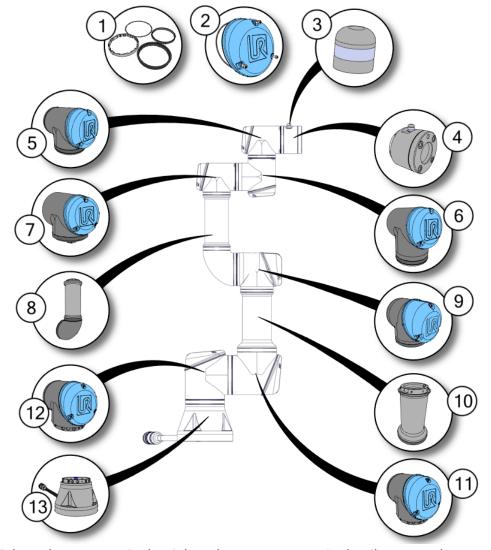


8.1 Robot Arm

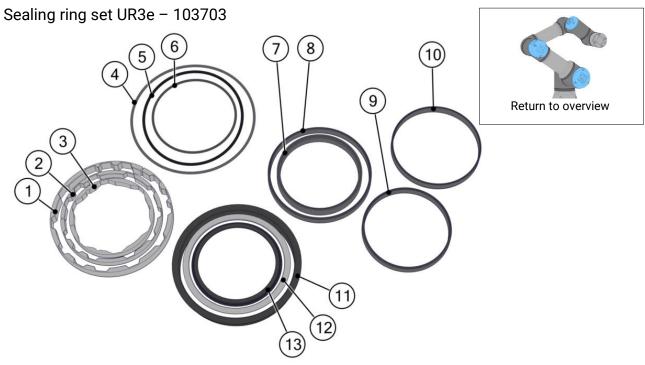


Click on the page no. in the right column to see part in detail or go to the page.

| NO. | DESCRIPTION | PART NUMBER(S) |
|-----|-------------------------------------|----------------------|
| 1 | Sealing ring set | 103703/103705/103700 |
| 2 | Lid set | 103413/103405/103410 |
| 3 | Protective cap for tool connector | 131095 |
| 4 | Tool mount with Force/Torque sensor | 124083/124085/124080 |
| 5 | Wrist joint 3 | 124002/102414/102412 |
| 6 | Wrist joint 2 | 124110/124111/124112 |
| 7 | Wrist joint 1 | 124001/102413/102411 |
| 8 | Lower arm assembly | N/A |
| 9 | Elbow joint | 124011/124031/124031 |
| 10 | Upper arm | N/A |
| 11 | Shoulder joint | 124021/124031/124041 |
| 12 | Base joint | 124021/124031/124041 |
| 13 | Base with Robot Arm cable | 122083/122085/122080 |

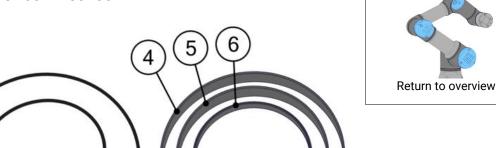
Refer to Section 4.1 Robot Arm for joint name and size.

| ige. |
|----------|
| PAGE NO. |
| 147-149 |
| 150-152 |
| 153 |
| 154-156 |
| 157-159 |
| 160-162 |
| 163-165 |
| 166 |
| 167-169 |
| 170 |
| 171-173 |
| 174-176 |
| 177-179 |



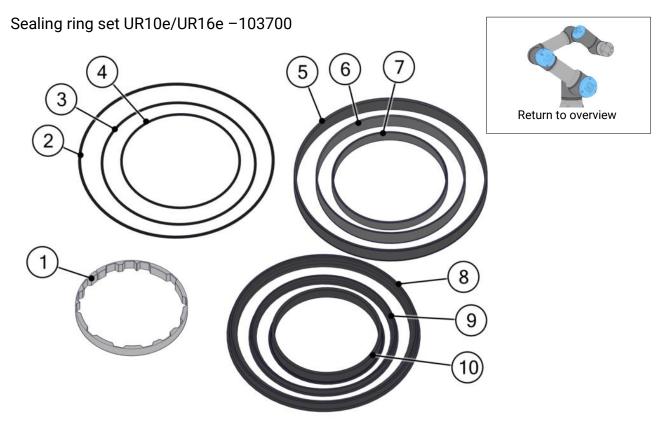
| | Sealing ring set UR3e – 103703 | | | | |
|-----|--------------------------------|-----------------------------|----------------|--|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. |
| 1 | 3 | Form-ring for Size 2 joints | N/A | | N/A |
| 2 | 2 | Form-ring for Size 1 joints | N/A | | N/A |
| 3 | 4 | Form-ring for size 0 joints | N/A | | N/A |
| 4 | 2 | O-ring for size 2 lids | N/A | | N/A |
| 5 | 1 | O-ring for size 1 lids | N/A | | N/A |
| 6 | 3 | O-ring for size 0 lids | N/A | | N/A |
| 7 | 2 | Flat ring for lower arm | N/A | | N/A |
| 8 | 1 | Flat ring for size 1 joints | N/A | | N/A |
| 9 | 4 | Flat ring for size 0 joints | N/A | | N/A |
| 10 | 3 | Flat ring for size 2 joints | N/A | | N/A |
| 11 | 2 | Wear ring for size 2 joints | N/A | | N/A |
| 12 | 1 | Wear ring for size 1 joints | N/A | | N/A |
| 13 | 3 | Wear ring for size 0 joints | N/A | | N/A |

Sealing ring set UR5e – 103705

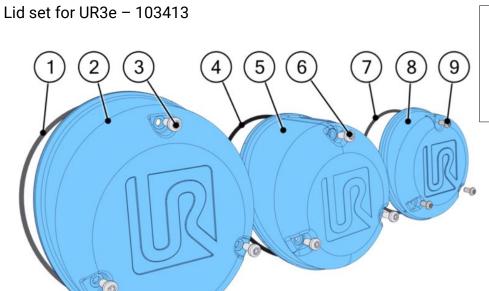




| | Sealing ring set UR5e – 103705 | | | | | |
|-----|--------------------------------|-----------------------------|----------------|----------|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | | |
| 1 | 4 | Form-ring for Size 1 joints | N/A | N/A | | |
| 2 | 3 | O-ring for size 3 lids | N/A | N/A | | |
| 3 | 3 | O-ring for size 1 lids | N/A | N/A | | |
| 4 | 5 | Flat ring for size 3 joints | N/A | N/A | | |
| 5 | 1 | Flat ring for lower arm | N/A | N/A | | |
| 6 | 4 | Flat ring for size 1 joints | N/A | N/A | | |
| 7 | 2 | Wear ring for size 3 joints | N/A | N/A | | |
| 8 | 3 | Wear ring for size 1 joints | N/A | N/A | | |



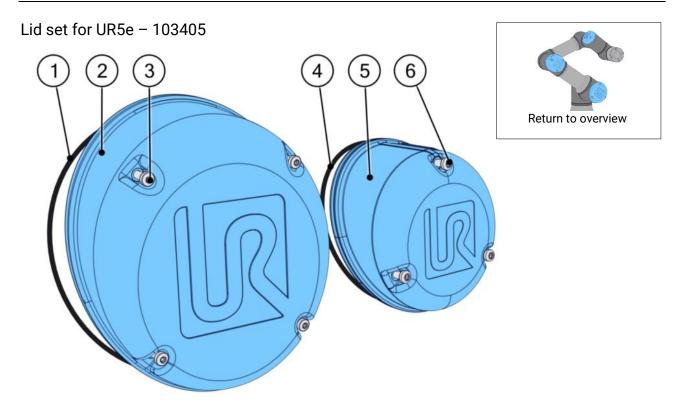
| | Sealing ring set UR10e/UR16e −103700 | | | | | |
|-----|--------------------------------------|-----------------------------|----------------|----------|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | | |
| 1 | 4 | Form-ring for Size 2 joints | N/A | N/A | | |
| 2 | 2 | O-ring for size 4 lids | N/A | N/A | | |
| 3 | 1 | O-ring for size 3 lids | N/A | N/A | | |
| 4 | 3 | O-ring for size 2 lids | N/A | N/A | | |
| 5 | 3 | Flat ring for size 4 joints | N/A | N/A | | |
| 6 | 3 | Flat ring for size 3 joints | N/A | N/A | | |
| 7 | 4 | Flat ring for size 2 joints | N/A | N/A | | |
| 8 | 2 | Wear ring for size 4 joints | N/A | N/A | | |
| 9 | 1 | Wear ring for size 3 joints | N/A | N/A | | |
| 10 | 3 | Wear ring for size 2 joints | N/A | N/A | | |



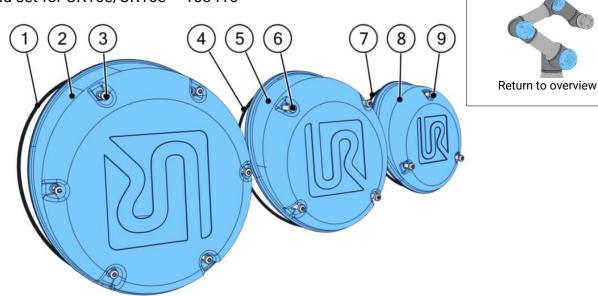


| | Lid set for UR3e – 103413 | | | | |
|-----|---------------------------|-----------------------|----------------|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | |
| 1 | 2 | O-ring for size 2 | N/A | N/A | |
| 2 | 2 | Lid for size 2 | N/A | N/A | |
| 3 | 6 | Screws for size 2 lid | N/A | N/A | |
| 4 | 1 | O-ring for size 1 | N/A | N/A | |
| 5 | 1 | Lid for size 1 | N/A | N/A | |
| 6 | 3 | Screws for size 1 | N/A | N/A | |
| 7 | 3 | O-ring for size 0 | N/A | N/A | |
| 8 | 3 | Lid for size 0 | N/A | N/A | |
| 9 | 9 | Screws for size 0 | N/A | N/A | |





| Lid set for UR5e – 103405 | | | | |
|---------------------------|------|-----------------------|----------------|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. |
| 1 | 3 | O-ring for size 3 | N/A | N/A |
| 2 | 3 | Lid for size 3 | N/A | N/A |
| 3 | 12 | Screws for size 3 lid | N/A | N/A |
| 4 | 3 | O-ring for size 1 | N/A | N/A |
| 5 | 3 | Lid for size 1 | N/A | N/A |
| 6 | 9 | Screws for size 1 | N/A | N/A |

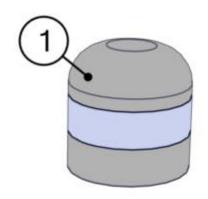


| Lid set for UR10e/UR16e – 103410 | | | | |
|----------------------------------|------|-----------------------|----------------|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. |
| 1 | 2 | O-ring for size 4 | N/A | N/A |
| 2 | 2 | Lid for size 4 | N/A | N/A |
| 3 | 12 | Screws for size 4 lid | N/A | N/A |
| 4 | 1 | O-ring for size 3 | N/A | N/A |
| 5 | 1 | Lid for size 3 | N/A | N/A |
| 6 | 4 | Screws for size 3 | N/A | N/A |
| 7 | 3 | O-ring for size 2 | N/A | N/A |
| 8 | 3 | Lid for size 2 | N/A | N/A |
| 9 | 9 | Screws for size 2 | N/A | N/A |



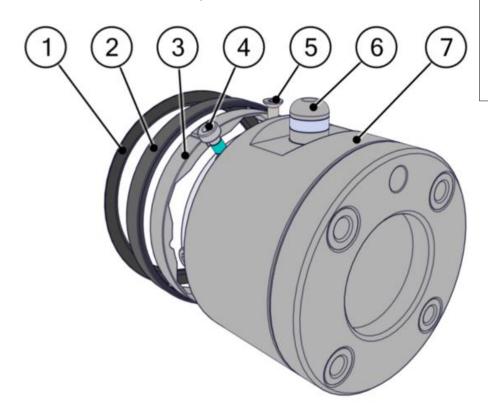
Protective cap for tool connector - 131095





| Protective cap for tool connector - 131095 | | | | | |
|--|------|-----------------------------------|----------------|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | |
| 1 | 1 | Protective cap for tool connector | 131095 | 153 | |

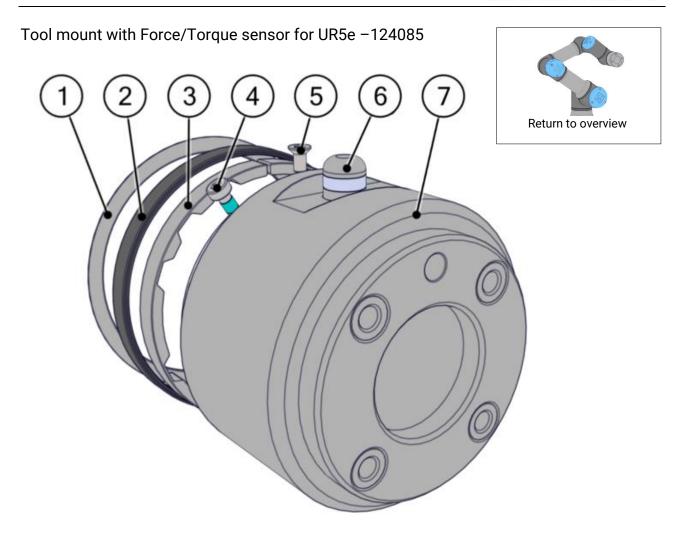
Tool mount with Force/Torque sensor for UR3e – 124083





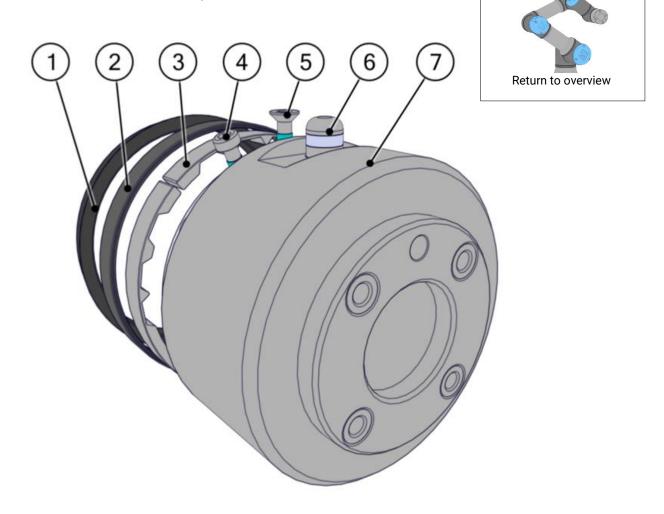
| | Tool mount with Force/Torque sensor for UR3e – 124083 | | | | | |
|-----|---|-------------------------------------|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 1 | Wear ring | 103703 | | 147 | |
| 2 | 1 | Flat ring | 103703 | | 147 | |
| 3 | 1 | Form ring | 103703 | | 147 | |
| 4 | 6 | Screw | N/A | | N/A | |
| 5 | 3 | Screw counter sunk | N/A | | N/A | |
| 6 | 1 | Tool connector lid | 131095 | | 153 | |
| 7 | 1 | Tool mount with Force/Torque sensor | 124083 | | 154 | |





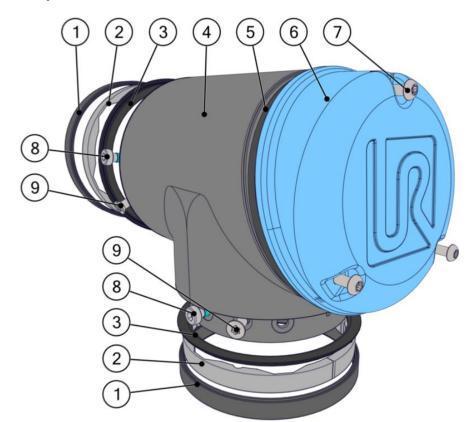
| | Tool mount with Force/Torque sensor for UR5e −124085 | | | | | |
|-----|--|-------------------------------------|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 1 | Wear ring | N/A | | 148 | |
| 2 | 1 | Flat ring | N/A | | 148 | |
| 3 | 1 | Form ring | N/A | | 148 | |
| 4 | 8 | Screw | N/A | | N/A | |
| 5 | 3 | Screw counter sunk | N/A | | N/A | |
| 6 | 1 | Tool connector lid | 131095 | | 153 | |
| 7 | 1 | Tool mount with Force/Torque sensor | 124085 | | 155 | |

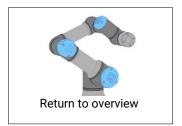
Tool mount with Force/Torque sensor for UR10e/UR16e - 124080



| | Tool mount with Force/Torque sensor for UR10e/UR16e – 124080 | | | | |
|-----|--|-------------------------------------|----------------|--|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. |
| 1 | 1 | Wear ring | N/A | | 149 |
| 2 | 1 | Flat ring | N/A | | 149 |
| 3 | 1 | Form ring | N/A | | 149 |
| 4 | 10 | Screw | N/A | | N/A |
| 5 | 3 | Screw counter sunk | N/A | | N/A |
| 6 | 1 | Tool connector lid | 131095 | | 153 |
| 7 | 1 | Tool mount with Force/Torque sensor | 124080 | | 156 |

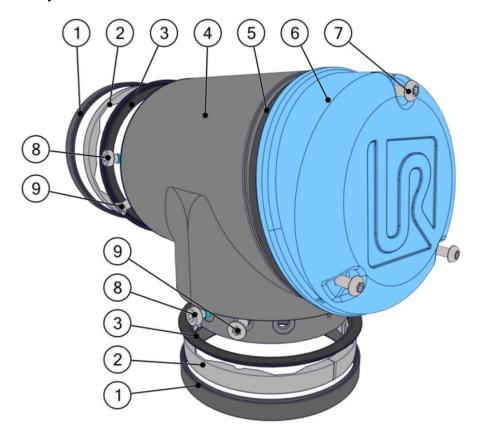
Wrist joint 3 for UR3e - 124002





| | Wrist joint 3 for UR3e – 124002 | | | | | |
|-----|---------------------------------|-----------------------|----------------|----------|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | | |
| 1 | 2 | Flat ring for size 0 | 103703 | 147 | | |
| 2 | 2 | Form ring for size 0 | 103703 | 147 | | |
| 3 | 2 | Wear ring for size 0 | 103703 | 147 | | |
| 4 | 1 | Wrist 3, size 0 | N/A | N/A | | |
| 5 | 1 | O-ring for lid size 0 | 103413 | 150 | | |
| 6 | 1 | Lid size 0 | 103413 | 150 | | |
| 7 | 3 | Screws for lid size 0 | 103413 | 150 | | |
| 8 | 12 | Screws | N/A | N/A | | |
| 9 | 6 | Screws counter sunk | N/A | N/A | | |

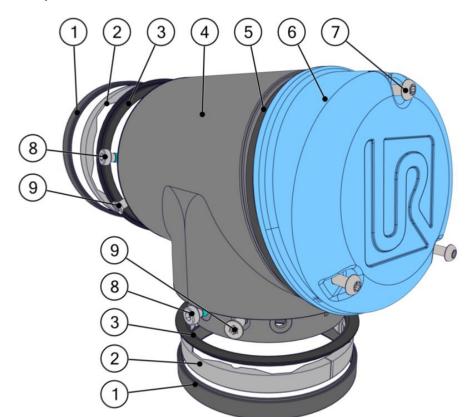
Wrist joint 3 for UR5e - 102414

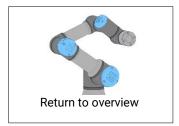




| | Wrist joint 3 for UR5e – 102414 | | | | | | |
|-----|---------------------------------|-----------------------|----------------|--|----------|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | | |
| 1 | 2 | Flat ring for size 1 | 103705 | | 148 | | |
| 2 | 2 | Form ring for size 1 | 103705 | | 148 | | |
| 3 | 2 | Wear ring for size 1 | 103705 | | 148 | | |
| 4 | 1 | Wrist 3, size 1 | N/A | | N/A | | |
| 5 | 1 | O-ring for lid size 1 | 103405 | | 151 | | |
| 6 | 1 | Lid size 1 | 103405 | | 151 | | |
| 7 | 3 | Screws for lid size 1 | 103405 | | 151 | | |
| 8 | 16 | Screws | N/A | | N/A | | |
| 9 | 6 | Screws counter sunk | N/A | | N/A | | |

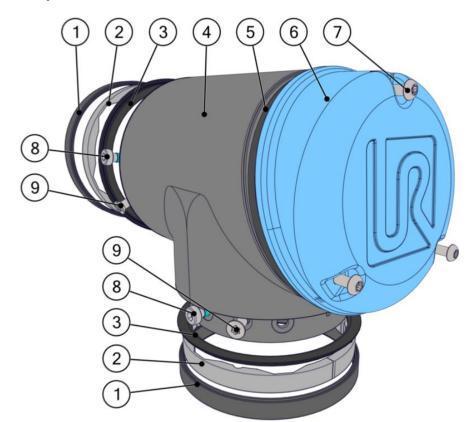
Wrist joint 3 for UR10e/UR16e - 102412





| | Wrist joint 3 for UR10e/UR16e - 102412 | | | | | |
|-----|--|-----------------------|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 2 | Flat ring for size 2 | 103700 | | 149 | |
| 2 | 2 | Form ring for size 2 | 103700 | | 149 | |
| 3 | 2 | Wear ring for size 2 | 103700 | | 149 | |
| 4 | 1 | Wrist 3, size 2 | N/A | | N/A | |
| 5 | 1 | O-ring for lid size 2 | 103410 | | 152 | |
| 6 | 1 | Lid size 2 | 103410 | | 152 | |
| 7 | 3 | Screws for lid size 2 | 103410 | | 152 | |
| 8 | 20 | Screws | N/A | | N/A | |
| 9 | 6 | Screws counter sunk | N/A | | N/A | |

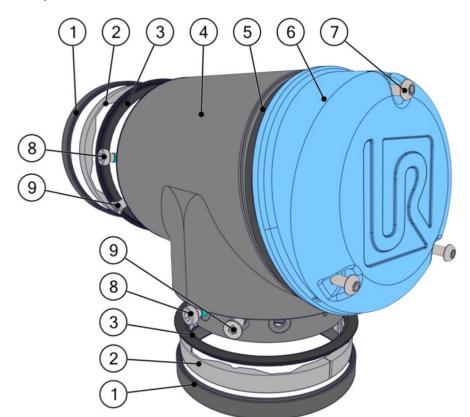
Wrist joint 2 for UR3e - 124110

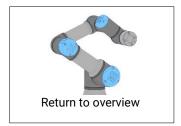




| | Wrist joint 2 for UR3e – 124110 | | | | | | |
|-----|---------------------------------|-----------------------|----------------|----------|--|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | | | |
| 1 | 2 | Flat ring for size 0 | 103703 | 147 | | | |
| 2 | 2 | Form ring for size 0 | 103703 | 147 | | | |
| 3 | 2 | Wear ring for size 0 | 103703 | 147 | | | |
| 4 | 1 | Wrist 2, size 0 | N/A | N/A | | | |
| 5 | 1 | O-ring for lid size 0 | 103413 | 150 | | | |
| 6 | 1 | Lid size 0 | 103413 | 150 | | | |
| 7 | 3 | Screws for lid size 0 | 103413 | 150 | | | |
| 8 | 12 | Screws | N/A | N/A | | | |
| 9 | 6 | Screws counter sunk | N/A | N/A | | | |

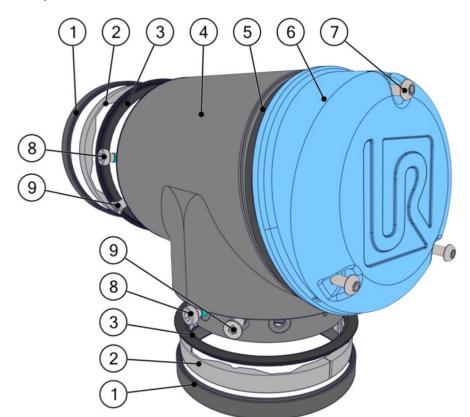
Wrist joint 2 for UR5e -124111





| | Wrist joint 2 for UR5e −124111 | | | | | | |
|-----|--------------------------------|-----------------------|----------------|--|----------|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | | |
| 1 | 2 | Flat ring for size 1 | 103705 | | 148 | | |
| 2 | 2 | Form ring for size 1 | 103705 | | 148 | | |
| 3 | 2 | Wear ring for size 1 | 103705 | | 148 | | |
| 4 | 1 | Wrist 2, size 1 | N/A | | N/A | | |
| 5 | 1 | O-ring for lid size 1 | 103405 | | 151 | | |
| 6 | 1 | Lid size 1 | 103405 | | 151 | | |
| 7 | 3 | Screws for lid size 1 | 103405 | | 151 | | |
| 8 | 16 | Screws | N/A | | N/A | | |
| 9 | 6 | Screws counter sunk | N/A | | N/A | | |

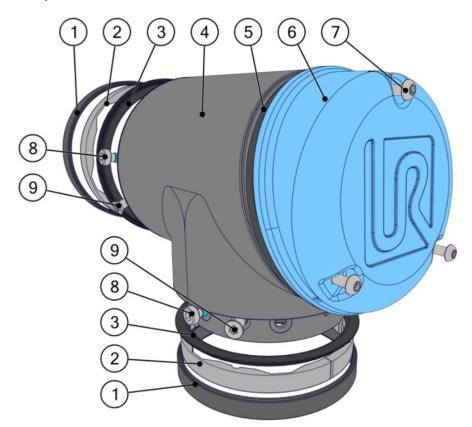
Wrist joint 2 for UR10e/UR16e -124112





| | Wrist joint 2 for UR10e/UR16e −124112 | | | | | | |
|-----|---------------------------------------|-----------------------|----------------|--|----------|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | | |
| 1 | 2 | Flat ring for size 2 | 103700 | | 149 | | |
| 2 | 2 | Form ring for size 2 | 103700 | | 149 | | |
| 3 | 2 | Wear ring for size 2 | 103700 | | 149 | | |
| 4 | 1 | Wrist 2, size 2 | N/A | | N/A | | |
| 5 | 1 | O-ring for lid size 2 | 103410 | | 152 | | |
| 6 | 1 | Lid size 2 | 103410 | | 152 | | |
| 7 | 3 | Screws for lid size 2 | 103410 | | 152 | | |
| 8 | 20 | Screws | N/A | | N/A | | |
| 9 | 6 | Screws counter sunk | N/A | | N/A | | |

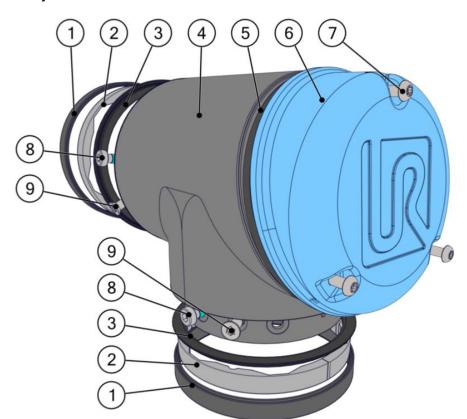
Wrist joint 1 for UR3e - 124001





| | Wrist joint 1 for UR3e – 124001 | | | | | |
|-----|---------------------------------|-----------------------|----------------|----------|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | | |
| 1 | 2 | Flat ring for size 0 | 103703 | 147 | | |
| 2 | 2 | Form ring for size 0 | 103703 | 147 | | |
| 3 | 2 | Wear ring for size 0 | 103703 | 147 | | |
| 4 | 1 | Wrist 1, size 0 | N/A | N/A | | |
| 5 | 1 | O-ring for lid size 0 | 103413 | 150 | | |
| 6 | 1 | Lid size 0 | 103413 | 150 | | |
| 7 | 3 | Screws for lid size 0 | 103413 | 150 | | |
| 8 | 12 | Screws | N/A | N/A | | |
| 9 | 6 | Screws counter sunk | N/A | N/A | | |

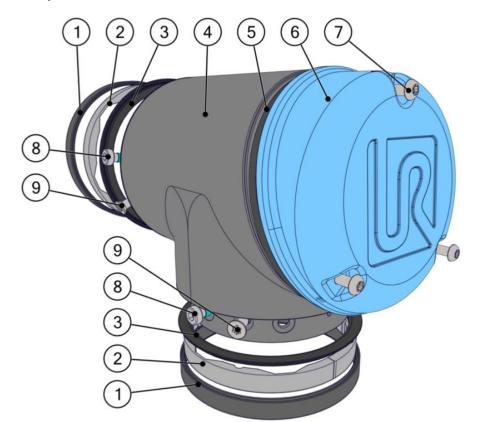
Wrist joint 1 for UR5e -102413





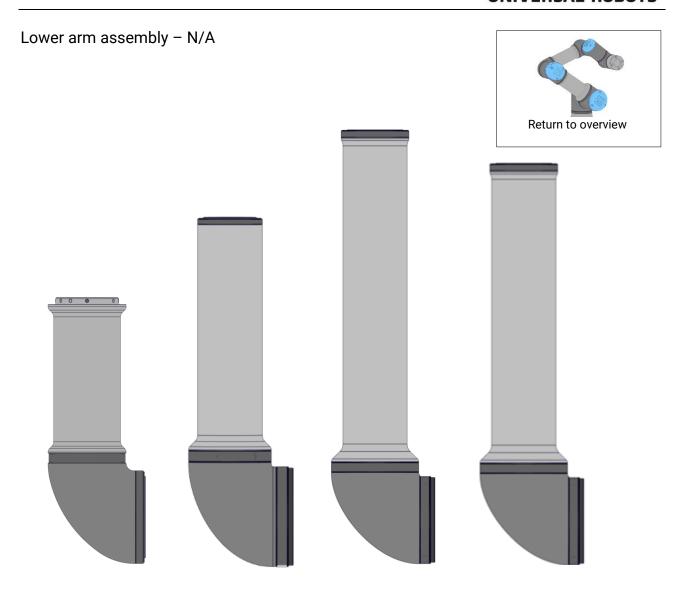
| | Wrist joint 1 for UR5e −102413 | | | | | | |
|-----|--------------------------------|-----------------------|----------------|--|----------|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | | |
| 1 | 2 | Flat ring for size 1 | 103705 | | 148 | | |
| 2 | 2 | Form ring for size 1 | 103705 | | 148 | | |
| 3 | 2 | Wear ring for size 1 | 103705 | | 148 | | |
| 4 | 1 | Wrist 1, size 1 | N/A | | N/A | | |
| 5 | 1 | O-ring for lid size 1 | 103405 | | 151 | | |
| 6 | 1 | Lid size 1 | 103405 | | 151 | | |
| 7 | 3 | Screws for lid size 1 | 103405 | | 151 | | |
| 8 | 16 | Screws | N/A | | N/A | | |
| 9 | 6 | Screws counter sunk | N/A | | N/A | | |

Wrist joint 1 for UR10e/UR16e -102411





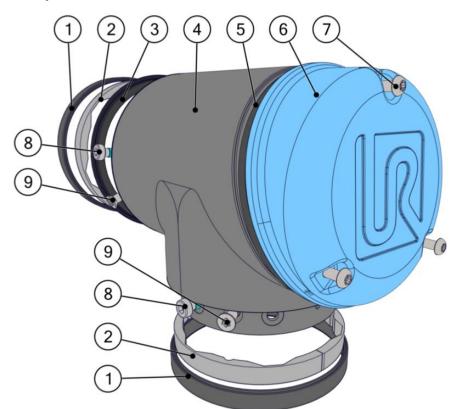
| | Wrist joint 1 for UR10e/UR16e −102411 | | | | | |
|-----|---------------------------------------|-----------------------|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 2 | Flat ring for size 2 | 103700 | | 149 | |
| 2 | 2 | Form ring for size 2 | 103700 | | 149 | |
| 3 | 2 | Wear ring for size 2 | 103700 | | 149 | |
| 4 | 1 | Wrist 1, size 2 | N/A | | N/A | |
| 5 | 1 | O-ring for lid size 2 | 103410 | | 152 | |
| 6 | 1 | Lid size 2 | 103410 | | 152 | |
| 7 | 3 | Screws for lid size 2 | 103410 | | 152 | |
| 8 | 20 | Screws | N/A | | N/A | |
| 9 | 6 | Screws counter sunk | N/A | | N/A | |



| | Lower arm assembly – N/A | | | | | |
|-----|--------------------------|--------------------------|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| | 1 | Lower arm assembly UR3e | N/A | | N/A | |
| | 1 | Lower arm assembly UR5e | N/A | | N/A | |
| | 1 | Lower arm assembly UR10e | N/A | | N/A | |
| | 1 | Lower arm assembly UR16e | N/A | | N/A | |

Contact your preferred distributor for part number and availability.

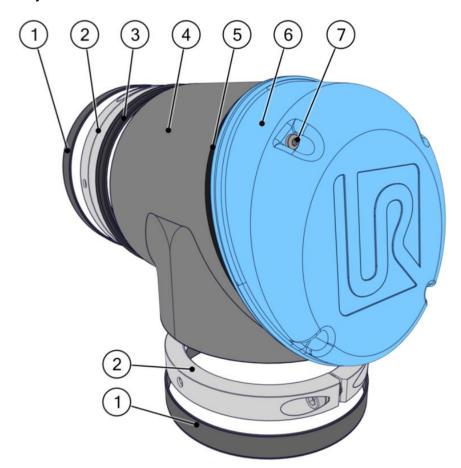
Elbow joint for UR3e- 124011





| | Elbow joint for UR3e- 124011 | | | | | |
|-----|------------------------------|-----------------------|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 2 | Flat ring for size 1 | 103703 | | 147 | |
| 2 | 2 | Form ring for size 1 | 103703 | | 147 | |
| 3 | 1 | Wear ring for size 1 | 103703 | | 147 | |
| 4 | 1 | Elbow, size 1 | N/A | | N/A | |
| 5 | 1 | O-ring for lid size 1 | 103413 | | 150 | |
| 6 | 1 | Lid size 1 | 103413 | | 150 | |
| 7 | 3 | Screws for lid size 1 | 103413 | | 150 | |
| 8 | 16 | Screws | N/A | | N/A | |
| 9 | 6 | Screws counter sunk | N/A | | N/A | |

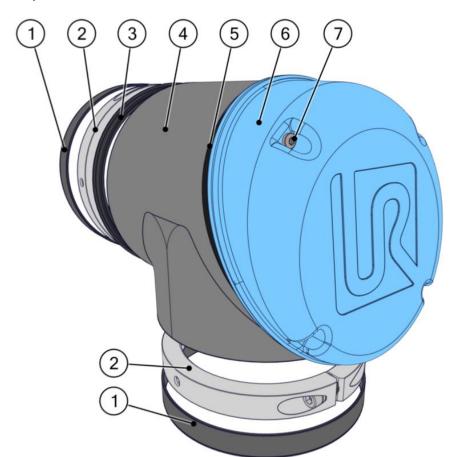
Elbow joint for UR5e -124031





| | Elbow joint for UR5e −124031 | | | | | | |
|-----|------------------------------|---|----------------|----------|--|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | | | |
| 1 | 2 | Flat ring for size 3 | 103705 | 148 | | | |
| 2 | 2 | Bracket connection incl. bolts and seals size 3 | N/A | N/A | | | |
| 3 | 1 | Wear ring size 3 | 103705 | 148 | | | |
| 4 | 1 | Elbow, size 3 | N/A | N/A | | | |
| 5 | 1 | O-ring for lid size 3 | 103405 | 151 | | | |
| 6 | 1 | Lid size 3 | 103405 | 151 | | | |
| 7 | 4 | Screws for lid size 3 | 103405 | 151 | | | |

Elbow joint for UR10e/UR16e -124031

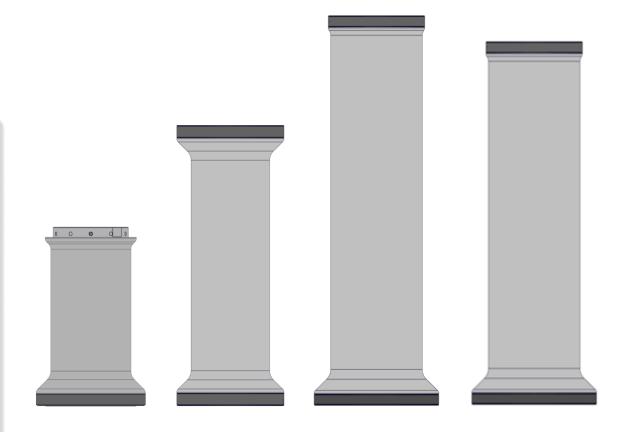




| | Elbow joint for UR10e/UR16e -124031 | | | | |
|-----|-------------------------------------|---|----------------|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | |
| 1 | 2 | Flat ring for size 3 | 103700 | 149 | |
| 2 | 2 | Bracket connection incl. bolts and seals size 1 | N/A | N/A | |
| 3 | 1 | Wear ring size 3 | 103700 | 149 | |
| 4 | 1 | Elbow, size 3 | N/A | N/A | |
| 5 | 1 | O-ring for lid size 3 | 103410 | 152 | |
| 6 | 1 | Lid size 3 | 103410 | 152 | |
| 7 | 3 | Screws for lid size 3 | 103410 | 152 | |

Upper arm - N/A

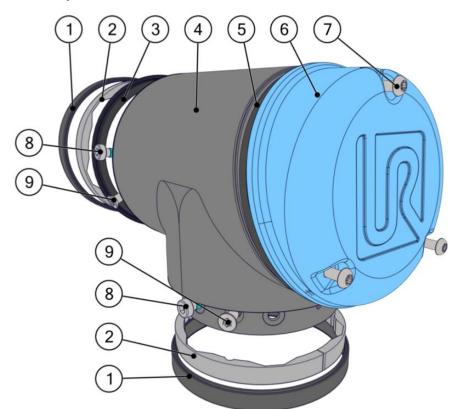




| | Upper arm assembly – N/A | | | | |
|-----|--------------------------|--------------------------|----------------|--|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. |
| | 1 | Upper arm assembly UR3e | N/A | | N/A |
| | 1 | Upper arm assembly UR5e | N/A | | N/A |
| | 1 | Upper arm assembly UR10e | N/A | | N/A |
| | 1 | Upper arm assembly UR16e | N/A | | N/A |

Contact your preferred distributor for part number and availability.

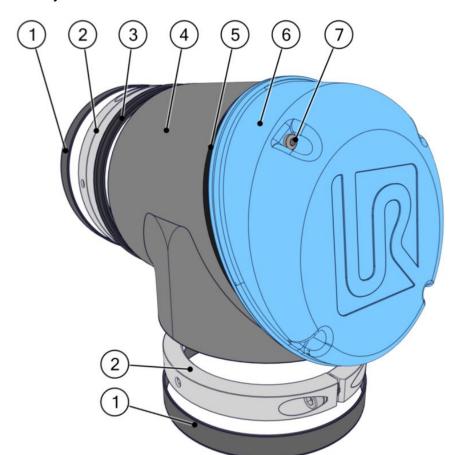
Shoulder joint for UR3e - 124021





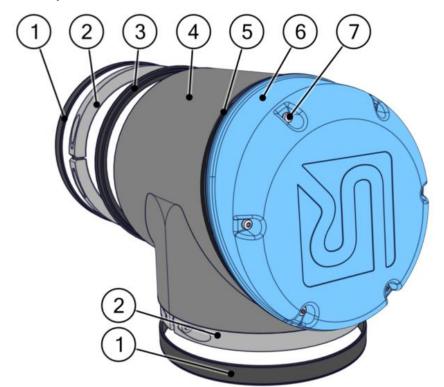
| | Shoulder joint for UR3e – 124021 | | | | |
|-----|----------------------------------|-----------------------|----------------|----|--------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PA | GE NO. |
| 1 | 2 | Flat ring for size 2 | 103703 | | 147 |
| 2 | 2 | Form ring for size 2 | 103703 | | 147 |
| 3 | 1 | Wear ring for size 2 | 103703 | | 147 |
| 4 | 1 | Shoulder, size 2 | N/A | | N/A |
| 5 | 1 | O-ring for lid size 2 | 103413 | | 150 |
| 6 | 1 | Lid size 2 | 103413 | | 150 |
| 7 | 3 | Screws for lid size 2 | 103413 | | 150 |
| 8 | 20 | Screws | N/A | | N/A |
| 9 | 6 | Screws counter sunk | N/A | | N/A |

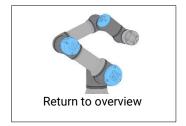
Shoulder joint for UR5e -124031





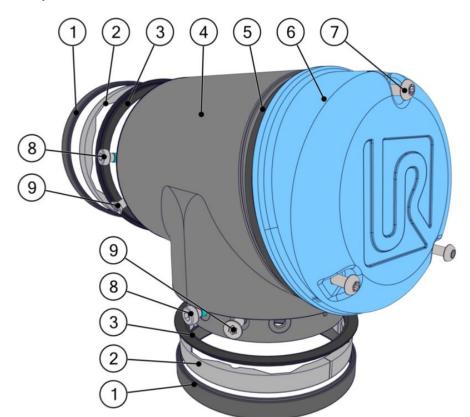
| | Shoulder joint for UR5e −124031 | | | |
|-----|---------------------------------|---|----------------|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. |
| 1 | 2 | Flat ring for size 3 | 103705 | 148 |
| 2 | 2 | Bracket connection incl. bolts and seals size 3 | N/A | N/A |
| 3 | 1 | Wear ring size 3 | 103705 | 148 |
| 4 | 1 | Shoulder, size 3 | N/A | N/A |
| 5 | 1 | O-ring for lid size 3 | 103405 | 151 |
| 6 | 1 | Lid size 3 | 103405 | 151 |
| 7 | 4 | Screws for lid size 3 | 103405 | 151 |





| | Shoulder joint for UR10e/UR16e −124041 | | | | |
|-----|--|---|----------------|---------|----|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO | 0. |
| 1 | 2 | Flat ring for size 4 | 103700 | 149 | |
| 2 | 2 | Bracket connection incl. bolts and seals size 4 | N/A | N/A | |
| 3 | 1 | Wear ring size 4 | 103700 | 149 | |
| 4 | 1 | Shoulder, size 4 | N/A | N/A | |
| 5 | 1 | O-ring for lid size 4 | 103410 | 152 | |
| 6 | 1 | Lid size 4 | 103410 | 152 | |
| 7 | 6 | Screws for lid size 4 | 103410 | 152 | |

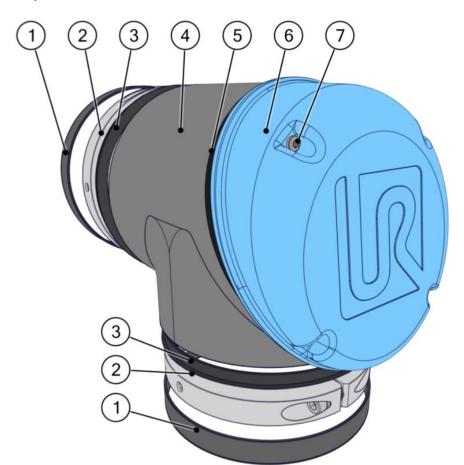
Base joint for UR3e - 124021

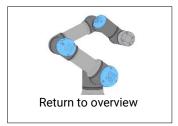




| | Base joint for UR3e – 124021 | | | | |
|-----|------------------------------|-----------------------|----------------|--|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. |
| 1 | 2 | Flat ring for size 2 | 103703 | | 147 |
| 2 | 2 | Form ring for size 2 | 103703 | | 147 |
| 3 | 2 | Wear ring for size 2 | 103703 | | 147 |
| 4 | 1 | Base joint, size 2 | N/A | | N/A |
| 5 | 1 | O-ring for lid size 2 | 103413 | | 150 |
| 6 | 1 | Lid size 2 | 103413 | | 150 |
| 7 | 3 | Screws for lid size 2 | 103413 | | 150 |
| 8 | 20 | Screws | N/A | | N/A |
| 9 | 6 | Screws counter sunk | N/A | | N/A |

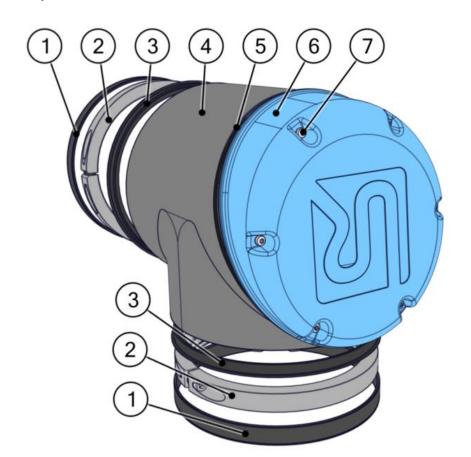
Base joint for UR5e - 124031





| | Base joint for UR5e – 124031 | | | |
|-----|------------------------------|---|----------------|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. |
| 1 | 2 | Flat ring for size 3 | 103705 | 148 |
| 2 | 2 | Bracket connection incl. bolts and seals size 3 | N/A | N/A |
| 3 | 2 | Wear ring size 3 | 103705 | 148 |
| 4 | 1 | Base joint, size 3 | N/A | N/A |
| 5 | 1 | O-ring for lid size 3 | 103405 | 151 |
| 6 | 1 | Lid size 3 | 103405 | 151 |
| 7 | 3 | Screws for lid size 3 | 103405 | 151 |

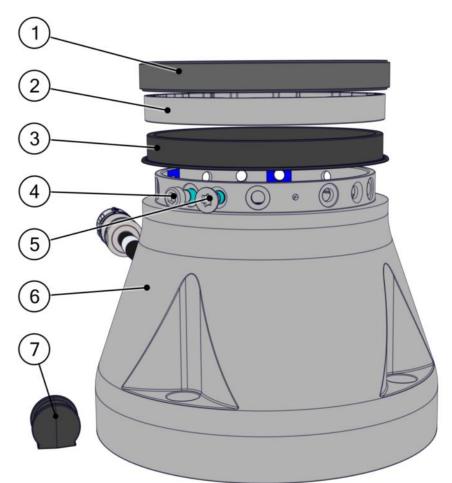
Base joint for UR10e/UR16e -124041





| | Base joint for UR10e/UR16e −124041 | | | |
|-----|------------------------------------|---|----------------|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. |
| 1 | 2 | Flat ring for size 4 | 103700 | 149 |
| 2 | 2 | Bracket connection incl. bolts and seals size 4 | N/A | N/A |
| 3 | 2 | Wear ring size 4 | 103700 | 149 |
| 4 | 1 | Base joint, size 4 | N/A | N/A |
| 5 | 1 | O-ring for lid size 4 | 103410 | 152 |
| 6 | 1 | Lid size 4 | 103410 | 152 |
| 7 | 6 | Screws for lid size 4 | 103410 | 152 |

Base with Robot Arm cable for UR3e - 122083

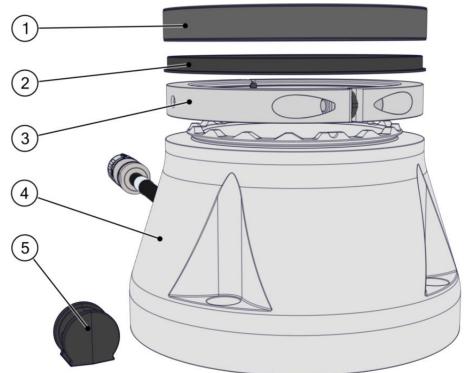




| | Base with Robot Arm cable for UR3e – 122083 | | | | |
|-----|---|--------------------------|----------------|--|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. |
| 1 | 1 | Flat ring for size 2 | 103703 | | 147 |
| 2 | 1 | Form ring for size 2 | 103703 | | 147 |
| 3 | 1 | Wear ring for size 2 | 103703 | | 147 |
| 4 | 10 | Screws | N/A | | N/A |
| 5 | 3 | Screws counter sunk | N/A | | N/A |
| 6 | 1 | Base incl. cable, size 2 | N/A | | N/A |
| 7 | 1 | Plug for Base | N/A | | N/A |



Base with Robot Arm cable for UR5e -122085

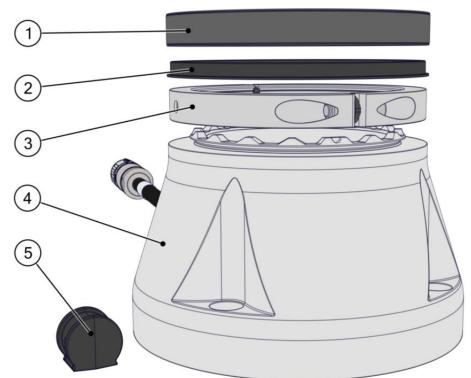




| | Base with Robot Arm cable for UR5e −122085 | | | |
|-----|--|---|----------------|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. |
| 1 | 1 | Flat ring for size 3 | 103705 | 148 |
| 2 | 1 | Wear ring for size 3 | 103705 | 148 |
| 3 | 1 | Bracket connection incl. bolts and seals size 3 | N/A | N/A |
| 5 | 1 | Base incl. cable, size 3 | N/A | N/A |
| 6 | 1 | Plug for Base | N/A | N/A |



Base with Robot Arm cable for UR10e/UR16e -122080

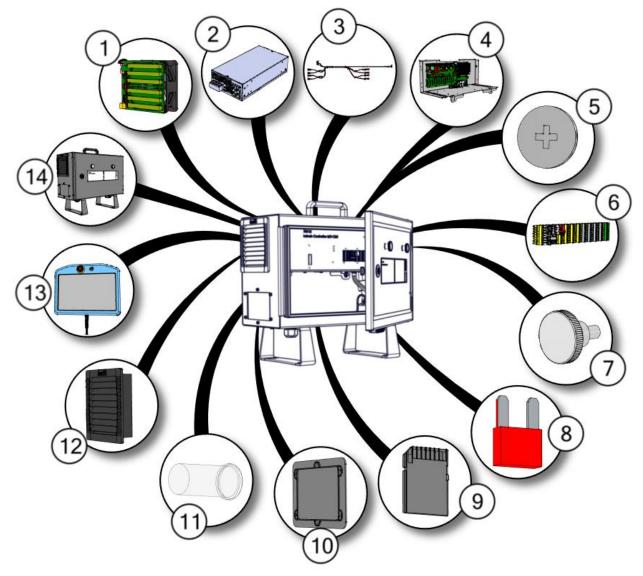




| | Base with Robot Arm cable for UR10e/UR16e −122080 | | | | |
|-----|---|---|----------------|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | |
| 1 | 1 | Flat ring for size 4 | 103700 | 149 | |
| 2 | 1 | Wear ring for size 4 | 103700 | 149 | |
| 3 | 1 | Bracket connection incl. bolts and seals size 4 | N/A | N/A | |
| 5 | 1 | Base incl. cable, size 4 | N/A | N/A | |
| 6 | 1 | Plug for Base | N/A | N/A | |

R

8.2 Control Box



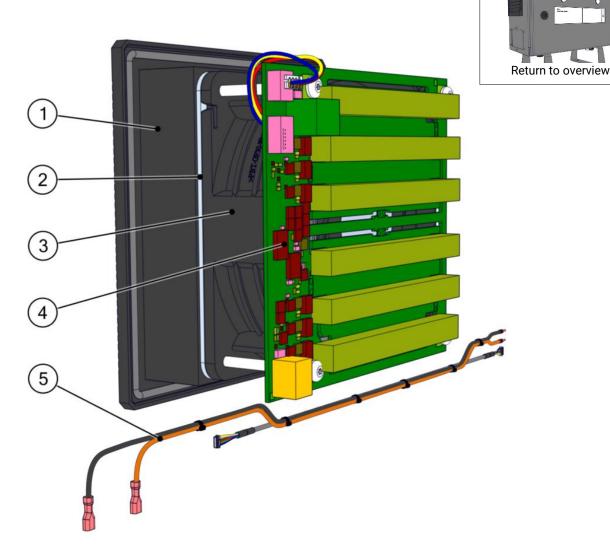
Click on the page no. in the right column to see part in detail or go to the page.

| | 1 3 | 1 3 |
|-----|---|----------------------|
| NO. | DESCRIPTION | PART NUMBER(S) |
| 1 | Fan & Energy Eater | 122750 |
| 2 | Power Supply | 177525/177526/177005 |
| 3 | Wire bundle Power Supply Unit | 164071/164072 |
| 4 | Control Board | 124511 |
| 5 | Battery for Control Board | 170009 |
| 6 | Terminals for Control Board | 104007 |
| 7 | Teach Pendant and Control Box mounting bolt | 105202 |
| 8 | Fuse for Control Board | 170008 |
| 9 | SD Card for Control Board | 170010/170013 |
| 10 | Cover plate with seal for Control Box | 103240 |
| 11 | Light Pipe for Control Box | 170007 |
| 12 | Fan housing and filter for Control Box | 104008/170020 |
| 13 | Teach Pendant | 124091 |
| 14 | Control Box | 124500/124510 |
| | | |

NOTE: If nothing is mentioned, the parts will also fit OEM version Control Box.

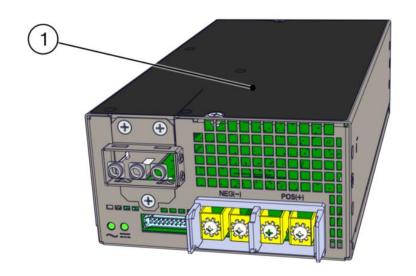


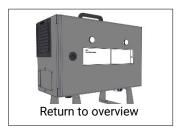
Fan & Energy Eater assembly – 122750



| Fan & Energy Eater assembly – 122750 | | | | |
|--------------------------------------|------|---------------------------------------|----------------|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. |
| 1 | 1 | Housing for filter incl. filter sheet | 104008 | 193 |
| 2 | 1 | Plate Fan Spacer Disc | N/A | N/A |
| 3 | 1 | Fan | N/A | N/A |
| 4 | 1 | Energy Eater PCB | N/A | N/A |
| 5 | 1 | Wire bundle | N/A | N/A |

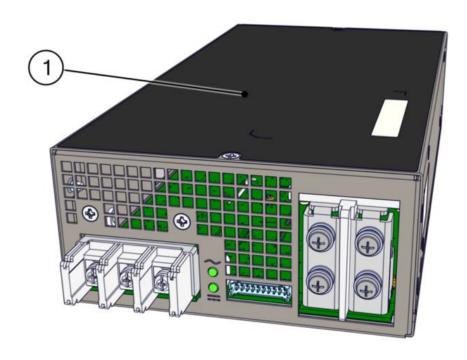
Power Supply for UR3e - 177525





| Power Supply for UR3e – 177525 | | | | | | |
|--------------------------------|------|-----------------------|----------------|----------|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | | |
| 1 | 1 | Power Supply for UR3e | 177525 | 182 | | |

Power Supply for UR5e/UR10e/UR16e/OEM AC - 177526

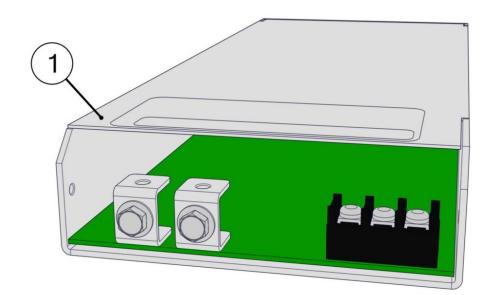




| | Power Supply for UR5e/UR10e/UR16e/OEM AC - 177526 | | | | | | |
|-----|---|--|----------------|----------|--|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | | | |
| 1 | 1 | Power Supply for UR5e/UR10e/UR16e/OEM AC | 177526 | 182 | | | |



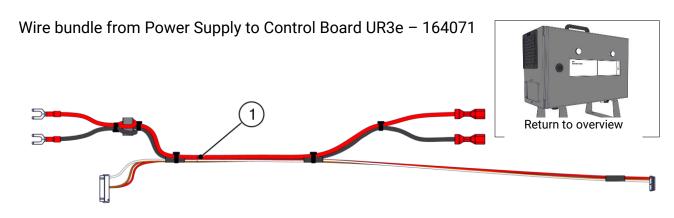
Power Supply for OEM DC - 177005





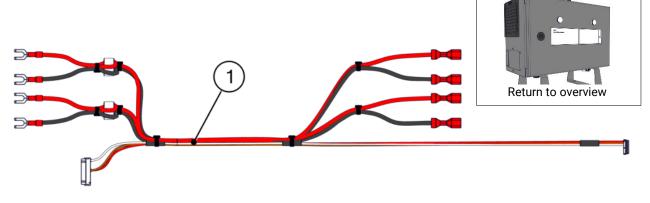
| | Power Supply for OEM DC – 177005 | | | | | | |
|-----|----------------------------------|-------------------------|----------------|----------|--|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | | | |
| 1 | 1 | Power Supply for OEM DC | 177005 | 183 | | | |





| Wire bundle from Power Supply to Control Board UR3e – 164071 | | | | | | |
|--|------|---|----------------|----------|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | | |
| 1 | 1 | Wire bundle from Power Supply to Control Board UR3e | 164071 | 184 | | |

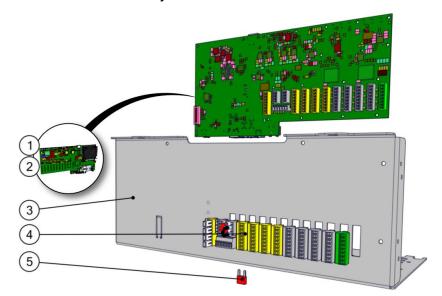
Wire bundle from Power Supply to Control Board UR5e/UR10e/UR16e/OEM AC - 164072



| Wire bundle from Power Supply to Control Board UR5e/UR10e/UR16e/OEM AC- 164072 | | | | | | |
|---|------|---|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 1 | Wire bundle from Power Supply to Control Board UR5e, UR10e, UR16e, OEM AC | 164072 | | 184 | |



Control Board Assembly - 124511

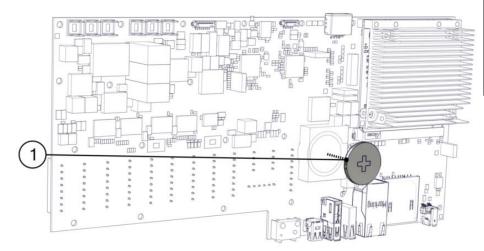




| Control Board Assembly – 124511 | | | | | |
|---------------------------------|------|-------------------------------|----------------|--|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. |
| 1 | 1 | Control Board PCB | N/A | | N/A |
| 2 | 1 | Battery for Control Board PCB | 170009 | | 186 |
| 3 | 1 | Control Board Bracket | N/A | | N/A |
| 4 | 1 | Control Board Terminal set | 104007 | | 187 |
| 5 | 1 | Fuse Mini Blade 10A | 170008 | | 189 |



Battery for Control Board PCB - 170009

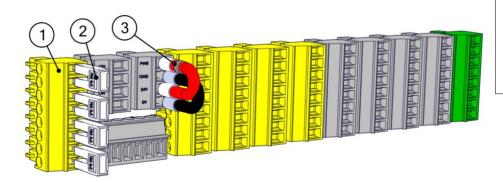




| Battery for Control Board PCB - 170009 | | | | | | |
|--|------|-------------------------------|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 1 | Battery for Control Board PCB | 170009 | | 186 | |



Terminal set for Control Board - 104007



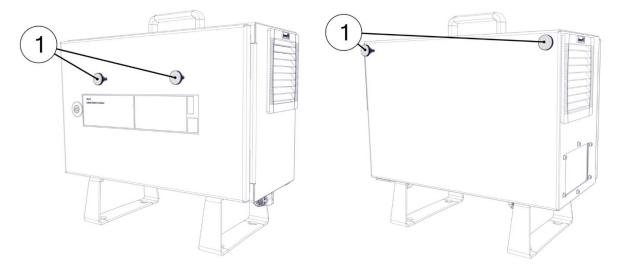


| Terminal set for Control Board – 104007 | | | | | | |
|---|------|--------------------------------|----------------|---------|----|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO | 0. | |
| 1 | 13 | Terminals for Control Board | 104007 | 187 | | |
| 2 | 4 | Jumpers for Safety Terminal | N/A | N/A | | |
| 3 | 2 | Jumpers for external 24V power | N/A | N/A | | |



Teach Pendant and Control Box mounting bolts – 105202

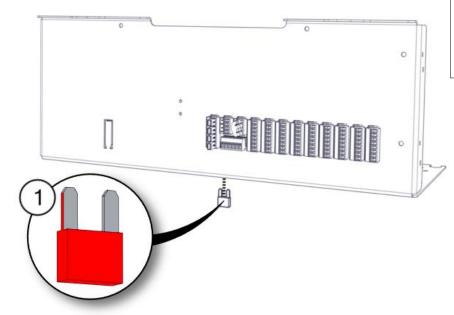




| Teach Pendant and Control Box mounting bolts – 105202 | | | | | | |
|---|------|--|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 10 | Teach Pendant and Control Box mounting bolts | 105202 | | 188 | |



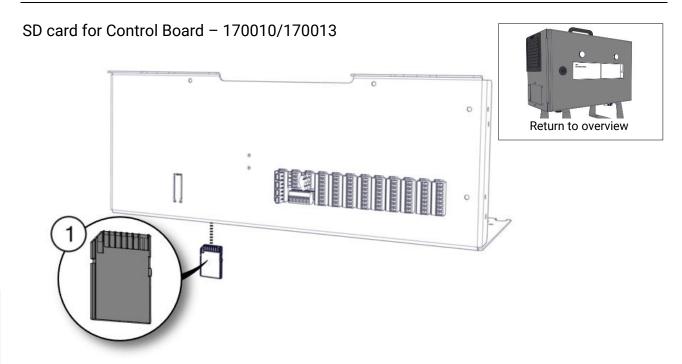
Fuse for Control Board - 170008





| Fuse for Control Board – 170008 | | | | | | |
|---------------------------------|------|---------------------|----------------|----------|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | | |
| 1 | 10 | Fuse Mini Blade 10A | 170008 | 189 | | |

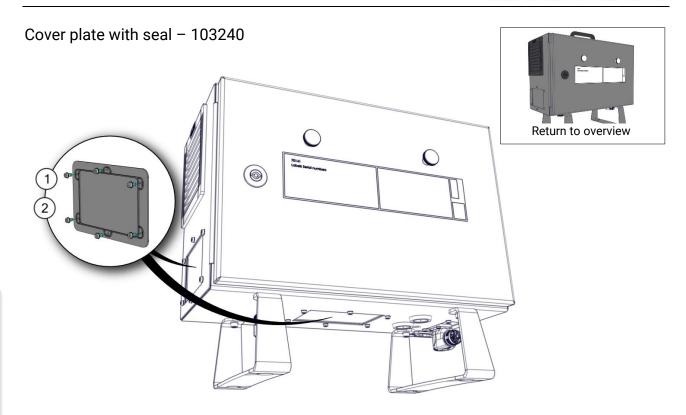




| SD Card for Control Board incl. Software and License - 170010 | | | | | | |
|---|------|--|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 1 | SD Card for Control Board excl. software | 170010 | | 190 | |

| SD Card for Control Board excl. software - 170013 | | | | | | |
|---|------|--|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 1 | SD Card for Control Board incl. Software and License | 170013 | | 190 | |

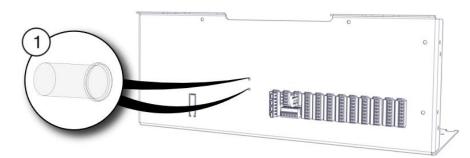




| Cover plate with seal for Control Box - 103240 | | | | | | |
|--|------|--|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 2 | Cover plate with seal for Control Box | 103240 | | 191 | |
| 2 | 12 | Screw and tooth washer for cover plate | N/A | | N/A | |



Light pipes for control box - 170007

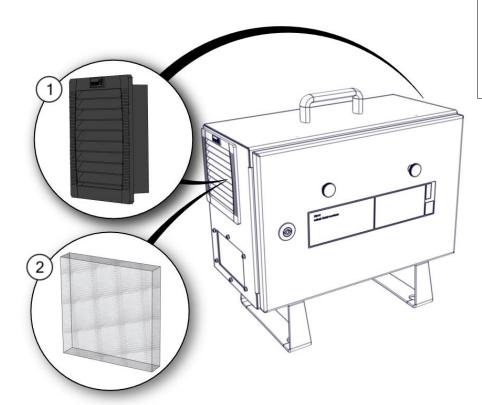




| Light pipes for control box - 170007 | | | | | | |
|--------------------------------------|------|-----------------------------|----------------|---------|----|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO |). | |
| 1 | 2 | Light Pipes for Control Box | 170007 | 192 | | |

UNIVERSAL ROBOTS

Fan housing and filter for Control Box – 104008/170020

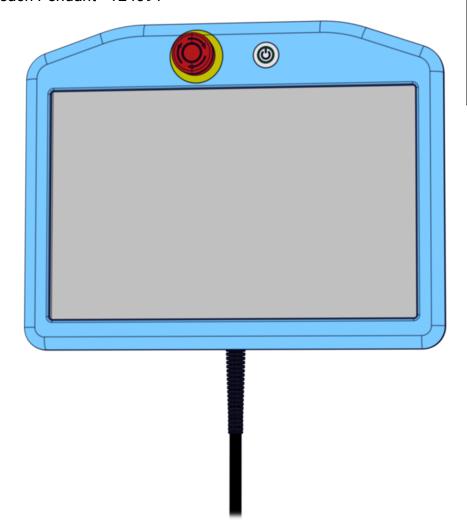


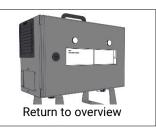


| Housing and filter for Control Box incl. filter sheets - 104008 | | | | | |
|---|------|-------------------------|----------------|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | |
| 1 | 1 | Housing for Control Box | 104008 | 193 | |
| 2 | 5 | Filter material sheets | 170020 | 193 | |

| Filter material sheets - 170020 | | | | | |
|---------------------------------|------|------------------------|----------------|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | |
| 2 | 5 | Filter material sheets | 170020 | 193 | |

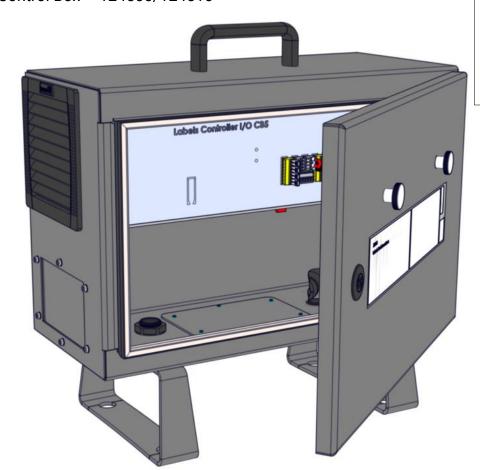
Teach Pendant - 124091

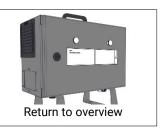




| Teach Pendant - 124091 | | | | | |
|------------------------|------|---------------|----------------|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | |
| 1 | 1 | Teach Pendant | 124091 | 194 | |

Control Box - 124500/124510

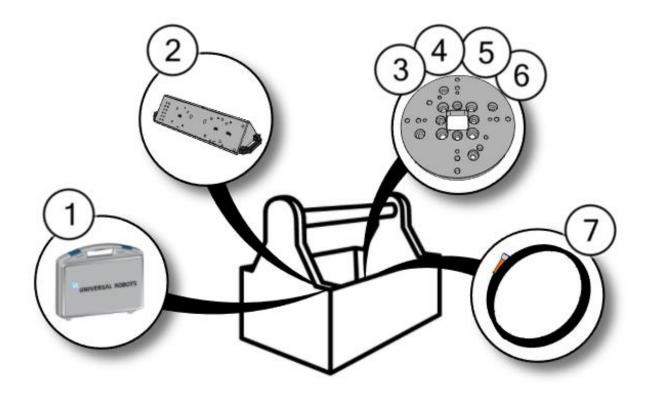




| Control Box for UR3e excl. Teach Pendant - 124500 | | | | | | |
|---|------|--|----------------|----------|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. | | |
| 1 | 1 | Control Box for UR3e excl. Teach Pendant | 124500 | 195 | | |

| | Control Box for UR5e/UR10e/UR16e excl. Teach Pendant - 124510 | | | | | |
|-----|---|--|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 1 | Control Box for UR5e/UR10e/UR16e excl. Teach Pendant | 124510 | | 195 | |

8.3 Tools



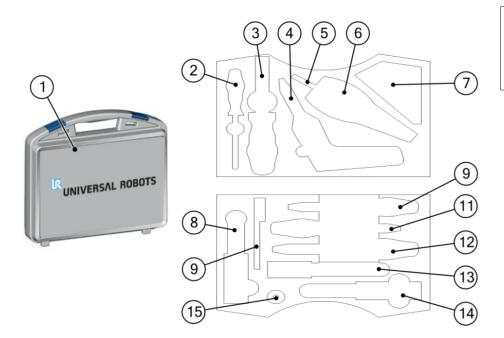
Click on the page no. in the right column to see part in detail or go to the page.

| NO. | DESCRIPTION | PART NUMBER(S) |
|-----|--|----------------|
| 1 | Service Tools - UR3e/UR5e/UR10e/UR16e | 109011 |
| 2 | Dual Robot Calibration Tooling Complete | 185500 |
| 3 | Mounting plate Robot Arm UR5e (Item profile) | 131501 |
| 4 | Mounting plate Robot Arm UR5e (BOSCH profile) | 131501 |
| 5 | Mounting plate Robot Arm UR3e (Item & BOSCH profile) | 131502 |
| 6 | Mounting plate Robot Arm UR5e/UR10e/UR16e (Item & BOSCH profile) | 131503 |
| 7 | Cable for tool external | 131510 |

| PAGE NO. |
|----------|
| 197 |
| 198 |
| 199 |
| 200 |
| 201 |
| 202 |
| 203 |

R

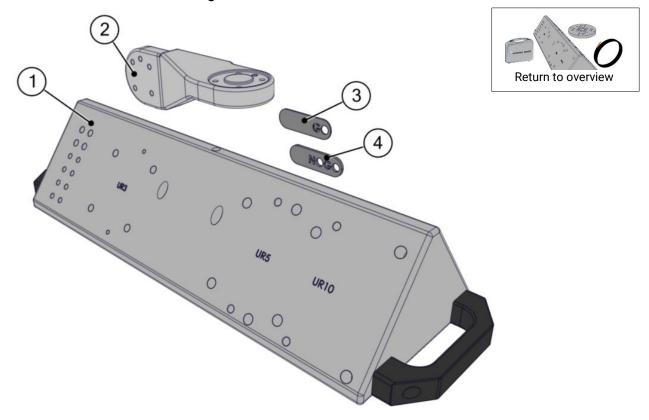
Service tool set - 109011





| | Service Tool set - 109011 | | | | | |
|-----|---------------------------|--|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 1 | Service tool set | 109011 | | 197 | |
| 2 | 1 | Screwdriver Flat 2.5 | N/A | | N/A | |
| 3 | 1 | Multi-bit tool incl. bits | 109117 | | N/A | |
| 4 | 1 | Screwdriver hex key 4mm. – 5.0Nm for e-Series | 109113 | | N/A | |
| 5 | 1 | Socket bit 10mm. for Control Box | 109118 | | N/A | |
| 6 | 1 | Needle nose pliers ESD | 109122 | | N/A | |
| 7 | 1 | ESD Wrist band | 109180 | | N/A | |
| 7 | 1 | By-pass cable | N/A | | N/A | |
| 8 | 1 | Torque wrench hex 10.0mm. – 8.0Nm for CB- | 109107 | | N/A | |
| | | Series | | | | |
| 9 | 1 | Spanner 5.5mm. | 109101 | | N/A | |
| 9 | 1 | Spanner 7.0mm. | 109102 | | N/A | |
| 9 | 1 | Spanner 10.0mm. | 109110 | | N/A | |
| 10 | 1 | Torque screwdriver ESD TX8 - 0.4Nm | 109114 | | N/A | |
| 11 | 1 | Torque screwdriver ESD TX10 - 1.3Nm | 109115 | | N/A | |
| 12 | 1 | Torque screwdriver ESD TX20 – 3.0Nm | 109116 | | N/A | |
| 13 | 1 | Torque wrench hex 5.5mm. – 1.3Nm for CB-Series | 109105 | | N/A | |
| 14 | 1 | Torque wrench hex 7.0mm. – 2.6Nm for CB-Series | 109106 | | N/A | |
| 15 | 1 | Torx TX10 bit for 109114 | 109120 | | N/A | |

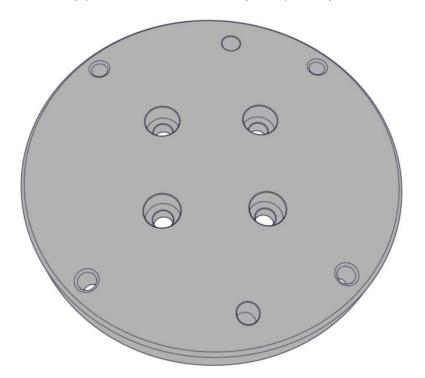
Dual Robot Calibration Tooling - 185500



| | Dual Robot Calibration Tooling - 185500 | | | | | | |
|-----|---|---|----------------|--|----------|--|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | | |
| 1 | 1 | Tooling Dual Robot Calibration Horse complete with mounting screws | N/A | | N/A | | |
| 2 | 1 | Tooling Dual Robot Calibration Tool Connector complete with mounting screws | N/A | | N/A | | |
| 3 | 1 | Tooling Calibration GO tool | N/A | | N/A | | |
| 4 | 1 | Tooling Calibration NOGO tool | N/A | | N/A | | |



Mounting plate Robot Arm UR5e(Item profile) - 131501

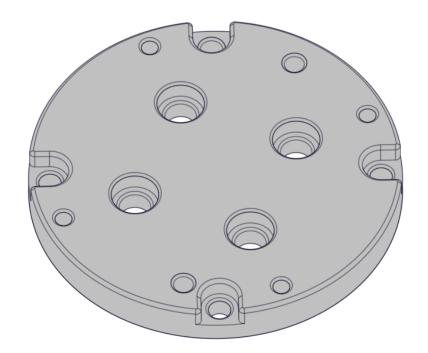




| Mounting plate Robot Arm UR5e(Item profile) - 131501 | | | | | |
|--|------|---|----------------|--|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. |
| 1 | 1 | Mounting plate Robot Arm UR5e(Item profile) | 131501 | | 199 |



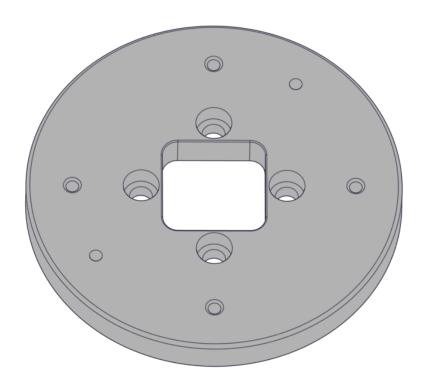
Mounting plate Robot Arm UR5e(BOSCH profile) - 131502





| Mounting plate Robot Arm UR5e(BOSCH profile) - 131502 | | | | | | |
|---|------|--|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 1 | Mounting plate Robot Arm UR5e(BOSCH profile) | 131502 | | 200 | |

Mounting plate Robot Arm UR3e(Item & BOSCH profile) - 135103

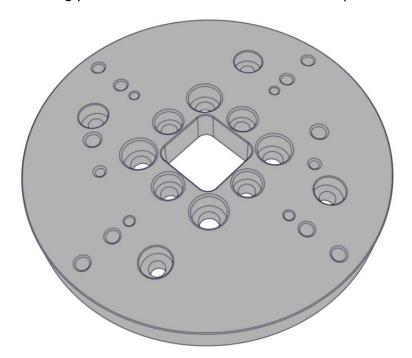




| Mounting plate Robot Arm UR3e(Item & BOSCH profile) - 135103 | | | | |
|--|------|--|----------------|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | PAGE NO. |
| 1 | 1 | Mounting plate Robot Arm UR3e (Item & BOSCH profile) | 131503 | 201 |



Mounting plate Robot Arm UR5e/UR10e/UR16e(Item & BOSCH profile) - 131510





| Mounting plate Robot Arm UR5e/UR10e/UR16e(Item & BOSCH profile) - 131510 | | | | | |
|--|------|--|----------------|--|----------|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. |
| 1 | 1 | Mounting plate Robot Arm UR5e/UR10e/UR16e (Item & BOSCH profile) | 131510 | | 202 |



Cable for tool external - 173101





| Cable for tool external - 173101 | | | | | | |
|----------------------------------|------|-------------------------|----------------|--|----------|--|
| NO. | QTY. | DESCRIPTION | PART NUMBER(S) | | PAGE NO. | |
| 1 | 1 | Cable for tool external | 173101 | | 203 | |

NOTE: Cable is with 90° bend connector - not shown on above image