

roboLink® - Apero®

Joints

Motor kits

INI kits

Accessories



roboLink® Apiro® | Product range

Apiro® worm gear joints, basic shapes



Joint



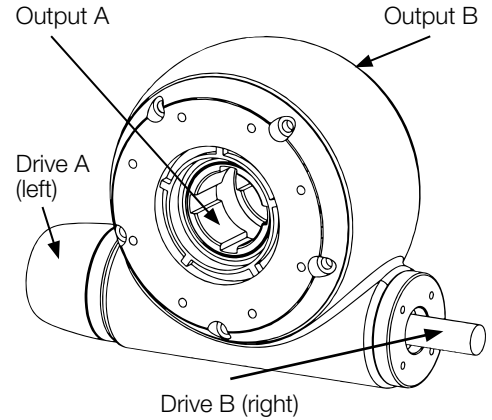
Joint with turntable



Joint with coupling



Delivery time
2–3 days



Technical data

| Designation | Transmission | Self-locking | Drive torque [Nm] | Moment of break- age [Nm] | F stat. axial [N] | Backlash [°] |
|----------------------|--------------|--------------|----------------------|---------------------------------|-------------------------|-----------------|
| Joint | 1:4 | – | 2.5 | 15 | 250 | < 0.5 |
| Joint with turntable | 1:32 | – | 2.5 | 20 | 250 | < 0.5 |
| Joint with coupling | 1:64 | Yes | 1.5 | 10 | 250 | < 0.5 |

Technical data

| Designation | | |
|------------------------------|-----------|-----------|
| Joint | | |
| Drive A | Output A | Drive B |
| HR | – | Drive pin |
| HK/PA/HR | – | Drive pin |
| HR | – | Profile |
| HK/PA/HR | – | Profile |
| Profile | – | Profile |
| Joint with turntable | | |
| HR | Turntable | Drive pin |
| HK/PA/HR | Turntable | HR |
| HR | Turntable | Profile |
| HK/PA/HR | Turntable | Profile |
| Profile | Turntable | Profile |
| Joint with coupling Ø 4–12mm | | |
| HR | Coupling | Drive pin |
| HK/PA/HR | Coupling | Drive pin |
| HR | Coupling | Profile |
| HK/PA/HR | Coupling | Profile |
| Profile | Coupling | Profile |



RL-A10.0105



Order example

RL-A10.0105

Apiro® joint with drive pin and hand wheel (HR)



RL-A10.0148.100



Order example

RL-A10.0148.100

Apiro® joint with 100mm profile, manual clamp (HK), position indicator (PA) and hand wheel (HR)



RL-A10.0160.100.100



Order example

RL-A10.0148.100

Apiro® joint with profile 100mm left, profile 100mm right

| Transmission 1:4 | Transmission 1:32 | Transmission 1:64 |
|---------------------|----------------------|----------------------|
| RL-A10.0105 | RL-A10.0106 | RL-A10.107 |
| RL-A10.0111 | RL-A10.0112 | RL-A10.113 |
| RL-A10.108.□ | RL-A10.0109.□ | RL-A10.0110.□ |
| RL-A10.0148.□ | RL-A10.0149.□ | RL-A10.0161.□ |
| RL-A10.0160.□.□ | RL-A10.0115.□.□ | RL-A10.0161.□.□ |
| RL-A10.0138 | RL-A10.0114 | RL-A10.0139 |
| RL-A10.0132 | RL-A10.0133 | RL-A10.0134 |
| RL-A10.0145.□ | RL-A10.0146.□ | RL-A10.0147.□ |
| RL-A10.0151.□ | RL-A10.0152.□ | RL-A10.0153.□ |
| RL-A10.0157.□.□ | RL-A10.0158.□.□ | RL-A10.0159.□.□ |
| RL-A10.0117 | RL-A10.0118 | RL-A10.0119 |
| RL-A10.0129 | RL-A10.0130 | RL-A10.0131 |
| RL-A10.0123.□ | RL-A10.0124.□ | RL-A10.0125.□ |
| RL-A10.0154.□ | RL-A10.0155.□ | RL-A10.0156.□ |
| RL-A10.0120.□.□ | RL-A10.0121.□.□ | RL-A10.0122.□.□ |

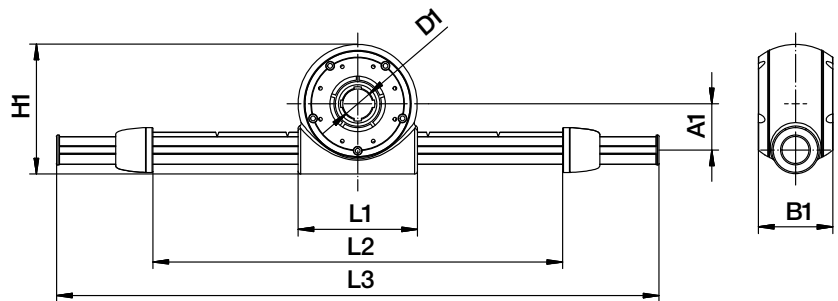
robolink® Apiro® | Product range

Cantilever axis



RL-A14.0100

- Inverted gearbox available
- Gearbox linear guide available
- 6 DOF¹⁶⁸⁾ can also be designed
- Modules can be switched consecutively, side by side
- Standard ratios 1:4, 1:32 and 1:64
- For format adjustments and easy automation tasks



Dimensions [mm]

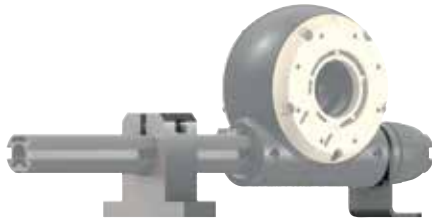
| Part No. | L1 | L2 | L3 | H1 | B1 | D1 | A1 |
|-------------|----|-------------|-------------|----|----|----|----|
| RL-A14.0100 | 80 | 133 – 1,122 | 250 – 1,300 | 87 | 50 | 20 | 31 |

Technical data

| Part No. | Designation | Transmission | Backlash | Length profile to middle L2 | Weight |
|-------------|---|--------------|----------|-----------------------------|----------|
| | | | [°] | [mm] | [g] |
| RL-A14.0100 | Basic cantilever axis with 100mm stroke | 125mm/rev | < 0.5 | 194.74 | from 330 |

¹⁶⁸⁾ DOF: degree of freedom





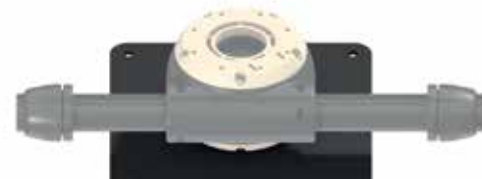
RL-A54.0102



RL-A54.0101



RL-A54.0100



RL-A54.0103



RL-A51.0101



RL-A55.0100

Images exemplary

| Part No. | Designation |
|--------------|--|
| RL-A51.0101 | Motor kit with stepper motor NEMA17, version with stranded wire |
| RL-A51.0102 | Motor kit with stepper motor NEMA17, version with connector |
| RL-A51.0103 | Motor kit with NEMA17 stepper motor, version with connector and encoder |
| RL-A51.0104 | Motor kit with NEMA17 stepper motor, version with connector, encoder and brake |
| RL-A51.0105 | Motor kit with stepper motor NEMA23, version with connector |
| RL-A52.0100 | INI kit available for: worm gear RL-A10 |
| RL-A52.0101 | INI kit available for: cantilever axis RL-A14 |
| RL-A220.0106 | Spacer element |
| RL-A320.0100 | Slot nut M2.5 |
| RL-A320.0101 | Slot nut M3 |
| RL-A320.0102 | Slot nut M4 |
| RL-A55.0100 | Assembly tool, tightening tool, open |
| RL-A55.0101 | Assembly tool, tightening tool, closed |

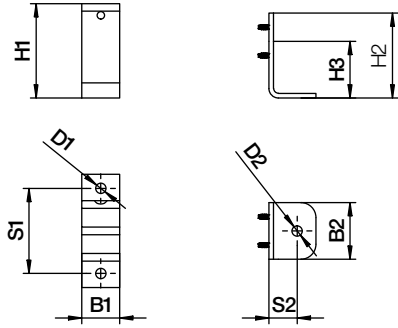


Connecting cables for NEMA stepper motors

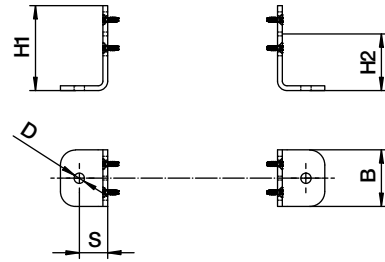
► Page 1732

Dimensions [mm]

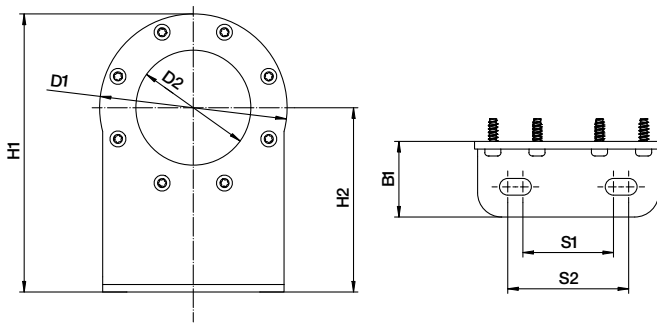
| Part No. | Short designation | D1 | D2 | D3 | D4 | B1 | B2 | S1 | S2 | S3 | H1 | H2 | H3 | Weight [g] |
|----------------|--|------|-----|----|----|-----|----|-----|-----|----|----|----|----|------------|
| RL-A54.0100 | Front mounting | 62 | 38 | - | - | 25 | - | 30 | 40 | - | 92 | 61 | - | 100.1 |
| RL-A54.0101 | Axial angle set, lateral attachment | 5.5 | - | - | - | 30 | - | 15 | - | - | 45 | 30 | - | 32 |
| RL-A54.0102 | Axial lead screw support block, lateral attachment | 5.5 | 5.5 | - | - | 20 | 30 | 45 | 15 | - | 50 | 45 | 30 | 109 |
| RL-A54.0103 | Mounting plate vertical, flat mounting | 30.5 | 5.5 | - | - | 140 | - | 120 | - | - | - | - | - | 370 |
| RL-A50.0100 | Profile stop | 30 | 20 | 25 | 2 | 25 | - | - | - | - | - | - | - | 8 |
| RL-A50.0101 | Profile flange | 30 | 12 | 2 | - | 25 | - | 15 | - | - | - | - | - | 8 |
| RL-A200.0103 | Profile end cap | 20 | - | - | - | - | - | - | - | - | - | - | - | 1 |
| RL-A220.0104 | Parallel connector | 62 | 46 | - | - | 5 | - | - | - | - | - | - | - | 4 |
| RL-A220.0105 | Feather key element, Apiro® feather key | 50 | - | - | - | - | - | - | - | - | - | - | - | - |
| RL-A400.0100.X | Multi-functional profile 20mm | 20 | 10 | - | - | - | - | 8.2 | 5.2 | 6 | - | - | - | 320/m |



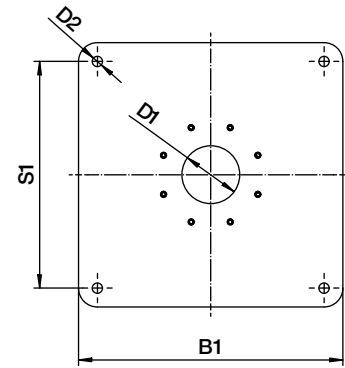
RL-A54.0102



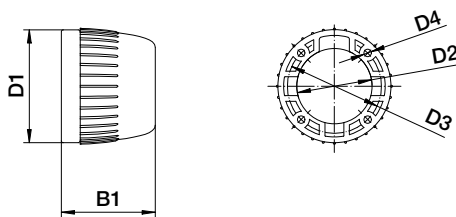
RL-A54.0101



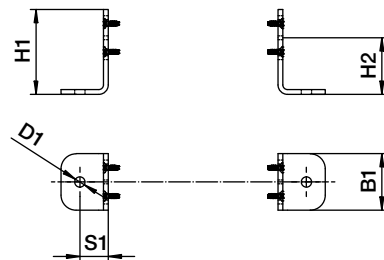
RL-A54.0100



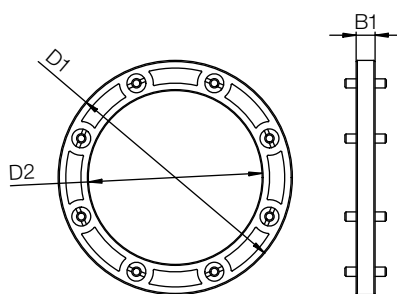
RL-A54.0103



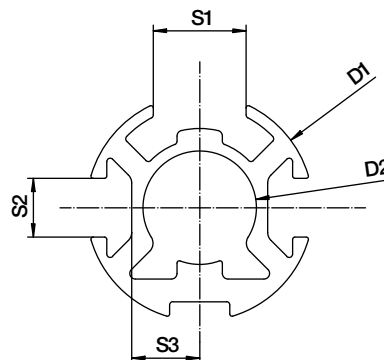
RL-A50.0100



RL-A50.0101



RL-A220.0104



RL-A400.0100