 ft  |      |      | 98 ft  |            |      | 98 ft  |      |      | 98 ft  |      |      | 98 ft  |      |      | 98 ft  |      |                 |
| <b>↔</b> ft         | 82°  | 75°      | 68°       | 82°  | 75°    | 68°  | 82°  | 75°    | 68°        | 82°  | 75°    | 68°  | 82°  | 75°    | 68°  | 82°  | 75°    | 68°  | 82°  | 75°    | 68°  | → f             |
| 60                  | 58.9 |          |           |      |        |      |      |        |            |      |        |      |      |        |      |      |        |      |      |        |      | 60              |
| 65                  | 61.1 |          |           |      |        |      |      |        |            |      |        |      |      |        |      |      |        |      |      |        |      | 65              |
| 70                  | 63.7 |          |           | 61.8 |        |      |      |        |            | 51.2 |        |      |      |        |      |      |        |      |      |        |      | 70              |
| 75                  | 65.7 |          |           | 62.2 |        |      | 56.3 |        |            | 51.2 |        |      | 44.7 |        |      | 39.3 |        |      |      |        |      | 75              |
| 80                  | 66.9 |          |           | 61.9 |        |      | 56.1 |        |            | 50.6 |        |      | 44.5 |        |      | 39.1 |        |      |      |        |      | 80              |
| 85                  | 66.6 |          |           | 61.2 |        |      | 55.6 |        |            | 50   |        |      | 44   |        |      | 38.6 |        |      | 34   |        |      | 85              |
| 90                  | 65.6 |          |           | 60   |        |      | 54.9 |        |            | 49.4 |        |      | 43.4 |        |      | 38   |        |      | 33.6 |        |      | 90              |
| 95                  | 63.5 | 61.8     |           | 58   | 57     |      | 54.2 |        |            | 48.7 |        |      | 42.9 |        |      | 37.5 |        |      | 33   |        |      | 95              |
| 100                 | 60.9 |          |           | 55.5 |        |      | 53.4 |        |            | 48.1 |        |      | 42.3 |        |      | 36.9 |        |      | 32.5 |        |      | 100             |
| 105                 | 58.3 |          |           | 53.3 |        |      | 52.5 |        |            | 47.4 |        |      | 41.7 |        |      | 36.4 |        |      | 31.9 |        |      | 105             |
| 110                 | 55.8 |          |           | 51   | 49.2   |      | 50.5 |        |            |      | 41.2   |      | 41.1 |        |      | 35.8 |        |      | 31.4 |        |      | 110             |
| 115                 |      | 49.9     |           | 48.8 |        |      | 48.6 |        |            | 45.5 | 39.4   |      |      | 35.7   |      | 35.2 |        |      | 30.8 |        |      | 115             |
| 120                 |      | 47.4     |           |      | 44.4   |      |      | 42.1   |            |      | 37.6   |      | 39.9 |        |      | 34.7 |        |      | 30.2 |        |      | 120             |
| 125                 |      | 45.1     | 38.6      |      | 42.3   |      |      | 40.3   |            |      | 36     |      |      | 32.6   |      |      | 30.5   |      |      | 27.8   |      | 125             |
| 130                 |      | 43       | 36.8      |      | 40.3   |      |      | 38.7   |            |      | 34.5   |      |      | 31.2   |      |      | 29.2   |      |      | 26.6   |      | 130             |
| 135                 |      |          | 35.1      |      |        | 31.5 |      | 37     | 28.8       |      | 33.1   |      |      | 30     |      |      | 28     |      |      | 25.5   |      | 135             |
| 140                 |      |          | 33.5      |      |        | 30   |      |        | 27.6       |      | 31.8   |      |      | 28.8   |      |      | 26.9   |      |      | 24.5   |      | 140             |
| 145                 |      |          |           |      |        | 28.7 |      |        | 26.5       |      |        | 22.1 |      |        |      |      | 25.8   |      |      | 23.5   |      | 145             |
| 150                 |      |          |           |      |        | 27.4 |      |        | 25.4       |      |        | 21.2 |      |        | 17.8 |      | 24.8   |      |      | 22.6   |      | 150             |
| 155                 |      |          |           |      |        |      |      |        | 24.5       |      |        | 20.4 |      |        | 17.1 |      |        | 14.2 |      | 21.7   |      | 155             |
| 160                 |      |          |           |      |        |      |      |        |            |      |        | 19.6 |      |        | 16.4 |      |        | 14.1 |      |        |      | 160             |
| 165                 |      |          |           |      |        |      |      |        |            |      |        |      |      |        | 15.8 |      |        | 14   |      |        | 10.6 | 165             |
| 170                 |      |          |           |      |        |      |      |        |            |      |        |      |      |        | 15.1 |      |        | 13.4 |      |        | 10.8 | 170             |
| 175                 |      |          |           |      |        |      |      |        |            |      |        |      |      |        |      |      |        | 12.8 |      |        | 10.5 | 175             |
| 180<br>adapter 11.5 |      |          |           |      |        |      |      |        |            |      |        |      |      |        |      |      |        |      |      |        | 10   | 180<br>64405 00 |



115 - 215 ft / 11.5 ft 118 ft 360° 220500 lbs

t\_180\_64501\_00\_000

|                | N N N      | <b>S</b> ⊤   | <b>©</b> — |            |         | V [          |          |          | For the second | N I          | M        | ] (          | * *          |         |      | 8            | 5%           |     |      |              |       |              |
|----------------|------------|--------------|------------|------------|---------|--------------|----------|----------|----------------|--------------|----------|--------------|--------------|---------|------|--------------|--------------|-----|------|--------------|-------|--------------|
| <u> </u>       | 11:        | 5 + 23       |            | 13         | 2 + 23  |              | 149      | 9 + 23   |                | 16           | 5 + 23   |              | 18:          | 2 + 23  |      | 198          | 3 + 23       |     |      | 5 + 23       | ft*   | <u> </u>     |
|                |            | 118 ft       |            |            | 118 ft  |              |          | 118 ft   |                |              | 118 ft   |              |              | 118 ft  |      |              | 118 ft       |     |      | 118 ft       |       |              |
| ↔ ft           | 82°        | 75°          | 68°        | 82°        | 75°     | 68°          | 82°      | 75°      | 68°            | 82°          | 75°      | 68°          | 82°          | 75°     | 68°  | 82°          | 75°          | 68° | 82°  | 75°          | 68°   | → ft         |
| 70             | 50.2       |              |            |            |         |              |          |          |                |              |          |              |              |         |      |              |              |     |      |              |       | 70           |
| 75             | 51.8       |              |            | 50.1       |         |              | 40       |          |                |              |          |              |              |         |      |              |              |     |      |              |       | 75           |
| 80             | 53.4       |              |            | 50.8       |         |              | 43.5     |          |                | 41.2         |          |              |              |         |      | 00.5         |              |     |      |              |       | 80           |
| 85             | 54.5       |              |            | 51.1       |         |              | 46.1     |          |                | 42.2         |          |              | 07.1         |         |      | 32.5         |              |     | 00.0 |              |       | 85           |
| 90<br>95       | 54.2       | E0.0         |            | 50.9       |         |              | 46.5     |          |                | 42.2<br>41.8 |          |              | 37.1<br>36.8 |         |      | 32.4<br>32.1 |              |     | 28.3 |              |       | 90<br>95     |
| 100            |            | 52.2<br>52.1 |            | 50.5<br>50 | 48.6    |              | 45.8     |          |                | 41.4         |          |              | 36.4         |         |      | 31.7         |              |     | 27.8 |              |       | 100          |
| 105            |            | 52.1         |            | 49.2       |         |              | 45.4     |          |                | 40.9         |          |              | 36.4         |         |      | 31.3         |              |     | 27.5 |              |       | 105          |
| 110            | 49.4       |              |            | 47.3       | 46.1    |              | 44.8     | 43.8     |                | 40.4         |          |              | 35.5         |         |      | 30.8         |              |     | 27   |              |       | 110          |
| 115            |            | 49.3         |            | 45.6       | 44.5    |              | 44.3     |          |                |              | 37.1     |              | 35.1         |         |      | 30.4         |              |     | 26.6 |              |       | 115          |
| 120            |            | 47.2         | 39.3       |            | 42.9    |              | 43.8     |          |                | 39.4         |          |              |              | 31.7    |      | 29.9         | 28.4         |     | 26.2 |              |       | 120          |
| 125            | 44.6       | 45           | 38.2       | 42.2       | 41.5    |              | 43.3     | 38.7     |                |              | 34.4     |              | 34.2         | 31      |      | 29.5         | 28.4         |     | 25.7 |              |       | 125          |
| 130            | 43.1       | 42.9         | 36.5       | 40.6       | 40.1    | 31.9         | 42       | 37.1     |                | 38.4         | 32.9     |              | 33.7         | 29.7    |      |              | 28           |     | 25.3 |              |       | 130          |
| 135            |            | 41           | 34.8       |            |         | 30.8         | 40.6     | 35.6     |                | 37.7         | 31.6     |              |              | 28.4    |      | 28.6         |              |     |      | 23.6         |       | 135          |
| 140            |            |              | 33.2       |            |         | 29.5         |          | 34.2     |                |              | 30.3     |              | 32.9         | 27.3    |      | 28.2         |              |     | 24.5 | 22.9         |       | 140          |
| 145            |            |              | 31.8       |            |         | 28.3         |          | 32.9     |                |              | 29.1     |              |              | 26.2    |      |              | 24.9         |     |      | 22.1         |       | 145          |
| 150            |            | 35.9         | 30.4       |            | 33.6    |              |          | 31.6     |                |              | 28       | 19.7         |              | 25.2    |      |              | 23.9         |     |      | 21.4         |       | 150          |
| 155            |            |              | 29.2       |            |         | 26           |          | 30.4     |                |              | 27       | 18.9         |              | 24.2    | 4.5  |              | 23           |     |      | 20.7         |       | 155          |
| 160<br>165     |            |              | 27.9       |            |         | 24.9<br>23.9 |          |          | 22.2<br>21.4   |              | 26       | 18.2<br>17.4 |              | 23.3    | 15   |              | 22.2<br>21.3 | 8.2 |      | 20.1<br>19.4 |       | 160<br>165   |
| 170            |            |              |            |            |         | 22.9         |          |          | 20.6           |              |          | 16.8         |              |         | 13.8 |              | 20.6         | 8.4 |      | 18.7         |       | 170          |
| 175            |            |              |            |            |         | 22.5         |          |          | 19.8           |              |          | 16.1         |              |         | 13.2 |              | 20.0         | 8.5 |      | 18.7         | 9.2   | 175          |
| 180            |            |              |            |            |         |              |          |          | 10.0           |              |          | 15.5         |              |         | 12.7 |              |              | 8.5 |      | 10           | 9.2   | 180          |
| 185            |            |              |            |            |         |              |          |          |                |              |          | 10.0         |              |         | 12.2 |              |              | 8.4 |      |              | 8.8   | 185          |
| 190            |            |              |            |            |         |              |          |          |                |              |          |              |              |         | 11.7 |              |              | 8.2 |      |              | 8.4   | 190          |
| 195            |            |              |            |            |         |              |          |          |                |              |          |              |              |         |      |              |              | 7.8 |      |              | 8     | 195          |
| 200            |            |              |            |            |         |              |          |          |                |              |          |              |              |         |      |              |              |     |      |              | 7.7   | 200          |
| * adapter 11.5 | ft + teles | scopic b     | oom ex     | tension    | 11.5 ft | · pièce d    | d'adapta | ateur 11 | .5 ft + ra     | llonge       | de flèch | e télesc     | opique '     | 11.5 ft |      |              |              |     |      |              | t 180 | 64505 00 000 |

| 115 – 215 ft<br>T | 11.5 ft      |              | 138 ft N     | 360° 308600 lbs | 85%        |
|-------------------|--------------|--------------|--------------|-----------------|------------|
| 115 ± 23 ft*      | 132 ± 23 ft* | 149 ± 23 ft* | 165 ± 23 ft* | 182 ± 23 ft*    | 198 ± 23 f |

|            |      |              |      |            |            |              |              |        |              |      |        |              |      |        |              |              |              | _          |              |              |     |            |             |
|------------|------|--------------|------|------------|------------|--------------|--------------|--------|--------------|------|--------|--------------|------|--------|--------------|--------------|--------------|------------|--------------|--------------|-----|------------|-------------|
|            |      | 5 + 23       |      |            | 2 + 23     |              |              | 9 + 23 |              | 16   | 5 + 23 |              | 182  | 2 + 23 |              |              | 3 + 23       |            |              | 5 + 23       |     |            | b           |
|            |      | 138 ft       |      |            | 138 ft     |              |              | 138 ft |              |      | 138 ft |              |      | 138 ft |              |              | 138 ft       |            |              | 138 ft       |     |            |             |
| → ft       | 82°  | 75°          | 68°  | 82°        | 75°        | 68°          | 82°          | 75°    | 68°          | 82°  | 75°    | 68°          | 82°  | 75°    | 68°          | 82°          | 75°          | 68°        | 82°          | 75°          | 68° | <b>/</b> ← | <b>→</b> ft |
| 75         | 44.5 |              |      | 40.2       |            |              |              |        |              |      |        |              |      |        |              |              |              |            |              |              |     | 7          | '5          |
| 80         | 45   |              |      | 41         |            |              | 36           |        |              |      |        |              |      |        |              |              |              |            |              |              |     | 8          | 30<br>35    |
| 85<br>90   | 45.3 |              |      | 41.5       |            |              | 37.4         |        |              |      |        |              |      |        |              |              |              |            |              |              |     | 8          | 35          |
| 90         | 44.9 |              |      | 41.8       |            |              | 37.9         |        |              | 33.3 |        |              |      |        |              |              |              |            |              |              |     |            | 0           |
| 95         | 44.2 | 40.5         |      | 41.8       |            |              | 38.2         |        |              | 34.4 |        |              | 26.9 |        |              | 26.5         |              |            | 23.5         |              |     |            | )5          |
| 100        |      | 42.5         |      | 41.7       |            |              | 38.2         |        |              | 34.7 |        |              | 30   |        |              | 26.5         |              |            | 23.4         |              |     | 10         |             |
| 105        | 42.2 | 42.4         |      | 41.3       | 40.5       |              | 38.1         |        |              | 34.7 |        |              | 30.5 |        |              | 26.4         |              |            | 23.3         |              |     | 10         |             |
| 110<br>115 | 41.1 |              |      |            | 40.5       |              | 37.8         | 06 E   |              | 34.4 |        |              | 30.3 |        |              | 26.2         |              |            | 23.1         |              |     | 11         |             |
| 120        |      | 41.5<br>40.2 |      | 40<br>38.9 | 40<br>39.1 |              | 37.4<br>37.1 | 36.4   |              | 34   | 32.2   |              | 29.7 |        |              | 25.9<br>25.6 |              |            | 22.9<br>22.6 |              |     | 11<br>12   |             |
| 125        |      | 38.8         |      |            | 37.7       |              | 36.7         | 36.4   |              |      | 32.2   |              | 29.7 |        |              | 25.3         |              |            | 22.3         |              |     | 12         |             |
| 130        |      | 37.5         |      |            | 36.5       |              | 36.2         |        |              | 32.8 |        |              | 29.3 |        |              | 24.9         |              |            | 21.9         |              |     | 13         |             |
| 135        |      | 36.3         | 34.7 |            |            |              | 35.3         |        |              | 32.5 | 31.7   |              |      | 27.5   |              | 24.6         | 23.5         |            | 21.6         |              |     | 13         |             |
| 140        | 33   | 35           | 33.7 |            |            | 31.6         | 34.2         |        |              | 32.1 | 31.4   |              |      |        |              |              | 23.3         |            | 21.2         | 19.9         |     | 14         |             |
| 145        | 31.9 |              |      |            | 32.9       | 30.8         | 33.1         | 33.8   |              | 31.7 | 31.2   |              | 27.9 | 27     |              | 23.9         | 23           |            | 20.9         |              |     | 14         |             |
| 150        | 30.9 | 32.8         | 31.8 | 31.5       |            |              | 32           |        | 30.7         |      | 30.8   |              | 27.6 | 26.8   |              | 23.6         | 22.7         |            | 20.5         | 19.6         |     | 15         |             |
| 155        |      |              | 30.8 |            | 30.8       | 29.1         | 31           | 31.7   |              | 31.1 | 30     |              | 27.3 | 26.5   |              | 23.3         | 22.5         |            | 20.2         |              |     | 15         |             |
| 160        |      |              | 29.9 |            | 29.8       | 28.2         |              | 30.7   | 29.1         |      | 29.1   |              |      | 26.2   |              | 23           | 22.2         |            | 19.8         | 18.6         |     | 16         |             |
| 165        |      | 29.4         |      |            | 28.7       | 27.4         |              |        | 28.1         |      | 28.2   | 24.8         |      | 25.8   |              |              | 22           |            |              | 18           |     | 16         |             |
| 170        |      | 28           | 28.2 |            | 27.7       |              |              | 28.9   | 27           |      | 27.4   | 23.9         |      | 25.5   | 00.4         |              | 21.7         |            |              | 17.5         |     | 17         |             |
| 175        |      |              | 27.3 |            |            | 25.8         |              | 28.1   | 26.1         |      |        |              |      | 24.9   |              |              | 21.2         | 7.0        |              | 16.9         |     | 17         |             |
| 180<br>185 |      |              | 26.4 |            |            | 25.1<br>24.3 |              |        | 25.1<br>24.2 |      | 25.8   | 22.2<br>21.3 |      | 24.3   | 19.6<br>18.9 |              | 20.3<br>18.8 | 7.3<br>7.3 |              | 16.4<br>15.9 |     | 18<br>18   |             |
| 190        |      |              |      |            |            | 23.5         |              |        | 23.4         |      |        | 20.6         |      |        | 18.1         |              | 17.2         | 7.3        |              | 15.4         |     | 19         |             |
| 195        |      |              |      |            |            | 20.0         |              |        | 22.5         |      |        | 19.8         |      |        | 17.5         |              | 11.2         | 7.3        |              | 14.9         | 7.8 | 19         |             |
| 200        |      |              |      |            |            |              |              |        | 0            |      |        | 19.1         |      |        | 16.8         |              |              | 7.2        |              | 0            | 7.8 | 20         |             |
| 205        |      |              |      |            |            |              |              |        |              |      |        | . 311        |      |        | 16.2         |              |              | 7          |              |              | 7.7 | 20         |             |
| 210        |      |              |      |            |            |              |              |        |              |      |        |              |      |        |              |              |              | 6.8        |              |              | 7.6 | 21         | 0           |
| 215        |      |              |      |            |            |              |              |        |              |      |        |              |      |        |              |              |              | 6.4        |              |              | 7.5 | 21         |             |
| 220        |      |              |      |            |            |              |              |        |              |      |        |              |      |        |              |              |              |            |              |              | 7.2 | 22         |             |

t\_180\_64601\_00\_000

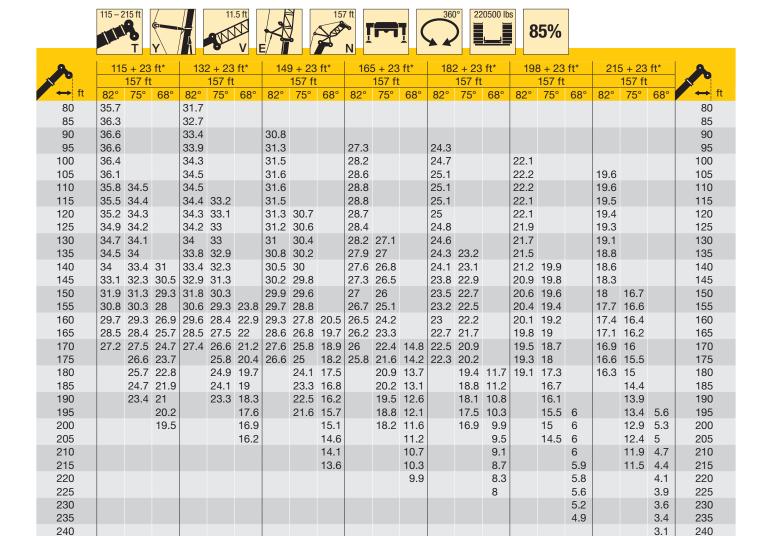
|             | 115-2        | 15 ft<br><b>R</b><br>T | Y\           |              | 11            | .5 ft<br>V E |              |              | 138  | S ft<br>N  |               | Ţ (  | 360          | ) 22       | 20500 lb |              | 5%            |     |      |               |     |            |
|-------------|--------------|------------------------|--------------|--------------|---------------|--------------|--------------|--------------|------|------------|---------------|------|--------------|------------|----------|--------------|---------------|-----|------|---------------|-----|------------|
|             |              | 5 + 23                 |              |              | 2 + 23        |              |              | 9 + 23       | ft*  | 16         | 5 + 23        |      |              | 2 + 23     |          |              | 3 + 23        | ft* |      | 5 + 23        | ft* |            |
| <b>↔</b> ft | 82°          | 138 ft<br>75°          |              | 82°          | 138 ft<br>75° | 68°          | 82°          | 138 ft       | 68°  | 820        | 138 ft<br>75° |      | 82°          | 138 ft     | 68°      | 82°          | 138 ft<br>75° | 68° |      | 138 ft<br>75° | 68° | <b>→</b> f |
| 75          | 44.5         | 75                     | 00           | 40.2         | 75            | 00           | 02           | 75           | 00   | 02         | 75            | 00   | 02           | 75         | 00       | 02           | 13            | 00  | 02   | 75            | 00  | 75         |
| 80          | 45           |                        |              | 41           |               |              | 36           |              |      |            |               |      |              |            |          |              |               |     |      |               |     | 80         |
| 85<br>90    | 45.3<br>44.9 |                        |              | 41.5<br>41.8 |               |              | 37.4<br>37.9 |              |      | 33.3       |               |      |              |            |          |              |               |     |      |               |     | 85<br>90   |
| 95          | 44.9         |                        |              | 41.8         |               |              | 38.2         |              |      | 34.4       |               |      | 26.9         |            |          | 26.5         |               |     | 23.5 |               |     | 95         |
| 100         | 43.3         | 42.5                   |              | 41.7         |               |              | 38.2         |              |      | 34.7       |               |      | 30           |            |          | 26.5         |               |     | 23.4 |               |     | 100        |
| 105         | 42.2         | 42.4                   |              | 41.3         |               |              | 38.1         |              |      | 34.7       |               |      | 30.5         |            |          | 26.4         |               |     | 23.3 |               |     | 105        |
| 110         | 41.1         |                        |              | 40.7         |               |              | 37.8         |              |      | 34.4       |               |      | 30.3         |            |          | 26.2         |               |     | 23.1 |               |     | 110        |
| 115<br>120  | 39.7         |                        |              | 40<br>38.9   | 40<br>39.1    |              | 37.4         | 36.5<br>36.4 |      | 34<br>33.6 | 20.0          |      | 30<br>29.7   |            |          | 25.9<br>25.6 |               |     | 22.9 |               |     | 115<br>120 |
| 125         | 36.8         |                        |              |              | 37.7          |              | 37.1<br>36.7 | 36.1         |      |            | 32.2          |      | 29.7         |            |          | 25.3         |               |     | 22.0 |               |     | 120        |
| 130         | 35.5         |                        |              | 36.2         |               |              | 36.2         |              |      |            | 31.7          |      | 29           |            |          | 24.9         |               |     | 21.9 |               |     | 130        |
| 135         |              |                        |              | 34.9         | 35.2          |              | 35.3         | 34.8         |      | 32.5       | 30.6          |      | 28.6         |            |          | 24.6         |               |     | 21.6 |               |     | 135        |
| 140         | 33           | 35                     |              | 33.7         | 34            |              | 34.2         |              |      | 32.1       | 29.4          |      | 28.3         |            |          | 24.2         |               |     | 21.2 |               |     | 140        |
| 145<br>150  | 31.9         | 33.9<br>32.8           |              | 32.5         |               | 27.3<br>26.2 | 33.1         | 32.2         | 23.2 | 31.7       | 28.2<br>27.1  |      | 27.9<br>27.6 |            |          | 23.9         |               |     |      | 19.8<br>19.6  |     | 145<br>150 |
| 155         | 30.3         | 31.6                   |              | 01.0         |               | 25.2         |              |              | 22.3 | 31.1       | 26.1          |      | 27.3         | 22.9       |          | 23.3         |               |     |      | 19.1          |     | 155        |
| 160         |              | 30.5                   |              |              | 29.8          | 24.2         |              | 28.8         | 21.5 | 0          | 25.1          | 17.2 | _,.0         | 22.1       |          | 23           | 21.5          |     | 19.8 | 18.6          |     | 160        |
| 165         |              |                        | 26.5         |              | 28.7          | 23.3         |              | 27.8         | 20.6 |            | 24.2          | 16.5 |              | 21.2       |          |              | 20.7          |     |      | 18            |     | 165        |
| 170         |              | 28                     | 25.4         |              | 27.7          |              |              | 26.8         |      |            | 23.3          | 15.8 |              | 20.5       | 10       |              | 19.9          |     |      | 17.4          |     | 170        |
| 175<br>180  |              |                        | 24.4<br>23.4 |              |               | 21.5<br>20.6 |              | 25.7         | 18.5 |            | 22.5<br>21.8  |      |              | 19.7<br>19 | 11.5     |              | 19.2<br>18.5  | 7.3 |      | 16.8<br>16.2  |     | 175<br>180 |
| 185         |              |                        | 20.7         |              |               | 19.8         |              |              | 17.8 |            | 21.0          | 14   |              | 10         | 11.5     |              | 17.9          | 7.3 |      | 15.6          |     | 185        |
| 190         |              |                        |              |              |               | 19           |              |              | 17.2 |            |               | 13.5 |              |            | 10.5     |              | 17.2          | 7.3 |      | 15            | 7.2 | 190        |
| 195         |              |                        |              |              |               |              |              |              | 16.6 |            |               | 13   |              |            | 10.1     |              |               | 7.3 |      | 14.5          | 6.9 | 195        |
| 200<br>205  |              |                        |              |              |               |              |              |              |      |            |               | 12.5 |              |            | 9.6      |              |               | 7.2 |      |               | 6.5 | 200<br>205 |
| 210         |              |                        |              |              |               |              |              |              |      |            |               |      |              |            | 9.2      |              |               | 6.8 |      |               | 5.9 | 210        |
| 215         |              |                        |              |              |               |              |              |              |      |            |               |      |              |            |          |              |               | 6.4 |      |               | 5.6 | 215        |
| 220         |              |                        |              |              |               |              |              |              |      |            |               |      |              |            |          |              |               |     |      |               | 5.3 | 220        |



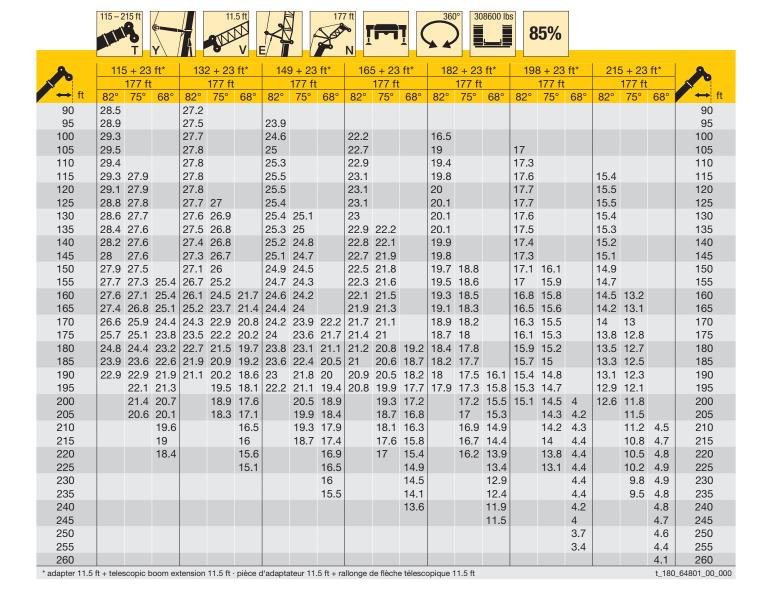
|                |            |          | Y \ /  |         |           | V       | =/       |           |           | IN      |           |           |          |        |      |      |        |     |      |        |       |               |
|----------------|------------|----------|--------|---------|-----------|---------|----------|-----------|-----------|---------|-----------|-----------|----------|--------|------|------|--------|-----|------|--------|-------|---------------|
| <u> </u>       | 115        | 5 + 23   | ft*    | 132     | 2 + 23    | ft*     | 149      | 9 + 23    | ft*       | 16      | 5 + 23    | ft*       | 182      | 2 + 23 | ft*  | 198  | 3 + 23 | ft* | 215  | 5 + 23 | ft*   | <u> </u>      |
|                |            | 157 ft   |        |         | 157 ft    |         |          | 157 ft    |           |         | 157 ft    |           |          | 157 ft |      |      | 157 ft |     |      | 157 ft |       |               |
| → ft           | 82°        | 75°      | 68°    | 82°     | 75°       | 68°     | 82°      | 75°       | 68°       | 82°     | 75°       | 68°       | 82°      | 75°    | 68°  | 82°  | 75°    | 68° | 82°  | 75°    | 68°   | <b>↔</b> ft   |
| 80             | 35.7       |          |        | 31.7    |           |         |          |           |           |         |           |           |          |        |      |      |        |     |      |        |       | 80            |
| 85             | 36.3       |          |        | 32.7    |           |         |          |           |           |         |           |           |          |        |      |      |        |     |      |        |       | 85            |
| 90             | 36.6       |          |        | 33.4    |           |         | 30.8     |           |           |         |           |           |          |        |      |      |        |     |      |        |       | 90            |
| 95             | 36.6       |          |        | 33.9    |           |         | 31.3     |           |           | 27.3    |           |           | 24.3     |        |      |      |        |     |      |        |       | 95            |
| 100            | 36.4       |          |        | 34.3    |           |         | 31.5     |           |           | 28.2    |           |           | 24.7     |        |      | 22.1 |        |     |      |        |       | 100           |
| 105            | 36.1       |          |        | 34.5    |           |         | 31.6     |           |           | 28.6    |           |           | 25.1     |        |      | 22.2 |        |     | 19.6 |        |       | 105           |
| 110            | 35.8       | 34.5     |        | 34.5    |           |         | 31.6     |           |           | 28.8    |           |           | 25.1     |        |      | 22.2 |        |     | 19.6 |        |       | 110           |
| 115            | 35.5       | 34.4     |        | 34.4    | 33.2      |         | 31.5     |           |           | 28.8    |           |           | 25.1     |        |      | 22.1 |        |     | 19.5 |        |       | 115           |
| 120            | 35.2       | 34.3     |        | 34.3    | 33.1      |         | 31.3     | 30.7      |           | 28.7    |           |           | 25       |        |      | 22.1 |        |     | 19.4 |        |       | 120           |
| 125            | 34.9       | 34.2     |        | 34.2    | 33        |         | 31.2     | 30.6      |           | 28.4    |           |           | 24.8     |        |      | 21.9 |        |     | 19.3 |        |       | 125           |
| 130            | 34.7       | 34.1     |        | 34      | 33        |         | 31       | 30.4      |           | 28.2    | 27.1      |           | 24.6     |        |      | 21.7 |        |     | 19.1 |        |       | 130           |
| 135            | 34.5       | 34       |        | 33.8    | 32.9      |         | 30.8     | 30.2      |           | 27.9    | 27        |           | 24.3     | 23.2   |      | 21.5 |        |     | 18.8 |        |       | 135           |
| 140            | 34         | 33.4     | 31     | 33.4    | 32.3      |         | 30.5     | 30        |           | 27.6    | 26.8      |           | 24.1     | 23.1   |      | 21.2 | 19.9   |     | 18.6 |        |       | 140           |
| 145            | 33.1       | 32.3     | 30.5   | 32.9    | 31.3      |         | 30.2     | 29.8      |           | 27.3    | 26.6      |           | 23.8     | 22.9   |      | 20.9 | 19.8   |     | 18.3 |        |       | 145           |
| 150            | 1          | 31.3     |        | 31.8    |           |         |          | 29.6      |           | 27      | 26.4      |           |          | 22.7   |      | 20.6 |        |     | 18   | 16.7   |       | 150           |
| 155            |            |          |        |         | 29.3      |         | 29.7     |           |           |         | 26.2      |           |          | 22.5   |      |      | 19.4   |     |      | 16.6   |       | 155           |
| 160            |            | 29.3     |        |         | 28.4      |         |          | 28.2      |           |         |           |           | 23       | 22.3   |      |      | 19.2   |     |      | 16.4   |       | 160           |
| 165            |            |          | 27.3   |         |           |         |          |           |           |         | 25.7      |           |          | 22.1   |      | 19.8 |        |     |      | 16.2   |       | 165           |
| 170            | 27.2       |          | 26.5   | 27.4    |           |         | 27.6     |           |           |         | 25.4      |           | 22.5     |        |      |      | 18.9   |     | 16.9 |        |       | 170           |
| 175            |            |          | 25.8   |         |           |         | 26.6     |           |           | 25.8    |           |           | 22.3     |        |      |      | 18.6   |     |      | 15.5   |       | 175           |
| 180            |            | 25.7     |        |         |           | 23.5    |          | 24.8      |           |         | 24        | 21.5      |          |        | 19.6 | 19.1 |        |     | 16.3 |        |       | 180           |
| 185            |            |          | 24.3   |         |           | 22.8    |          | 24.1      |           |         |           | 20.7      |          | 21.2   |      |      | 18.2   |     |      | 14.6   |       | 185           |
| 190            |            | 23.4     | 23.6   |         | 23.3      | 22.2    |          | 23.3      |           |         |           | 19.9      |          |        | 18.6 |      | 18     |     |      | 14.2   |       | 190           |
| 195            |            |          | 22.9   |         |           | 21.6    |          | 22.5      |           |         | 22        | 19.2      |          |        | 17.9 |      | 17.6   |     |      | 13.8   | 0.0   | 195           |
| 200            |            |          | 22.2   |         |           | 20.9    |          |           | 20.6      |         | 21.4      | 18.5      |          | 19.8   |      |      | 16.9   |     |      | 13.3   |       | 200           |
| 205            |            |          |        |         |           | 20.3    |          |           | 20.1      |         |           | 17.9      |          |        | 16.6 |      | 15.9   |     |      | 12.9   | 6.4   | 205           |
| 210            |            |          |        |         |           |         |          |           | 19.5      |         |           | 17.2      |          |        | 16.1 |      |        | 6   |      | 12.5   | 6.4   | 210           |
| 215            |            |          |        |         |           |         |          |           | 18.9      |         |           | 16.6      |          |        | 15.5 |      |        | 5.9 |      | 12.2   |       | 215           |
| 220            |            |          |        |         |           |         |          |           |           |         |           | 16.1      |          |        | 14.9 |      |        | 5.8 |      |        | 6.3   | 220           |
| 225            |            |          |        |         |           |         |          |           |           |         |           |           |          |        | 14.4 |      |        | 5.6 |      |        | 6.2   | 225           |
| 230            |            |          |        |         |           |         |          |           |           |         |           |           |          |        |      |      |        | 5.2 |      |        | 6.1   | 230           |
| 235            |            |          |        |         |           |         |          |           |           |         |           |           |          |        |      |      |        | 4.9 |      |        | 6     | 235           |
| 240            | ft , toler | aconic b | noom c | topolo- | 11 E #    | niàne e | l'adorte | tour 11   | E #       | llongs  | do flàch  | o tálos s | opique i | 11 5 # |      |      |        |     |      |        | 5.7   | 240           |
| * adapter 11.5 | it + teles | scopic t | oom ex | tension | 11.5 ft · | hiece c | a adapta | ileur 11. | .ο π + ra | monge o | ie tieche | e (elesc  | obidue . | π כ.וו |      |      |        |     |      |        | t_180 | _64701_00_000 |

3.1

t\_180\_64705\_00\_000



\* adapter 11.5 ft + telescopic boom extension 11.5 ft · pièce d'adaptateur 11.5 ft + rallonge de flèche télescopique 11.5 ft





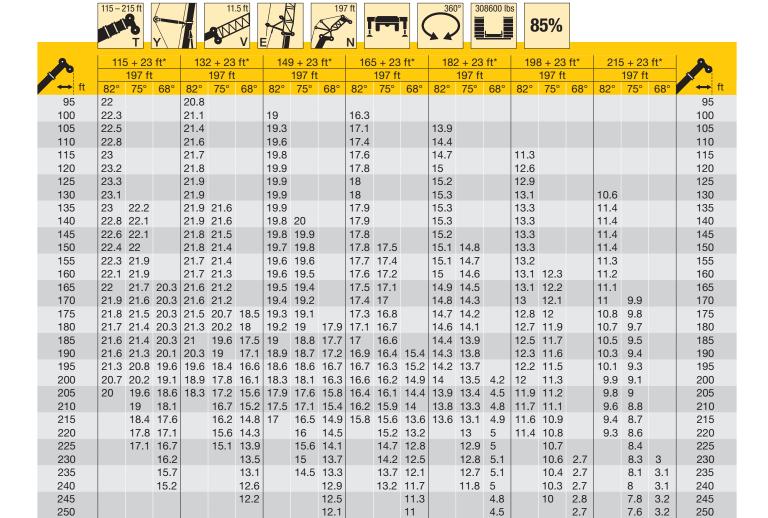
|            |      | Т            | <b>Y</b> \_/ |      | -6     | V    | <b>=</b> / <b>  </b> |        |      | N    |              |      |              |        |     |              |        |     |              |        |     |            |
|------------|------|--------------|--------------|------|--------|------|----------------------|--------|------|------|--------------|------|--------------|--------|-----|--------------|--------|-----|--------------|--------|-----|------------|
| <u> </u>   | 115  | 5 + 23       | ft*          | 132  | 2 + 23 | ft*  | 149                  | 9 + 23 | ft*  | 16   | 5 + 23       | ft*  | 182          | 2 + 23 | ft* | 198          | 3 + 23 | ft* | 215          | 5 + 23 | ft* | <u> </u>   |
|            |      | 177 ft       |              |      | 177 ft |      |                      | 177 ft |      |      | 177 ft       |      |              | 177 ft |     |              | 177 ft |     |              | 177 ft |     |            |
| ← ft       | 82°  | 75°          | 68°          | 82°  | 75°    | 68°  | 82°                  | 75°    | 68°  | 82°  | 75°          | 68°  | 82°          | 75°    | 68° | 82°          | 75°    | 68° | 82°          | 75°    | 68° | ↔ ft       |
| 90         | 28.5 |              |              | 27.2 |        |      |                      |        |      |      |              |      |              |        |     |              |        |     |              |        |     | 90         |
| 95         | 28.9 |              |              | 27.5 |        |      | 23.9                 |        |      |      |              |      |              |        |     |              |        |     |              |        |     | 95         |
| 100        | 29.3 |              |              | 27.7 |        |      | 24.6                 |        |      | 22.2 |              |      | 16.5         |        |     |              |        |     |              |        |     | 100        |
| 105        | 29.5 |              |              | 27.8 |        |      | 25                   |        |      | 22.7 |              |      | 19           |        |     | 17           |        |     |              |        |     | 105        |
| 110        | 29.4 |              |              | 27.8 |        |      | 25.3                 |        |      | 22.9 |              |      | 19.4         |        |     | 17.3         |        |     |              |        |     | 110        |
| 115        | 29.3 |              |              | 27.8 |        |      | 25.5                 |        |      | 23.1 |              |      | 19.8         |        |     | 17.6         |        |     | 15.4         |        |     | 115        |
| 120        |      | 27.9         |              | 27.8 |        |      | 25.5                 |        |      | 23.1 |              |      | 20           |        |     | 17.7         |        |     | 15.5         |        |     | 120        |
| 125        |      | 27.8         |              | 27.7 |        |      | 25.4                 | 05.4   |      | 23.1 |              |      | 20.1         |        |     | 17.7         |        |     | 15.5         |        |     | 125        |
| 130        |      | 27.7         |              |      | 26.9   |      | 25.4                 |        |      | 23   | 00.0         |      | 20.1         |        |     | 17.6         |        |     | 15.4         |        |     | 130        |
| 135<br>140 | 28.4 |              |              | 27.5 | 26.8   |      | 25.3                 |        |      |      | 22.2         |      | 20.1         |        |     | 17.5<br>17.4 |        |     | 15.3         |        |     | 135<br>140 |
| 140        | 28   | 27.6<br>27.6 |              |      |        |      | 25.2                 |        |      |      | 22.1         |      | 19.9<br>19.8 |        |     | 17.4         |        |     | 15.2<br>15.1 |        |     | 140        |
| 150        | 27.9 |              |              | 27.3 | 26.7   |      | 24.9                 | 24.7   |      |      | 21.9<br>21.8 |      |              | 18.8   |     | 17.3         | 16 1   |     | 14.9         |        |     | 150        |
| 155        | 1    | 27.3         | 25.4         | 26.7 |        |      | 24.5                 |        |      |      | 21.6         |      |              | 18.6   |     | 17.1         | 15.9   |     | 14.5         |        |     | 155        |
| 160        |      |              | 25.2         |      |        | 21 7 | 24.6                 |        |      |      | 21.5         |      |              | 18.5   |     | 16.8         |        |     | 14.7         | 13.2   |     | 160        |
| 165        | 1    |              | 24.7         |      |        |      |                      |        |      | 1    | 21.3         |      |              | 18.3   |     |              | 15.6   |     |              | 13.1   |     | 165        |
| 170        |      |              | 23.7         |      |        |      |                      |        | 17.9 |      |              |      |              | 18.2   |     |              | 15.5   |     | 14           | 13     |     | 170        |
| 175        | 1    |              | 22.8         |      |        |      |                      |        |      | 21.4 |              |      | 18.7         |        |     |              | 15.3   |     |              | 12.8   |     | 175        |
| 180        |      |              | 21.8         |      |        |      |                      |        |      |      | 20.4         | 13.1 |              | 17.8   |     |              | 15.2   |     |              | 12.7   |     | 180        |
| 185        | 1    | 23.6         |              |      | 20.9   |      |                      |        |      |      | 19.6         |      |              |        |     | 15.7         |        |     |              | 12.5   |     | 185        |
| 190        | 22.9 | 22.9         | 20.1         |      | 20.2   |      | 23                   |        |      |      | 18.9         | 12   | 18           | 16.8   | 9.3 |              | 14.7   |     |              | 12.3   |     | 190        |
| 195        |      | 22.1         | 19.3         |      | 19.5   |      | 22.2                 |        |      |      | 18.3         |      | 17.9         | 16.2   | 8.9 | 15.3         | 14.2   |     | 12.9         | 12     |     | 195        |
| 200        |      | 21.4         | 18.6         |      | 18.9   | 16.4 |                      | 20.3   | 14.2 |      | 17.7         | 11.1 |              | 15.6   | 8.5 | 15.1         | 13.7   | 4   | 12.6         | 11.5   |     | 200        |
| 205        |      | 20.6         | 17.9         |      | 18.3   | 15.9 |                      | 19.6   | 13.7 |      | 17.1         | 10.6 |              | 15.1   | 8.1 |              | 13.2   | 4.2 |              | 11.1   | 3.4 | 205        |
| 210        |      |              | 17.2         |      |        | 15.3 |                      |        | 13.2 |      | 16.5         | 10.2 |              |        | 7.7 |              | 12.7   | 4.3 |              | 10.6   | 3.3 | 210        |
| 215        |      |              | 16.5         |      |        | 14.7 |                      | 18.2   | 12.7 |      | 16           | 9.8  |              | 14     | 7.4 |              | 12.2   | 4.4 |              | 10.2   |     | 215        |
| 220        |      |              | 15.9         |      |        | 14.1 |                      |        | 12.3 |      | 15.5         |      |              | 13.5   | 7   |              | 11.8   | 4.4 |              | 9.8    | 2.7 | 220        |
| 225        |      |              |              |      |        | 13.5 |                      |        | 11.8 |      |              | 9    |              |        | 6.7 |              | 11.4   | 4.4 |              | 9.4    |     | 225        |
| 230        |      |              |              |      |        |      |                      |        | 11.4 |      |              | 8.6  |              |        | 6.4 |              |        | 4.4 |              | 9      |     | 230        |
| 235        |      |              |              |      |        |      |                      |        | 11   |      |              | 8.3  |              |        | 6.1 |              |        | 4.3 |              | 8.7    |     | 235        |
| 240        |      |              |              |      |        |      |                      |        |      |      |              | 7.9  |              |        | 5.8 |              |        | 4   |              |        |     | 240        |
| 245        |      |              |              |      |        |      |                      |        |      |      |              |      |              |        | 5.5 |              |        | 3.8 |              |        |     | 245        |
| 250        |      |              |              |      |        |      |                      |        |      |      |              |      |              |        |     |              |        | 3.5 |              |        |     | 250        |
| 255        |      |              |              |      |        |      |                      |        |      |      |              |      |              |        |     |              |        | 3.3 |              |        |     | 255        |

255

260

265

270



275 adapter 11.5 ft + telescopic boom extension 11.5 ft · pièce d'adaptateur 11.5 ft + rallonge de flèche télescopique 11.5 ft

11.8

10.6

10.3

4.2

3.8

3.3

2.7

7.4

3.2

3.1

2.9

2.7

3

255

260

265

270

275

t\_180\_64901\_00\_000



|             |      | T      | <b>Y</b> \ |      | 0      | V E/ |      |        | <b>™</b> |      |        |     |      |        |     |      |        |     |       |        |             |
|-------------|------|--------|------------|------|--------|------|------|--------|----------|------|--------|-----|------|--------|-----|------|--------|-----|-------|--------|-------------|
| <u> </u>    | 11:  | 5 + 23 | ft*        | 13   | 2 + 23 | ft*  | 149  | 9 + 23 | ft*      | 16   | 5 + 23 | ft* | 182  | 2 + 23 | ft* | 198  | 3 + 23 | ft* | 215 + | 23 ft* | <u> </u>    |
|             |      | 197 ft |            |      | 197 ft |      |      | 197 ft |          |      | 197 ft |     |      | 197 ft |     |      | 197 ft |     | 197   | 7 ft   |             |
| <b>↔</b> ft | 82°  | 75°    | 68°        | 82°  | 75°    | 68°  | 82°  | 75°    | 68°      | 82°  | 75°    | 68° | 82°  | 75°    | 68° | 82°  | 75°    | 68° | 82°   | 75°    | <b>↔</b> ft |
| 95          | 22   |        |            | 20.8 |        |      |      |        |          |      |        |     |      |        |     |      |        |     |       |        | 95          |
| 100         | 22.3 |        |            | 21.1 |        |      | 19   |        |          | 16.3 |        |     |      |        |     |      |        |     |       |        | 100         |
| 105         | 22.5 |        |            | 21.4 |        |      | 19.3 |        |          | 17.1 |        |     | 13.9 |        |     |      |        |     |       |        | 105         |
| 110         | 22.8 |        |            | 21.6 |        |      | 19.6 |        |          | 17.4 |        |     | 14.4 |        |     |      |        |     |       |        | 110         |
| 115         | 23   |        |            | 21.7 |        |      | 19.8 |        |          | 17.6 |        |     | 14.7 |        |     | 11.3 |        |     |       |        | 115         |
| 120         | 23.2 |        |            | 21.8 |        |      | 19.9 |        |          | 17.8 |        |     | 15   |        |     | 12.6 |        |     |       |        | 120         |
| 125         | 23.3 |        |            | 21.9 |        |      | 19.9 |        |          | 18   |        |     | 15.2 |        |     | 12.9 |        |     |       |        | 125         |
| 130         | 23.1 |        |            | 21.9 |        |      | 19.9 |        |          | 18   |        |     | 15.3 |        |     | 13.1 |        |     | 10.6  |        | 130         |
| 135         | 23   | 22.2   |            |      | 21.6   |      | 19.9 |        |          | 17.9 |        |     | 15.3 |        |     | 13.3 |        |     | 11.4  |        | 135         |
| 140         |      | 22.1   |            |      | 21.6   |      | 19.8 |        |          | 17.9 |        |     | 15.3 |        |     | 13.3 |        |     | 11.4  |        | 140         |
| 145         |      | 22.1   |            |      | 21.5   |      | 19.8 |        |          | 17.8 |        |     | 15.2 |        |     | 13.3 |        |     | 11.4  |        | 145         |
| 150         | 22.4 |        |            |      | 21.4   |      | 19.7 |        |          | 17.8 |        |     | 15.1 |        |     | 13.3 |        |     | 11.4  |        | 150         |
| 155         |      | 21.9   |            |      | 21.4   |      | 19.6 |        |          | 17.7 |        |     |      | 14.7   |     | 13.2 |        |     | 11.3  |        | 155         |
| 160         |      | 21.9   |            |      | 21.3   |      | 19.6 |        |          |      | 17.2   |     | 15   | 14.6   |     | 13.1 |        |     | 11.2  |        | 160         |
| 165         | 22   |        | 20.3       |      | 21.2   |      | 19.5 |        |          |      | 17.1   |     |      | 14.5   |     | 13.1 |        |     | 11.1  |        | 165         |
| 170         | 21.9 |        | 20.3       |      | 21.2   |      | 19.4 |        |          | 17.4 |        |     |      | 14.3   |     | 13   | 12.1   |     | 11    | 9.9    | 170         |
| 175         | 1    | 21.5   |            | 1    | 20.7   |      | 19.3 |        |          |      | 16.8   |     |      | 14.2   |     |      | 12     |     | 10.8  | 9.8    | 175         |
| 180         |      |        |            | 21.3 |        |      | 19.2 |        | 15.6     | 17.1 | 16.7   |     |      | 14.1   |     | 12.7 |        |     | 10.7  | 9.7    | 180         |
| 185         |      | 21.4   |            |      | 19.6   |      | 19   | 18.8   |          | 17   | 16.6   |     |      | 13.9   |     |      | 11.7   |     | 10.5  | 9.5    | 185         |
| 190         |      | 21.3   |            |      |        | 16.4 |      | 18.7   |          |      | 16.4   |     |      | 13.8   |     |      | 11.6   |     | 10.3  | 9.4    | 190         |
| 195         |      | 20.8   |            |      | 18.4   |      |      | 18.6   |          |      | 16.3   |     |      | 13.7   |     |      | 11.5   |     | 10.1  | 9.3    | 195         |
| 200         | 20.7 |        | 18.2       |      | 17.8   |      |      | 18.1   |          |      | 16.2   |     | 14   | 13.5   | 4.2 | 12   | 11.3   |     | 9.9   | 9.1    | 200         |
| 205         | 20   |        | 17.5       | 18.3 | 17.2   |      |      | 17.6   |          | 16.4 |        | 9.7 |      | 13.4   | 4.5 |      | 11.2   |     | 9.8   | 9      | 205         |
| 210         |      | 19     | 16.8       |      | 16.7   |      |      | 17.1   |          |      | 15.7   | 9.3 |      | 13.3   | 4.8 | 11.7 |        |     | 9.6   | 8.8    | 210         |
| 215         |      |        | 16.1       |      |        | 13.6 | 17   | 16.5   |          | 15.8 |        | 8.9 | 13.6 | 13.1   | 4.9 |      | 10.9   |     | 9.4   | 8.7    | 215         |
| 220         |      | 17.8   | 15.5       |      | 15.6   |      |      | 16     | 11.3     |      | 14.6   | 8.5 |      | 12.9   | 5   | 11.4 | 10.6   |     | 9.3   | 8.5    | 220         |
| 225         |      | 17.1   | 14.9       |      | 15.1   |      |      | 15.6   |          |      | 14.1   | 8.1 |      | 12.6   | 5   |      | 10.2   | 0.7 |       | 8.3    | 225         |
| 230         |      |        | 14.3       |      |        | 12.2 |      | 15     | 10.5     |      | 13.6   | 7.7 |      | 12.1   | 5.1 |      | 9.8    | 2.7 |       | 7.9    | 230         |
| 235         |      |        | 13.8       |      |        | 11.8 |      | 14.5   |          |      | 13.2   | 7.4 |      | 11.7   | 5.1 |      | 9.4    | 2.7 |       | 7.6    | 235         |
| 240         |      |        | 13.3       |      |        | 11.3 |      |        | 9.7      |      | 12.8   | 7.1 |      | 11.3   | 5   |      | 9.1    | 2.7 |       | 7.2    | 240         |
| 245         |      |        |            |      |        | 10.8 |      |        | 9.4      |      |        | 6.7 |      |        | 4.8 |      | 8.7    |     |       | 6.9    | 245         |
| 250         |      |        |            |      |        |      |      |        | 9        |      |        | 6.4 |      |        | 4.5 |      |        |     |       | 6.6    | 250         |
| 255         |      |        |            |      |        |      |      |        | 8.7      |      |        | 6.1 |      |        | 4.2 |      |        |     |       | 6.3    | 255         |
| 260         |      |        |            |      |        |      |      |        |          |      |        | 5.8 |      |        | 3.8 |      |        |     |       |        | 260         |
| 265         |      |        |            |      |        |      |      |        |          |      |        |     |      |        | 3.3 |      |        |     |       |        | 265         |

















|            |              | 1 1          |              |              | V L          |              |              | IN           |              |            |              |      |              |              |     |              |            |            |
|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|------|--------------|--------------|-----|--------------|------------|------------|
| <u>A</u>   | 11           | 5 + 23       | ft*          | 13           |              |              |              |              |              |            | 165 + 23 ft* |      | 182 + 23 ft* |              | ft* | 198 + 23 ft* |            | <u>A</u>   |
|            |              | 217 ft       |              |              | 217 ft       |              |              | 217 ft       |              |            | 217 ft       |      |              | 217 ft       |     |              | 7 ft       |            |
| → ft       | 82°          | 75°          | 68°          | 82°          | 75°          | 68°          | 82°          | 75°          | 68°          | 82°        | 75°          | 68°  | 82°          | 75°          | 68° | 82°          | 75°        | → ft       |
| 95         | 18.3         |              |              |              |              |              |              |              |              |            |              |      |              |              |     |              |            | 95         |
| 100        | 18.4         |              |              | 16           |              |              | 15           |              |              |            |              |      |              |              |     |              |            | 100        |
| 105        | 18.5         |              |              | 16.3         |              |              | 15.3         |              |              | 13         |              |      |              |              |     |              |            | 105        |
| 110        | 18.6         |              |              | 16.5         |              |              | 15.4         |              |              | 13.3       |              |      |              |              |     | 7.0          |            | 110        |
| 115        | 18.7         |              |              | 16.8         |              |              | 15.6         |              |              | 13.6       |              |      | 9.2          |              |     | 7.8          |            | 115        |
| 120        | 18.8         |              |              | 16.9         |              |              | 15.7         |              |              | 13.7       |              |      | 10.1         |              |     | 8.8          |            | 120        |
| 125<br>130 | 18.8<br>18.8 |              |              | 17.1<br>17.2 |              |              | 15.8<br>15.8 |              |              | 13.9<br>14 |              |      | 11<br>11.2   |              |     | 9.1<br>9.3   |            | 125<br>130 |
| 135        | 18.8         |              |              | 17.2         |              |              | 15.6         |              |              | 14         |              |      | 11.4         |              |     | 9.5          |            | 135        |
| 140        | 18.7         | 17.7         |              | 17.3         |              |              | 15.7         |              |              | 14         |              |      | 11.5         |              |     | 9.7          |            | 140        |
| 145        | 18.5         | 17.8         |              | 17.3         | 17.1         |              | 15.7         | 15.9         |              | 13.9       |              |      | 11.6         |              |     | 9.8          |            | 145        |
| 150        | 18.4         | 17.8         |              | 17.3         | 17.2         |              | 15.6         | 15.9         |              | 13.9       |              |      | 11.7         |              |     | 9.8          |            | 150        |
| 155        | 18.2         | 17.8         |              | 17.3         | 17.2         |              | 15.5         | 15.9         |              | 13.8       | 13.9         |      | 11.7         |              |     | 9.7          |            | 155        |
| 160        | 18.1         | 17.7         |              | 17.3         | 17.2         |              | 15.5         | 15.8         |              | 13.8       | 13.8         |      | 11.6         | 11.6         |     | 9.7          |            | 160        |
| 165        | 18           | 17.7         |              | 17.3         | 17.2         |              | 15.4         | 15.7         |              | 13.7       | 13.7         |      | 11.6         | 11.4         |     | 9.6          |            | 165        |
| 170        | 17.9         | 17.6         |              | 17.2         | 17.1         |              | 15.3         | 15.6         |              | 13.6       | 13.6         |      | 11.5         | 11.3         |     | 9.6          |            | 170        |
| 175        | 17.7         | 17.5         |              | 17.2         | 17.1         |              | 15.3         | 15.4         |              | 13.6       | 13.5         |      | 11.5         | 11.2         |     | 9.5          | 8.3        | 175        |
| 180        | 17.6         | 17.4         | 16.2         | 17.1         | 17           |              | 15.2         | 15.3         |              | 13.5       | 13.4         |      | 11.4         | 11.1         |     | 9.5          | 8.4        | 180        |
| 185        | 17.6         | 17.3         | 16.2         | 17           | 17           | 15.3         | 15.1         | 15.2         |              | 13.4       | 13.3         |      | 11.4         | 11           |     | 9.4          | 8.4        | 185        |
| 190        | 17.5         | 17.1         | 16.2         | 16.8         | 16.9         | 15.5         | 14.9         | 15.1         | 14.1         | 13.3       | 13.2         |      | 11.3         | 10.9         |     | 9.3          | 8.4        | 190        |
| 195        | 17.4         | 17.1         | 15.9         | 16.7         | 16.8         | 15           | 14.7         | 15           | 14.1         | 13.2       | 13.1         |      | 11.2         | 10.8         |     | 9.2          | 8.4        | 195        |
| 200<br>205 | 17.3         | 16.8<br>16.4 | 15.5<br>15.1 | 16.5<br>16.3 | 16.5<br>16.1 | 14.6<br>14.2 | 14.5<br>14.3 | 14.9<br>14.8 | 13.8<br>13.4 | 13.1<br>13 | 12.9<br>12.8 | 10.6 | 11.1         | 10.7<br>10.6 |     | 9.1          | 8.3<br>8.1 | 200<br>205 |
| 210        | 16.6         | 15.9         | 14.7         | 16.3         | 15.5         | 13.8         | 14.3         | 14.7         | 13.4         | 12.9       | 12.7         | 10.0 | 10.9         | 10.5         |     | 8.9          | 8          | 210        |
| 215        | 16.0         | 15.4         | 14.7         | 15.9         | 15.1         | 13.4         | 13.8         | 14.7         | 12.6         | 12.7       | 12.7         | 10.7 | 10.9         | 10.3         |     | 8.8          | 7.9        | 215        |
| 220        | 15.4         | 14.9         | 13.8         | 15.6         | 14.6         | 13           | 13.5         | 13.9         | 12.2         | 12.4       | 12.5         | 10.8 | 10.7         | 10.3         |     | 8.7          | 7.7        | 220        |
| 225        | 14.8         | 14.4         | 13.5         | 15.2         | 14.1         | 12.7         | 13.1         | 13.5         | 11.9         | 12.1       | 12.5         | 10.7 | 10.5         | 10.2         | 3.2 | 8.6          | 7.4        | 225        |
| 230        |              | 13.9         | 13.1         |              | 13.7         | 12.3         | 12.8         | 13           | 11.5         | 11.7       | 12.3         | 10.5 | 10.2         | 10.1         | 3.3 | 8.5          | 7.1        | 230        |
| 235        |              | 13.4         | 12.7         |              | 13.2         | 11.9         | 12.4         | 12.6         | 11.1         | 11.3       | 12           | 10.1 | 9.8          | 10           | 3.4 | 8.1          | 6.8        | 235        |
| 240        |              | 12.9         | 12.3         |              | 12.7         | 11.5         |              | 12.2         | 10.7         |            | 11.6         | 9.8  |              | 9.9          | 3.4 | 7.7          | 6.3        | 240        |
| 245        |              |              | 11.9         |              | 12.3         | 11.1         |              | 11.8         | 10.4         |            | 11.2         | 9.5  |              | 9.8          | 3.5 |              | 5.8        | 245        |
| 250        |              |              | 11.5         |              |              | 10.8         |              | 11.4         | 10.1         |            | 10.8         | 9.1  |              | 9.8          | 3.5 |              | 5.3        | 250        |
| 255        |              |              | 11.1         |              |              | 10.4         |              | 10.8         | 9.8          |            | 10.5         | 8.8  |              | 9.7          | 3.4 |              | 4.8        | 255        |
| 260        |              |              | 10.7         |              |              | 10.1         |              |              | 9.4          |            | 10           | 8.5  |              | 9.2          | 3.3 |              | 4.2        | 260        |
| 265        |              |              |              |              |              | 9.7          |              |              | 9.1          |            |              | 8.2  |              |              | 3.1 |              | 3.5        | 265        |
| 270        |              |              |              |              |              |              |              |              | 8.7          |            |              | 7.8  |              |              |     |              |            | 270        |
| 275        |              |              |              |              |              |              |              |              | 8.2          |            |              | 7.1  |              |              |     |              |            | 275        |
| 280        |              |              |              |              |              |              |              |              |              |            |              | 6.2  |              |              |     |              |            | 280        |

t\_180\_65001\_00\_000



|             |              | T Y          |      | - 0          | V E          |      |              | N            |      | تسال         |              |     |              |              |     |            |            |            |
|-------------|--------------|--------------|------|--------------|--------------|------|--------------|--------------|------|--------------|--------------|-----|--------------|--------------|-----|------------|------------|------------|
| Δ.          | 11           | 5 + 23       | ft*  | 13           | 32 + 23      | ft*  | 14           | 9 + 23       | ft*  | 16           | 55 + 23      | ft* | 18           | 2 + 23       | ft* | 198 +      | 23 ft*     | <u> </u>   |
|             |              | 217 ft       |      |              | 217 ft       |      |              | 217 ft       |      |              | 217 ft       |     |              | 217 ft       |     |            | 7 ft       |            |
| <b>←</b> ft | 82°          | 75°          | 68°  | 82°          | 75°          | 68°  | 82°          | 75°          | 68°  | 82°          | 75°          | 68° | 82°          | 75°          | 68° | 82°        | 75°        | ↔ ft       |
| 95          | 18.3         |              |      |              |              |      |              |              |      |              |              |     |              |              |     |            |            | 95         |
| 100         | 18.4         |              |      | 16           |              |      | 15           |              |      |              |              |     |              |              |     |            |            | 100        |
| 105         | 18.5         |              |      | 16.3         |              |      | 15.3         |              |      | 13           |              |     |              |              |     |            |            | 105        |
| 110         | 18.6         |              |      | 16.5         |              |      | 15.4         |              |      | 13.3         |              |     |              |              |     |            |            | 110        |
| 115         | 18.7         |              |      | 16.8         |              |      | 15.6         |              |      | 13.6         |              |     | 9.2          |              |     | 7.8        |            | 115        |
| 120         | 18.8         |              |      | 16.9         |              |      | 15.7         |              |      | 13.7         |              |     | 10.1         |              |     | 8.8        |            | 120        |
| 125         | 18.8         |              |      | 17.1         |              |      | 15.8         |              |      | 13.9         |              |     | 11           |              |     | 9.1        |            | 125        |
| 130         | 18.8         |              |      | 17.2         |              |      | 15.8         |              |      | 14           |              |     | 11.2         |              |     | 9.3        |            | 130        |
| 135         | 18.8         |              |      | 17.3         |              |      | 15.7         |              |      | 14           |              |     | 11.4         |              |     | 9.5        |            | 135        |
| 140         | 18.7         | 17.7         |      | 17.3         |              |      | 15.7         |              |      | 14           |              |     | 11.5         |              |     | 9.7        |            | 140        |
| 145         | 18.5         | 17.8         |      | 17.3         | 17.1         |      | 15.7         | 15.9         |      | 13.9         |              |     | 11.6         |              |     | 9.8        |            | 145        |
| 150         | 18.4         | 17.8         |      | 17.3         | 17.2         |      | 15.6         | 15.9         |      | 13.9         | 10.0         |     | 11.7         |              |     | 9.8        |            | 150        |
| 155         | 18.2         | 17.8         |      | 17.3         | 17.2         |      | 15.5         | 15.9         |      | 13.8         | 13.9         |     | 11.7         | 44.0         |     | 9.7        |            | 155        |
| 160         | 18.1         | 17.7         |      | 17.3         | 17.2         |      | 15.5         | 15.8         |      | 13.8         | 13.8         |     | 11.6         | 11.6         |     | 9.7        |            | 160        |
| 165         | 18<br>17.9   | 17.7         |      | 17.3         | 17.2         |      | 15.4         | 15.7         |      | 13.7         | 13.7         |     | 11.6         | 11.4         |     | 9.6        |            | 165<br>170 |
| 170         | -            | 17.6<br>17.5 |      | 17.2<br>17.2 | 17.1<br>17.1 |      | 15.3<br>15.3 | 15.6<br>15.4 |      | 13.6         | 13.6         |     | 11.5         | 11.3         |     | 9.6        | 0.0        | -          |
| 175<br>180  | 17.7<br>17.6 | 17.5         | 16.2 | 17.2         | 17.1         |      | 15.3         | 15.4         |      | 13.6<br>13.5 | 13.5<br>13.4 |     | 11.5<br>11.4 | 11.2<br>11.1 |     | 9.5<br>9.5 | 8.3<br>8.4 | 175<br>180 |
| 185         | 17.6         | 17.4         | 16.2 | 17.1         | 17           | 15.3 | 15.2         | 15.2         |      | 13.4         | 13.4         |     | 11.4         | 11.1         |     | 9.5        | 8.4        | 185        |
| 190         | 17.5         | 17.3         | 16.2 | 16.8         | 16.9         | 15.2 | 14.9         | 15.1         | 13.5 | 13.4         | 13.2         |     | 11.3         | 10.9         |     | 9.3        | 8.4        | 190        |
| 195         | 17.3         | 17.1         | 15.9 | 16.7         | 16.8         | 14.7 | 14.7         | 15.1         | 12.9 | 13.2         | 13.1         |     | 11.2         | 10.8         |     | 9.2        | 8.4        | 195        |
| 200         | 17.3         | 16.8         | 15.5 | 16.5         | 16.5         | 14.1 | 14.5         | 14.9         | 12.4 | 13.1         | 12.9         | 9.3 | 11.1         | 10.7         |     | 9.1        | 8.3        | 200        |
| 205         | 17.1         | 16.4         | 15.1 | 16.3         | 16.1         | 13.6 | 14.3         | 14.8         | 11.9 | 13           | 12.8         | 8.9 | 11           | 10.6         |     | 9          | 8.1        | 205        |
| 210         | 16.6         | 15.9         | 14.7 | 16.1         | 15.5         | 13   | 14.1         | 14.7         | 11.4 | 12.9         | 12.7         | 8.5 | 10.9         | 10.5         |     | 8.9        | 8          | 210        |
| 215         | 16           | 15.4         | 14.2 | 15.9         | 15.1         | 12.5 | 13.8         | 14.4         | 10.9 | 12.7         | 12.6         | 8.1 | 10.8         | 10.4         |     | 8.8        | 7.9        | 215        |
| 220         | 15.4         | 14.9         | 13.8 | 15.6         | 14.6         | 12   | 13.5         | 13.9         | 10.5 | 12.4         | 12.5         | 7.7 | 10.7         | 10.3         |     | 8.7        | 7.7        | 220        |
| 225         | 14.8         | 14.4         | 13.5 | 15.2         | 14.1         | 11.6 | 13.1         | 13.5         | 10.1 | 12.1         | 12.5         | 7.3 | 10.5         | 10.2         | 3.2 | 8.6        | 7.4        | 225        |
| 230         |              | 13.9         | 13.1 |              | 13.7         | 11.2 | 12.8         | 13           | 9.6  | 11.7         | 12.3         | 6.9 | 10.2         | 10.1         | 3.3 | 8.5        | 7.1        | 230        |
| 235         |              | 13.4         | 12.7 |              | 13.2         | 10.7 | 12.4         | 12.6         | 9.2  | 11.3         | 12           | 6.6 | 9.8          | 10           | 3.4 | 8.1        | 6.8        | 235        |
| 240         |              | 12.9         | 12.3 |              | 12.7         | 10.3 |              | 12.2         | 8.9  |              | 11.6         | 6.3 |              | 9.9          | 3.4 | 7.7        | 6.3        | 240        |
| 245         |              |              | 11.9 |              | 12.3         | 9.9  |              | 11.8         | 8.5  |              | 11.2         | 6   |              | 9.8          | 3.5 |            | 5.8        | 245        |
| 250         |              |              | 11.5 |              |              | 9.5  |              | 11.4         | 8.2  |              | 10.8         | 5.7 |              | 9.5          | 3.5 |            | 5.3        | 250        |
| 255         |              |              | 11.1 |              |              | 9.2  |              | 10.8         | 7.8  |              | 10.5         | 5.4 |              | 9.1          | 3.4 |            | 4.8        | 255        |
| 260         |              |              | 10.7 |              |              | 8.8  |              |              | 7.5  |              | 10           | 5.1 |              | 8.8          | 3.2 |            | 4.2        | 260        |
| 265         |              |              |      |              |              | 8.5  |              |              | 7.2  |              |              | 4.8 |              |              | 2.9 |            | 3.5        | 265        |
| 270         |              |              |      |              |              |      |              |              | 6.9  |              |              | 4.5 |              |              |     |            |            | 270        |
| 275         |              |              |      |              |              |      |              |              | 6.6  |              |              | 4.3 |              |              |     |            |            | 275        |
| 280         |              |              |      |              |              |      |              |              |      |              |              | 4   |              |              |     |            |            | 280        |

t\_180\_65005\_00\_000



|             |              | T Y          |              | 6          | V E/         |            | <u> </u>     | 1            |          |              | <u> </u>     |            |            |            |            |            |             |
|-------------|--------------|--------------|--------------|------------|--------------|------------|--------------|--------------|----------|--------------|--------------|------------|------------|------------|------------|------------|-------------|
| <u> </u>    | 11           | 15 + 23 1    | ft*          | 13         | 32 + 23      | ft*        | 14           | 19 + 23      | ft*      | 16           | 65 + 23 1    | ft*        | 182 +      | 23 ft*     | 198 +      | 23 ft*     | <u> </u>    |
|             |              | 236 ft       |              |            | 236 ft       |            |              | 236 ft       |          |              | 236 ft       |            | 23         | 6 ft       |            | 6 ft       |             |
| <b>↔</b> ft | 82°          | 75°          | 68°          | 82°        | 75°          | 68°        | 82°          | 75°          | 68°      | 82°          | 75°          | 68°        | 82°        | 75°        | 82°        | 75°        | <b>↔</b> ft |
| 100         | 14.3         |              |              |            |              |            |              |              |          |              |              |            |            |            |            |            | 100         |
| 105         | 14.3         |              |              | 12.3       |              |            | 11.3         |              |          |              |              |            |            |            |            |            | 105         |
| 110         | 14.4         |              |              | 12.4       |              |            | 11.6         |              |          | 0.7          |              |            | 0.7        |            |            |            | 110         |
| 115<br>120  | 14.5<br>14.6 |              |              | 12.6       |              |            | 11.8<br>12   |              |          | 9.7<br>10.1  |              |            | 6.7        |            |            |            | 115<br>120  |
| 120         | 14.6         |              |              | 12.8<br>13 |              |            | 12.1         |              |          | 10.1         |              |            | 7.3<br>7.7 |            | 4.9        |            | 125         |
| 130         | 14.7         |              |              | 13.1       |              |            | 12.1         |              |          | 10.5         |              |            | 8.2        |            | 5.7        |            | 130         |
| 135         | 14.6         |              |              | 13.2       |              |            | 12.2         |              |          | 10.3         |              |            | 8.4        |            | 6.3        |            | 135         |
| 140         | 14.5         |              |              | 13.3       |              |            | 12.3         |              |          | 10.7         |              |            | 8.5        |            | 6.7        |            | 140         |
| 145         | 14.5         | 13.2         |              | 13.4       |              |            | 12.3         |              |          | 10.8         |              |            | 8.7        |            | 6.9        |            | 145         |
| 150         | 14.4         | 13.4         |              | 13.4       |              |            | 12.3         |              |          | 10.8         |              |            | 8.7        |            | 7          |            | 150         |
| 155         | 14.3         | 13.5         |              | 13.4       | 12.8         |            | 12.2         |              |          | 10.8         |              |            | 8.8        |            | 7.1        |            | 155         |
| 160         | 14.3         | 13.6         |              | 13.4       | 13           |            | 12.2         | 12.2         |          | 10.8         |              |            | 8.8        |            | 7.2        |            | 160         |
| 165         | 14.2         | 13.7         |              | 13.5       | 13.1         |            | 12.1         | 12.4         |          | 10.7         | 10.9         |            | 8.8        |            | 7.2        |            | 165         |
| 170         | 14.1         | 13.8         |              | 13.5       | 13.2         |            | 12.1         | 12.4         |          | 10.7         | 10.8         |            | 8.7        | 8.9        | 7.2        |            | 170         |
| 175         | 14           | 13.7         |              | 13.4       | 13.3         |            | 12           | 12.3         |          | 10.6         | 10.7         |            | 8.7        | 8.8        | 7.1        |            | 175         |
| 180         | 13.9         | 13.7         |              | 13.4       | 13.3         |            | 11.9         | 12.3         |          | 10.6         | 10.7         |            | 8.7        | 8.7        | 7.1        | 6.2        | 180         |
| 185         | 13.8         | 13.6         | 11.7         | 13.3       | 13.3         |            | 11.8         | 12.2         |          | 10.5         | 10.6         |            | 8.6        | 8.6        | 7.1        | 6.3        | 185         |
| 190<br>195  | 13.7<br>13.6 | 13.5<br>13.5 | 11.9<br>12.1 | 13.2<br>13 | 13.2<br>13.2 |            | 11.7<br>11.6 | 12.1<br>12   |          | 10.5<br>10.4 | 10.5<br>10.4 |            | 8.6<br>8.5 | 8.5<br>8.4 | 7          | 6.3<br>6.4 | 190<br>195  |
| 200         | 13.5         | 13.4         | 12.1         | 12.9       | 13.1         | 11.4       | 11.5         | 11.9         |          | 10.4         | 10.4         |            | 8.5        | 8.3        | 6.9        | 6.4        | 200         |
| 205         | 13.4         | 13.3         | 12.4         | 12.8       | 13           | 11.6       | 11.3         | 11.8         | 10.6     | 10.3         | 10.2         |            | 8.4        | 8.2        | 6.9        | 6.4        | 205         |
| 210         | 13.3         | 13.3         | 12.5         | 12.7       | 13           | 11.8       | 11.2         | 11.8         | 10.7     | 10.1         | 10.1         | 7.9        | 8.4        | 8.1        | 6.8        | 6.4        | 210         |
| 215         | 13.2         | 13.2         | 12.5         | 12.5       | 12.9         | 11.9       | 11           | 11.7         | 10.8     | 10           | 10           | 8          | 8.3        | 8.1        | 6.7        | 6.3        | 215         |
| 220         | 13           | 13.2         | 12.4         | 12.4       | 12.9         | 11.7       | 10.8         | 11.6         | 10.7     | 9.8          | 9.9          | 8.2        | 8.2        | 8          | 6.6        | 6.2        | 220         |
| 225         | 12.9         | 13.1         | 12.2         | 12.2       | 12.8         | 11.3       | 10.6         | 11.5         | 10.6     | 9.7          | 9.8          | 8.3        | 8.1        | 7.9        | 6.6        | 6.1        | 225         |
| 230         | 12.8         | 13           | 11.8         | 12.1       | 12.7         | 11         | 10.4         | 11.5         | 10.2     | 9.5          | 9.8          | 8.4        | 8.1        | 7.8        | 6.5        | 6          | 230         |
| 235         | 12.7         | 12.5         | 11.4         | 11.9       | 12.3         | 10.7       | 10.1         | 11.4         | 9.9      | 9.3          | 9.7          | 8.4        | 7.8        | 7.7        | 6.4        | 5.8        | 235         |
| 240         | 12.5         | 12.1         | 11.1         | 11.8       | 11.9         | 10.3       | 9.9          | 11.2         | 9.6      | 9            | 9.6          | 8.3        | 7.6        | 7.6        | 6.2        | 5.6        | 240         |
| 245         | 12.1         | 11.7         | 10.8         | 11.6       | 11.4         | 10         | 9.6          | 10.8         | 9.3      | 8.7          | 9.6          | 8.1        | 7.3        | 7.6        | 6          | 5.4        | 245         |
| 250<br>255  |              | 11.3<br>10.9 | 10.5<br>10.1 |            | 11<br>10.6   | 9.7<br>9.4 | 9.4<br>9     | 10.5<br>10.1 | 9<br>8.6 | 8.5<br>8.2   | 9.5<br>9.5   | 7.9<br>7.7 | 7<br>6.7   | 7.5<br>7.4 | 5.7<br>5.4 | 5.2<br>4.8 | 250<br>255  |
| 260         |              | 10.9         | 9.8          |            | 10.8         | 9.4        | 9            | 9.7          | 8.3      | 0.2          | 9.3          | 7.7        | 0.7        | 7.4        | 5.4        | 4.6        | 260         |
| 265         |              | 10.4         | 9.4          |            | 9.8          | 8.8        |              | 9.4          | 8.1      |              | 8.9          | 7.2        |            | 7.4        | )          | 3.9        | 265         |
| 270         |              |              | 9.1          |            | 0.0          | 8.5        |              | 9            | 7.8      |              | 8.5          | 7          |            | 6.3        |            | 3.5        | 270         |
| 275         |              |              | 8.8          |            |              | 8.1        |              | 8.5          | 7.6      |              | 8.2          | 6.8        |            | 5.4        |            | 3.1        | 275         |
| 280         |              |              | 8.4          |            |              | 7.9        |              |              | 7.3      |              | 7.8          | 6.6        |            | 4.5        |            |            | 280         |
| 285         |              |              |              |            |              | 7.6        |              |              | 7.1      |              |              | 6.3        |            |            |            |            | 285         |
| 290         |              |              |              |            |              |            |              |              | 6.8      |              |              | 6          |            |            |            |            | 290         |
| 295         |              |              |              |            |              |            |              |              | 6.4      |              |              | 5.6        |            |            |            |            | 295         |
| 300         |              |              |              |            |              |            |              |              |          |              |              | 4.7        |            |            |            |            | 300         |

t\_180\_65101\_00\_000



|             |              | T Y          |              | - 6          | V E/         |      | N N          | 1            |      |              |              |     |            |            |       |            |             |
|-------------|--------------|--------------|--------------|--------------|--------------|------|--------------|--------------|------|--------------|--------------|-----|------------|------------|-------|------------|-------------|
| <u> </u>    | 11           | 15 + 23 1    | ft*          | 13           | 32 + 23      | ft*  | 14           | 9 + 23       | ft*  | 16           | 55 + 23 1    | t*  | 182 +      | 23 ft*     | 198 + | 23 ft*     | <u> </u>    |
|             |              | 236 ft       |              |              | 236 ft       |      |              | 236 ft       |      |              | 236 ft       |     |            | 6 ft       |       | 6 ft       |             |
| <b>↔</b> ft | 82°          | 75°          | 68°          | 82°          | 75°          | 68°  | 82°          | 75°          | 68°  | 82°          | 75°          | 68° | 82°        | 75°        | 82°   | 75°        | <b>↔</b> ft |
| 100         | 14.3         |              |              |              |              |      |              |              |      |              |              |     |            |            |       |            | 100         |
| 105         | 14.3         |              |              | 12.3         |              |      | 11.3         |              |      |              |              |     |            |            |       |            | 105         |
| 110         | 14.4         |              |              | 12.4         |              |      | 11.6         |              |      |              |              |     |            |            |       |            | 110         |
| 115         | 14.5         |              |              | 12.6         |              |      | 11.8         |              |      | 9.7          |              |     | 6.7        |            |       |            | 115         |
| 120         | 14.6         |              |              | 12.8         |              |      | 12           |              |      | 10.1         |              |     | 7.3        |            |       |            | 120         |
| 125         | 14.6         |              |              | 13           |              |      | 12.1         |              |      | 10.3         |              |     | 7.7        |            | 4.9   |            | 125         |
| 130         | 14.7         |              |              | 13.1         |              |      | 12.2         |              |      | 10.5         |              |     | 8.2        |            | 5.7   |            | 130         |
| 135         | 14.6         |              |              | 13.2         |              |      | 12.2         |              |      | 10.7         |              |     | 8.4        |            | 6.3   |            | 135         |
| 140         | 14.5         |              |              | 13.3         |              |      | 12.3         |              |      | 10.7         |              |     | 8.5        |            | 6.7   |            | 140         |
| 145         | 14.5         | 13.2         |              | 13.4         |              |      | 12.3         |              |      | 10.8         |              |     | 8.7        |            | 6.9   |            | 145         |
| 150         | 14.4         | 13.4         |              | 13.4         |              |      | 12.3         |              |      | 10.8         |              |     | 8.7        |            | 7     |            | 150         |
| 155         | 14.3         | 13.5         |              | 13.4         | 12.8         |      | 12.2         | 40.0         |      | 10.8         |              |     | 8.8        |            | 7.1   |            | 155         |
| 160         | 14.3         | 13.6         |              | 13.4         | 13           |      | 12.2         | 12.2         |      | 10.8         | 40.0         |     | 8.8        |            | 7.2   |            | 160         |
| 165         | 14.2         | 13.7         |              | 13.5         | 13.1         |      | 12.1         | 12.4         |      | 10.7         | 10.9         |     | 8.8        | 0.0        | 7.2   |            | 165         |
| 170         | 14.1         | 13.8         |              | 13.5         | 13.2         |      | 12.1         | 12.4         |      | 10.7         | 10.8         |     | 8.7        | 8.9        | 7.2   |            | 170         |
| 175         | 14           | 13.7         |              | 13.4         | 13.3         |      | 12           | 12.3         |      | 10.6         | 10.7         |     | 8.7        | 8.8        | 7.1   | 0.0        | 175         |
| 180<br>185  | 13.9         | 13.7         | 117          | 13.4<br>13.3 | 13.3<br>13.3 |      | 11.9         | 12.3<br>12.2 |      | 10.6         | 10.7         |     | 8.7        | 8.7        | 7.1   | 6.2        | 180         |
|             | 13.8<br>13.7 | 13.6<br>13.5 | 11.7         | 13.3         | 13.3         |      | 11.8<br>11.7 | 12.2         |      | 10.5<br>10.5 | 10.6<br>10.5 |     | 8.6<br>8.6 | 8.6<br>8.5 | 7.1   | 6.3        | 185<br>190  |
| 190<br>195  | 13.7         | 13.5         | 11.9<br>12.1 | 13.2         | 13.2         |      | 11.6         | 12.1         |      | 10.3         | 10.5         |     | 8.5        | 8.4        | 7     | 6.3<br>6.4 | 195         |
| 200         | 13.5         | 13.4         | 12.1         | 12.9         | 13.1         | 11.4 | 11.5         | 11.9         |      | 10.4         | 10.4         |     | 8.5        | 8.3        | 6.9   | 6.4        | 200         |
| 205         | 13.4         | 13.3         | 12.4         | 12.8         | 13           | 11.6 | 11.3         | 11.8         | 10.6 | 10.3         | 10.2         | 7.5 | 8.4        | 8.2        | 6.9   | 6.4        | 205         |
| 210         | 13.3         | 13.3         | 12.5         | 12.7         | 13           | 11.8 | 11.2         | 11.8         | 10.4 | 10.1         | 10.1         | 7.4 | 8.4        | 8.1        | 6.8   | 6.4        | 210         |
| 215         | 13.2         | 13.2         | 12.5         | 12.5         | 12.9         | 11.5 | 11           | 11.7         | 9.9  | 10           | 10           | 7   | 8.3        | 8.1        | 6.7   | 6.3        | 215         |
| 220         | 13           | 13.2         | 12.4         | 12.4         | 12.9         | 11   | 10.8         | 11.6         | 9.5  | 9.8          | 9.9          | 6.6 | 8.2        | 8          | 6.6   | 6.2        | 220         |
| 225         | 12.9         | 13.1         | 12.2         | 12.2         | 12.8         | 10.6 | 10.6         | 11.5         | 9    | 9.7          | 9.8          | 6.3 | 8.1        | 7.9        | 6.6   | 6.1        | 225         |
| 230         | 12.8         | 13           | 11.8         | 12.1         | 12.7         | 10.2 | 10.4         | 11.5         | 8.6  | 9.5          | 9.8          | 5.9 | 8.1        | 7.8        | 6.5   | 6          | 230         |
| 235         | 12.7         | 12.5         | 11.4         | 11.9         | 12.3         | 9.7  | 10.1         | 11.4         | 8.3  | 9.3          | 9.7          | 5.6 | 7.8        | 7.7        | 6.4   | 5.8        | 235         |
| 240         | 12.5         | 12.1         | 11.1         | 11.8         | 11.9         | 9.3  | 9.9          | 11.2         | 7.9  | 9            | 9.6          | 5.3 | 7.6        | 7.6        | 6.2   | 5.6        | 240         |
| 245         | 12.1         | 11.7         | 10.8         | 11.6         | 11.4         | 9    | 9.6          | 10.8         | 7.5  | 8.7          | 9.6          | 5   | 7.3        | 7.6        | 6     | 5.4        | 245         |
| 250         |              | 11.3         | 10.5         |              | 11           | 8.6  | 9.4          | 10.5         | 7.2  | 8.5          | 9.5          | 4.7 | 7          | 7.5        | 5.7   | 5.2        | 250         |
| 255         |              | 10.9         | 10.1         |              | 10.6         | 8.2  | 9            | 10.1         | 6.9  | 8.2          | 9.5          | 4.4 | 6.7        | 7.4        | 5.4   | 4.8        | 255         |
| 260         |              | 10.4         | 9.8          |              | 10.3         | 7.9  |              | 9.7          | 6.5  |              | 9.2          | 4.1 |            | 7.4        | 5     | 4.4        | 260         |
| 265         |              |              | 9.4          |              | 9.8          | 7.6  |              | 9.4          | 6.2  |              | 8.9          | 3.8 |            | 7          |       | 3.9        | 265         |
| 270         |              |              | 9.1          |              |              | 7.3  |              | 9            | 5.9  |              | 8.5          | 3.6 |            | 6.3        |       | 3.5        | 270         |
| 275         |              |              | 8.8          |              |              | 7    |              | 8.5          | 5.7  |              | 8.2          | 3.3 |            | 5.4        |       | 3.1        | 275         |
| 280         |              |              | 8.4          |              |              | 6.7  |              |              | 5.4  |              | 7.8          | 3.1 |            | 4.5        |       |            | 280         |
| 285         |              |              |              |              |              | 6.4  |              |              | 5.1  |              |              | 2.9 |            |            |       |            | 285         |
| 290         |              |              |              |              |              |      |              |              | 4.9  |              |              |     |            |            |       |            | 290         |
| 295         |              |              |              |              |              |      |              |              | 4.6  |              |              |     |            |            |       |            | 295         |

t\_180\_65105\_00\_000

















|             |      | Y         |            | ' V  | E/ <b>  </b> |     | N   |           |          |     |            |            |       |        |            |
|-------------|------|-----------|------------|------|--------------|-----|-----|-----------|----------|-----|------------|------------|-------|--------|------------|
| <u> </u>    | 1    | 15 + 23 f | t*         | 1    | 32 + 23 f    | t*  | 1   | 49 + 23 f | t*       | 10  | 35 + 23 f  | t*         | 182 + | 23 ft* | <u> </u>   |
|             |      | 256 ft    |            |      | 256 ft       |     |     | 256 ft    |          |     | 256 ft     |            |       | 6 ft   |            |
| <b>↔</b> ft | 82°  | 75°       | 68°        | 82°  | 75°          | 68° | 82° | 75°       | 68°      | 82° | 75°        | 68°        | 82°   | 75°    | ↔ ft       |
| 105         | 10.7 |           |            |      |              |     |     |           |          |     |            |            |       |        | 105        |
| 110         | 10.7 |           |            |      |              |     |     |           |          |     |            |            |       |        | 110        |
| 115         | 10.8 |           |            | 10   |              |     | 8.1 |           |          |     |            |            |       |        | 115        |
| 120         | 10.9 |           |            | 10.1 |              |     | 8.4 |           |          | 6.4 |            |            |       |        | 120        |
| 125         | 10.9 |           |            | 10.1 |              |     | 8.5 |           |          | 6.7 |            |            | 3     |        | 125        |
| 130         | 10.9 |           |            | 10.2 |              |     | 8.7 |           |          | 6.9 |            |            | 3.4   |        | 130        |
| 135         | 10.8 |           |            | 10.2 |              |     | 8.8 |           |          | 7.2 |            |            | 3.8   |        | 135        |
| 140         | 10.7 |           |            | 10.2 |              |     | 8.9 |           |          | 7.4 |            |            | 4.3   |        | 140        |
| 145         | 10.7 |           |            | 10.2 |              |     | 8.9 |           |          | 7.5 |            |            | 4.7   |        | 145        |
| 150         | 10.6 |           |            | 10.2 |              |     | 9   |           |          | 7.6 |            |            | 5.2   |        | 150        |
| 155         | 10.6 | 10        |            | 10.1 |              |     | 9   |           |          | 7.6 |            |            | 5.5   |        | 155        |
| 160         | 10.5 | 10.1      |            | 10.1 | 9.5          |     | 9   |           |          | 7.7 |            |            | 5.7   |        | 160        |
| 165         | 10.4 | 10.3      |            | 10   | 9.7          |     | 9   | 8.9       |          | 7.7 |            |            | 5.8   |        | 165        |
| 170         | 10.4 | 10.3      |            | 9.9  | 9.8          |     | 8.9 | 9.1       |          | 7.7 |            |            | 5.9   |        | 170        |
| 175         | 10.3 | 10.4      |            | 9.8  | 10           |     | 8.8 | 9.2       |          | 7.7 | 8          |            | 5.9   | 6.3    | 175        |
| 180         | 10.3 | 10.5      |            | 9.8  | 10.1         |     | 8.7 | 9.2       |          | 7.7 | 7.9        |            | 5.9   | 6.3    | 180        |
| 185         | 10.2 | 10.5      |            | 9.7  | 10.1         |     | 8.6 | 9.2       |          | 7.6 | 7.9        |            | 5.9   | 6.2    | 185        |
| 190         | 10.1 | 10.5      |            | 9.6  | 10.2         |     | 8.6 | 9.2       |          | 7.6 | 7.8        |            | 5.9   | 6.1    | 190        |
| 195         | 10   | 10.5      |            | 9.5  | 10.2         |     | 8.4 | 9.1       |          | 7.6 | 7.7        |            | 5.9   | 6.1    | 195        |
| 200         | 9.9  | 10.4      | 8.7        | 9.4  | 10.2         |     | 8.3 | 9.1       |          | 7.5 | 7.6        |            | 5.9   | 6      | 200        |
| 205         | 9.9  | 10.4      | 8.9        | 9.3  | 10.1         |     | 8.2 | 9         |          | 7.4 | 7.6        |            | 5.9   | 5.9    | 205        |
| 210         | 9.8  | 10.3      | 9          | 9.2  | 10.1         |     | 8.1 | 8.9       | 7.6      | 7.3 | 7.5        |            | 5.9   | 5.8    | 210        |
| 215         | 9.7  | 10.2      | 9.2        | 9.1  | 10           |     | 7.9 | 8.8       | 7.7      | 7.2 | 7.4        |            | 5.9   | 5.8    | 215        |
| 220         | 9.6  | 10.2      | 9.2        | 9    | 9.9          |     | 7.8 | 8.8       | 7.9      | 7   | 7.3        |            | 5.8   | 5.7    | 220        |
| 225         | 9.5  | 10.1      | 9.3        | 8.9  | 9.9          |     | 7.6 | 8.7       | 8        | 6.9 | 7.3        | 5.6        | 5.7   | 5.6    | 225        |
| 230         | 9.4  | 10        | 9.4        | 8.7  | 9.8          |     | 7.5 | 8.6       | 8        | 6.7 | 7.2        | 5.8        | 5.5   | 5.6    | 230        |
| 235         | 9.3  | 9.8       | 9.4        | 8.6  | 9.6          |     | 7.3 | 8.6       | 8        | 6.5 | 7.1        | 5.9        | 5.4   | 5.5    | 235        |
| 240         | 9.2  | 9.8       | 9.4        | 8.5  | 9.3          |     | 7.1 | 8.5       | 8        | 6.4 | 7          | 6          | 5.2   | 5.4    | 240        |
| 245         | 9.1  | 9.8       | 9.4        | 8.4  | 8.9          | 7.4 | 6.9 | 8.5       | 7.9      | 6.2 | 7          | 6.1        | 5     | 5.4    | 245        |
| 250         | 9    | 9.8       | 9.1        | 8.3  | 8.6          | 7.2 | 6.7 | 8.4       | 7.7      | 6   | 6.9        | 6.1        | 4.8   | 5.3    | 250        |
| 255         | 8.9  | 9.8       | 8.8        | 8.1  | 8.3          | 7   | 6.5 | 8.4       | 7.4      | 5.8 | 6.9        | 6.1        | 4.6   | 5.2    | 255        |
| 260         | 8.8  | 9.5       | 8.5        | 8    | 7.9          | 6.7 | 6.3 | 8.4       | 7.2      | 5.6 | 6.8        | 6          | 4.4   | 5.2    | 260        |
| 265         | 8.7  | 9.1       | 8.3        | 7.9  | 7.6          | 6.5 | 6.1 | 8.2       | 6.9      | 5.4 | 6.8        | 6          | 4.2   | 5.1    | 265        |
| 270         |      | 8.8       | 8          |      | 7.3          | 6.1 |     | 8         | 6.7      | 5.1 | 6.7        | 5.9        | 3.9   | 5.1    | 270        |
| 275         |      | 8.4<br>8  | 7.7        |      | 7            | 4.8 |     | 7.7       | 6.5      | 4.8 | 6.7        | 5.7        | 3.7   | 5      | 275        |
| 280         |      | ð         | 7.5        |      | 6.5          | 3.6 |     | 7.4       | 6.3      |     | 6.7        | 5.5        |       | 5      | 280        |
| 285         |      |           | 7.2        |      | 6.2          |     |     | 7.2       | 6.1      |     | 6.6        | 5.3        |       | 5      | 285        |
| 290         |      |           | 7          |      |              |     |     | 6.9       | 5.8      |     | 6.4        | 5.1        |       | 4.9    | 290        |
| 295<br>300  |      |           | 6.7<br>6.4 |      |              |     |     | 6.5       | 5.6      |     | 6.2<br>5.9 | 4.9<br>4.7 |       | 4.9    | 295        |
|             |      |           | 0.4        |      |              |     |     |           | 5.4      |     | 5.9        |            |       | 4.9    | 300        |
| 305<br>310  |      |           |            |      |              |     |     |           | 5.2<br>5 |     |            | 4.5        |       |        | 305<br>310 |
| 310         |      |           |            |      |              |     |     |           | 5        |     |            |            |       |        | 310        |

t\_180\_65201\_00\_000











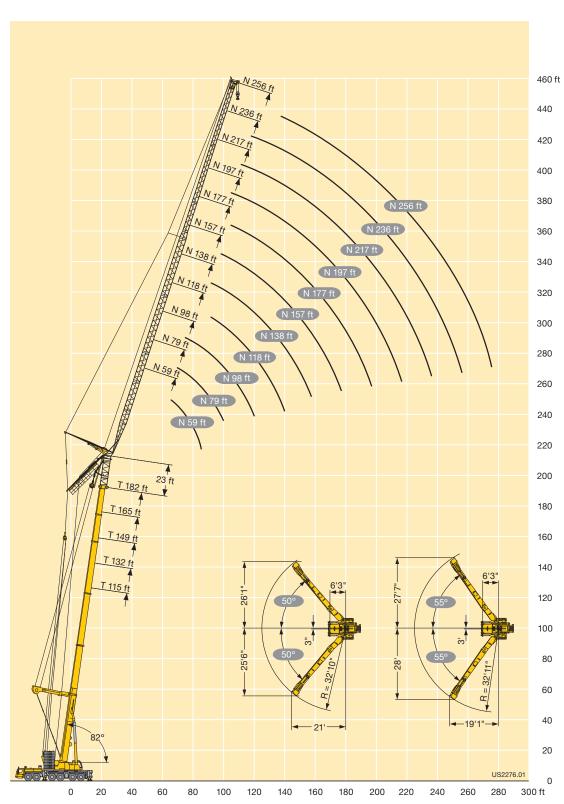






|          |      | Υ \       |     | V V  | =/        |     | N   |           |     |     |           |     |       |        |          |
|----------|------|-----------|-----|------|-----------|-----|-----|-----------|-----|-----|-----------|-----|-------|--------|----------|
| <u> </u> | 1    | 15 + 23 f | t*  | 1    | 32 + 23 f | t*  | 1   | 49 + 23 f | t*  | 1   | 65 + 23 f | t*  | 182 + | 23 ft* | <u> </u> |
|          |      | 256 ft    |     |      | 256 ft    |     |     | 256 ft    |     |     | 256 ft    |     |       | 6 ft   |          |
| ← ft     | 82°  | 75°       | 68° | 82°  | 75°       | 68° | 82° | 75°       | 68° | 82° | 75°       | 68° | 82°   | 75°    | ← ft     |
| 105      | 10.7 |           |     |      |           |     |     |           |     |     |           |     |       |        | 105      |
| 110      | 10.7 |           |     |      |           |     |     |           |     |     |           |     |       |        | 110      |
| 115      | 10.8 |           |     | 10   |           |     | 8.1 |           |     |     |           |     |       |        | 115      |
| 120      | 10.9 |           |     | 10.1 |           |     | 8.4 |           |     | 6.4 |           |     |       |        | 120      |
| 125      | 10.9 |           |     | 10.1 |           |     | 8.5 |           |     | 6.7 |           |     | 3     |        | 125      |
| 130      | 10.9 |           |     | 10.2 |           |     | 8.7 |           |     | 6.9 |           |     | 3.4   |        | 130      |
| 135      | 10.8 |           |     | 10.2 |           |     | 8.8 |           |     | 7.2 |           |     | 3.8   |        | 135      |
| 140      | 10.7 |           |     | 10.2 |           |     | 8.9 |           |     | 7.4 |           |     | 4.3   |        | 140      |
| 145      | 10.7 |           |     | 10.2 |           |     | 8.9 |           |     | 7.5 |           |     | 4.7   |        | 145      |
| 150      | 10.6 |           |     | 10.2 |           |     | 9   |           |     | 7.6 |           |     | 5.2   |        | 150      |
| 155      | 10.6 | 10        |     | 10.1 |           |     | 9   |           |     | 7.6 |           |     | 5.5   |        | 155      |
| 160      | 10.5 | 10.1      |     | 10.1 | 9.5       |     | 9   |           |     | 7.7 |           |     | 5.7   |        | 160      |
| 165      | 10.4 | 10.3      |     | 10   | 9.7       |     | 9   | 8.9       |     | 7.7 |           |     | 5.8   |        | 165      |
| 170      | 10.4 | 10.3      |     | 9.9  | 9.8       |     | 8.9 | 9.1       |     | 7.7 |           |     | 5.9   |        | 170      |
| 175      | 10.3 | 10.4      |     | 9.8  | 10        |     | 8.8 | 9.2       |     | 7.7 | 8         |     | 5.9   | 6.3    | 175      |
| 180      | 10.3 | 10.5      |     | 9.8  | 10.1      |     | 8.7 | 9.2       |     | 7.7 | 7.9       |     | 5.9   | 6.3    | 180      |
| 185      | 10.2 | 10.5      |     | 9.7  | 10.1      |     | 8.6 | 9.2       |     | 7.6 | 7.9       |     | 5.9   | 6.2    | 185      |
| 190      | 10.1 | 10.5      |     | 9.6  | 10.2      |     | 8.6 | 9.2       |     | 7.6 | 7.8       |     | 5.9   | 6.1    | 190      |
| 195      | 10   | 10.5      |     | 9.5  | 10.2      |     | 8.4 | 9.1       |     | 7.6 | 7.7       |     | 5.9   | 6.1    | 195      |
| 200      | 9.9  | 10.4      | 8.7 | 9.4  | 10.2      |     | 8.3 | 9.1       |     | 7.5 | 7.6       |     | 5.9   | 6      | 200      |
| 205      | 9.9  | 10.4      | 8.9 | 9.3  | 10.1      |     | 8.2 | 9         |     | 7.4 | 7.6       |     | 5.9   | 5.9    | 205      |
| 210      | 9.8  | 10.3      | 9   | 9.2  | 10.1      |     | 8.1 | 8.9       | 7.6 | 7.3 | 7.5       |     | 5.9   | 5.8    | 210      |
| 215      | 9.7  | 10.2      | 9.2 | 9.1  | 10        |     | 7.9 | 8.8       | 7.7 | 7.2 | 7.4       |     | 5.9   | 5.8    | 215      |
| 220      | 9.6  | 10.2      | 9.2 | 9    | 9.9       |     | 7.8 | 8.8       | 7.9 | 7   | 7.3       | 5.2 | 5.8   | 5.7    | 220      |
| 225      | 9.5  | 10.1      | 9.3 | 8.9  | 9.9       |     | 7.6 | 8.7       | 7.8 | 6.9 | 7.3       | 5   | 5.7   | 5.6    | 225      |
| 230      | 9.4  | 10        | 9.4 | 8.7  | 9.8       |     | 7.5 | 8.6       | 7.4 | 6.7 | 7.2       | 4.7 | 5.5   | 5.6    | 230      |
| 235      | 9.3  | 9.8       | 9.4 | 8.6  | 9.6       |     | 7.3 | 8.6       | 7   | 6.5 | 7.1       | 4.4 | 5.4   | 5.5    | 235      |
| 240      | 9.2  | 9.8       | 9.4 | 8.5  | 9.3       |     | 7.1 | 8.5       | 6.7 | 6.4 | 7         | 4   | 5.2   | 5.4    | 240      |
| 245      | 9.1  | 9.8       | 9.4 | 8.4  | 8.9       | 7.4 | 6.9 | 8.5       | 6.3 | 6.2 | 7         | 3.7 | 5     | 5.4    | 245      |
| 250      | 9    | 9.8       | 9.1 | 8.3  | 8.6       | 7.2 | 6.7 | 8.4       | 6   | 6   | 6.9       | 3.5 | 4.8   | 5.3    | 250      |
| 255      | 8.9  | 9.8       | 8.8 | 8.1  | 8.3       | 7   | 6.5 | 8.4       | 5.7 | 5.8 | 6.9       | 3.2 | 4.6   | 5.2    | 255      |
| 260      | 8.8  | 9.5       | 8.5 | 8    | 7.9       | 6.7 | 6.3 | 8.4       | 5.4 | 5.6 | 6.8       | 2.9 | 4.4   | 5.2    | 260      |
| 265      | 8.7  | 9.1       | 8.3 | 7.9  | 7.6       | 6.5 | 6.1 | 8.2       | 5.1 | 5.4 | 6.8       |     | 4.2   | 5.1    | 265      |
| 270      |      | 8.8       | 8   |      | 7.3       | 6.1 |     | 8         | 4.8 | 5.1 | 6.7       |     | 3.9   | 5.1    | 270      |
| 275      |      | 8.4       | 7.7 |      | 7         | 4.8 |     | 7.7       | 4.5 | 4.8 | 6.7       |     | 3.7   | 5      | 275      |
| 280      |      | 8         | 7.5 |      | 6.5       | 3.6 |     | 7.4       | 4.2 |     | 6.7       |     |       | 5      | 280      |
| 285      |      |           | 7.2 |      | 6.2       |     |     | 7.2       | 4   |     | 6.6       |     |       | 5      | 285      |
| 290      |      |           | 7   |      |           |     |     | 6.9       | 3.7 |     | 6.4       |     |       | 4.9    | 290      |
| 295      |      |           | 6.7 |      |           |     |     | 6.5       | 3.5 |     | 6.1       |     |       | 4.7    | 295      |
| 300      |      |           | 6.4 |      |           |     |     |           | 3.2 |     | 5.8       |     |       | 4.4    | 300      |
| 305      |      |           |     |      |           |     |     |           | 3   |     |           |     |       |        | 305      |
| 310      |      |           |     |      |           |     |     |           | 2.8 |     |           |     |       |        | 310      |

t\_180\_65205\_00\_000



Angle of the Y-suspension between 50° and 55° depending on the extension condition of the individual telescopic sections. Angle du haubanage Y entre 50° et 55°, en fonction de l'état de sortie des différents éléments télescopiques.

#### Equipment Equipement

| Crane carrie      | er   |
|-------------------|--|
| Frame             | Self-manufactured, torsion-resistant box-type design of high-tensile fine grained structural steel.  |
| Outriggers        | 4-point supporting system, hydraulically telescopable into horizontal and vertical direction. Operation with remote control, automatic support leveling, electronic inclination display  |
| Engine            | 8-cylinder Diesel, make Liebherr, watercooled, output 450 kW (612 h.p.), max. torque 2106 lbs-ft. Exhaust emissions acc. to 97/68/EG and EPA/CARB. Fuel reservoir: 127 gallons.  |
| Transmission      | Automatic transmission system with torque converter and intarder, make ZF, type TC-TRONIC with 12 forward speeds and 2 reverse speeds, transfer case with transfer differential.   |
| Axles             | Low maintenance carrier axles, all 6 axles steered. Axle 1, 3 and 5 are equipped with planetary gears, all driven axles with transverse differential locks, axle 3 with longitudinal differential lock.  |
| Cardan shaft      | All cardan shafts with 70° diagonal toothing and maintenance free.   |
| Suspension        | All axles are hydro-pneumatically suspended with automatic leveling. Suspension hydraulically lockable.  |
| Tyre equipment    | 12 tyres, all axles equipped with single tyres. Size of tyres: 445/95 R 25 (16.00 R 25).   |
| Steering          | 2-circuit system with hydraulic servo steering. Active speed depending rear axle steering, special steering programs for various driving situations.   |
| Brakes            | Service brake: all-wheel servo-air brake, all axles are equipped with disc brakes, dual circuit.  Additional brakes: exhaust flap brake, Telma Eddy current brake (optional), intarder in gearbox.  Hand brake: Spring-loaded, acting on all wheels of axles 2 to 6. |
| Driving cab       | Spacious and comfortable sheet steel cab mounted on rubber shock absorbers, safety glass windows.  |
| Electrical system | Modern data bus technique, 24 Volt DC, 2 batteries of 170 Ah each.   |
|                   |  |

| Crane super     | structure  |
|-----------------|--|
| Frame           | Liebherr-manufactured, torsionally rigid steel construction made from high-tensile fine-grain steel. Triple-roller slewing rim.  |
| Crane engine    | 4-cylinder Diesel, make Liebherr, watercooled, output 180 kW (245 h.p.), max. torque 845 lbs-ft. Exhaust emissions acc. to 97/68/EG and EPA/ CARB. Fuel reservoir: 106 gallons.  |
| Crane drive     | Diesel-hydraulic, with 5 axial piston variable displacement pumps, with servo-control and capacity control.  |
| Crane control   | Two self-centering control levers (joy-sticks). Pedal switches for telescoping. Infinitely variable crane motions through displacement control of the hydraulic pumps. Additional working speed control by variation of the Diesel engine speed. |
| Hoist gear      | Axial piston variable displacement motor, hoist drum with integrated planetary gear and spring-loaded static brake.  |
| Luffing gear    | 1 differential hydraulic ram with nonreturn valve.   |
| Slewing gear    | Axial piston fixed displacement motor, planetary gear, spring-loaded static brake.   |
| Crane cab       | Large screen area, compound glass, comfort furnishing, cabin tiltable 20° to rear.   |
| Safety devices  | LICCON2 safe load indicator, test system,<br>hoist limit switches, safety valves against<br>rupture of pipes and hoses.  |
| Counterweight   | 220500 lbs   |
| Telescopic boom | 1 base section and 5 telescopic sections. All telescopic sections extendable individually by means of the rapid-cycle telescoping system TELEMATIK.  Boom length 49 ft – 230 ft.   |
| Electric system | Modern data bus technique, 24 Volt DC, 2 batteries of 170 Ah each.   |

| Ad | dit | ion | al e | equ | ıpm | ent |
|----|-----|-----|------|-----|-----|-----|
|    |     |     |      |     |     |     |

| Guying system for telescopic boom Y | Consisting of guying frames with stay ropes, tiltable hydraulically into transport position Self assembly.  |
|-------------------------------------|---|
| Additional counterweight            | 4 additional counterweight slabs of 22050 lbs each for a total counterweight of 308600 lbs.   |
| Lattice jibs                        | Fixed lattice jib 20 ft to 138 ft long, installation at $0^{\circ}$ , $20^{\circ}$ , $40^{\circ}$ or $60^{\circ}$ , luffing lattice jib 39 ft to 256 ft long. |
| 2nd hoist gear                      | For 2-hook operation or for operating the luffing lattice jib.  |
| Tyre equipment                      | 12 tyres, size 525/80 R 25 (20.5 R 25).   |
| Drive 12 x 8                        | The 4th axle is driven additionally.  |

Other items of equipment available on request.

| Châssis port               | eur   |
|----------------------------|---|
| Châssis                    | Châssis résistant à la torsion de fabrication<br>Liebherr, en acier à grains fins très résistant.   |
| Stabilisateurs             | Dispositif de calage horizontal et vertical en 4 points, entièrement déployable hydrauliquement. Utilisation avec commande à distance, mise à niveau automatique du calage, inclinomètre électronique.  |
| Moteur                     | Moteur diesel, 8 cylindres, fabriqué par<br>Liebherr, à refroidissement par eau, de<br>450 kW (612 ch), couple max. 2106 lbs-ft.<br>Emissions des gaz d'échappement con-<br>formes aux directives 97/68/EG et EPA/CARB.<br>Capacité du réservoir à carburant: 127 gallons.                                  |
| Boîte de vitesse           | Boîte automatique avec convertisseur de couple et ralentisseur, marque ZF, type TC-TRONIC avec 12 marches AV et 2 marches AR, boîte de transfert avec différentiel répartiteur.   |
| Essieux                    | Essieux nécessitant peu d'entretien, les 6 essieux sont directeurs. Les essieux 1, 3 et 5 sont des essieux planétaires, tous les essieux moteurs avec différentiel transversal et l'essieu 3 avec différentiel longitudinal.  |
| Arbres articulés           | Tous les flasques de croisillons avec denture en croix 70° et sans entretien.   |
| Suspension                 | Tous les essieux sont à suspension hydro-<br>pneumatique avec mise à niveau automa-<br>tique. Suspension blocable hydrauliquement.  |
| Pneumatiques               | 12 roues à monte simple.<br>Taille: 445/95 R 25 (16.00 R 25).   |
| Direction                  | 2 circuits avec direction assistée hydraulique. Direction active des essieux arrière et dépendante de la vitesse, programmes de direction spéciaux pour les différents modes de déplacement.  |
| Freins                     | Freins de service: servofrein à air comprimé, tous les essieux sont munis de freins à disque, à 2 circuits. Freins auxiliaire: par clapet sur échappement, frein Telma (option), ralentisseur monté sur boîte de vitesse. Frein de secours et frein à main: par cylindres à ressorts sur les essieux 2 à 6. |
| Cabine                     | Cabine spacieuse, en tôle d'acier, équipe-<br>ment «grand confort», suspendue sur silent<br>blocs, vitrage de sécurité.   |
| Installation<br>électrique | Technique moderne de transmission de<br>données par BUS de données, courant con-<br>tinu 24 Volts, 2 batteries de 170 Ah chacune.   |

| _      |           |
|--------|-----------|
| Daudio | tournante |
| Partie | tournante |

| Châssis | Fabrication Liebherr, construction soudée   |
|---------|---|
|         | indéformable, en acier à grain fin haute    |
|         | résistance. Couronne d'orientation à triple |

rangée de rouleaux.

| Moteur              | Moteur diesel Liebherr, 4 cylindres, à re-<br>froidissement par eau, de 180 kW (245 ch),<br>couple max. 845 lbs-ft. Emissions des gaz<br>d'échappement conformes aux directives<br>97/68/EG et EPA/CARB.<br>Capacité du réservoir à carburant: 106 gallons. |
|---------------------|---|
| Entraînement        | Diesel hydraulique à 5 pompes à débit variable servo commandées à régulation de puissance.  |
| Commande            | 2 leviers à 4 directions avec rappel automa-<br>tique au point mort. Commande des<br>mouvements progressive en continu par<br>variation de l'inclinaison des pompes et<br>augmentation du régime moteur.  |
| Treuil              | Moteur hydraulique à cylindrée variable, treuil<br>avec réducteur planétaire à frein d'arrêt à<br>lamelles intégrées.   |
| Relevage de flèche  | 1 vérin hydraulique différentiel avec clapet anti-retour de sécurité.   |
| Orientation         | Moteur à cylindrée constante à pistons axiaux, engrenage planétaire, frein d'arrêt commandé par ressort.  |
| Cabine de grue      | Large champ de vision, vitrage de sécurité,<br>équipement pour un confort idéal, cabine<br>inclinable de 20° vers l'arrière.  |
| Sécurités           | Contrôleur de charge LICCON2, système test, fin de course crochet haut, clapets de sécurité en cas de ruptures de flexibles.  |
| Contrepoids         | 220500 lbs  |
| Flèche télescopique | Un élément de base et de 5 télescopes. Chaque partie peut être télescopée individuellement à l'aide du système de télescopage séquentiel rapide TELEMATIK. Longueur de flèche: 49 ft – 230 ft.  |
| Circuit électrique  | Technique moderne de transmission de don-<br>nées par BUS de données. Courant continu<br>24 Volts, 2 batteries de 170 Ah chacune.   |

## **Equipement supplémentaire**

| Haubanage de<br>flèche Y   | Composé du chevalet d'haubanage<br>avec haubanage du câble, rabattable<br>hydrauliquement en position de transport.<br>Montage autonome. |
|----------------------------|--|
| Contrepoids complémentaire | 4 blocs latéraux de suspension de 22050 lbs pour un contrepoids total de 308600 lbs.   |
| Fléchettes                 | Fléchette fixe de 20 ft à 138 ft; montable à 0°, 20°, 40° ou 60° fléchette à volée variable de 39 ft à 256 ft.                           |
| Deuxième treuil            | Pour le travail avec 2 crochets ou le relevage de la fléchette à volée variable.   |
| Pneumatiques               | 12 pneus. Taille 525/80 R 25 (20.5 R 25).  |
| Entraînement 12 x 8        | Le 4ème essieu est également entraîné.   |

Autres équipements supplémentaires sur demande.

#### **Remarks referring to load charts**

- 1. The lifting capacities do not exceed 85 % of the tipping load according to ASME B 30.5. The crane's structural steelwork is in accordance with EN 13000 and ASME B 30.5.
- 2. For the calculation of the load charts at least a wind speed of 23 ft/s (7 m/s, 15.7 mph) and regarding the load a sail area of 1 m<sup>2</sup> per ton load and a wind resistance coefficient of 1.2 on the load have been taken into account. For lifting of loads with large sail areas and/or high wind resistance coefficients the maximum wind speed as stated in the load charts has to be reduced.
- 3. Lifting capacities are given in kips.
- 4. The weight of the hook blocks and hooks is part of the load and therefore it must be deducted from the lifting capacities.
- 5. Working radii are measured from the slewing centre.
- 6. The lifting capacities given for the telescopic boom apply if the folding jib is removed.
- 7. Subject to modification of lifting capacities.
- 8. Lifting capacities above 343.3 kips / 463 kips only with additional pulley block/special equipment.
- 9. The data of this brochure serves only for general information. All information is provided without warranty. Instructions for the correct commissioning of the crane please take from the operation manual and the load chart book.

#### Remarques relatives aux tableaux des charges

- 1. La capacité de charge ne doit pas dépasser 85 % de la charge de basculement conformément à ASME B 30.5. La structure métallique de la grue est conforme à EN 13000 et ASME B 30.5.
- 2. Une vitesse de vent de 23 ft/s (7 m/s, 15.7 mph) minimum, une surface de prise au vent de 1 m² par tonne ainsi qu'un coefficient de résistance au vent de la charge 1,2 sont pris en compte pour le calcul des tableaux de charge. Lorsque des charges ayant une surface de prise au vent et/ou un coefficient de résistance au vent plus élevé(e)(s) sont levées, la vitesse de vent maximale indiquée dans les tableaux de charge doit être réduite.
- 3. Les charges sont indiquées en kips.
- 4. Le poids du crochet de levage resp. de la moufle à crochet est une partie de la charge et doit donc être déduit de la capacité de charge.
- 5. Les portées sont calculées à partir de l'axe de rotation.
- 6. Les charges indiquées pour la flèche télescopique sont valables lorsque la fléchette pliante est démontée.
- 7. Charges données sous réserve de modification.
- 8. Les charges supérieures à 343.3 kips / 463 kips seulement avec moufle additionnel/équipement supplémentaire.
- 9. Les données de cette brochure sont données à titre informatif. Ces renseignements sont sans garantie. Les consignes relatives à la bonne mise en service de la grue sont disponibles dans le manuel d'utilisation et le manuel de tableaux de charge.