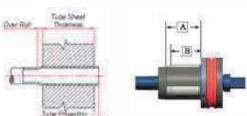


TUBE EXPANDER AB SERIES





- Similar to A Series Expander.
- Bearing reduces the frictional force & increases the life of tool
- Commonly used tool through-out the world for parallel expansion of tubes..



| Tube Sheet Thickness | Roller Length (A) | ler Length (A) Effective Rolling Length (B) | | | |
|--------------------------------------|--------------------|---|-----------|--|--|
| 1/2" – 7/8" (12.7 – 22.22mm) | 2.1/4" (57.10 mm) | 1.1/2" (38.0 mm)` | AB - 31/2 | | |
| 3/4" - 1.1/8" (19.05 - 28.58mm) | 2.1/2" (63.50 mm) | 1.3/4 " (45.0 mm) | AB - 31/3 | | |
| 1.1/8" - 1.5/8" (28.58 - 41.30mm) | 3" (76.20 mm) | 2.1/4 " (57.0 mm) | AB - 31/4 | | |
| 1.5/8" - 2.1/8" (41.30 - 54.0mm) | 3.1/2" (88.80 mm) | 2.3/4 " (70.0 mm) | AB - 31/5 | | |
| 2.1/8" - 2.5/8" (54.0 - 66.70mm) | 4" (101.50 mm) | 3.1/4 " (82.5 mm) | AB - 31/6 | | |

TUBE EXPANDERS SPECIFICATION

| Tube O.D | TU THICK | IBE | Tube O.D | | UBE CKNESS | Mi I.C | | | ax. | Expander | Roll | Mandrel | Mandrel Square |
|-------------|-------------|-----------|-------------|-------|---------------|-----------|-------|------|-------|----------|-------|----------|-------------------|
| inch | BWG | inch | inch | BWG | inch | mm | inch | mm | inch | Model | Model | Model | Drive |
| 7/8 | 15 | .072 | 1 | 10 | .134 | 18.1 | 0.713 | 20.4 | 0.803 | AB - 31 | 15-RS | DBM - 11 | 3/8 |
| 7/8 | 16 | .065 | - | - | - | 18.4 | 0.724 | 20.7 | 0.815 | AB - 32 | 15-RS | DBM - 12 | 3/8 |
| 7/8 | 17 | .058 | 1 | 11 | .120 | 18.8 | 0.740 | 21.1 | 0.831 | AB - 33 | 16-RS | DBM - 12 | 3/8 |
| 7/8 | 18 | .049 | 1 | 12 | .109 | 19.4 | 0.764 | 21.6 | 0.850 | AB - 34 | 20-RS | DBM - 12 | 3/8 |
| 7/8 | 19-20 | .042/.035 | 1.1/8 | 8 | .165 | 19.7 | 0.776 | 22.3 | 0.878 | AB - 35 | 17-RS | DBM - 13 | 3/8 |
| 1 | 13 | .095 | - | - | - | 20.1 | 0.791 | 22.4 | 0.882 | AB - 36 | 18-RS | DBM - 12 | 3/8 |
| 1 | 14 | .083 | 1.1/8 | 9 | .148 | 20.6 | 0.811 | 23.1 | 0.909 | AB - 37 | 18-RS | DBM - 13 | 3/8 |
| 1 | 15-16 | .072/.065 | 1.1/8 | 10 | .134 | 21.3 | 0.839 | 23.8 | 0.937 | AB - 38 | 19-RS | DBM - 13 | 3/8 |
| 1 | 17-18 | .058/.048 | 1.1/8 | 11 | .120 | 22.0 | 0.866 | 24.5 | 0.965 | AB - 39 | 21-RS | DBM - 13 | 3/8 |
| 1 | 19-20 | .042/.035 | 1.1/8 | 12 | .109 | 22.4 | 0.882 | 25.0 | 0.984 | AB - 40 | 21-RS | DBM - 14 | 3/8 |
| 1.1/4 | 8 | .165 | 1.1/8 | 13 | .095 | 23.3 | 0.917 | 25.9 | 1.020 | AB - 41 | 22-RS | DBM - 14 | 3/8 |
| 1.1/4 | 9 | .148 | 1.1/8 | 14 | .083 | 23.8 | 0.937 | 26.5 | 1.043 | AB - 42 | 23-RS | DBM - 15 | 1/2 |
| 1.1/4 | 10 | .134 | 1.1/8 | 15-16 | .072/.065 | 24.4 | 0.961 | 27.2 | 1.071 | AB - 43 | 24-RS | DBM - 15 | 1/2 |
| 1.1/4 | 11 | .120 | - | - | - | 25.2 | 0.992 | 28.0 | 1.102 | AB - 44 | 26-RS | DBM - 16 | 1/2 |
| 1.1/4 | 12 | .109 | - | - | - | 25.7 | 1.012 | 28.5 | 1.122 | AB - 45 | 27-RS | DBM - 16 | 1/2 |
| 1.1/4 | 13 | .095 | 1.3/8 | 8 | .165 | 26.1 | 1.028 | 28.8 | 1.134 | AB - 46 | 31-RS | DBM - 16 | 1/2 |
| 1.1/4 | 14 | .083 | - | - | - | 26.4 | 1.039 | 29.2 | 1.150 | AB - 47 | 28-RS | DBM - 17 | 1/2 |
| 1.1/4 | 15 | .072 | 1.3/8 | 9 | .148 | 26.9 | 1.059 | 29.7 | 1.169 | AB - 48 | 29-RS | DBM - 17 | 1/2 |
| 1.1/4 | 16 | .065 | 1.3/8 | 10 | .134 | 27.6 | 1.087 | 30.4 | 1.197 | AB - 49 | 30-RS | DBM - 17 | 1/2 |
| 1.1/2 | 7 | .180 | 1.3/8 | 11 | .120 | 28.3 | 1.114 | 31.2 | 1.228 | AB - 50 | 30-RS | DBM - 18 | 1/2 |
| 1.1/2 | 8 | .165 | 1.3/8 | 12 | .109 | 28.8 | 1.134 | 31.7 | 1.248 | AB - 51 | 32-RS | DBM - 18 | 1/2 |
| 1.1/2 | 9 | .148 | 1.3/8 | 13-14 | .095/.083 | 29.5 | 1.161 | 33.4 | 1.315 | AB - 52 | 28-RS | DBM - 20 | 1/2 |
| 1.1/2 | 10 | .134 | 1.3/8 | 15-16 | .072/.065 | 30.0 | 1.181 | 34.1 | 1.343 | AB - 53 | 29-RS | DBM - 20 | 1/2 |
| 1.1/2 | 11-12 | .120/.109 | - | - | - | 30.6 | 1.205 | 34.8 | 1.370 | AB - 54 | 30-RS | DBM - 20 | 1/2 |
| 1.1/2 | 13 | .095 | 1.3/4 | 5 | .220 | 31.4 | 1.236 | 35.6 | 1.402 | AB - 55 | 33-RS | DBM - 20 | 1/2 |
| 1.1/2 | 14-15 | .083/.072 | 1.3/4 | 6 | .203 | 32.6 | 1.283 | 36.8 | 1.449 | AB - 56 | 32-RS | DBM - 21 | 1/2 |
| - | - | - | 1.3/4 | 7 | .180 | 33.4 | 1.315 | 38.1 | 1.500 | AB - 57 | 36-RS | DBM - 21 | 1/2 |
| - | - | - | 1.3/4 | 8 | .165 | 34.2 | 1.346 | 38.7 | 1.524 | AB - 58 | 37-RS | DBM - 21 | 1/2 |
| 2 | 3 | .259 | 1.3/4 | 9-10 | .148/.134 | 35.0 | 1.378 | 40.6 | 1.598 | AB - 59 | 33-RS | DBM - 22 | 3/4 |
| 2 | 4 | .238 | 1.3/4 | 11-12 | .120/.109 | 36.6 | 1.441 | 42.2 | 1.661 | AB - 60 | 37-RS | DBM - 22 | 3/4 |
| 2 | 5-6 | .220/.203 | 1.3/4 | 13-14 | .095/.083 | 38.2 | 1.504 | 43.8 | 1.724 | AB - 61 | 38-RS | DBM - 22 | 3/4 |
| 2 | 7-8 | .180/.165 | 1.3/4 | 15-16 | .072/.065 | 39.8 | 1.567 | 45.4 | 1.787 | AB - 62 | 39-RS | DBM - 22 | 3/4 |
| 2 | 9-10 | .148/.134 | 2.1/4 | 3 | .259 | 41.4 | 1.630 | 47.0 | 1.850 | AB - 63 | 40-RS | DBM - 22 | 3/4 |
| 2 | 11-13 | .120/.095 | 2.1/4 | 4 | .238 | 42.9 | 1.689 | 49.5 | 1.949 | AB - 64 | 40-RS | DBM - 23 | 3/4 |
| 2 | 14-16 | .083/.065 | 2.1/4 | 6-7 | .203/.180 | 44.5 | 1.752 | 51.1 | 2.012 | AB - 65 | 41-RS | DBM - 23 | 3/4 |
| 2 | 17-18 | .058/0.49 | 2.1/4 | 8-9 | .165/.148 | 46.1 | 1.815 | 52.7 | 2.075 | AB - 66 | 42-RS | DBM - 23 | 3/4 |

An ISO 9001: 2015 Certified Co.



TUBE EXPANDER AB SERIES



Features

- Similar to A Series Expander.
- Bearing reduces the frictional force & increases the life of tool
- Commonly used tool through-out the world for parallel expansion of tubes.

| Tube Sheet Thickness | Roller Length (A) | Effective Rolling Length (B) | When orderering Expander add Prefix |
|--------------------------------------|--------------------|---------------------------------|---|
| 1/2" – 7/8" (12.7 – 22.22mm) | 2.1/4" (57.10 mm) | 1.1/2" (38.0 mm)` | AB - 67/2 |
| 3/4" - 1.1/8" (19.05 - 28.58mm) | 2.1/2" (63.50 mm) | 1.3/4 " (45.0 mm) | AB - 67/3 |
| 1.1/8" - 1.5/8" (28.58 - 41.30mm) | 3" (76.20 mm) | 2.1/4 " (57.0 mm) | AB - 67/4 |
| 1.5/8" - 2.1/8" (41.30 - 54.0mm) | 3.1/2" (88.80 mm) | 2.3/4 " (70.0 mm) | AB - 67/5 |
| 2.1/8" - 2.5/8" (54.0 - 66.70mm) | 4" (101.50 mm) | 3.1/4 " (82.5 mm) | AB – 67/6 |

TUBE EXPANDERS SPECIFICATION

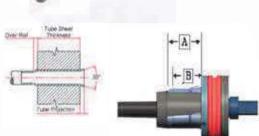
| Tube | TUBE | | Tube | | ΓUΒE | Mi | in. | Ma | ıx. | Expander | Roll | Mandrel | Mandrel |
|-------|-------|------------|-------|-------|------------|-------|-------|-------|--------|----------|-------|----------|---------|
| O.D | | CKNESS | O.D | | CKNESS | 1.1 | | Ex | | Model | Model | Model | Square |
| inch | BWG | inch | inch | BWG | inch | mm | inch | mm | inch | | | | Drive |
| 2.1/2 | 3 | .259 | 2.1/4 | 10-11 | .134/.120 | 47.7 | 1.878 | 54.3 | 2.138 | AB - 67 | 43-RS | DBM - 23 | 3/4 |
| 2.1/2 | 4-5 | .238/.220 | 2.1/4 | 12-13 | .109/.095 | 49.3 | 1.941 | 55.9 | 2.201 | AB - 68 | 44-RS | DBM - 23 | 3/4 |
| 2.1/2 | 6-7 | .203/.180 | 2.1/4 | 14-16 | .083/.065 | 50.8 | 2.000 | 57.8 | 2.276 | AB - 69 | 43-RS | DBM - 24 | 3/4 |
| 2.1/2 | 8-9 | .165/.148 | 2.3/4 | 3 | .259 | 52.4 | 2.063 | 59.4 | 2.339 | AB - 70 | 44-RS | DBM - 24 | 3/4 |
| 2.1/2 | 10-11 | .134/.120 | 2.3/4 | 4 | .238 | 54.0 | 2.126 | 61.0 | 2.402 | AB - 71 | 45-RS | DBM - 24 | 3/4 |
| 2.1/2 | 12-14 | .109/.083 | 2.3/4 | 5-6 | .220/.203 | 55.6 | 2.189 | 64.0 | 2.520 | AB - 72 | 47-RS | DBM - 24 | 3/4 |
| 2.1/2 | 15-16 | .07 2/.065 | 2.3/4 | 7-8 | .180/.165 | 57.2 | 2.252 | 65.6 | 2.583 | AB - 73 | 46-RS | DBM - 25 | 1 |
| 3 | 3 | .259 | 2.3/4 | 9-10 | .148/.134 | 58.6 | 2.307 | 67.0 | 2.638 | AB - 74 | 47-RS | DBM - 25 | 1 |
| 3 | 4 | .238 | 2.3/4 | 11-13 | .120/.095 | 60.4 | 2.378 | 68.8 | 2.709 | AB - 75 | 48-RS | DBM - 25 | 1 |
| 3 | 5-6 | .220/.203 | 2.3/4 | 14-16 | .083/.065 | 62.2 | 2.449 | 70.4 | 2.772 | AB - 76 | 49-RS | DBM - 25 | 1 |
| 3 | 7-8 | .180/.165 | - | - | - | 63.6 | 2.504 | 72.0 | 2.835 | AB - 77 | 50-RS | DBM - 25 | 1 |
| 3 | 9-10 | .148/.134 | 3.1/4 | 3 | .259 | 65.0 | 2.559 | 73.4 | 2.890 | AB - 78 | 51-RS | DBM - 25 | 1 |
| 3 | 11-13 | .120/.095 | 3.1/4 | 4 | .238 | 66.6 | 2.622 | 75.0 | 2.953 | AB - 79 | 52-RS | DBM - 25 | 1 |
| 3 | 14-16 | 0.083/.065 | 3.1/4 | 5-6 | .220/.203 | 68.3 | 2.689 | 76.9 | 3.028 | AB - 80 | 51-RS | DBM - 26 | 1 |
| 3.1/2 | 2 | .284 | 3.1/4 | 7-8 | .180/.165 | 69.9 | 2.752 | 78.5 | 3.091 | AB - 81 | 52-RS | DBM - 26 | 1 |
| 3.1/2 | 3 | .259 | 3.1/4 | 9-10 | .148/.134 | 71.5 | 2.815 | 80.1 | 3.154 | AB - 82 | 53-RS | DBM - 26 | 1 |
| 3.1/2 | 4 | .238 | 3.1/4 | 11-13 | .120/.095 | 73.1 | 2.878 | 81.7 | 3.217 | AB - 83 | 54-RS | DBM - 26 | 1 |
| 3.1/2 | 5-6 | .220/.203 | 3.1/4 | 14-16 | .083/.065 | 74.6 | 2.937 | 84.2 | 3.315 | AB - 84 | 54-RS | DBM - 26 | 1 |
| 3.1/2 | 7-8 | .180/.165 | 3.3/4 | 2 | .084 | 76.2 | 3.000 | 85.5 | 3.366 | AB - 85 | 55-RS | DBM - 27 | 1 |
| 3.1/2 | 9-11 | .148/.120 | 3.3/4 | 3 | .25 9 | 77.8 | 3.063 | 87.4 | 3.441 | AB - 86 | 56-RS | DBM - 27 | 1 |
| 3.1/2 | 12-6 | .109/.065 | 3.3/4 | 4 | .238 | 79.4 | 3.126 | 89.0 | 3.504 | AB - 87 | 57-RS | DBM - 27 | 1 |
| - | - | - | 3.3/4 | 5-6 | .220/.203 | 81.0 | 3.189 | 90.6 | 3.567 | AB - 88 | 58-RS | DBM - 27 | 1 |
| 4 | 2 | .284 | 3.3/4 | 7-8 | .180/.165 | 82.6 | 3.252 | 92.2 | 3.630 | AB - 89 | 59-RS | DBM - 27 | 1 |
| 4 | 3 | .259 | 3.3/4 | 9-10 | .148/.134 | 84.2 | 3.315 | 93.8 | 3.693 | AB - 90 | 60-RS | DBM - 27 | 1 |
| 4 | 4 | .238 | 3.3/4 | 11-13 | .120/.095 | 85.8 | 3.378 | 96.2 | 3.787 | AB - 91 | 59-RS | DBM - 28 | 1 |
| 4 | 5-6 | .220/.203 | 3.3/4 | 14-16 | .083/.065 | 87.4 | 3.441 | 97.8 | 3.8 50 | AB - 92 | 60-RS | DBM - 28 | 1 |
| 4 | 7-8 | .180/.165 | 4.1/4 | 2 | .084 | 89.0 | 3.504 | 99.4 | 3.913 | AB - 93 | 61-RS | DBM - 28 | 1 |
| 4 | 9-11 | .148/.120 | 4.1/4 | 3 | .284 | 90.4 | 3.559 | 100.8 | 3.969 | AB - 94 | 62-RS | DBM - 28 | 1 |
| 4 | 12-16 | .109/.065 | 4.1/4 | 4 | .238 | 92.0 | 3.622 | 102.4 | 4.031 | AB - 95 | 63-RS | DBM - 28 | 1 |
| - | - | - | 4.1/4 | 5-6 | .220/.203 | 93.4 | 3.677 | 103.8 | 4.087 | AB - 96 | 62-RS | DBM - 29 | 1 |
| 4.1/2 | 2 | .284 | 4.1/4 | 7-8 | .180/.16 5 | 95.0 | 3.740 | 105.4 | 4.150 | AB - 97 | 63-RS | DBM - 29 | 1 |
| 4.1/2 | 3 | .259 | 4.1/4 | 9-10 | .148/.120 | 96.6 | 3.803 | 107.0 | 4.213 | AB - 98 | 64-RS | DBM - 29 | 1 |
| 4.1/2 | 4-5 | .238/.220 | 4.1/4 | 11-13 | .120/.095 | 98.2 | 3.866 | 108.6 | 4.276 | AB - 99 | 63-RS | DBM - 30 | 1 |
| 4.1/2 | 6-7 | .203/.180 | - | - | - | 101.2 | 3.984 | 110.0 | 4.331 | AB - 100 | 64-RS | DBM - 30 | 1 |
| 4.1/2 | 8-9 | .165/.148 | - | - | - | 102.8 | 4.047 | 111.6 | 4.394 | AB - 101 | 65-RS | DBM - 30 | 1 |
| 4.1/2 | 10-12 | .134/.109 | - | - | - | 104.4 | 4.110 | 113.2 | 4.457 | AB - 102 | 66-RS | DBM - 30 | 1 |





TUBE EXPANDER ABF3 SERIES





Features

- Similar to AF3 Series Expander.
- Bearing reduces the frictional force & increases the life of tool
- Commonly used tool through-out the world for parallel expansion of tubes..

| Tube Sheet Thickness | Plain Roller Length (A) | Plain Roller Effective Length (B) | When orderering Expander add Prefix |
|--------------------------------------|----------------------------|--------------------------------------|---|
| 1/2" – 7/8" (12.7 – 22.22mm) | 1.1/8 " (28.5 mm) | 7/8" (22.2 mm)` | ABF3 - 31/2 |
| 3/4" – 1.1/8" (19.05 - 28.58mm) | 1.3/8 " (39.5 mm) | 1.1/8 " (28.5 mm) | ABF3 - 31/3 |
| 1.1/8" - 1.5/8" (28.58 - 41.30mm) | 1.7/8 " (47.5 mm) | 1.5/8 " (41.0 mm) | ABF3 - 31/4 |
| 1.5/8" - 2.1/8" (41.30 - 54.0mm) | 2.3/8 " (60.0 mm) | 2.1/8 " (54.0 mm) | ABF3 - 31/5 |
| 2.1/8" - 2.5/8" (54.0 - 66.70mm) | 2.7/8 " (73.0 mm) | 2.5/8 " (66.5 mm) | ABF3 - 31/6 |

TUBE EXPANDERS SPECIFICATION

| 7/8 16 .065 - - - 18.4 0.724 20.7 0.815 ABF3 - 32 15-F32 7/8 17 .058 1 11 .120 18.8 0.740 21.1 0.831 ABF3 - 33 16-F35 7/8 18 .049 1 12 .109 19.4 0.764 21.6 0.850 ABF3 - 34 20-F32 7/8 19-20 .042/.035 1.1/8 8 .165 19.7 0.776 22.3 0.878 ABF3 - 34 20-F32 1 13 .095 - - - 20.1 0.791 22.4 0.882 ABF3 - 35 17-F35 1 14 .083 1.1/8 9 .148 20.6 0.811 23.1 0.909 ABF3 - 37 18-F35 1 15-16 .072/.065 1.1/8 10 .134 21.3 0.839 23.8 0.937 ABF3 - 38 19-F35 1 17-1 | Model Square Drive DBM - 11 3/8 DBM - 12 3/8 DBM - 12 3/8 DBM - 12 3/8 DBM - 13 3/8 | 15-F3S 15-F3S | Model | inch | | | | | THIC | O.D | CKNESS | 11110 | O.D |
|--|---|------------------|------------|--------|------|-------|------|-----------|-------|-------|-----------|-------|-------|
| 7/8 16 .065 - - - 18.4 0.724 20.7 0.815 ABF3 - 32 15-F33 7/8 17 .058 1 11 .120 18.8 0.740 21.1 0.831 ABF3 - 33 16-F35 7/8 18 .049 1 12 .109 19.4 0.764 21.6 0.850 ABF3 - 34 20-F33 7/8 19-20 .042/.035 1.1/8 8 .165 19.7 0.776 22.3 0.878 ABF3 - 34 20-F33 1 13 .095 - - - 20.1 0.791 22.4 0.882 ABF3 - 35 17-F35 1 14 .083 1.1/8 9 .148 20.6 0.811 23.1 0.909 ABF3 - 36 18-F35 1 15-16 .072/.065 1.1/8 10 .134 21.3 0.839 23.8 0.937 ABF3 - 38 19-F35 1 17-1 | DBM - 12 3/8 DBM - 12 3/8 DBM - 12 3/8 DBM - 13 3/8 DBM - 13 3/8 DBM - 13 3/8 DBM - 13 3/8 | 15-F3S | | IIICII | l mm | inch | mm | inch | BWG | inch | inch | BWG | inch |
| 7/8 17 .058 1 11 .120 18.8 0.740 21.1 0.831 ABF3 - 33 16-F35 7/8 18 .049 1 12 .109 19.4 0.764 21.6 0.850 ABF3 - 34 20-F35 7/8 19-20 .042/.035 1.1/8 8 .165 19.7 0.776 22.3 0.878 ABF3 - 35 17-F35 1 13 .095 - - - 20.1 0.791 22.4 0.882 ABF3 - 35 17-F35 1 14 .083 1.1/8 9 .148 20.6 0.811 23.1 0.909 ABF3 - 36 18-F35 1 15-16 .072/.065 1.1/8 10 .134 21.3 0.839 23.8 0.937 ABF3 - 38 19-F35 1 17-18 .058/.048 1.1/8 11 .120 22.0 0.866 24.5 0.965 ABF3 - 39 21-F35 1 | DBM - 12 3/8 DBM - 12 3/8 DBM - 13 3/8 DBM - 12 3/8 DBM - 12 3/8 DBM - 13 3/8 | | ABF3 - 31 | 0.803 | 20.4 | 0.713 | 18.1 | .134 | 10 | 1 | .072 | 15 | 7/8 |
| 7/8 18 .049 1 12 .109 19.4 0.764 21.6 0.850 ABF3 - 34 20-F32 7/8 19-20 .042/.035 1.1/8 8 .165 19.7 0.776 22.3 0.878 ABF3 - 35 17-F35 1 13 .095 - - - 20.1 0.791 22.4 0.882 ABF3 - 36 18-F35 1 14 .083 1.1/8 9 .148 20.6 0.811 23.1 0.909 ABF3 - 37 18-F35 1 15-16 .072/.065 1.1/8 10 .134 21.3 0.839 23.8 0.937 ABF3 - 38 19-F35 1 17-18 .058/.048 1.1/8 11 .120 22.0 0.866 24.5 0.965 ABF3 - 39 21-F35 1 19-20 .042/.035 1.1/8 12 .109 22.4 0.882 25.0 0.984 ABF3 - 40 21-F35 <td< td=""><td>DBM - 12 3/8 DBM - 13 3/8 DBM - 12 3/8 DBM - 13 3/8</td><td>16-F3S</td><td>ABF3 - 32</td><td>0.815</td><td>20.7</td><td>0.724</td><td>18.4</td><td>-</td><td>-</td><td>-</td><td>.065</td><td>16</td><td>7/8</td></td<> | DBM - 12 3/8 DBM - 13 3/8 DBM - 12 3/8 DBM - 13 3/8 | 16-F3S | ABF3 - 32 | 0.815 | 20.7 | 0.724 | 18.4 | - | - | - | .065 | 16 | 7/8 |
| 7/8 19-20 .042/.035 1.1/8 8 .165 19.7 0.776 22.3 0.878 ABF3 - 35 17-F35 1 13 .095 - - - 20.1 0.791 22.4 0.882 ABF3 - 36 18-F35 1 14 .083 1.1/8 9 .148 20.6 0.811 23.1 0.909 ABF3 - 37 18-F35 1 15-16 .072/.065 1.1/8 10 .134 21.3 0.839 23.8 0.937 ABF3 - 38 19-F35 1 17-18 .058/.048 1.1/8 11 .120 22.0 0.866 24.5 0.965 ABF3 - 39 21-F35 1 19-20 .042/.035 1.1/8 12 .109 22.4 0.882 25.0 0.984 ABF3 - 40 21-F35 1.1/4 8 .165 1.1/8 13 .095 23.3 0.917 25.9 1.020 ABF3 - 41 22-F35 | DBM - 13 3/8 DBM - 12 3/8 DBM - 13 3/8 | | ABF3 - 33 | 0.831 | 21.1 | 0.740 | 18.8 | .120 | 11 | 1 | .058 | 17 | 7/8 |
| 1 13 .095 - - - 20.1 0.791 22.4 0.882 ABF3 - 36 18-F35 1 14 .083 1.1/8 9 .148 20.6 0.811 23.1 0.909 ABF3 - 37 18-F35 1 15-16 .072/.065 1.1/8 10 .134 21.3 0.839 23.8 0.937 ABF3 - 38 19-F35 1 17-18 .058/.048 1.1/8 11 .120 22.0 0.866 24.5 0.965 ABF3 - 39 21-F35 1 19-20 .042/.035 1.1/8 12 .109 22.4 0.882 25.0 0.984 ABF3 - 40 21-F35 1.1/4 8 .165 1.1/8 13 .095 23.3 0.917 25.9 1.020 ABF3 - 41 22-F35 1.1/4 9 .148 1.1/8 14 .083 23.8 0.937 26.5 1.043 ABF3 - 42 23-F35 | DBM - 12 3/8 DBM - 13 3/8 | 20-F3S | ABF3 - 34 | 0.850 | 21.6 | 0.764 | 19.4 | .109 | 12 | 1 | .049 | 18 | 7/8 |
| 1 14 .083 1.1/8 9 .148 20.6 0.811 23.1 0.909 ABF3 - 37 18-F33 1 15-16 .072/.065 1.1/8 10 .134 21.3 0.839 23.8 0.937 ABF3 - 38 19-F35 1 17-18 .058/.048 1.1/8 11 .120 22.0 0.866 24.5 0.965 ABF3 - 39 21-F35 1 19-20 .042/.035 1.1/8 12 .109 22.4 0.882 25.0 0.984 ABF3 - 40 21-F35 1.1/4 8 .165 1.1/8 13 .095 23.3 0.917 25.9 1.020 ABF3 - 41 22-F35 1.1/4 9 .148 1.1/8 14 .083 23.8 0.937 26.5 1.043 ABF3 - 42 23-F35 1.1/4 10 .134 1.1/8 15-16 .072/.065 24.4 0.961 27.2 1.071 ABF3 - 43 24-F35 | DBM - 13 3/8 | 17-F3S | ABF3 - 35 | 0.878 | 22.3 | 0.776 | 19.7 | .165 | 8 | 1.1/8 | .042/.035 | 19-20 | 7/8 |
| 1 15-16 .072/.065 1.1/8 10 .134 21.3 0.839 23.8 0.937 ABF3 - 38 19-F3S 1 17-18 .058/.048 1.1/8 11 .120 22.0 0.866 24.5 0.965 ABF3 - 39 21-F3S 1 19-20 .042/.035 1.1/8 12 .109 22.4 0.882 25.0 0.984 ABF3 - 40 21-F3S 1.1/4 8 .165 1.1/8 13 .095 23.3 0.917 25.9 1.020 ABF3 - 41 22-F3S 1.1/4 9 .148 1.1/8 14 .083 23.8 0.937 26.5 1.043 ABF3 - 42 23-F3S 1.1/4 10 .134 1.1/8 15-16 .072/.065 24.4 0.961 27.2 1.071 ABF3 - 43 24-F3S 1.1/4 11 .120 - - - 25.2 0.992 28.0 1.102 ABF3 - 44 26-F3S | | 18-F3S | ABF3 - 36 | 0.882 | 22.4 | 0.791 | 20.1 | - | - | - | .095 | 13 | 1 |
| 1 17-18 .058/.048 1.1/8 11 .120 22.0 0.866 24.5 0.965 ABF3 - 39 21-F35 1 19-20 .042/.035 1.1/8 12 .109 22.4 0.882 25.0 0.984 ABF3 - 40 21-F35 1.1/4 8 .165 1.1/8 13 .095 23.3 0.917 25.9 1.020 ABF3 - 41 22-F35 1.1/4 9 .148 1.1/8 14 .083 23.8 0.937 26.5 1.043 ABF3 - 42 23-F35 1.1/4 10 .134 1.1/8 15-16 .072/.065 24.4 0.961 27.2 1.071 ABF3 - 43 24-F35 1.1/4 11 .120 - - 25.2 0.992 28.0 1.102 ABF3 - 44 26-F35 1.1/4 12 .109 - - 25.7 1.012 28.5 1.122 ABF3 - 45 27-F35 | DPM 12 2/0 | 18-F3S | ABF3 - 37 | 0.909 | 23.1 | 0.811 | 20.6 | .148 | 9 | 1.1/8 | .083 | 14 | 1 |
| 1 19-20 .042/.035 1.1/8 12 .109 22.4 0.882 25.0 0.984 ABF3 - 40 21-F3S 1.1/4 8 .165 1.1/8 13 .095 23.3 0.917 25.9 1.020 ABF3 - 41 22-F3S 1.1/4 9 .148 1.1/8 14 .083 23.8 0.937 26.5 1.043 ABF3 - 42 23-F3S 1.1/4 10 .134 1.1/8 15-16 .072/.065 24.4 0.961 27.2 1.071 ABF3 - 43 24-F3S 1.1/4 11 .120 - - - 25.2 0.992 28.0 1.102 ABF3 - 44 26-F3S 1.1/4 12 .109 - - - 25.7 1.012 28.5 1.122 ABF3 - 45 27-F3S | DBM - 13 3/8 | 19-F3S | ABF3 - 38 | 0.937 | 23.8 | 0.839 | 21.3 | .134 | 10 | 1.1/8 | .072/.065 | 15-16 | 1 |
| 1.1/4 8 .165 1.1/8 13 .095 23.3 0.917 25.9 1.020 ABF3 - 41 22-F3S 1.1/4 9 .148 1.1/8 14 .083 23.8 0.937 26.5 1.043 ABF3 - 42 23-F3S 1.1/4 10 .134 1.1/8 15-16 .072/.065 24.4 0.961 27.2 1.071 ABF3 - 43 24-F3S 1.1/4 11 .120 - - - 25.2 0.992 28.0 1.102 ABF3 - 44 26-F3S 1.1/4 12 .109 - - - 25.7 1.012 28.5 1.122 ABF3 - 45 27-F3S | DBM - 13 3/8 | 21-F3S | ABF3 - 39 | 0.965 | 24.5 | 0.866 | 22.0 | .120 | 11 | 1.1/8 | .058/.048 | 17-18 | 1 |
| 1.1/4 9 .148 1.1/8 14 .083 23.8 0.937 26.5 1.043 ABF3 - 42 23-F3S 1.1/4 10 .134 1.1/8 15-16 .072/.065 24.4 0.961 27.2 1.071 ABF3 - 43 24-F3S 1.1/4 11 .120 - - - 25.2 0.992 28.0 1.102 ABF3 - 44 26-F3S 1.1/4 12 .109 - - - 25.7 1.012 28.5 1.122 ABF3 - 45 27-F3S | DBM - 14 3/8 | 21-F3S | ABF3 - 40 | 0.984 | 25.0 | 0.882 | 22.4 | .109 | 12 | 1.1/8 | .042/.035 | 19-20 | 1 |
| 1.1/4 10 .134 1.1/8 15-16 .072/.065 24.4 0.961 27.2 1.071 ABF3 - 43 24-F35 1.1/4 11 .120 - - - 25.2 0.992 28.0 1.102 ABF3 - 44 26-F35 1.1/4 12 .109 - - - 25.7 1.012 28.5 1.122 ABF3 - 45 27-F35 | DBM - 14 3/8 | 22-F3S | A BF3 - 41 | 1.020 | 25.9 | 0.917 | 23.3 | .095 | 13 | 1.1/8 | .165 | 8 | 1.1/4 |
| 1.1/4 11 .120 - - 25.2 0.992 28.0 1.102 ABF3 - 44 26-F3S 1.1/4 12 .109 - - 25.7 1.012 28.5 1.122 ABF3 - 45 27-F3S | DBM - 15 1/2 | 23-F3S | ABF3 - 42 | 1.043 | 26.5 | 0.937 | 23.8 | .083 | 14 | 1.1/8 | .148 | 9 | 1.1/4 |
| 1.1/4 12 .109 25.7 1.012 28.5 1.122 ABF3 - 45 27-F3S | DBM - 15 1/2 | 24-F3S | A BF3 - 43 | 1.071 | 27.2 | 0.961 | 24.4 | .072/.065 | 15-16 | 1.1/8 | .134 | 10 | 1.1/4 |
| | DBM - 16 1/2 | 26-F3S | ABF3 - 44 | 1.102 | 28.0 | 0.992 | 25.2 | - | - | - | .120 | 11 | 1.1/4 |
| 1.1/4 13 .095 1.3/8 8 .165 26.1 1.028 28.8 1.134 ABF3 - 46 31-F3S | DBM - 16 1/2 | 27-F3S | A BF3 - 45 | 1.122 | 28.5 | 1.012 | 25.7 | - | - | - | .109 | | 1.1/4 |
| | DBM - 16 1/2 | 31-F3S | ABF3 - 46 | 1.134 | 28.8 | 1.028 | 26.1 | .165 | 8 | 1.3/8 | .095 | 13 | 1.1/4 |
| 1.1/4 14 .083 26.4 1.039 29.2 1.150 ABF3 - 47 28-F3S | DBM - 17 1/2 | 28-F3S | ABF3 - 47 | 1.150 | 29.2 | 1.039 | 26.4 | - | - | - | .083 | 14 | 1.1/4 |
| 1.1/4 15 .072 1.3/8 9 .148 26.9 1.059 29.7 1.169 ABF3 - 48 29-F33 | DBM - 17 1/2 | 29-F3S | ABF3 - 48 | 1.169 | 29.7 | 1.059 | 26.9 | .148 | 9 | 1.3/8 | .072 | 15 | 1.1/4 |
| 1.1/4 16 .065 1.3/8 10 .134 27.6 1.087 30.4 1.197 ABF3 - 49 30-F3S | DBM - 17 1/2 | 30-F3S | ABF3 - 49 | 1.197 | 30.4 | 1.087 | 27.6 | .134 | 10 | 1.3/8 | .065 | 16 | 1.1/4 |
| 1.1/2 7 .180 1.3/8 11 .120 28.3 1.114 31.2 1.228 ABF3 - 50 30-F3S | DBM - 18 1/2 | 30-F3S | ABF3 - 50 | 1.228 | 31.2 | 1.114 | 28.3 | .120 | 11 | 1.3/8 | .180 | 7 | 1.1/2 |
| 1.1/2 8 .165 1.3/8 12 .109 28.8 1.134 31.7 1.248 ABF3 - 51 32-F3S | DBM - 18 1/2 | 32-F3S | ABF3 - 51 | 1.248 | 31.7 | 1.134 | 28.8 | .109 | 12 | 1.3/8 | .165 | 8 | 1.1/2 |
| | DBM - 20 1/2 | 28-F3S | ABF3 - 52 | 1.315 | 33.4 | 1.161 | | .095/.083 | 13-14 | 1.3/8 | | | 1.1/2 |
| 1.1/2 10 .134 1.3/8 15-16 .072/.065 30.0 1.181 34.1 1.343 ABF3 - 53 29-F3S | DBM - 20 1/2 | 29-F3S | A BF3 - 53 | 1.343 | 34.1 | 1.181 | 30.0 | .072/.065 | 15-16 | 1.3/8 | .134 | 10 | 1.1/2 |
| | DBM - 20 1/2 | 30-F3S | ABF3 - 54 | 1.370 | 34.8 | 1.205 | 30.6 | - | - | | .120/.109 | 11-12 | 1.1/2 |
| | DBM - 20 1/2 | 33-F3S | | | | | | | 5 | | | | |
| | DBM - 21 1/2 | 32-F3S | | | | | | | | | .083/.072 | 14-15 | 1.1/2 |
| | DBM - 21 1/2 | 36-F3S | | | 38.1 | _ | | | | | - | - | - |
| | DBM - 21 1/2 | 37-F3S | | | | | | | | | | | |
| | DBM - 22 3/4 | 33-F3S | | | | | | | | _ | | | |
| | DBM - 22 3/4 | 37-F3S | | | | | | | | _ | | - | |
| | DBM - 22 3/4 | 38-F3S | | | | | | | | | | | |
| | DBM - 22 3/4 | 39-F3S | | | | | | | | _ | | | |
| | DBM - 22 3/4 | 40-F3S | | _ | | | | | | | | | |
| | DBM - 23 3/4 | 40-F3S | | | 49.5 | | | | | | | | |
| 2 14-16 .083/.065 2.1/4 6-7 .203/.180 44.5 1.752 51.1 2.012 ABF3 - 65 41-F3S | | 41-F3S | | | | 1.752 | 44.5 | .203/.180 | 6-7 | 2.1/4 | .083/.065 | | |
| 2 17-18 .058/0.49 2.1/4 8-9 .165/.148 46.1 1.815 52.7 2.075 ABF3 - 66 42-F3S | DBM - 23 3/4 DBM - 23 3/4 | | | | | | | | | | | | |

An ISO 9001: 2015 Certified Co.



TUBE EXPANDER ABF3 SERIES



Features

- Similar to AF3 Series Expander.
- Bearing reduces the frictional force & increases the life of tool
- Commonly used tool through-out the world for parallel expansion of tubes..

| Tube Sheet Thickness | Plain Roller Length (A) | Plain Roller Effective Length (B) | When orderering Expander add Prefix |
|--------------------------------------|----------------------------|--------------------------------------|---|
| 1/2" – 7/8" (12.7 – 22.22mm) | 1.1/8 " (28.5 mm) | 7/8" (22.2 mm)` | ABF3 - 67/2 |
| 3/4" - 1.1/8" (19.05 - 28.58mm) | 1.3/8 " (39.5 mm) | 1.1/8 " (28.5 mm) | ABF3 - 67/3 |
| 1.1/8" - 1.5/8" (28.58 - 41.30mm) | 1.7/8 " (47.5 mm) | 1.5/8 " (41.0 mm) | ABF3 - 67/4 |
| 1.5/8" - 2.1/8" (41.30 - 54.0mm) | 2.3/8 " (60.0 mm) | 2.1/8 " (54.0 mm) | ABF3 - 67/5 |
| 2.1/8" - 2.5/8" (54.0 - 66.70mm) | 2.7/8 " (73.0 mm) | 2.5/8 " (66.5 mm) | ABF3 - 67/6 |

TUBE EXPANDERS SPECIFICATION

| O.D inch 2.1/2 2.1/2 | BWG 3 | CKNESS inch | O.D | | CKNESS | 1.1 | D. | Ex | p. | Expander | | Roll Mandrel | Square |
|----------------------|----------|----------------|-------|-------|-----------|-------|-------|-------|-------|------------|-----------------|--------------|--------|
| | | | inch | BWG | inch | mm | inch | mm | inch | Model | Model | Model | Drive |
| 2.1/2 | | .259 | 2.1/4 | 10-11 | .134/.120 | 47.7 | 1.878 | 54.3 | 2.138 | ABF3 - 67 | 43-F3S | DBM - 23 | 3/4 |
| | 4-5 | .238/.220 | 2.1/4 | 12-13 | .109/.095 | 49.3 | 1.941 | 55.9 | 2.201 | ABF3 - 68 | 44-F3S | DBM - 23 | 3/4 |
| 2.1/2 | 6-7 | .203/.180 | 2.1/4 | 14-16 | .083/.065 | 50.8 | 2.000 | 57.8 | 2.276 | ABF3 - 69 | 43-F3S | DBM - 24 | 3/4 |
| 2.1/2 | 8-9 | .165/.148 | 2.3/4 | 3 | .259 | 52.4 | 2.063 | 59.4 | 2.339 | ABF3 - 70 | 44-F3S | DBM - 24 | 3/4 |
| 2.1/2 | 10-11 | .134/.120 | 2.3/4 | 4 | .238 | 54.0 | 2.126 | 61.0 | 2.402 | ABF3 - 71 | 45-F3S | DBM - 24 | 3/4 |
| 2.1/2 | 12-14 | .109/.083 | 2.3/4 | 5-6 | .220/.203 | 55.6 | 2.189 | 64.0 | 2.520 | ABF3 - 72 | 47-F3S | DBM - 24 | 3/4 |
| 2.1/2 | 15-16 | .072/.065 | 2.3/4 | 7-8 | .180/.165 | 57.2 | 2.252 | 65.6 | 2.583 | ABF3 - 73 | 46-F3S | DBM - 25 | 1 |
| 3 | 3 | .259 | 2.3/4 | 9-10 | .148/.134 | 58.6 | 2.307 | 67.0 | 2.638 | ABF3 - 74 | 47-F3S | DBM - 25 | 1 |
| 3 | 4 | .238 | 2.3/4 | 11-13 | .120/.095 | 60.4 | 2.378 | 68.8 | 2.709 | ABF3 - 75 | 48-F3S | DBM - 25 | 1 |
| 3 | 5-6 | .220/.203 | 2.3/4 | 14-16 | .083/.065 | 62.2 | 2.449 | 70.4 | 2.772 | ABF3 - 76 | 49-F3S | DBM - 25 | 1 |
| 3 | 7-8 | .180/.165 | - | - | - | 63.6 | 2.504 | 72.0 | 2.835 | ABF3 - 77 | 50-F3S | DBM - 25 | 1 |
| 3 | 9-10 | .148/.134 | 3.1/4 | 3 | .259 | 65.0 | 2.559 | 73.4 | 2.890 | ABF3 - 78 | 51-F3S | DBM - 25 | 1 |
| 3 | 11-13 | .120/.095 | 3.1/4 | 4 | .238 | 66.6 | 2.622 | 75.0 | 2.953 | ABF3 - 79 | 52-F3S | DBM - 25 | 1 |
| 3 | 14-16 | 0.083/.065 | 3.1/4 | 5-6 | .220/.203 | 68.3 | 2.689 | 76.9 | 3.028 | ABF3 - 80 | 51-F3S | DBM - 26 | 1 |
| 3.1/2 | 2 | .284 | 3.1/4 | 7-8 | .180/.165 | 69.9 | 2.752 | 78.5 | 3.091 | ABF3 - 81 | 52-F3S | DBM - 26 | 1 |
| 3.1/2 | 3 | .259 | 3.1/4 | 9-10 | .148/.134 | 71.5 | 2.815 | 80.1 | 3.154 | ABF3 - 82 | 53-F3S | DBM - 26 | 1 |
| 3.1/2 | 4 | .238 | 3.1/4 | 11-13 | .120/.095 | 73.1 | 2.878 | 81.7 | 3.217 | ABF3 - 83 | 54-F3S | DBM - 26 | 1 |
| 3.1/2 | 5-6 | .220/.203 | 3.1/4 | 14-16 | .083/.065 | 74.6 | 2.937 | 84.2 | 3.315 | ABF3 - 84 | 54-F3S | DBM - 26 | 1 |
| 3.1/2 | 7-8 | .180/.165 | 3.3/4 | 2 | .084 | 76.2 | 3.000 | 85.5 | 3.366 | ABF3 - 85 | 55-F3S | DBM - 27 | 1 |
| 3.1/2 | 9-11 | .148/.120 | 3.3/4 | 3 | .259 | 77.8 | 3.063 | 87.4 | 3.441 | ABF3 - 86 | 56-F3S | DBM - 27 | 1 |
| 3.1/2 | 12-6 | .109/.065 | 3.3/4 | 4 | .238 | 79.4 | 3.126 | 89.0 | 3.504 | ABF3 - 87 | 57-F3S | DBM - 27 | 1 |
| - | - | - | 3.3/4 | 5-6 | .220/.203 | 81.0 | 3.189 | 90.6 | 3.567 | ABF3 - 88 | 58-F3S | DBM - 27 | 1 |
| 4 | 2 | .284 | 3.3/4 | 7-8 | .180/.165 | 82.6 | 3.252 | 92.2 | 3.630 | ABF3 - 89 | 59-F3S | DBM - 27 | 1 |
| 4 | 3 | .259 | 3.3/4 | 9-10 | .148/.134 | 84.2 | 3.315 | 93.8 | 3.693 | ABF3 - 90 | 60-F3S | DBM - 27 | 1 |
| 4 | 4 | .238 | 3.3/4 | 11-13 | .120/.095 | 85.8 | 3.378 | 96.2 | 3.787 | ABF3 - 91 | 59 - F3S | DBM - 28 | 1 |
| 4 | 5-6 | .220/.203 | 3.3/4 | 14-16 | .083/.065 | 87.4 | 3.441 | 97.8 | 3.850 | ABF3 - 92 | 60-F3S | DBM - 28 | 1 |
| 4 | 7-8 | .180/.165 | 4.1/4 | 2 | .084 | 89.0 | 3.504 | 99.4 | 3.913 | ABF3 - 93 | 61-F3S | DBM - 28 | 1 |
| 4 | 9-11 | .148/.120 | 4.1/4 | 3 | .284 | 90.4 | 3.559 | 100.8 | 3.969 | ABF3 - 94 | 62-F3S | DBM - 28 | 1 |
| 4 | 12-16 | .109/.065 | 4.1/4 | 4 | .238 | 92.0 | 3.622 | 102.4 | 4.031 | ABF3 - 95 | 63-F3S | DBM - 28 | 1 |
| - | - | - | 4.1/4 | 5-6 | .220/.203 | 93.4 | 3.677 | 103.8 | 4.087 | ABF3 - 96 | 62-F3S | DBM - 29 | 1 |
| 4.1/2 | 2 | .284 | 4.1/4 | 7-8 | .180/.165 | 95.0 | 3.740 | 105.4 | 4.150 | ABF3 - 97 | 63-F3S | DBM - 29 | 1 |
| 4.1/2 | 3 | .259 | 4.1/4 | 9-10 | .148/.120 | 96.6 | 3.803 | 107.0 | 4.213 | ABF3 - 98 | 64-F3S | DBM - 29 | 1 |
| 4.1/2 | 4-5 | .238/.220 | 4.1/4 | 11-13 | .120/.095 | 98.2 | 3.866 | 108.6 | 4.276 | ABF3 - 99 | 63-F3S | DBM - 30 | 1 |
| 4.1/2 | 6-7 | .203/.180 | - | - | - | 101.2 | 3.984 | 110.0 | 4.331 | ABF3 - 100 | 64-F3S | DBM - 30 | 1 |
| 4.1/2 | 8-9 | .165/.148 | - | - | - | 102.8 | 4.047 | 111.6 | 4.394 | ABF3 - 101 | 65-F3S | DBM - 30 | 1 |
| 4.1/2 | 10-12 | .134/.109 | - | - | - | 104.4 | 4.110 | 113.2 | 4.457 | ABF3 - 102 | 66-F3S | DBM - 30 | 1 |