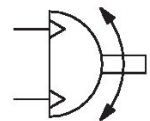


The AVENTICS Series RCM with its rotary modules can perform all standardized rotary and swivel movements. These modules can be installed directly on mini slides and are equipped with mechanical grippers.



Technical data

| | |
|---|-------------------------|
| Industry | Industrial |
| Diameter | 6 mm |
| Compressed air connection | M3 |
| Magnetic piston | with magnetic piston |
| Rotary compact module version | Double piston with rack |
| Easy2Combine | capable |
| Frame size | RCM-06 |
| Theoretical torque at | 6 bar |
| Min. swivel times | 0.12 s |
| Air consumption per rotation | 2.26 cm ³ |
| Max. permissible axial bearing load | 170 N |
| Radial shaft load | 170 N |
| Max. permissible mass moment of inertia | 0.08 kg cm ² |
| Theoretical torque | 0.17 Nm |
| Repetitive precision | 0.2 ° |
| Cushioning | elastic |
| Min. angle of rotation | 0 ° |
| Max. angle of rotation | 180 ° |
| Min. working pressure | 2 bar |

R412000358

| | |
|------------------------------------|---------------------|
| Max. working pressure | 8 bar |
| Min. ambient temperature | 5 °C |
| Max. ambient temperature | 60 °C |
| Min. medium temperature | 5 °C |
| Max. medium temperature | 60 °C |
| Medium | Compressed air |
| Min. oil content of compressed air | 0 mg/m ³ |
| Max. oil content of compressed air | 1 mg/m ³ |
| Max. particle size | 5 µm |
| Weight | 0.13 kg |

Material

| | |
|------------------------|--------------------------------|
| Housing material | Aluminum |
| Surface housing | anodized |
| Material front cover | Aluminum |
| Surface cover | black anodized |
| Material base | Aluminum |
| Surface base | black anodized |
| Seal material | Acrylonitrile butadiene rubber |
| Material axis | Steel, chrome-plated |
| Surface axis | hardened |
| Material rotary flange | Steel, chrome-plated |
| Surface rotary flange | hardened |
| Part No. | R412000358 |

Technical information

The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

The oil content of compressed air must remain constant during the life cycle.

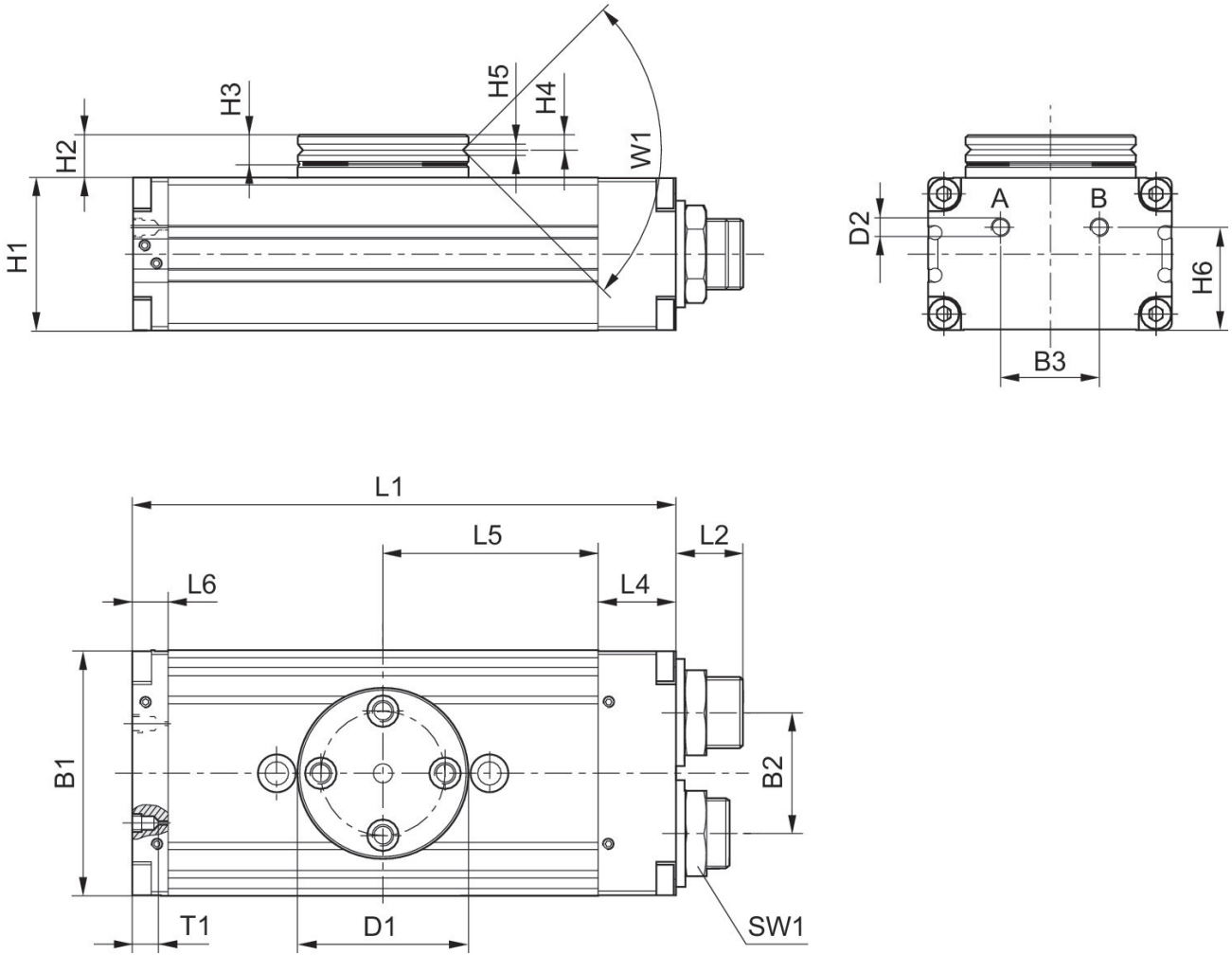
Use only the approved oils from AVENTICS. Further information can be found in the “Technical information” document (available in <https://www.emerson.com/en-us/support>).

Rotary Compact Module, Series RCM-SE

2024-04-05

R412000358

RCM-6/.../-25



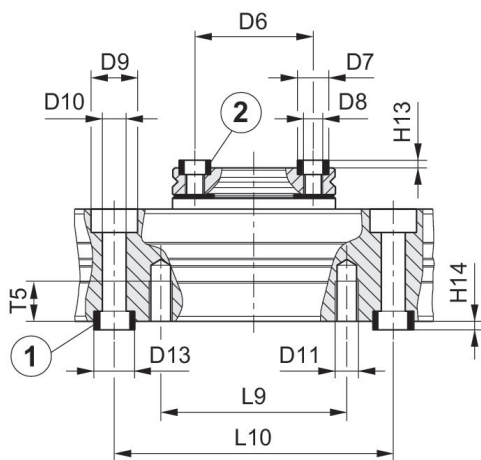
T1 = depth of thread

| Frame size | Part No. | B1 | B2 | B3 | Ø D1 | Ø D2 | H1 | H2 | H3 |
|------------|------------|----|------|------|------|------|----|------|----|
| RCM-06 | R412000357 | 31 | 13.6 | 11.6 | 26 | M3 | 17 | 7.5 | 5 |
| RCM-06 | R412000358 | 31 | 13.6 | 11.6 | 26 | M3 | 17 | 7.5 | 5 |
| RCM-08 | R412000359 | 35 | 15 | 13 | 28 | M3 | 18 | 8 | 5 |
| RCM-08 | R412000360 | 35 | 15 | 13 | 28 | M3 | 18 | 8 | 5 |
| RCM-12 | R412000361 | 43 | 18 | 18 | 35 | M5 | 24 | 10.5 | 6 |
| RCM-12 | R412000362 | 43 | 18 | 18 | 35 | M5 | 24 | 10.5 | 6 |

| Frame size | H4 | H5 | H6 | L1 | L2 | L4 | L5 | L6 | SW1 |
|------------|-----|-----|------|-----|------|----|------|----|-----|
| RCM-06 | 2.4 | 2 | 12.9 | 71 | 9 | 7 | 28.5 | 7 | 8 |
| RCM-06 | 2.4 | 2 | 12.9 | 71 | 9 | 7 | 28.5 | 7 | 8 |
| RCM-08 | 2.4 | 2 | 14 | 77 | 9.5 | 7 | 31.5 | 7 | 10 |
| RCM-08 | 2.4 | 2 | 14 | 77 | 9.5 | 7 | 31.5 | 7 | 10 |
| RCM-12 | 2.9 | 2.5 | 18 | 103 | 12.5 | 14 | 40 | 9 | 15 |
| RCM-12 | 2.9 | 2.5 | 18 | 103 | 12.5 | 14 | 40 | 9 | 15 |

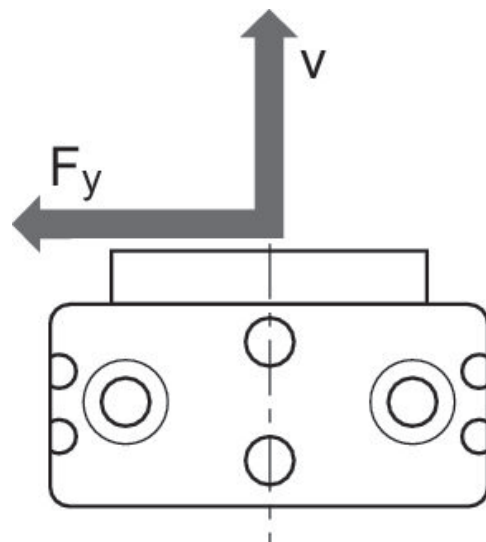
| Frame size | T1 | W1 |
|------------|----|-----|
| RCM-06 | 3 | 90° |
| RCM-06 | 3 | 90° |
| RCM-08 | 3 | 90° |
| RCM-08 | 3 | 90° |
| RCM-12 | 4 | 90° |
| RCM-12 | 4 | 90° |

Mounting and assembly RCM-12

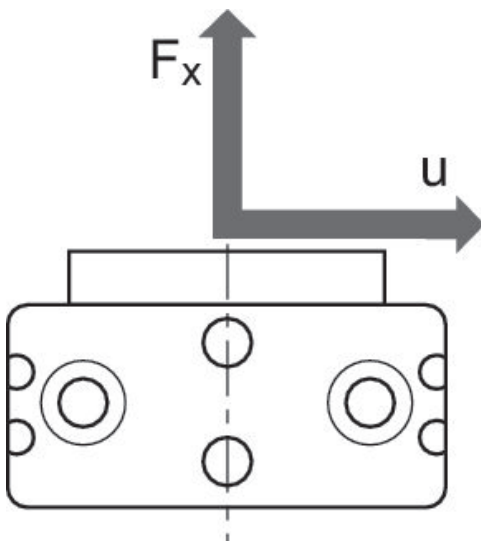


1) centering sleeve, included in the scope of delivery 2) centering sleeve

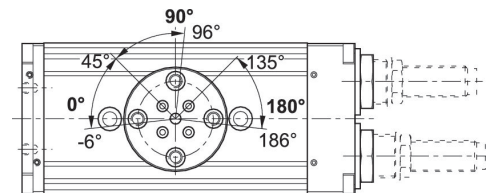
Maximum permissible radial force F_y [N] as a function of v [mm]



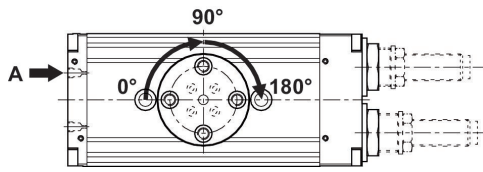
Maximum permissible axial force F_x [N] as a function of u [mm]



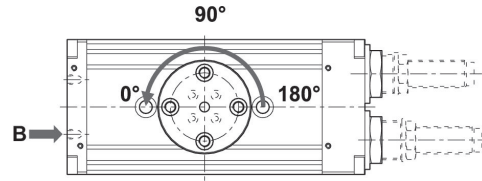
Setting range for end positions 0° / 90° / 180°



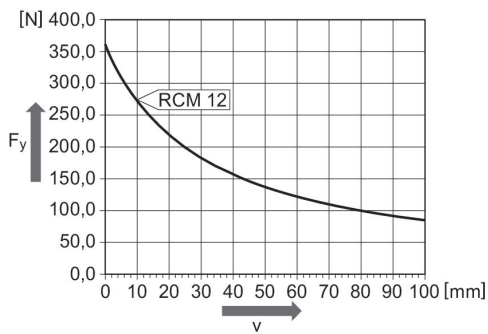
Movement into end position 90°/180°



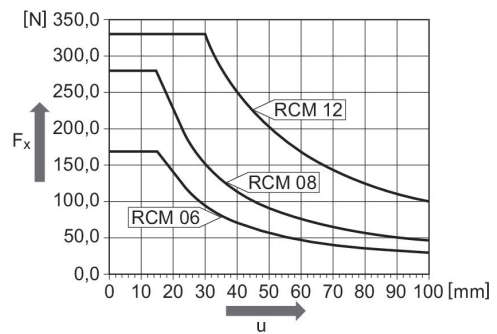
Movement into end position 0°



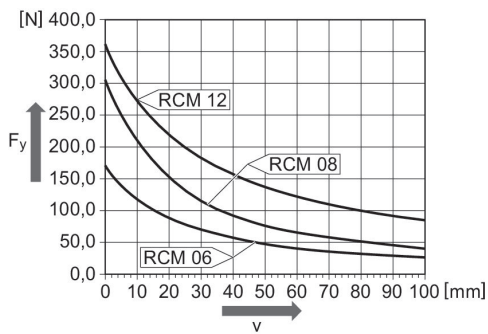
Maximum permissible radial force F_y [N] as a function of v [mm]
RCM 12



Maximum permissible axial force F_x [N] as a function of u [mm]
RCM 6 – 12



Maximum permissible radial force F_y [N] as a function of v [mm]
RCM 6 – 12



| Frame size | Part No. | Ø D6 ±0,02 | Ø D7 k6 | Ø D8 | Ø D9 | Ø D10 | Ø D11 | Ø D12 | Ø D13 k6 |
|------------|------------|------------|---------|------|------|-------|-------|-------|----------|
| RCM-06 | R412000357 | 18 | 5 | M3 | 6 | 3.3 | M4 | – | 5 |
| RCM-06 | R412000358 | 18 | 5 | M3 | 6 | 3.3 | M4 | – | 5 |
| RCM-08 | R412000359 | 20 | 5 | M3 | 7.5 | 4.2 | – | M5 | 7 |
| RCM-08 | R412000360 | 20 | 5 | M3 | 7.5 | 4.2 | – | M5 | 7 |
| RCM-12 | R412000361 | 25 | 7 | M4 | 10 | 5.1 | M5 | – | 9 |
| RCM-12 | R412000362 | 25 | 7 | M4 | 10 | 5.1 | M5 | – | 9 |

Rotary Compact Module, Series RCM-SE

2024-04-05

R412000358

| Frame size | H13 +0,2 | H14 +0,2 | L9 | L10 ± 0,02 | T5 | T6 |
|------------|----------|----------|----|------------|-----|-----|
| RCM-06 | 1.6 | 1.6 | 20 | 40 | 7 | – |
| RCM-06 | 1.6 | 1.6 | 20 | 40 | 7 | – |
| RCM-08 | 1.6 | 1.6 | – | 40 | – | 9.1 |
| RCM-08 | 1.6 | 1.6 | – | 40 | – | 9.1 |
| RCM-12 | 1.6 | 2.1 | 40 | 60 | 8.5 | – |
| RCM-12 | 1.6 | 2.1 | 40 | 60 | 8.5 | – |