

Rotary actuators ▶ Rack-and-pinion gears

## Series RCM




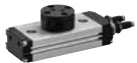




Brochure

**Rexroth**  
Pneumatics





Rotary actuators ▶ Rack-and-pinion gears

## Series RCM






	Rotary Compact Module, Series RCM-SE ▶ angle of rotation: 0 - 180 ° ▶ Ø6 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic	4
	Rotary Compact Module, Series RCM-SH ▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable	9
	Rotary Compact Module, Series RCM-SE ▶ angle of rotation: 0 - 180 ° ▶ Ø8 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with air duct	14
	Rotary Compact Module, Series RCM-SH ▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with air duct	20
	Rotary Compact Module, Series RCM-SE ▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with integrated intermediate position	26
	Rotary Compact Module, Series RCM-SH ▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with integrated intermediate position	31
	Rotary Compact Module, Series RCM-SE ▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with integrated intermediate position ▶ with air duct	36
	Rotary Compact Module, Series RCM-SH ▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with integrated intermediate position ▶ with air duct	42

## Accessories

### Easy-2-Combine connection kits

	Easy-2-Combine, Connection kit ▶ For combination: MSC / RCM	48
	Centering rings	49

### Sensors and sensor mountings, accessories

	Sensor, Series ST4 ▶ 4 mm groove ▶ with cable ▶ without wire end ferrule, tin-plated	50
	Sensor, Series ST4 ▶ 4 mm groove ▶ with cable ▶ Plug, M8, 3-pin	51
	Sensor, Series ST4 ▶ 4 mm groove ▶ with cable ▶ Plug, M8, 3-pin, with knurled screw	53
	Sensors, Series ST4-2P ▶ 4 mm groove ▶ number of switching points:2 ▶ with cable ▶ without wire end ferrule, tin-plated ▶ electronic PNP	54
	Sensors, Series ST4-2P ▶ 4 mm groove ▶ number of switching points:2 ▶ with cable ▶ Plug, M8x1, 4-pin, with knurled screw ▶ electronic PNP	55

Rotary actuators ▶ Rack-and-pinion gears  
**Series RCM**

---

**Industrial shock absorber**



Industrial shock absorber, Series SA2-RC  
▶ for RCM-12, RCM-16, RCM-20, RCM-25 ▶ sealing for piston rod: Lip ring

57

## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SE

▶ angle of rotation: 0 - 180 ° ▶ Ø6 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic



00117211

Working pressure min./max.	2 bar / 8 bar
Ambient temperature min./max.	+5 °C / +60 °C
Medium temperature min./max.	+5 °C / +60 °C
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m <sup>3</sup> - 1 mg/m <sup>3</sup>
Theoretical torque at	6 bar

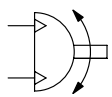
Materials:	
Housing	Aluminum, anodized
Covers	Aluminum black anodized
Base	Aluminum, black anodized
Seals	Acrylonitrile Butadiene Rubber
Axis	Steel, hardened
Rotary flange	Steel, hardened

## Technical Remarks

- The pressure dew point must be at least 15 °C under 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, see chapter „Technical information“.

Frame size		RCM-06	RCM-08	RCM-12	RCM-16	RCM-20
Max. permissible axial bearing load	[N]	170	280	330	490	620
Max. permissible radial bearing load	[N]	170	300	360	580	780
Max. permissible mass moment of inertia	[kgcm <sup>2</sup> ]	0.08	0.25	0.7	1.6	3.2
Repetitive precision	[°]	0.2	0.2	0.2	0.2	0.2
Theoretical torque	[Nm]	0.17	0.33	0.95	1.7	3

Frame size		RCM-25			
Max. permissible axial bearing load	[N]	1160			
Max. permissible radial bearing load	[N]	1480			
Max. permissible mass moment of inertia	[kgcm <sup>2</sup> ]	6.3			
Repetitive precision	[°]	0.2			
Theoretical torque	[Nm]	6.5			

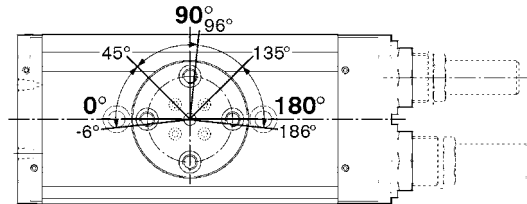
	Frame size	Compressed air connection	angle of rotation	Swivel time min./max.	Air consumption per rotation	Weight	Part No.
			[°]	[s]	[cm <sup>3</sup> ]	[kg]	
	RCM-06	M3	0 - 90	0.08 / --	1.13	0.13	R412000357
	RCM-06	M3	0 - 180	0.12 / --	2.26	0.13	<b>R412000358</b>
	RCM-08	M3	0 - 90	0.1 / --	2.14	0.18	R412000359
	RCM-08	M3	0 - 180	0.16 / --	4.27	0.18	R412000360
	RCM-12	M5	0 - 90	0.1 / --	5.86	0.42	<b>R412000361</b>
	RCM-12	M5	0 - 180	0.16 / --	11.72	0.42	R412000362
	RCM-16	M5	0 - 90	0.13 / --	10.36	0.7	<b>R412000363</b>
	RCM-16	M5	0 - 180	0.2 / --	20.71	0.7	<b>R412000364</b>
	RCM-20	M5	0 - 90	0.16 / --	17.92	0.91	<b>R412000365</b>
	RCM-20	M5	0 - 180	0.25 / --	35.84	0.91	R412000366
	RCM-25	M5	0 - 90	0.16 / --	38.75	1.73	R412000367
	RCM-25	M5	0 - 180	0.25 / --	77.5	1.73	<b>R412000368</b>

## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SE

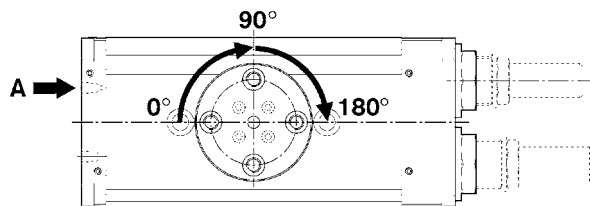
▶ angle of rotation: 0 - 180 ° ▶ Ø6 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic

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



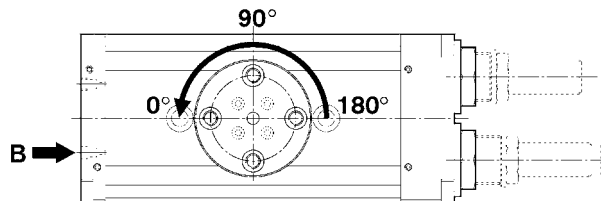
00122055

Movement into end position 90°/180°



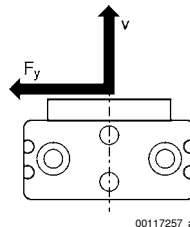
00122053

Movement into end position 0°



00122054\_a

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



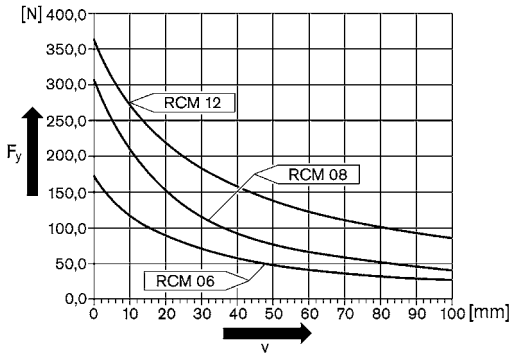
00117257\_a

Rotary actuators ▶ Rack-and-pinion gears

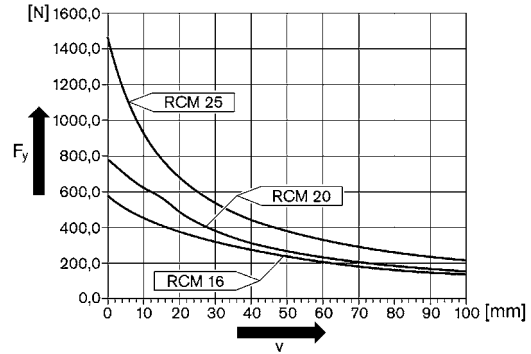
**Rotary Compact Module, Series RCM-SE**

▶ angle of rotation: 0 - 180 ° ▶ Ø6 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic

**RCM 6 – 12** | **RCM 16 – 25**

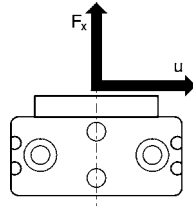


00117261\_b



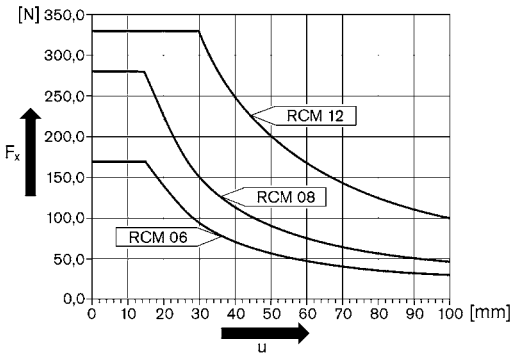
00117262\_b

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

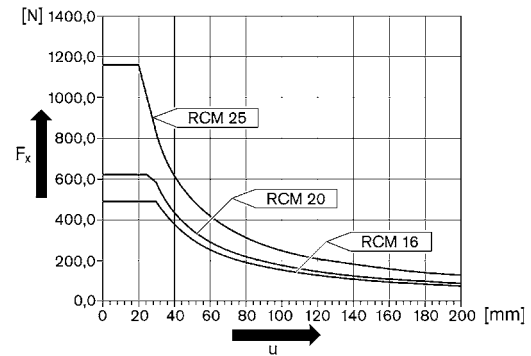


00117258\_a

**RCM 6 – 12** | **RCM 16 – 25**



00117259\_b



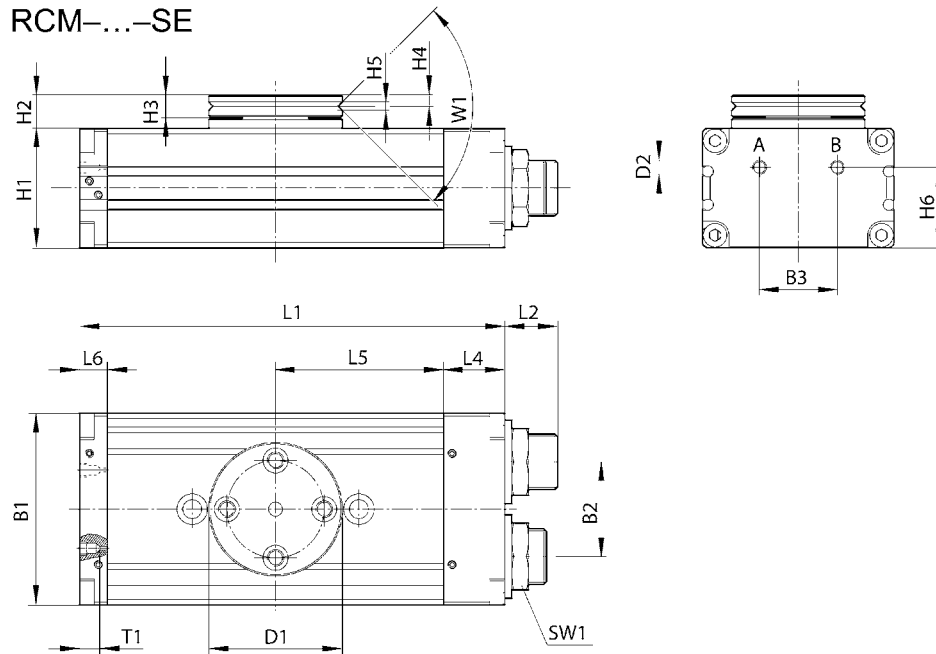
00117260\_b

## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SE

▶ angle of rotation: 0 - 180 ° ▶ Ø6 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic

RCM-6/.../-25



00125723

T1 = depth of thread

Frame size	B1	B2	B3	Ø D1	Ø D2	H1	H2	H3	H4	H5	H6	L1	L2
RCM-06	31	13.6	11.6	26	M3	17	7.5	5	2.4	2	12.9	71	9
RCM-08	35	15	13	28	M3	18	8	5	2.4	2	14	77	9.5
RCM-12	43	18	18	35	M5	24	10.5	6	2.9	2.5	18	103	12.5
RCM-16	52	24	20	40	M5	32	10	7	3.3	2.5	21	108	15
RCM-20	58	30	20	42	M5	37	11	7	3.3	3	26	114	15
RCM-25	69	34	28	48	M5	43	12	8	4	3	29	153	19

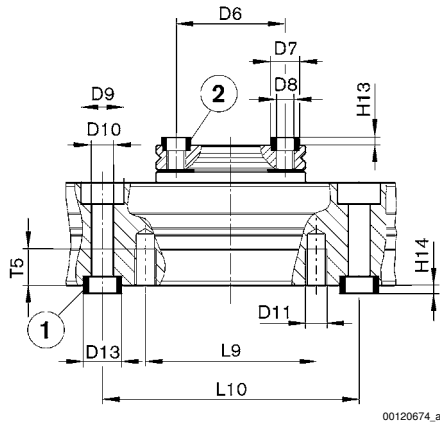
Frame size	L4	L5	L6	SW1	T1	W1							
RCM-06	7	28.5	7	8	3	90°							
RCM-08	7	31.5	7	10	3	90°							
RCM-12	14	40	9	15	4	90°							
RCM-16	18	40	10	19	4	90°							
RCM-20	19	43	9	19	4	90°							
RCM-25	22	60.5	10	23	4	90°							

## Rotary actuators ▶ Rack-and-pinion gears

### Rotary Compact Module, Series RCM-SE

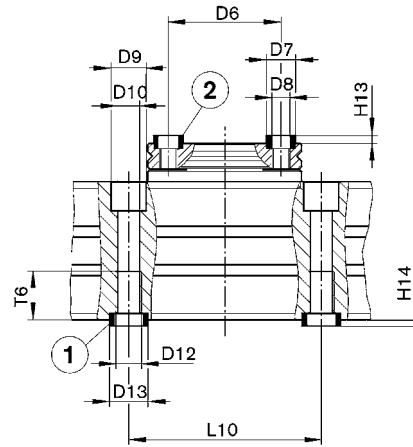
▶ angle of rotation: 0 - 180 ° ▶ Ø6 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic

Mounting and assembly, RCM-6/-12



00120674\_a

RCM-8/-16/-20/-25



00120675\_a

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

Frame size	Ø D6 ±0,02	Ø D7 k6	Ø D8	Ø D9	Ø D10	Ø D11	Ø D12	Ø D13 k6	H13 +0,2	H14 +0,2	L9	L10 ± 0,02	T5
RCM-06	18	5	M3	6	3.3	M4	-	5	1.6	1.6	20	40	7
RCM-08	20	5	M3	7.5	4.2	-	M5	7	1.6	1.6	-	40	-
RCM-12	25	7	M4	10	5.1	M5	-	9	1.6	2.1	40	60	8.5
RCM-16	30	7	M5	10	5	-	M6	9	1.6	2.1	-	60	-
RCM-20	30	7	M5	11	6.8	-	M8	12	1.6	2.1	-	60	-
RCM-25	35	9	M6	11	6.8	-	M8	12	2.1	2.1	-	60	-

Frame size	T6												
RCM-06	-												
RCM-08	9.1												
RCM-12	-												
RCM-16	11.1												
RCM-20	15.1												
RCM-25	15.1												



## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SH

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable



00131811

Working pressure min./max.	2 bar / 8 bar
Ambient temperature min./max.	+5 °C / +60 °C
Medium temperature min./max.	+5 °C / +60 °C
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Theoretical torque at	6 bar

## Materials:

Housing	Aluminum, anodized
Covers	Aluminum black anodized
Base	Aluminum, black anodized
Seals	Acrylonitrile Butadiene Rubber
Axis	Steel, hardened
Rotary flange	Steel, hardened

## Technical Remarks

- The pressure dew point must be at least 15 °C under 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, see chapter „Technical information“.

Frame size		RCM-12	RCM-16	RCM-20	RCM-25
Max. permissible axial bearing load	[N]	330	490	620	1160
Max. permissible radial bearing load	[N]	360	580	780	1480
Max. permissible mass moment of inertia	[kgcm²]	10	80	180	450
Repetitive precision	[°]	0.05	0.05	0.05	0.05
Theoretical torque	[Nm]	0.95	1.7	3	6.5

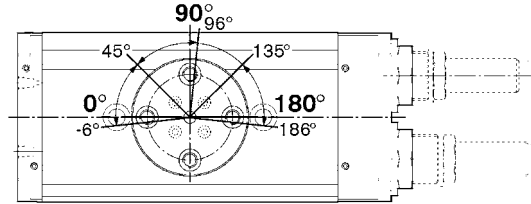
	Frame size	Compressed air connection	angle of rotation	Swivel time min./max.	Air consumption per rotation	Weight	Part No.
			[°]	[s]	[cm³]	[kg]	
	RCM-12	M5	0 - 90	0.3 / --	5.86	0.46	<b>R412000369</b>
	RCM-12		0 - 180	0.3 / --	11.72	0.46	<b>R412000370</b>
	RCM-16		0 - 90	0.32 / --	10.36	0.77	<b>R412000371</b>
	RCM-16		0 - 180	0.32 / --	20.71	0.77	<b>R412000372</b>
	RCM-20		0 - 90	0.48 / --	17.92	0.96	<b>R412000373</b>
	RCM-20		0 - 180	0.48 / --	35.84	0.96	<b>R412000374</b>
	RCM-25		0 - 90	0.6 / --	38.75	1.85	<b>R412000375</b>
	RCM-25		0 - 180	0.6 / --	77.5	1.85	<b>R412000376</b>

Rotary actuators ▶ Rack-and-pinion gears

### Rotary Compact Module, Series RCM-SH

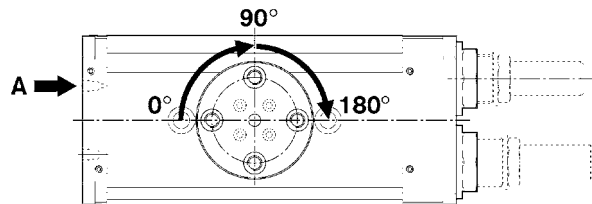
▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable

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



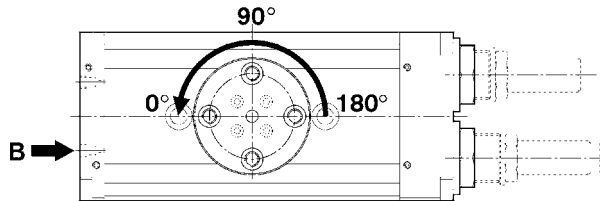
00122055\_b

Movement into end position 90°/180°



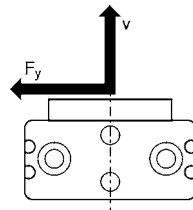
00122053\_b

Movement into end position 0°



00122054\_c

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

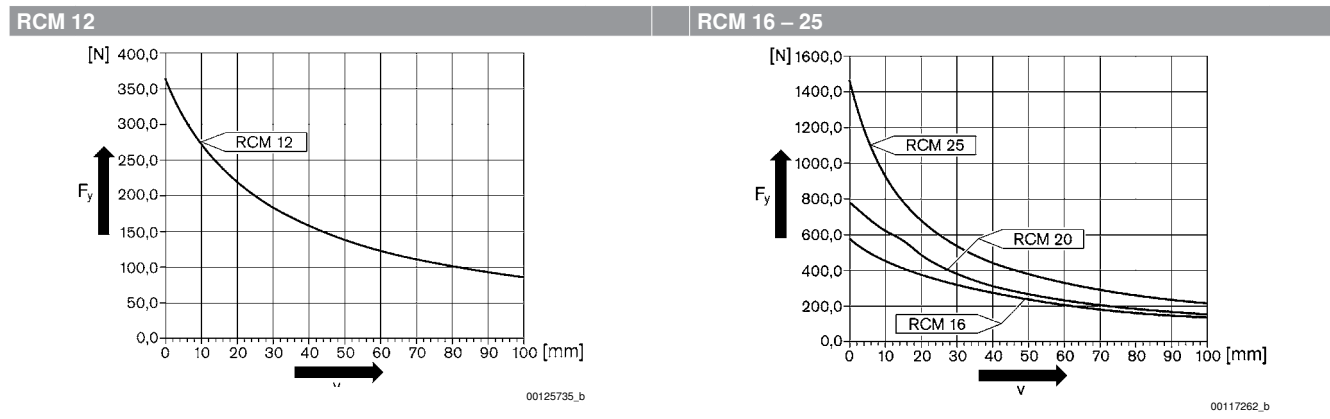


00117257\_c

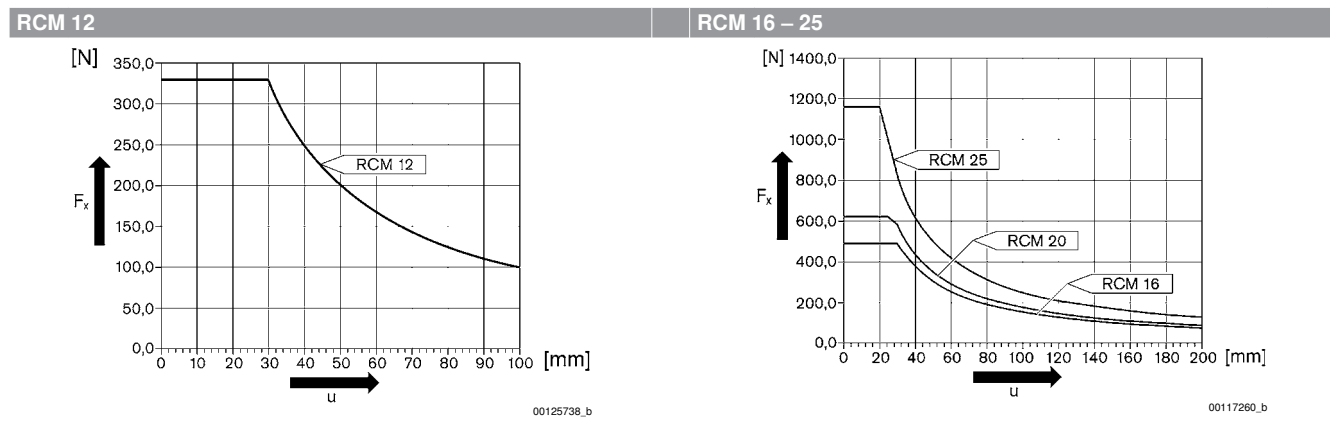
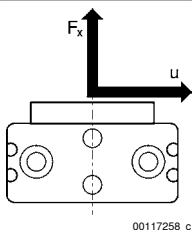
Rotary actuators ▶ Rack-and-pinion gears

**Rotary Compact Module, Series RCM-SH**

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable



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



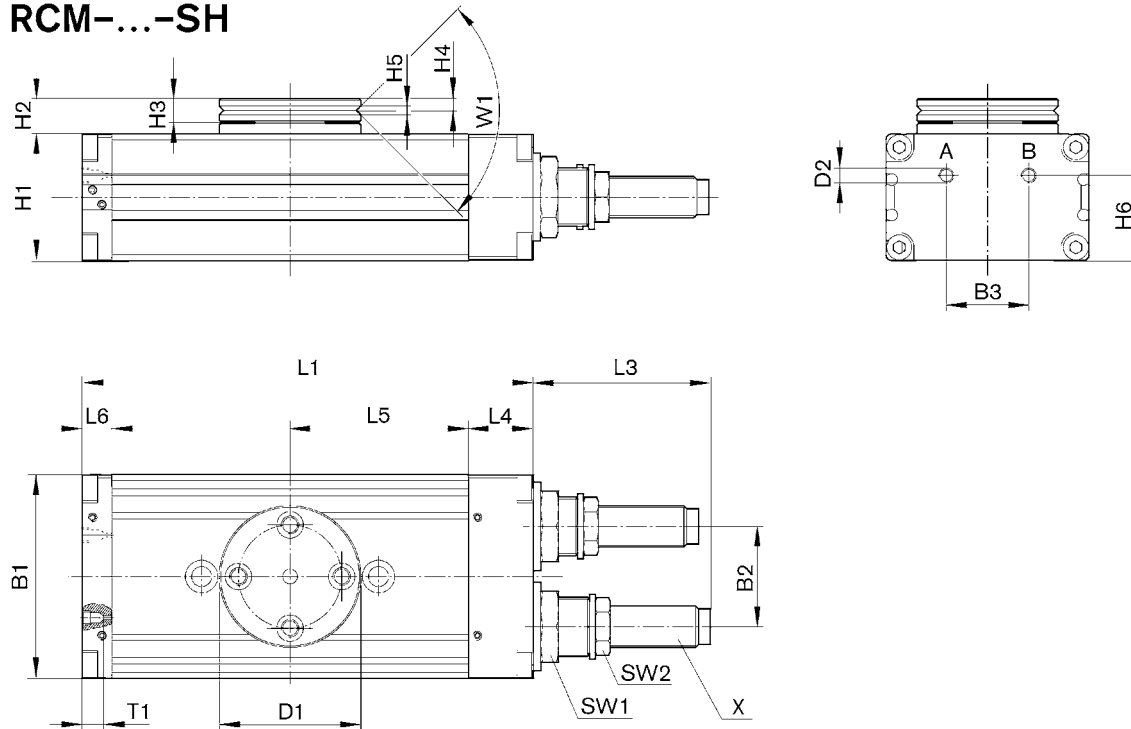
## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SH

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable

RCM-12/.../-25

## RCM-...-SH



00125724

T1 = depth of thread

Frame size	B1	B2	B3	Ø D1	Ø D2	H1	H2	H3	H4	H5	H6
RCM-12	43	18	18	35	M5	24	10.5	6	2.9	2.5	18
RCM-16	52	24	20	40	M5	32	10	7	3.3	2.5	21
RCM-20	58	30	20	42	M5	37	11	7	3.3	3	26
RCM-25	69	34	28	48	M5	43	12	8	4	3	29

Frame size	L1	L3	L4	L5	L6	SW1	SW2	T1	W1	X
RCM-12	103	33.5	14	40	9	15	11	4	90°	M8x1
RCM-16	108	34	18	40	10	19	13	4	90°	M10x1
RCM-20	114	48.5	19	43	9	19	15	4	90°	M12x1
RCM-25	153	60	22	60.5	10	23	17	4	90°	M14x1,5

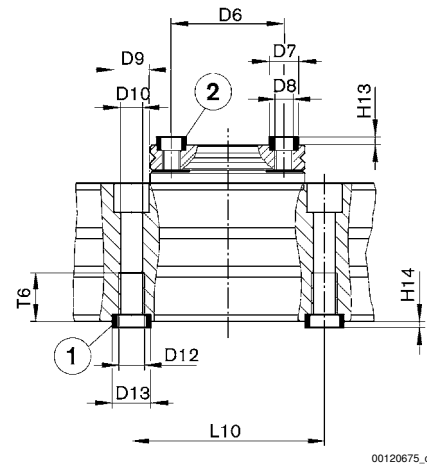
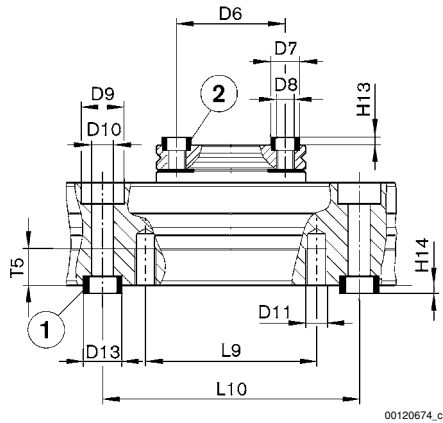
## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SH

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable

Mounting and assembly, RCM-12

RCM 16 – 25



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

Frame size	Ø D6 ±0,02	Ø D7 k6	Ø D8	Ø D9	Ø D10	Ø D11	Ø D12	Ø D13 k6	H13 +0,2	H14 +0,2	L9	L10 ±0,02	T5
RCM-12	25	7	M4	10	5.1	M5	-	9	1.6	2.1	40	60	8.5
RCM-16	30	7	M5	10	5	-	M6	9	1.6	2.1	-	60	-
RCM-20	30	7	M5	11	6.8	-	M8	12	1.6	2.1	-	60	-
RCM-25	35	9	M6	11	6.8	-	M8	12	2.1	2.1	-	60	-

Frame size	T6												
RCM-12	-												
RCM-16	11.1												
RCM-20	15.1												
RCM-25	15.1												

## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SE

▶ angle of rotation: 0 - 180 ° ▶ Ø8 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with air duct



00119187

Working pressure min./max.	See table below
Ambient temperature min./max.	+5 °C / +60 °C
Medium temperature min./max.	+5 °C / +60 °C
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m <sup>3</sup> - 1 mg/m <sup>3</sup>
Theoretical torque at	6 bar

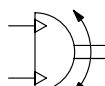
## Materials:

Housing	Aluminum, anodized
Covers	Aluminum black anodized
Base	Aluminum, black anodized
Seals	Acrylonitrile Butadiene Rubber
Axis	Steel, hardened
Rotary flange	Steel, hardened

## Technical Remarks

- The pressure dew point must be at least 15 °C under 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, see chapter „Technical information“.

Frame size		RCM-08	RCM-12	RCM-16	RCM-20	RCM-25
Number of air ducts		2	2	4	4	4
Max. permissible axial bearing load	[N]	280	330	490	620	1160
Max. permissible radial bearing load	[N]	210	290	400	560	700
Max. permissible mass moment of inertia	[kgcm <sup>2</sup> ]	0.25	0.7	1.6	3.2	6.3
Repetitive precision	[°]	0.2	0.2	0.2	0.2	0.2
Theoretical torque	[Nm]	0.33	0.95	1.7	3	6.5

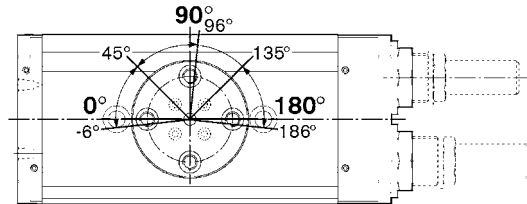
	Frame size	Compressed air connection	angle of rotation	Swivel time min./max.	Working pressure min./max.	Air consumption per rotation	Weight	Part No.
			[°]	[s]	[bar]	[cm <sup>3</sup> ]	[kg]	
	RCM-08	M3	0 - 90	0.2 / --	3.5 / 8	2.14	0.19	R412000377
	RCM-08	M3	0 - 180	0.28 / --	3.5 / 8	4.27	0.19	R412000378
	RCM-12	M5	0 - 90	0.2 / --	2.5 / 8	5.86	0.46	R412000379
	RCM-12	M5	0 - 180	0.28 / --	2.5 / 8	11.72	0.46	R412000380
	RCM-16	M5	0 - 90	0.2 / --	2 / 8	10.36	0.76	R412000381
	RCM-16	M5	0 - 180	0.25 / --	2 / 8	20.71	0.76	<b>R412000382</b>
	RCM-20	M5	0 - 90	0.22 / --	2 / 8	17.92	0.99	R412000383
	RCM-20	M5	0 - 180	0.3 / --	2 / 8	35.84	0.99	R412000384
	RCM-25	M5	0 - 90	0.22 / --	2 / 8	38.75	1.83	R412000385
	RCM-25	M5	0 - 180	0.3 / --	2 / 8	77.5	1.83	R412000386

## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SE

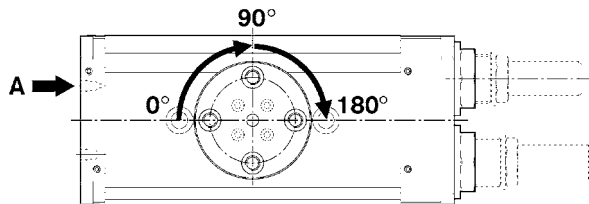
▶ angle of rotation: 0 - 180 ° ▶ Ø8 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with air duct

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



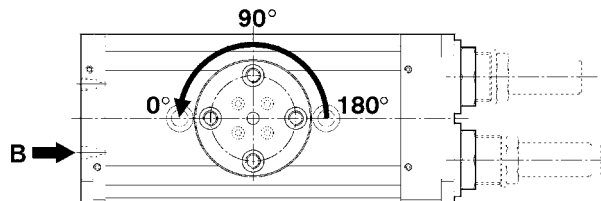
00122055\_a

Movement into end position 90°/180°



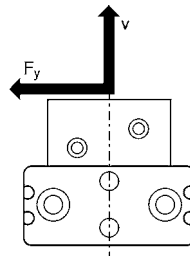
00122053\_a

Movement into end position 0°



00122054\_b

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



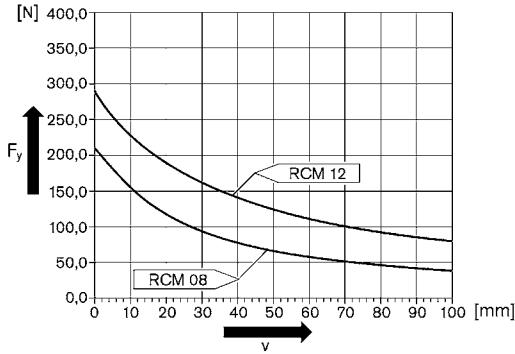
00117405

Rotary actuators ▶ Rack-and-pinion gears

**Rotary Compact Module, Series RCM-SE**

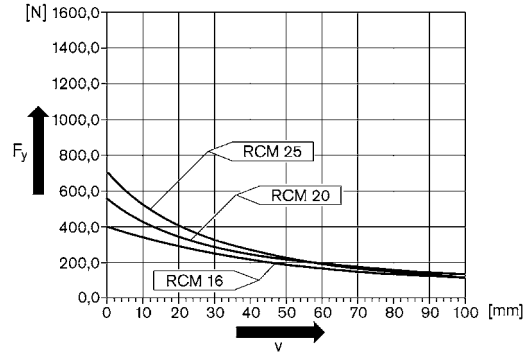
▶ angle of rotation: 0 - 180 ° ▶ Ø8 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with air duct

**RCM 8 – 12**



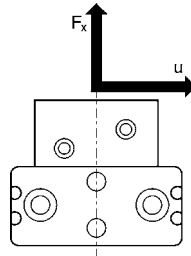
00117406\_b

**RCM 16 – 25**



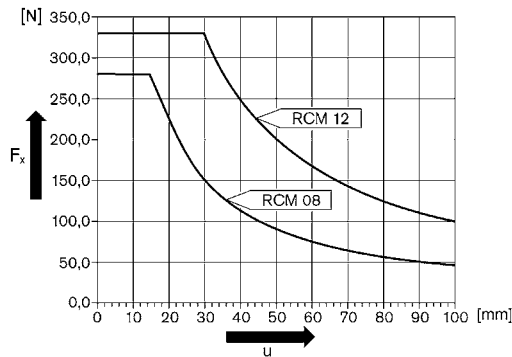
00117407\_b

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



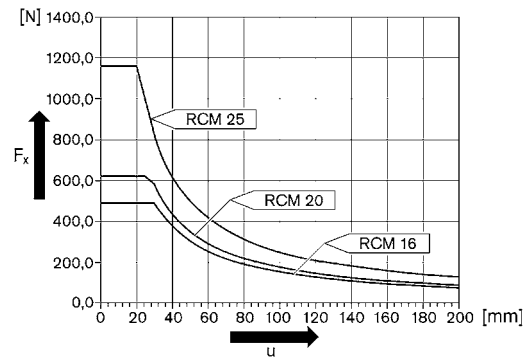
00117404

**RCM 8 – 12**



00122092\_b

**RCM 16 – 25**



00117260\_b



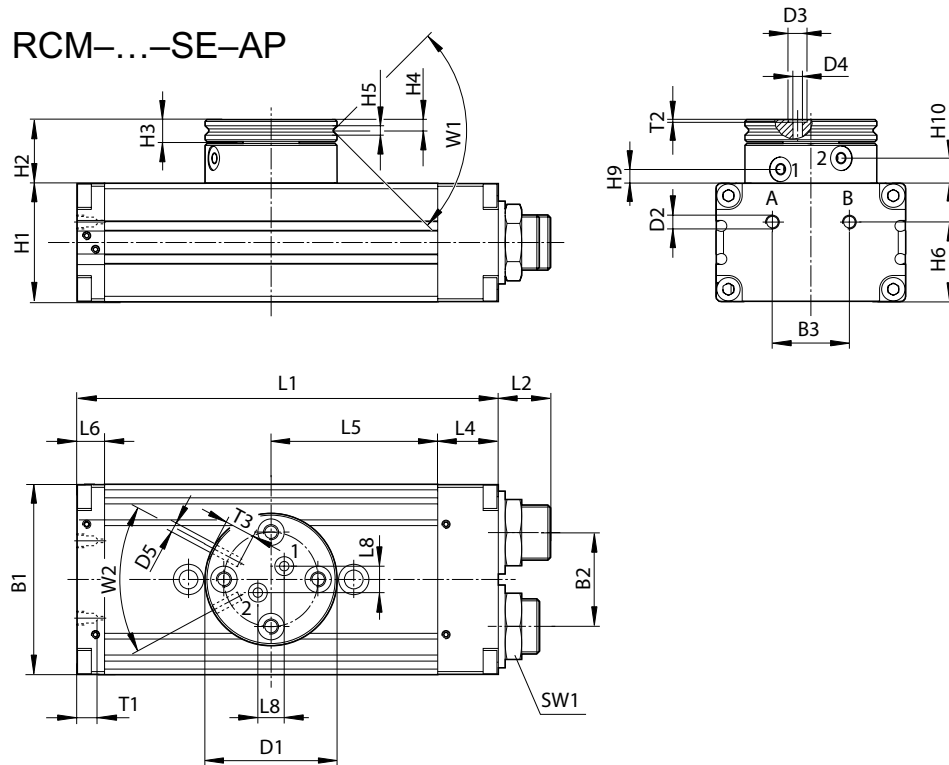
## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SE

▶ angle of rotation: 0 - 180 ° ▶ Ø8 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with air duct

RCM-8/-12

RCM-...-SE-AP



00125725

T1 = depth of thread

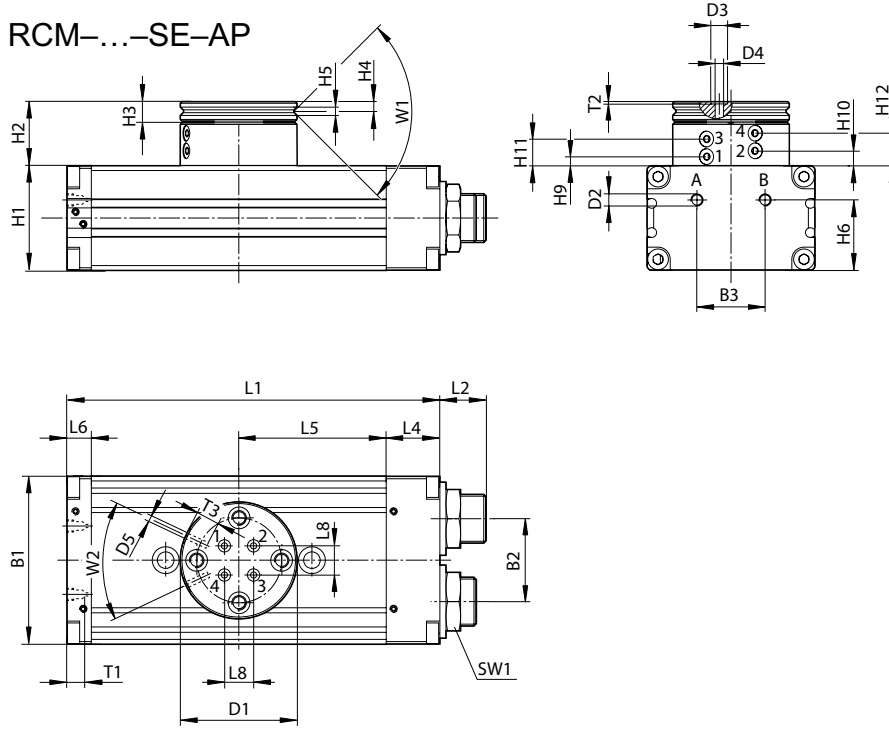
Frame size	B1	B2	B3	Ø D1	Ø D2	Ø D3	Ø D4	Ø D5	H1	H2	H3	H4	H5
RCM-08	35	15	13	28	M3	3	1.5	M3	18	16.5	5	2.4	2
RCM-12	43	18	18	35	M5	5	2.5	M3	24	17	6	2.9	2.5
Frame size	H6	H9 ±0,2	H10 ±0,2	L1	L2	L4	L5	L6	L8	SW1	T1	T2	T3
RCM-08	14	4.3	7.2	77	9.5	7	31.5	7	4	10	3	0.35	4
RCM-12	18	3.8	6.7	103	12.5	14	40	9	7	15	4	0.7	4
Frame size	W1	W2											
RCM-08	90°	60°											
RCM-12	90°	56°											

Rotary actuators ▶ Rack-and-pinion gears

**Rotary Compact Module, Series RCM-SE**

▶ angle of rotation: 0 - 180 ° ▶ Ø8 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with air duct

RCM-16/.../-25



T1 = depth of thread

00125727

Frame size	B1	B2	B3	Ø D1	Ø D2	Ø D3	Ø D4	Ø D5	H1	H2	H3	H4	H5
RCM-16	52	24	20	40	M5	5	2.5	M3	32	25.5	7	3.3	2.5
RCM-20	58	30	20	42	M5	5	2.5	M3	37	26	7	3.3	3
RCM-25	69	34	28	48	M5	5	2.5	M3	43	26.5	8	4	3

Frame size	H6	H9 ±0,2	H10 ±0,2	H11 ±0,2	H12 ±0,2	L1	L2	L4	L5	L6	L8	SW1	T1
RCM-16	21	3.9	6.5	11.1	13.7	108	15	18	40	10	6	19	4
RCM-20	26	4.4	7	11.6	14.2	114	15	19	43	9	10	19	4
RCM-25	29	3.9	6.5	11.1	13.7	153	19	22	60.5	10	12	23	4

Frame size	T2	T3	W1	W2									
RCM-16	0.7	4	90°	50°									
RCM-20	0.7	4	90°	50°									
RCM-25	0.7	4	90°	50°									

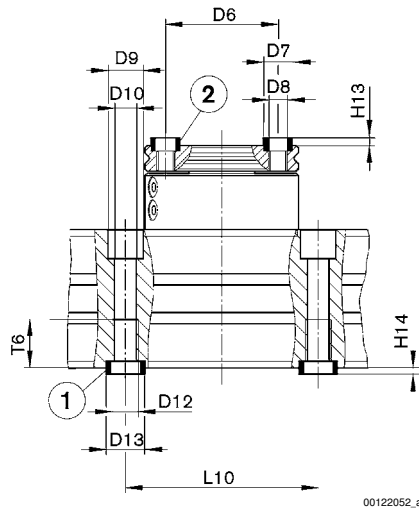
## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SE

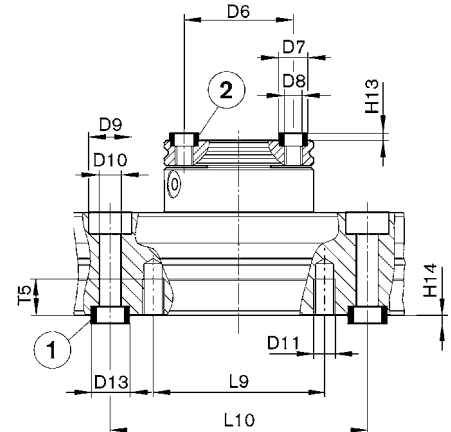
▶ angle of rotation: 0 - 180 ° ▶ Ø8 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with air duct

## Mounting and assembly, RCM-8/-16/-20/-25

## RCM 12



00122052\_a



00122049\_c

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

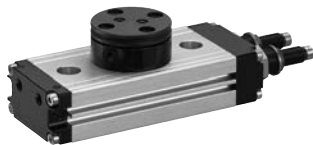
Frame size	Ø D6 ±0,02	Ø D7 k6	Ø D8	Ø D9	Ø D10	Ø D11	Ø D12	Ø D13 k6	H13 +0,2	H14 +0,2	L9	L10 ± 0,02	T5
RCM-08	20	5	M3	7.5	4.2	-	M5	7	1.6	1.6	-	40	-
RCM-12	25	7	M4	10	5.1	M5	-	9	1.6	2.1	40	60	8.5
RCM-16	30	7	M5	10	5	-	M6	9	1.6	2.1	-	60	-
RCM-20	30	7	M5	11	6.8	-	M8	12	1.6	2.1	-	60	-
RCM-25	35	9	M6	11	6.8	-	M8	12	2.1	2.1	-	60	-

Frame size	T6												
RCM-08	9.1												
RCM-12	-												
RCM-16	11.1												
RCM-20	15.1												
RCM-25	15.1												

## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SH

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with air duct



00131809

Working pressure min./max.	See table below
Ambient temperature min./max.	+5 °C / +60 °C
Medium temperature min./max.	+5 °C / +60 °C
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m <sup>3</sup> - 1 mg/m <sup>3</sup>
Theoretical torque at	6 bar

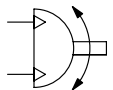
## Materials:

Housing	Aluminum, anodized
Covers	Aluminum black anodized
Base	Aluminum, black anodized
Seals	Acrylonitrile Butadiene Rubber
Axis	Steel, hardened
Rotary flange	Steel, hardened

## Technical Remarks

- The pressure dew point must be at least 15 °C under 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, see chapter „Technical information“.

Frame size		RCM-12	RCM-16	RCM-20	RCM-25
Number of air ducts		2	4	4	4
Max. permissible axial bearing load	[N]	330	490	620	1160
Max. permissible radial bearing load	[N]	290	400	560	700
Max. permissible mass moment of inertia	[kgcm <sup>2</sup> ]	10	80	180	450
Repetitive precision	[°]	0.05	0.05	0.05	0.05
Theoretical torque	[Nm]	0.95	1.7	3	6.5

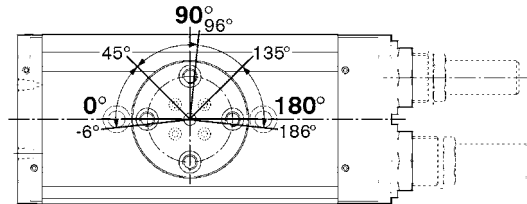
	Frame size	Compressed air connection	angle of rotation	Swivel time min./max.	Working pressure min./max.	Air consumption per rotation	Weight	Part No.
			[°]	[s]	[bar]	[cm <sup>3</sup> ]	[kg]	
	RCM-12	M5	0 - 90	0.3 / --	2.5 / 8	5.86	0.5	R412000387
	RCM-12		0 - 180	0.3 / --	2.5 / 8	11.72	0.5	<b>R412000388</b>
	RCM-16		0 - 90	0.32 / --	2 / 8	10.36	0.84	R412000389
	RCM-16		0 - 180	0.32 / --	2 / 8	20.71	0.84	R412000390
	RCM-20		0 - 90	0.48 / --	2 / 8	17.92	1.04	R412000391
	RCM-20		0 - 180	0.48 / --	2 / 8	35.84	1.04	R412000392
	RCM-25		0 - 90	0.6 / --	2 / 8	38.75	1.95	R412000393
	RCM-25		0 - 180	0.6 / --	2 / 8	77.5	1.95	<b>R412000394</b>

## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SH

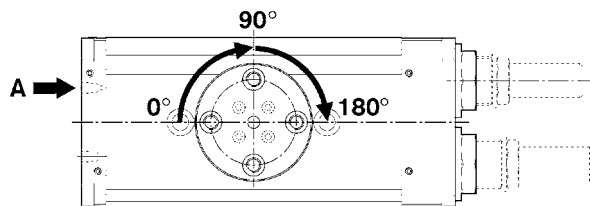
▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with air duct

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



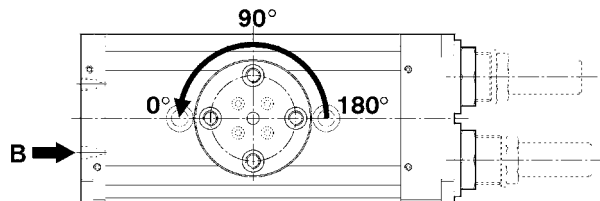
00122055\_c

Movement into end position 90°/180°



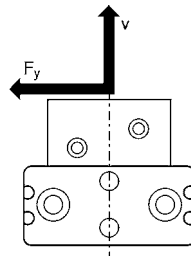
00122053\_c

Movement into end position 0°



00122054

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



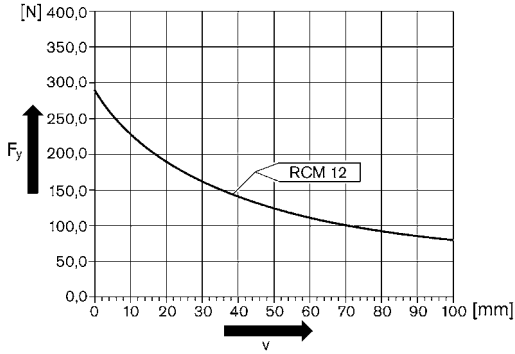
00117405\_a

Rotary actuators ▶ Rack-and-pinion gears

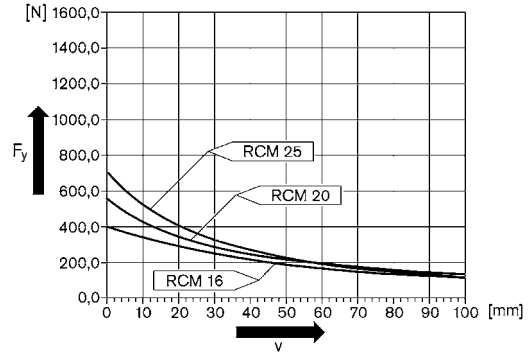
**Rotary Compact Module, Series RCM-SH**

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with air duct

**RCM-12** | **RCM 16 – 25**

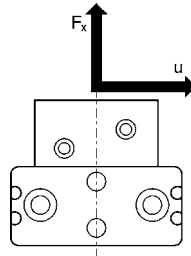


00125737\_b



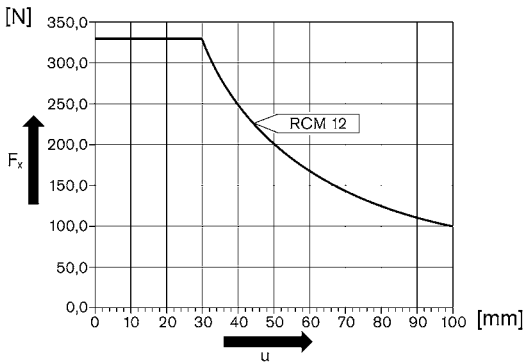
00117407\_b

**Maximum permissible axial force F<sub>x</sub> [N] as a function of u [mm]**

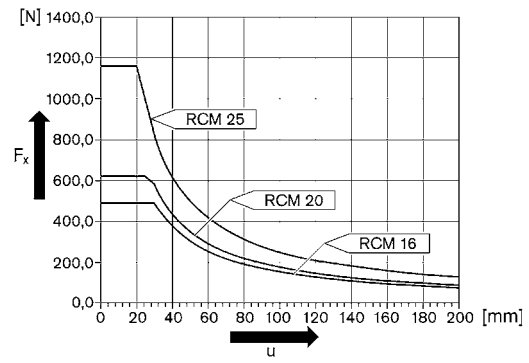


00117404\_b

**RCM-12** | **RCM 16 – 25**



00125738\_b



00117260\_b

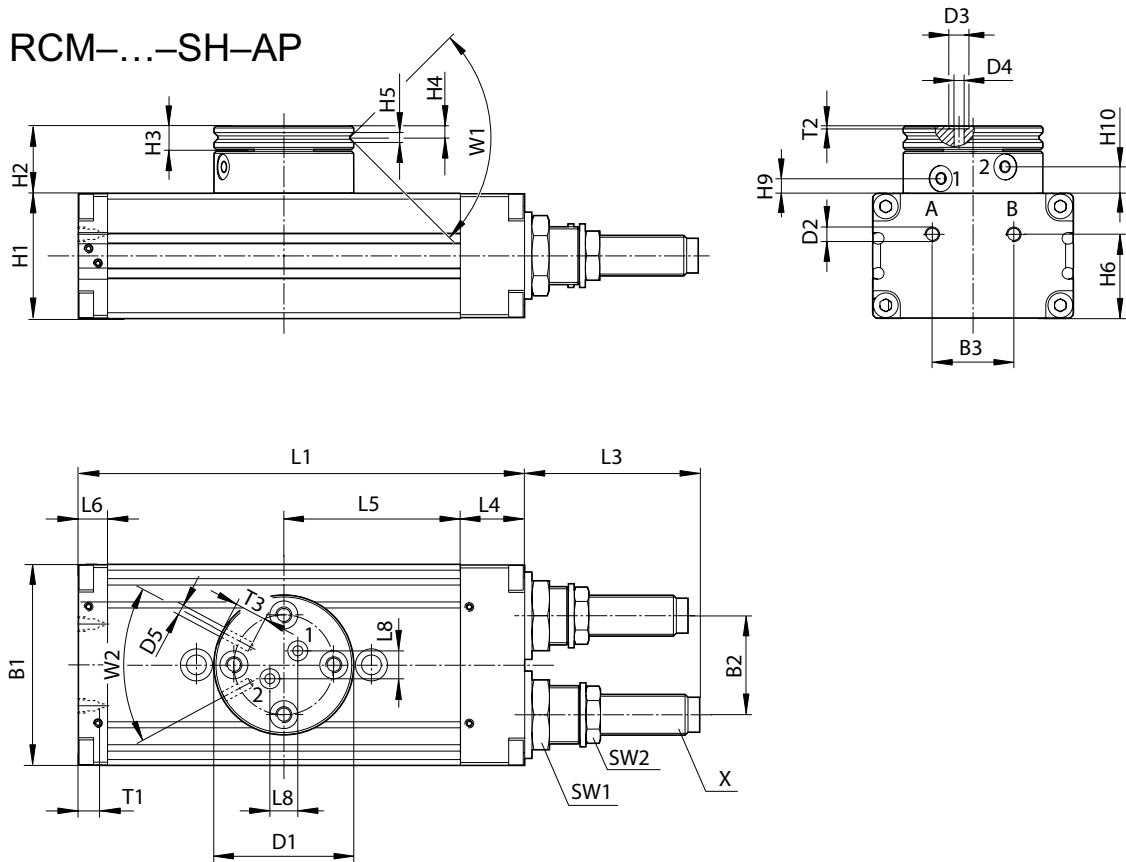
## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SH

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with air duct

RCM-12

RCM-...-SH-AP



T1 = depth of thread

00125726

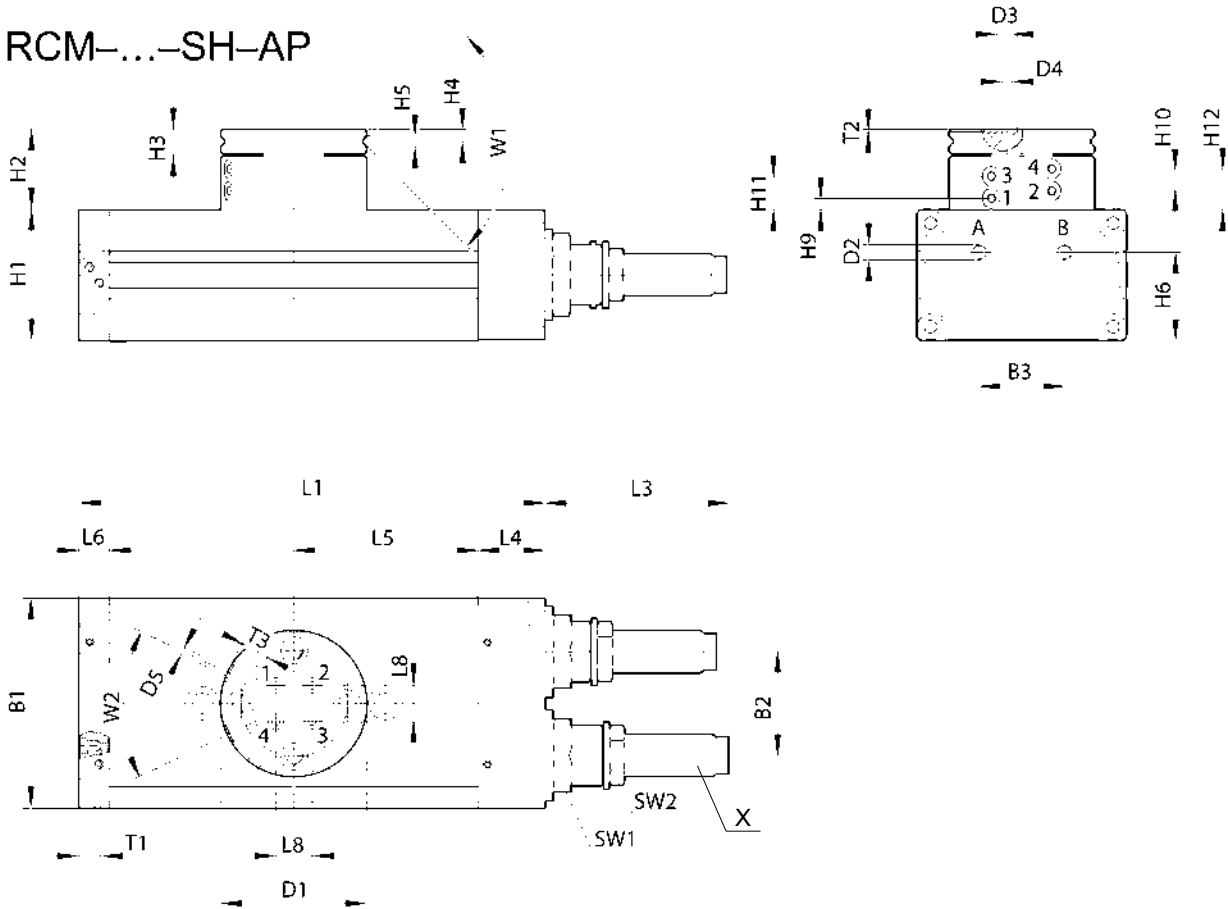
Frame size	B1	B2	B3	Ø D1	Ø D2	Ø D3	Ø D4	Ø D5	H1	H2	H3	H4	H5
RCM-12	43	18	18	35	M5	5	2.5	M3	24	17	6	2.9	2.5
Frame size	H6	H9 ±0,2	H10 ±0,2	L1	L3	L4	L5	L6	L8	SW1	SW2	T1	T2
RCM-12	18	3.8	6.7	103	33.5	14	40	9	7	15	11	4	0.7
Frame size	T3	W1	W2	X									
RCM-12	4	90°	56°	M8x1									

### Rotary Compact Module, Series RCM-SH

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with air duct

RCM-16/.../-25

RCM-...-SH-AP



T1 = depth of thread

00125728

Frame size	B1	B2	B3	Ø D1	Ø D2	Ø D3	Ø D4	Ø D5	H1	H2	H3	H4	H5
RCM-16	52	24	20	40	M5	5	2.5	M3	32	25.5	7	3.3	2.5
RCM-20	58	30	20	42	M5	5	2.5	M3	37	26	7	3.3	3
RCM-25	69	34	28	48	M5	5	2.5	M3	43	26.5	8	4	3

Frame size	H6	H9 ±0,2	H10 ±0,2	H11 ±0,2	H12 ±0,2	L1	L3	L4	L5	L6	L8	SW1	SW2
RCM-16	21	3.9	6.5	11.1	13.7	108	34	18	40	10	6	19	13
RCM-20	26	4.4	7	11.6	14.2	114	48.5	19	43	9	10	19	15
RCM-25	29	3.9	6.5	11.1	13.7	153	60	22	60.5	10	12	23	17

Frame size	T1	T2	T3	W1	W2	X							
RCM-16	4	0.7	4	90°	50°	M10x1							
RCM-20	4	0.7	4	90°	50°	M12x1							
RCM-25	4	0.7	4	90°	50°	M14x1,5							



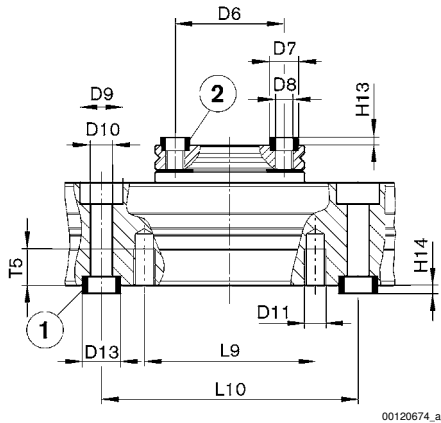
## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SH

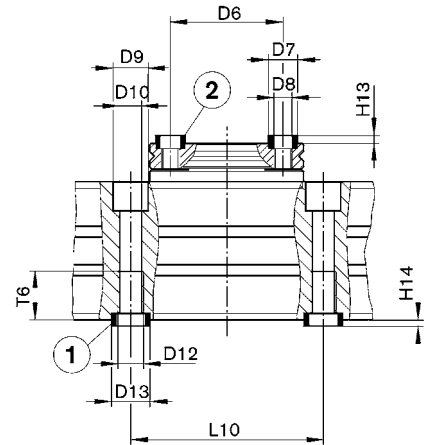
▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with air duct

Mounting and assembly, RCM-12

RCM-6/.../-25



00120674\_a



00120675\_a

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

Frame size	Ø D6 ±0,02	Ø D7 k6	Ø D8	Ø D9	Ø D10	Ø D11	Ø D12	Ø D13 k6	H13 +0,2	H14 +0,2	L9	L10 ±0,02	T5
RCM-12	25	7	M4	10	5.1	M5	-	9	1.6	2.1	40	60	8.5
RCM-16	30	7	M5	10	5	-	M6	9	1.6	2.1	-	60	-
RCM-20	30	7	M5	11	6.8	-	M8	12	1.6	2.1	-	60	-
RCM-25	35	9	M6	11	6.8	-	M8	12	2.1	2.1	-	60	-

Frame size	T6												
RCM-12	-												
RCM-16	11.1												
RCM-20	15.1												
RCM-25	15.1												

## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SE

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with integrated intermediate position



00121315

Working pressure min./max.	4 bar / 8 bar
Ambient temperature min./max.	+5 °C / +60 °C
Medium temperature min./max.	+5 °C / +60 °C
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m <sup>3</sup> - 1 mg/m <sup>3</sup>
Theoretical torque at	6 bar

## Materials:

Housing	Aluminum, anodized
Covers	Aluminum black anodized
Base	Aluminum, black anodized
Seals	Acrylonitrile Butadiene Rubber
Axis	Steel, hardened
Rotary flange	Steel, hardened

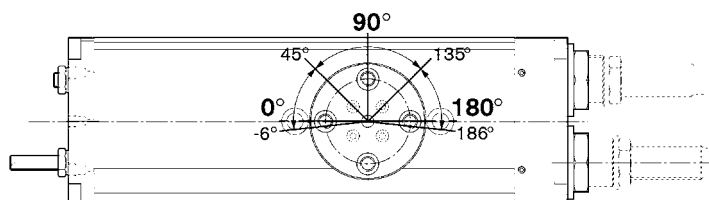
## Technical Remarks

- The pressure dew point must be at least 15 °C under 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, see chapter „Technical information“.
- NOTICE: For positioning without overswing in the intermediate position, it is recommended to limit the mass moment of inertia to 40% of the maximum permissible value!

Frame size		RCM-12	RCM-16	RCM-20	RCM-25
Max. permissible axial bearing load	[N]	330	490	620	1160
Max. permissible radial bearing load	[N]	360	580	780	1480
Max. permissible mass moment of inertia	[kgcm <sup>2</sup> ]	0.7	1.6	3.2	6.3
Repetitive precision	[°]	0.2	0.2	0.2	0.2
Theoretical torque	[Nm]	0.95	1.7	3	6.5

	Frame size	Compressed air connection	angle of rotation	Swivel time min./max.	Air consumption per rotation	Weight	Part No.
			[°]	[s]	[cm <sup>3</sup> ]	[kg]	
	RCM-12	M5	0 - 180	0.28 / --	13.29	0.48	<b>R412000395</b>
	RCM-16			0.25 / --	22.14	0.79	R412000396
	RCM-20			0.3 / --	37.83	1.12	R412000397
	RCM-25			0.3 / --	80.72	2.1	R412000398

## Setting range for end positions 0°/180° and intermediate position 90°



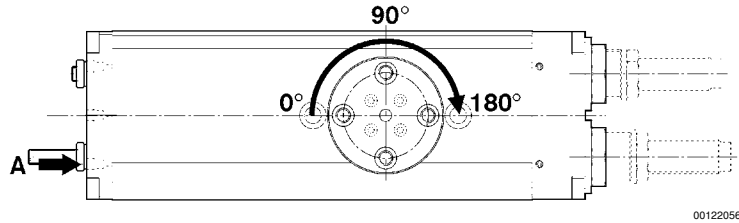
00122059

## Rotary actuators ▶ Rack-and-pinion gears

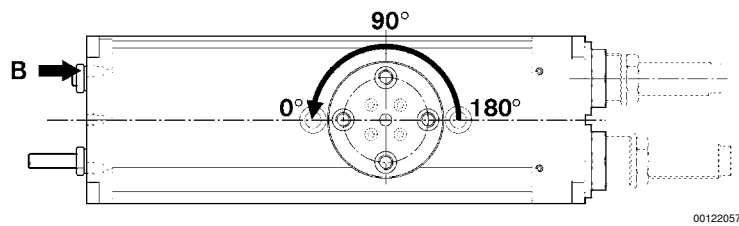
**Rotary Compact Module, Series RCM-SE**

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with integrated intermediate position

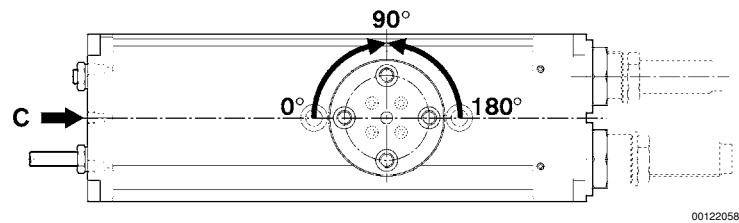
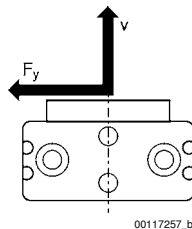
## Movement into end position 180°



## Movement into end position 0°



## Movement into intermediate position 90°

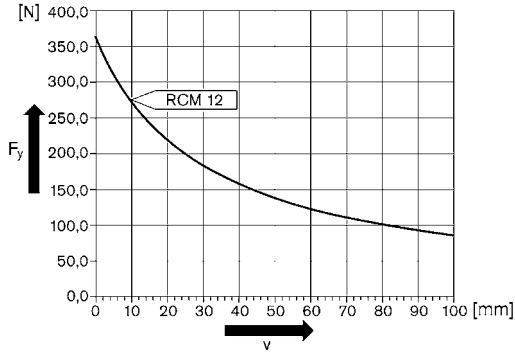
Maximum permissible radial force  $F_y$  [N] as a function of  $v$  [mm]

Rotary actuators ▶ Rack-and-pinion gears

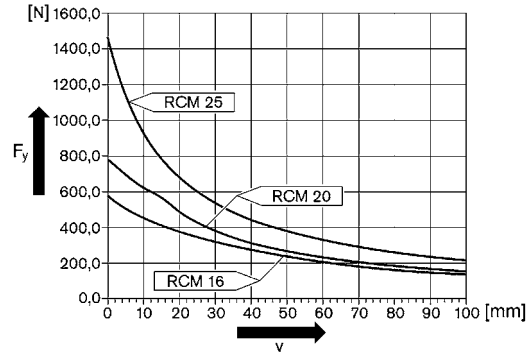
**Rotary Compact Module, Series RCM-SE**

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with integrated intermediate position

**RCM 12** | **RCM 16 – 25**

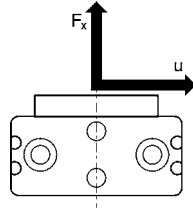


00122095\_b



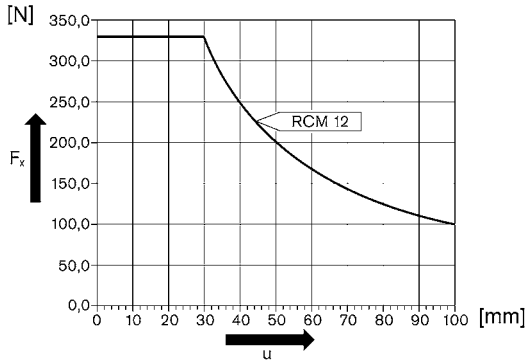
00117262\_b

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

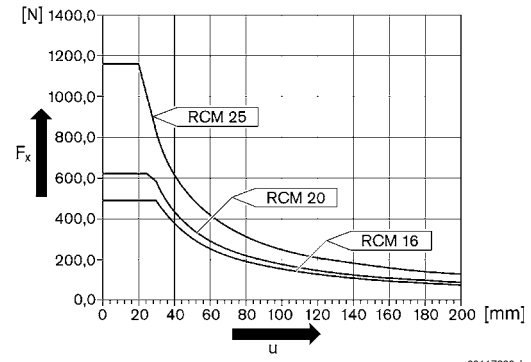


00117258\_b

**RCM 12** | **RCM 16 – 25**



00125738\_b



00117260\_b

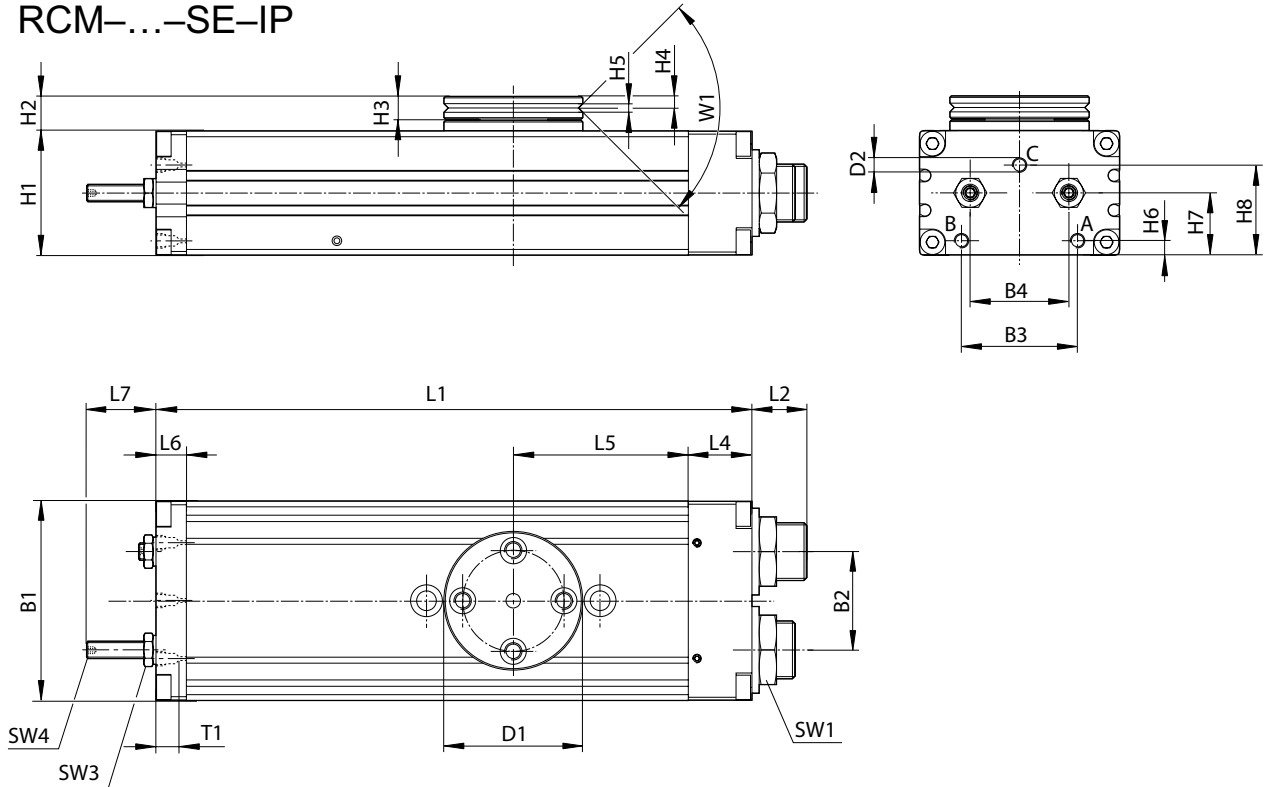
## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SE

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with integrated intermediate position

RCM-12/.../-25

RCM-...-SE-IP



T1 = depth of thread

00125729

Frame size	B1	B2	B3	B4	Ø D1	Ø D2	H1	H2	H3	H4	H5	H6	H7
RCM-12	43	18	24	18	35	M5	24	10.5	6	2.9	2.5	3.7	12.5
RCM-16	52	24	29	24	40	M5	32	10	7	3.3	2.5	5	16
RCM-20	58	30	30	30	42	M5	37	11	7	3.3	3	5.5	19
RCM-25	69	34	40	34	48	M5	43	12	8	4	3	5	21.5

Frame size	H8	L1	L2	L4	L5	L6	L7	SW1	SW3	SW4	T1	W1
RCM-12	18.1	136	12.5	14	40	8.5	17	15	7	2	4	90°
RCM-16	21.1	140	15.5	18	40	8.5	17	19	7	2	4	90°
RCM-20	27.1	156	15	19	43	8.5	22	19	8	2.5	4	90°
RCM-25	31.1	206	19	22	60.5	10.5	24	23	10	3	4	90°

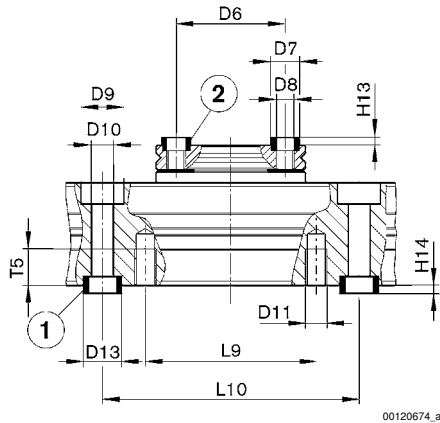
## Rotary actuators ▶ Rack-and-pinion gears

**Rotary Compact Module, Series RCM-SE**

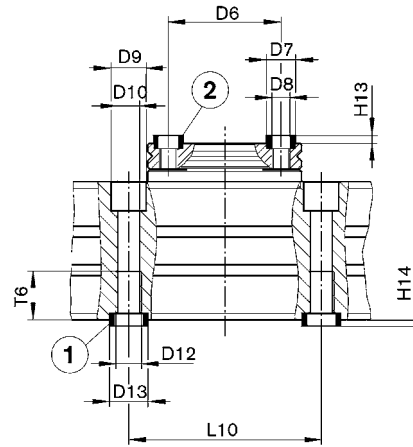
▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with integrated intermediate position

## Mounting and assembly, RCM-12

## RCM-16/.../-25



00120674\_a



00120675\_a

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

Frame size	Ø D6 ±0,02	Ø D7 k6	Ø D8	Ø D9	Ø D10	Ø D11	Ø D12	Ø D13 k6	H13 +0,2	H14 +0,2	L9	L10 ± 0,02	T5
RCM-12	25	7	M4	10	5.1	M5	–	9	1.6	2.1	40	60	8.5
RCM-16	30	7	M5	10	5	–	M6	9	1.6	2.1	–	60	–
RCM-20	30	7	M5	11	6.8	–	M8	12	1.6	2.1	–	60	–
RCM-25	35	9	M6	11	6.8	–	M8	12	2.1	2.1	–	60	–

Frame size	T6												
RCM-12	–												
RCM-16	11.1												
RCM-20	15.1												
RCM-25	15.1												

## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SH

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with integrated intermediate position



00131807

Working pressure min./max.	4 bar / 8 bar
Ambient temperature min./max.	+5 °C / +60 °C
Medium temperature min./max.	+5 °C / +60 °C
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Theoretical torque at	6 bar

## Materials:

Housing	Aluminum, anodized
Covers	Aluminum black anodized
Base	Aluminum, black anodized
Seals	Acrylonitrile Butadiene Rubber
Axis	Steel, hardened
Rotary flange	Steel, hardened

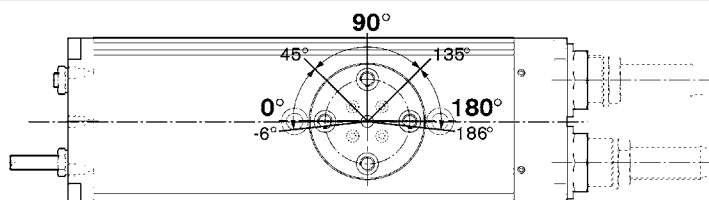
## Technical Remarks

- The pressure dew point must be at least 15 °C under 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, see chapter „Technical information“.
- NOTICE: For positioning without overswing in the intermediate position, it is recommended to limit the mass moment of inertia to 40% of the maximum permissible value!

Frame size		RCM-12	RCM-16	RCM-20	RCM-25
Max. permissible axial bearing load	[N]	330	490	620	1160
Max. permissible radial bearing load	[N]	360	580	780	1480
Max. permissible mass moment of inertia	[kgcm²]	10	80	180	450
Repetitive precision	[°]	0.05	0.05	0.05	0.05
Theoretical torque	[Nm]	0.95	1.7	3	6.5

	Frame size	Compressed air connection	angle of rotation	Swivel time min./max.	Air consumption per rotation	Weight	Part No.
			[°]	[s]	[cm³]	[kg]	
	RCM-12	M5	0 - 180	0.3 / --	13.29	0.5	R412000399
	RCM-16			0.32 / --	22.14	0.82	R412000400
	RCM-20			0.48 / --	37.83	1.18	R412000401
	RCM-25			0.6 / --	80.72	2.23	R412000402

## Setting range for end positions 0°/180° and intermediate position 90°

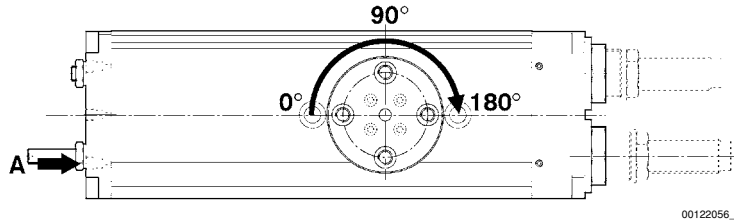
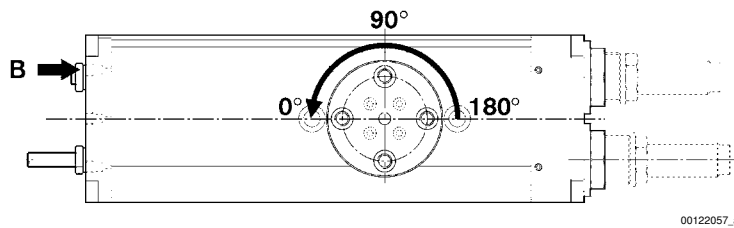
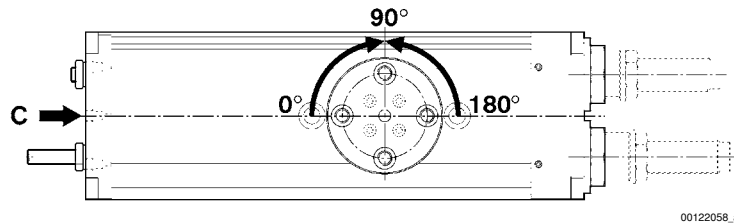
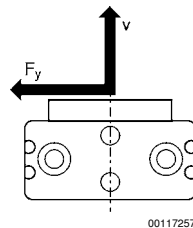


00122059\_a

## Rotary actuators ▶ Rack-and-pinion gears

**Rotary Compact Module, Series RCM-SH**

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with integrated intermediate position

**Movement into end position 180°**

**Movement into end position 0°**

**Movement into intermediate position 90°**

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


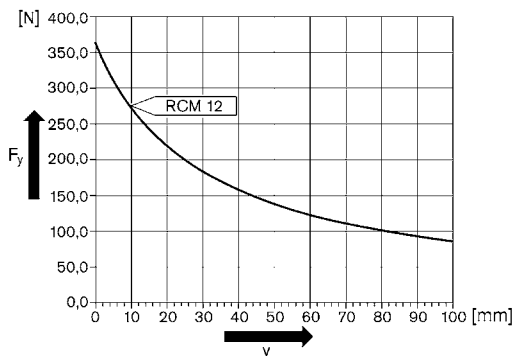


Rotary actuators ▶ Rack-and-pinion gears

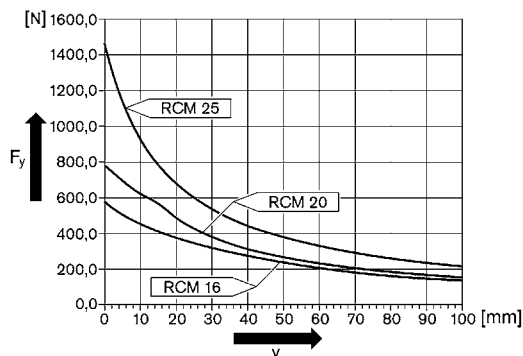
**Rotary Compact Module, Series RCM-SH**

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with integrated intermediate position

**RCM 12** | **RCM 16 – 25**

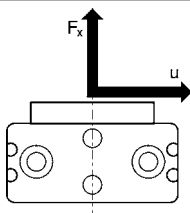


00122095\_b



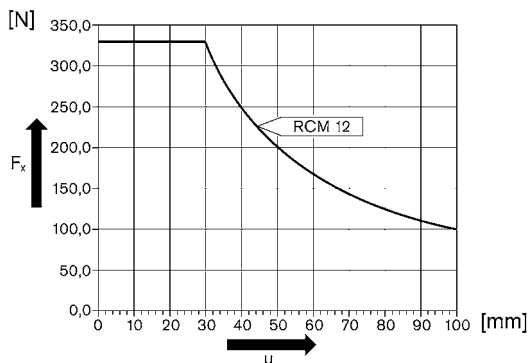
00117262\_b

**Maximum permissible radial force F<sub>y</sub> [N] as a function of v [mm]**

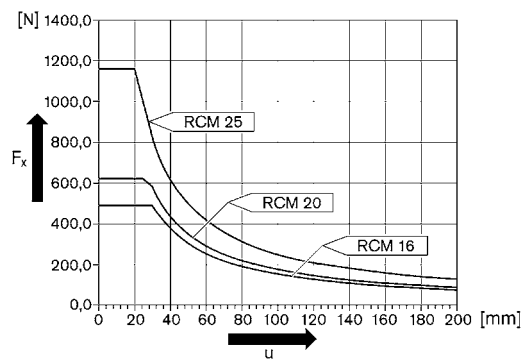


00117258

**RCM 12** | **RCM 16 – 25**



00125738\_b



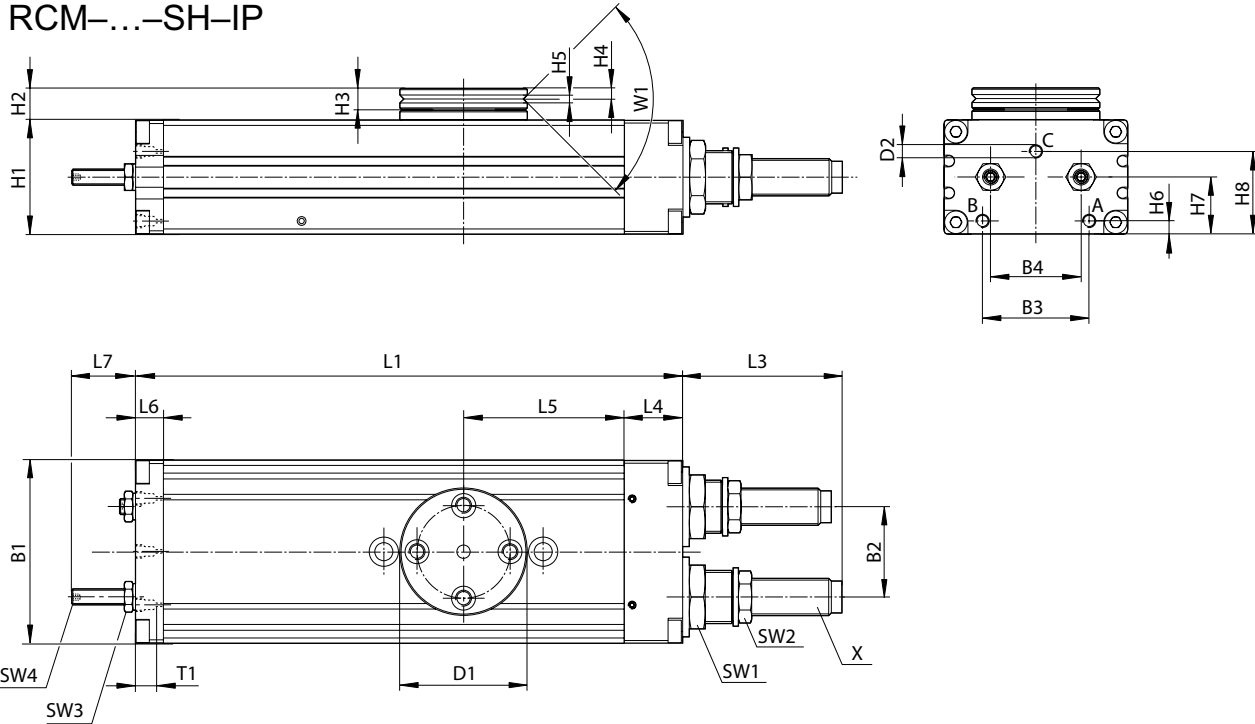
00117260\_b

**Rotary Compact Module, Series RCM-SH**

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with integrated intermediate position

**RCM-12/.../-25**

**RCM-...-SH-IP**



00125730

T1 = depth of thread

Frame size	B1	B2	B3	B4	Ø D1	Ø D2	H1	H2	H3	H4	H5	H6	H7
RCM-12	43	18	24	18	35	M5	24	10.5	6	2.9	2.5	3.7	12.5
RCM-16	52	24	29	24	40	M5	32	10	7	3.3	2.5	5	16
RCM-20	58	30	30	30	42	M5	37	11	7	3.3	3	5.5	19
RCM-25	69	34	40	34	48	M5	43	12	8	4	3	5	21.5

Frame size	H8	L1	L3	L4	L5	L6	L7	SW1	SW2	SW3	SW4	T1	W1
RCM-12	18.1	136	33.5	14	40	8.5	17	15	11	7	2	4	90°
RCM-16	21.1	140	34	18	40	8.5	17	19	13	7	2	4	90°
RCM-20	27.1	156	48.5	19	43	8.5	22	19	15	8	2.5	4	90°
RCM-25	31.1	206	60	22	60.5	10.5	24	23	17	10	3	4	90°

Frame size	X												
RCM-12	M8x1												
RCM-16	M10x1												
RCM-20	M12x1												
RCM-25	M14x1,5												

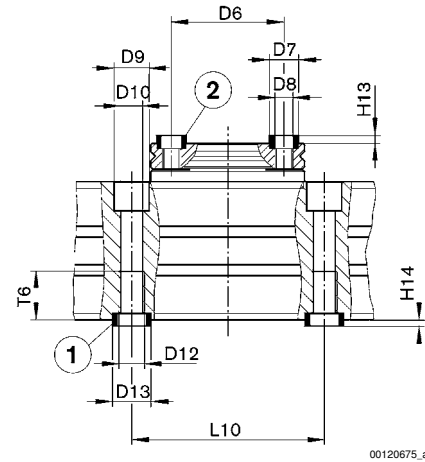
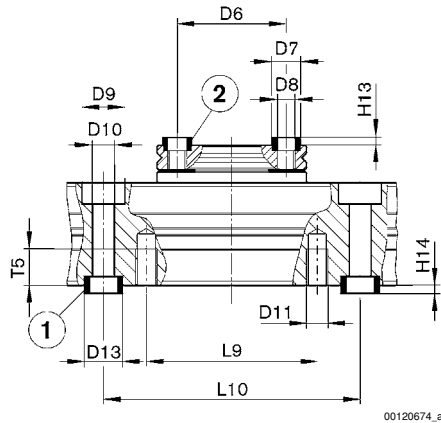
## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SH

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with integrated intermediate position

Mounting and assembly, RCM 12

RCM-16/.../-25



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

Frame size	Ø D6 ±0,02	Ø D7 k6	Ø D8	Ø D9	Ø D10	Ø D11	Ø D12	Ø D13 k6	H13 +0,2	H14 +0,2	L9	L10 ± 0,02	T5
RCM-12	25	7	M4	10	5.1	M5	-	9	1.6	2.1	40	60	8.5
RCM-16	30	7	M5	10	5	-	M6	9	1.6	2.1	-	60	-
RCM-20	30	7	M5	11	6.8	-	M8	12	1.6	2.1	-	60	-
RCM-25	35	9	M6	11	6.8	-	M8	12	2.1	2.1	-	60	-

Frame size	T6												
RCM-12	-												
RCM-16	11.1												
RCM-20	15.1												
RCM-25	15.1												

## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SE

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with integrated intermediate position ▶ with air duct



00121302

Working pressure min./max.	4 bar / 8 bar
Ambient temperature min./max.	+5 °C / +60 °C
Medium temperature min./max.	+5 °C / +60 °C
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m <sup>3</sup> - 1 mg/m <sup>3</sup>
Theoretical torque at	6 bar

## Materials:

Housing	Aluminum, anodized
Covers	Aluminum black anodized
Base	Aluminum, black anodized
Seals	Acrylonitrile Butadiene Rubber
Axis	Steel, hardened
Rotary flange	Steel, hardened

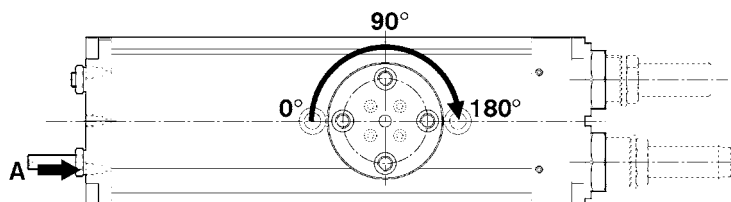
## Technical Remarks

- The pressure dew point must be at least 15 °C under 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, see chapter „Technical information“.
- NOTICE: For positioning without overswing in the intermediate position, it is recommended to limit the mass moment of inertia to 40% of the maximum permissible value!

Frame size		RCM-12	RCM-16	RCM-20	RCM-25
Number of air ducts		2	4	4	4
Max. permissible axial bearing load	[N]	330	490	620	1160
Max. permissible radial bearing load	[N]	290	400	560	700
Max. permissible mass moment of inertia	[kgcm <sup>2</sup> ]	0.7	1.6	3.2	6.3
Repetitive precision	[°]	0.2	0.2	0.2	0.2
Theoretical torque	[Nm]	0.95	1.7	3	6.5

	Frame size	Compressed air connection	angle of rotation	Swivel time min./max.	Air consumption per rotation	Weight	Part No.
			[°]	[s]	[cm <sup>3</sup> ]	[kg]	
	RCM-12	M5	0 - 180	0.32 / --	13.29	0.52	R412000403
	RCM-16			0.3 / --	22.14	0.85	R412000404
	RCM-20			0.35 / --	37.83	1.2	R412000405
	RCM-25			0.35 / --	80.72	2.2	R412000406

## Movement into end position 180°



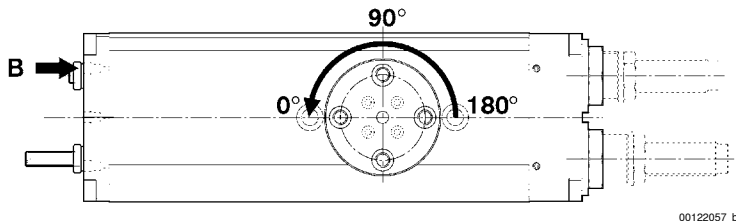
00122056\_b

Rotary actuators ▶ Rack-and-pinion gears

**Rotary Compact Module, Series RCM-SE**

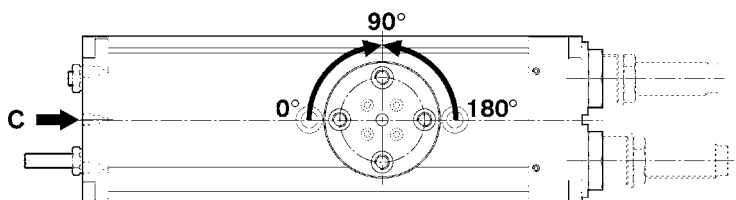
▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with integrated intermediate position ▶ with air duct

Movement into end position 0°



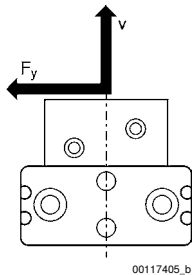
00122057\_b

Movement into intermediate position 90°



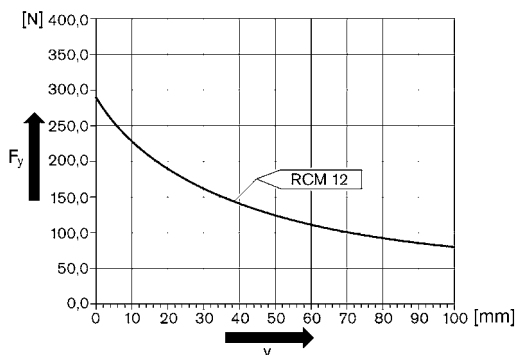
00122058\_b

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



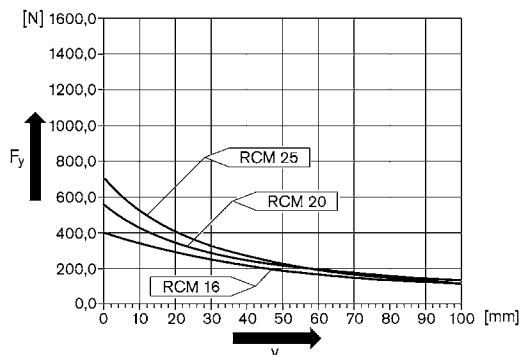
00117405\_b

**RCM 12**



00122094\_b

**RCM 16 – 25**

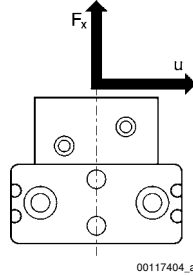


00117407\_b

**Rotary Compact Module, Series RCM-SE**

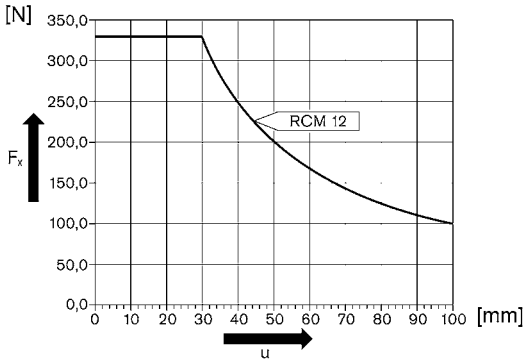
▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with integrated intermediate position ▶ with air duct

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

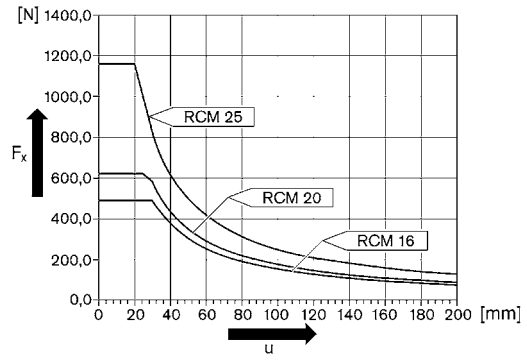


00117404\_a

**RCM 12** | **RCM 16 – 25**



00125738\_b



00117260\_b

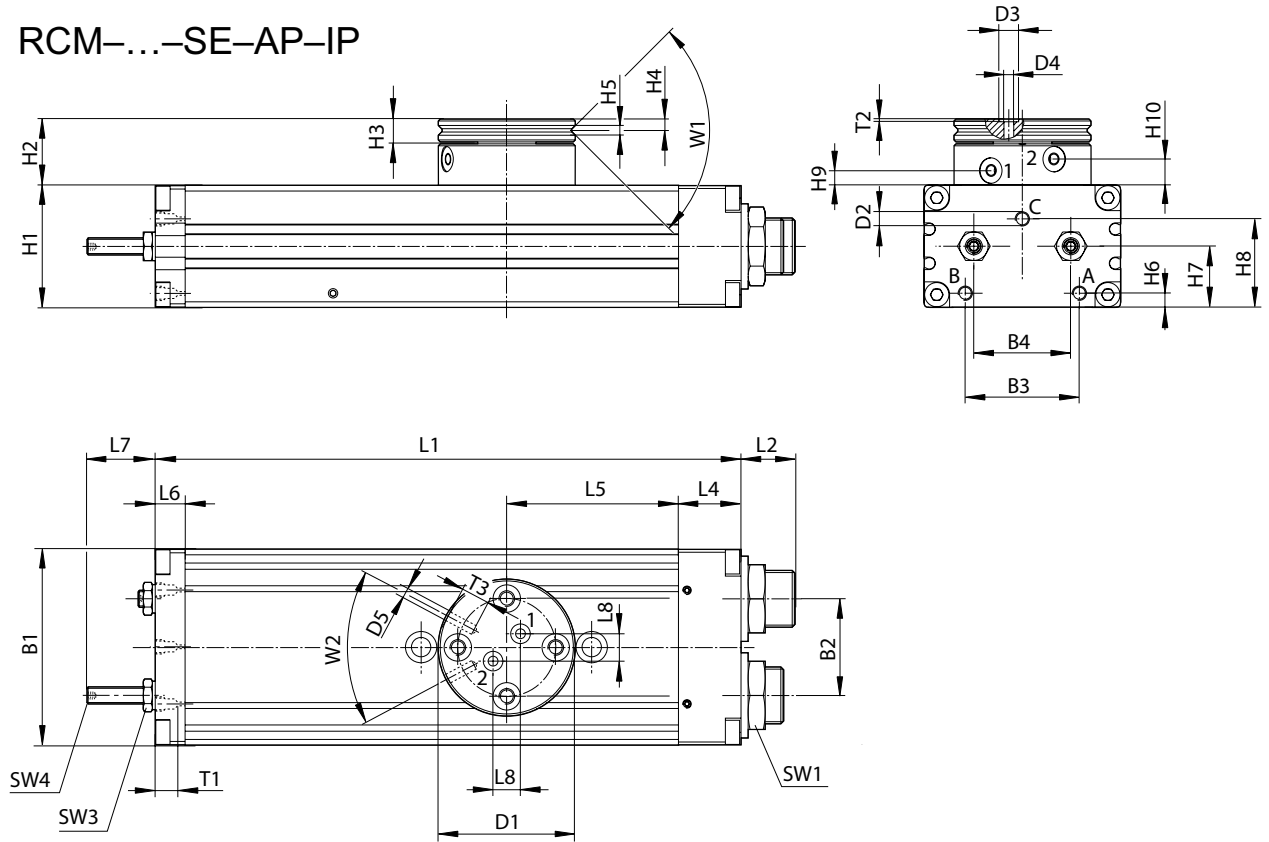
Rotary actuators ▶ Rack-and-pinion gears

**Rotary Compact Module, Series RCM-SE**

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with integrated intermediate position ▶ with air duct

RCM-12

RCM-...-SE-AP-IP



T1 = depth of thread

00125731

Frame size	B1	B2	B3	B4	Ø D1	Ø D2	Ø D3	Ø D4	Ø D5	H1	H2	H3	H4
RCM-12	43	18	24	18	35	M5	5	2.5	M3	24	17	6	2.9
Frame size	H5	H6	H7	H8	H9	H10	L1	L2	L4	L5	L6	L7	L8
RCM-12	2.5	3.7	12.5	18.1	3.8 ±0,2	6.7 ±0,2	136	12.5	14	40	8.5	17	7
Frame size	SW1	SW3	SW4	T1	T2	T3	W1	W2					
RCM-12	15	7	2	4	0.7	4	90°	56°					

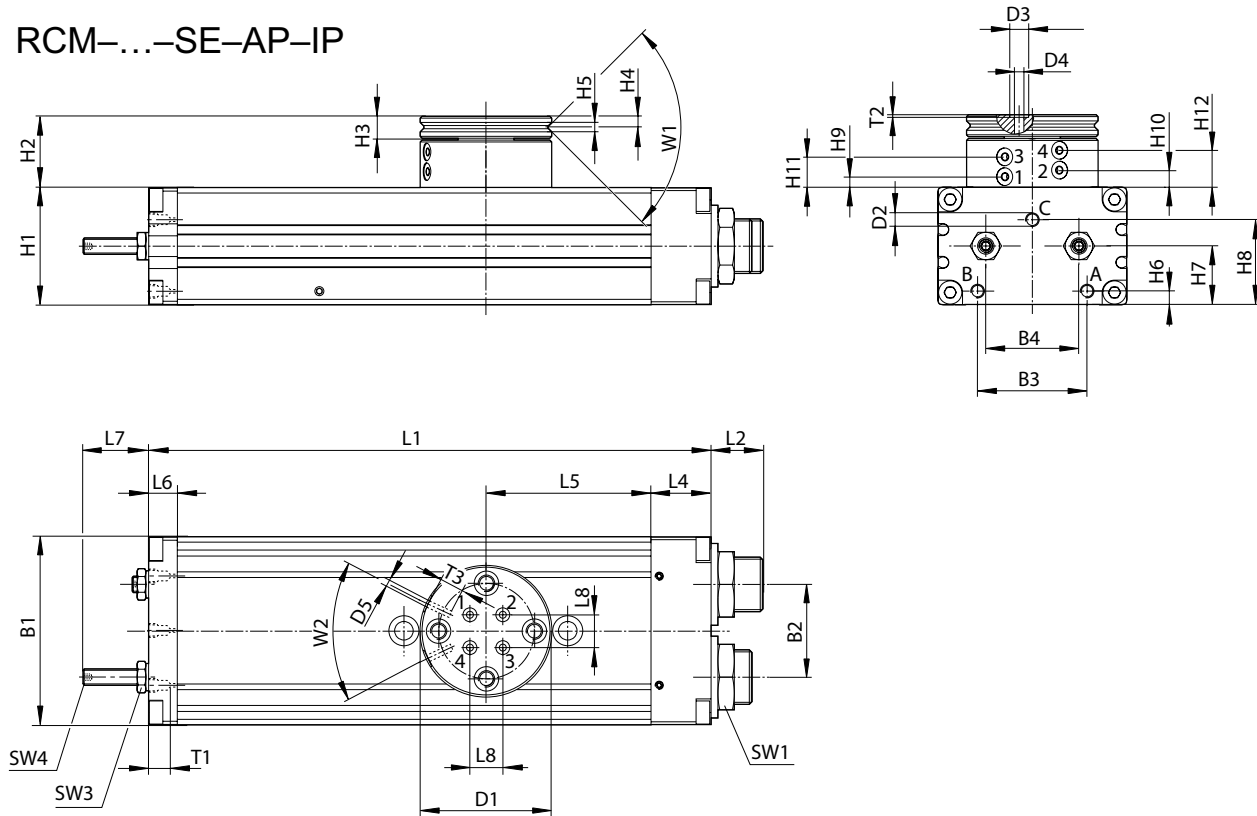
## Rotary actuators ▶ Rack-and-pinion gears

### Rotary Compact Module, Series RCM-SE

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with integrated intermediate position ▶ with air duct

RCM-16/.../25

RCM-...-SE-AP-IP



T1 = depth of thread

00125733

Frame size	B1	B2	B3	B4	Ø D1	Ø D2	Ø D3	Ø D4	Ø D5	H1	H2	H3	H4
RCM-16	52	24	29	24	40	M5	5	2.5	M3	32	25.5	7	3.3
RCM-20	58	30	30	30	42	M5	5	2.5	M3	37	26	7	3.3
RCM-25	69	34	40	34	48	M5	5	2.5	M3	43	26.5	8	4

Frame size	H5	H6	H7	H8	H9	H10	H11	H12	L1	L2	L4	L5	L6
RCM-16	2.5	5	16	21.1	3.9	6.5	11.1	13.7	140	15.5	18	40	8.5
RCM-20	3	5.5	19	27.1	4.4	7	11.6	14.2	156	15	19	43	8.5
RCM-25	3	5	21.5	31.1	3.9	6.5	11.1	13.7	206	19	22	60.5	10.5

Frame size	L7	L8	SW1	SW3	SW4	T1	T2	T3	W1	W2		
RCM-16	17	6	19	7	2	4	0.7	4	90°	50°		
RCM-20	22	10	19	8	2.5	4	0.7	4	90°	50°		
RCM-25	24	12	23	10	3	4	0.7	4	90°	50°		



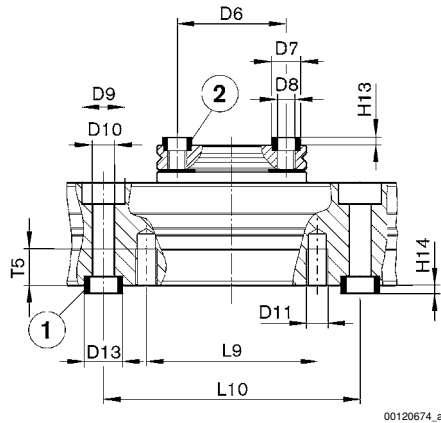
## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SE

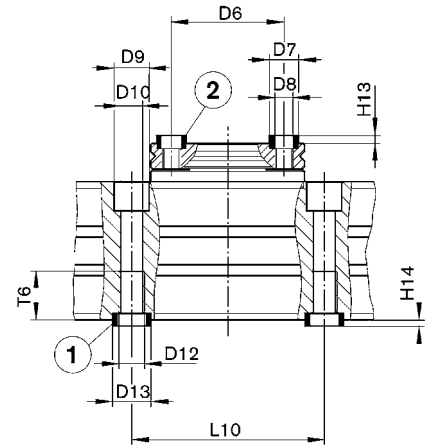
▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: elastic ▶ with integrated intermediate position ▶ with air duct

Mounting and assembly, RCM-12

RCM-16/.../-25



00120674\_a



00120675\_a

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

Frame size	Ø D6 ±0,02	Ø D7 k6	Ø D8	Ø D9	Ø D10	Ø D11	Ø D12	Ø D13 k6	H13 +0,2	H14 +0,2	L9	L10 ±0,02	T5
RCM-12	25	7	M4	10	5.1	M5	-	9	1.6	2.1	40	60	8.5
RCM-16	30	7	M5	10	5	-	M6	9	1.6	2.1	-	60	-
RCM-20	30	7	M5	11	6.8	-	M8	12	1.6	2.1	-	60	-
RCM-25	35	9	M6	11	6.8	-	M8	12	2.1	2.1	-	60	-

Frame size	T6												
RCM-12	-												
RCM-16	11.1												
RCM-20	15.1												
RCM-25	15.1												

## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SH

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with integrated intermediate position ▶ with air duct



00131805

Working pressure min./max.	4 bar / 8 bar
Ambient temperature min./max.	+5 °C / +60 °C
Medium temperature min./max.	+5 °C / +60 °C
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m <sup>3</sup> - 1 mg/m <sup>3</sup>
Theoretical torque at	6 bar

## Materials:

Housing	Aluminum, anodized
Covers	Aluminum black anodized
Base	Aluminum, black anodized
Seals	Acrylonitrile Butadiene Rubber
Axis	Steel, hardened
Rotary flange	Steel, hardened

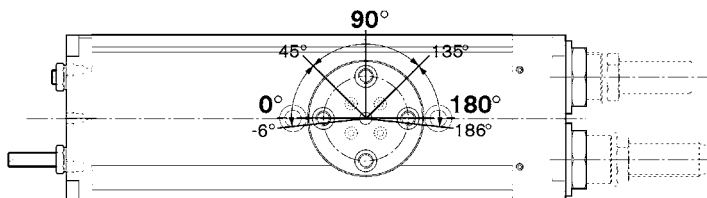
## Technical Remarks

- The pressure dew point must be at least 15 °C under 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, see chapter „Technical information“.
- NOTICE: For positioning without overswing in the intermediate position, it is recommended to limit the mass moment of inertia to 40% of the maximum permissible value!

Frame size		RCM-12	RCM-16	RCM-20	RCM-25
Number of air ducts		2	4	4	4
Max. permissible axial bearing load	[N]	330	490	620	1160
Max. permissible radial bearing load	[N]	290	400	560	700
Max. permissible mass moment of inertia	[kgcm <sup>2</sup> ]	10	80	180	450
Repetitive precision	[°]	0.05	0.05	0.05	0.05
Theoretical torque	[Nm]	0.95	1.7	3	6.5

	Frame size	Compressed air connection	angle of rotation	Swivel time min./max.	Air consumption per rotation	Weight	Part No.
			[°]	[s]	[cm <sup>3</sup> ]	[kg]	
	RCM-12	M5	0 - 180	0.3 / --	13.29	0.56	<b>R412000407</b>
	RCM-16			0.32 / --	22.14	0.93	R412000408
	RCM-20			0.48 / --	37.83	1.25	R412000409
	RCM-25			0.65 / --	80.72	2.33	R412000410

## Setting range for end positions 0°/180° and intermediate position 90°



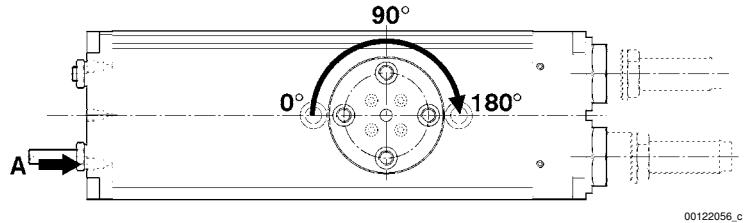
00122059\_c

## Rotary actuators ▶ Rack-and-pinion gears

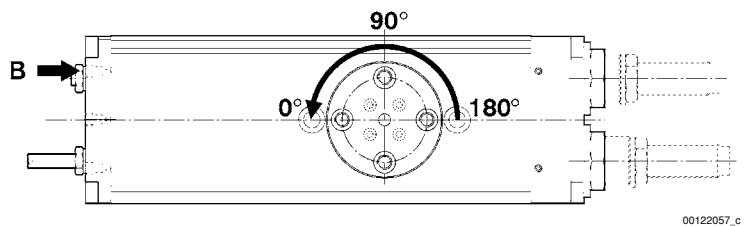
## Rotary Compact Module, Series RCM-SH

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with integrated intermediate position ▶ with air duct

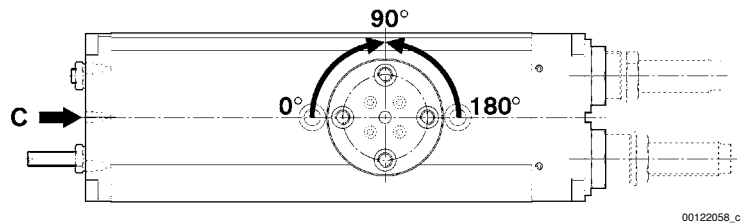
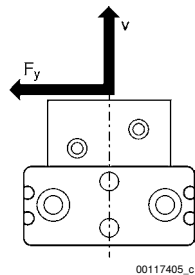
## Movement into end position 180°



## Movement into end position 0°



## Movement into intermediate position 90°

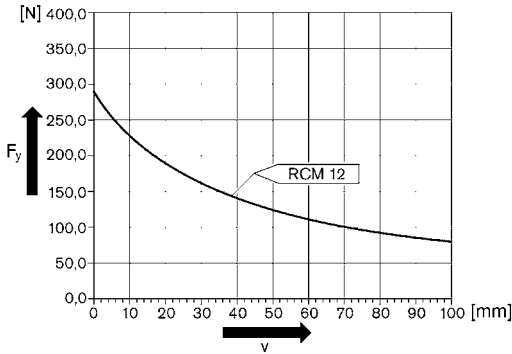
Maximum permissible radial force  $F_y$  [N] as a function of  $v$  [mm]

Rotary actuators ▶ Rack-and-pinion gears

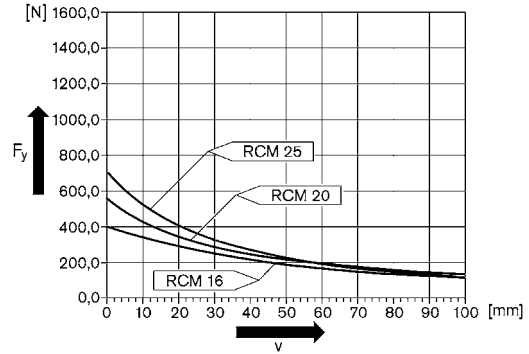
**Rotary Compact Module, Series RCM-SH**

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with integrated intermediate position ▶ with air duct

**RCM 12** | **RCM 16 – 25**

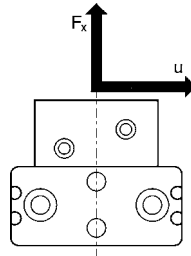


00122094\_b



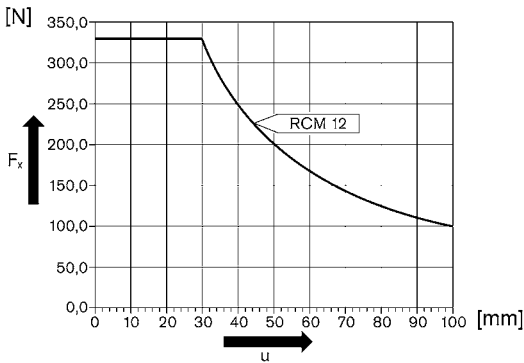
00117407\_b

**Maximum permissible axial force F<sub>x</sub> [N] as a function of u [mm]**

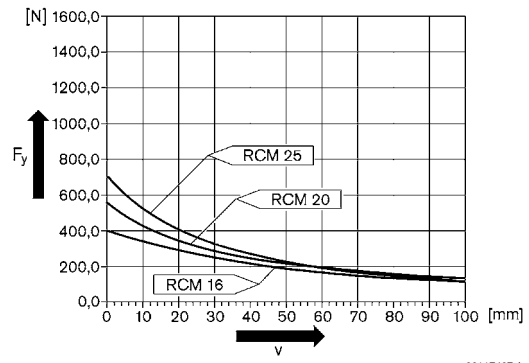


00117404\_c

**RCM 12** | **RCM 16 – 25**



00125738\_b



00117407\_b

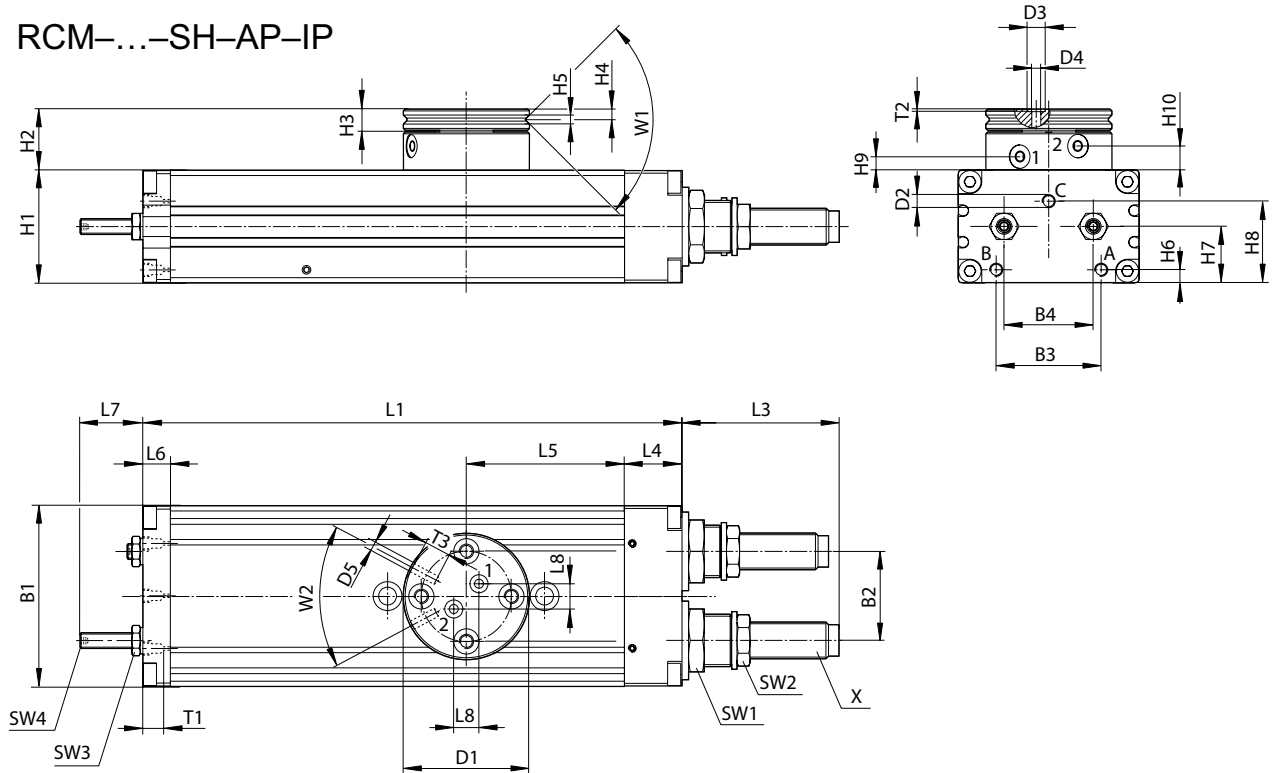
## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SH

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with integrated intermediate position ▶ with air duct

## RCM-12

## RCM-...-SH-AP-IP



T1 = depth of thread

00125732

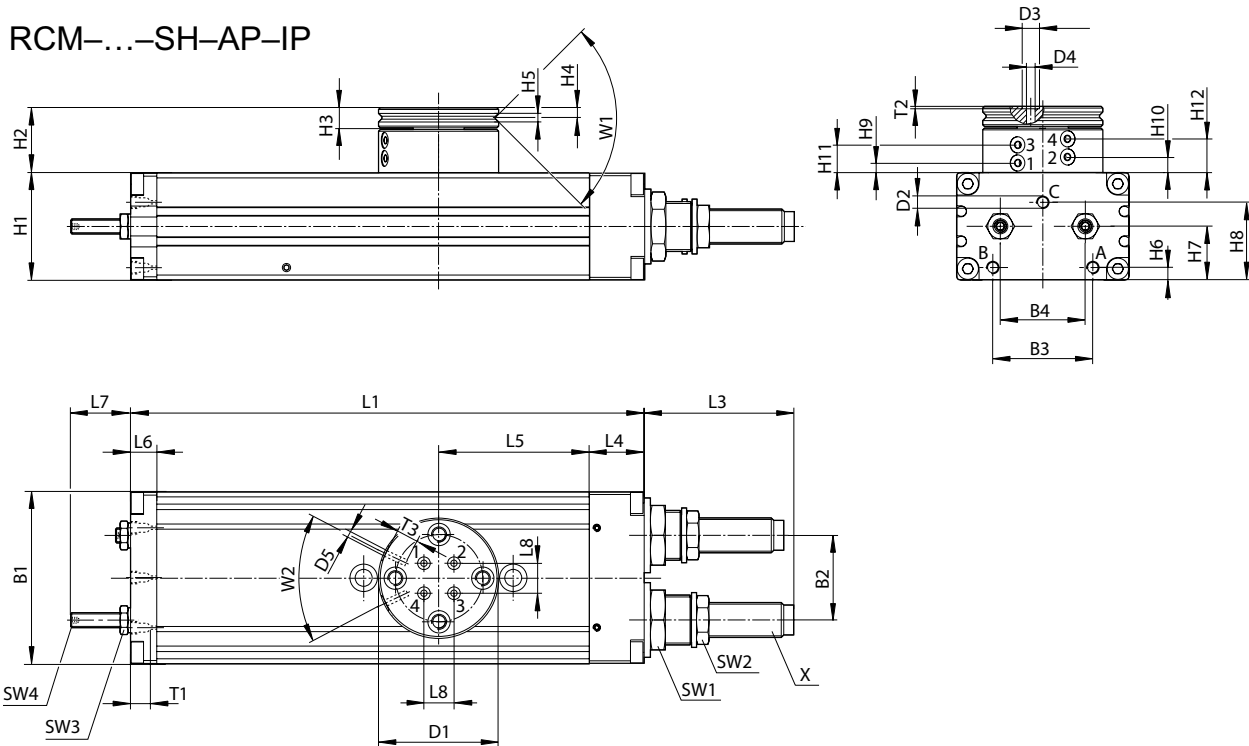
Frame size	B1	B2	B3	B4	Ø D1	Ø D2	Ø D3	Ø D4	Ø D5	H1	H2	H3	H4
RCM-12	43	18	24	18	35	M5	5	2.5	M3	24	17	6	2.9
Frame size	H5	H6	H7	H8	H9	H10	L1	L3	L4	L5	L6	L7	L8
RCM-12	2.5	3.7	12.5	18.1	3.8	6.7	136	33.5	14	40	8.5	17	7
Frame size	SW1	SW2	SW3	SW4	T1	T2	T3	W1	W2	X			
RCM-12	15	11	7	2	4	0.7	4	90°	56°	M8x1			

### Rotary Compact Module, Series RCM-SH

▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with integrated intermediate position ▶ with air duct

RCM-16/.../-25

RCM-...-SH-AP-IP



00125734

T1 = depth of thread

Frame size	B1	B2	B3	B4	Ø D1	Ø D2	Ø D3	Ø D4	Ø D5	H1	H2	H3	H4
RCM-16	52	24	29	24	40	M5	5	2.5	M3	32	25.5	7	3.3
RCM-20	58	30	30	30	42	M5	5	2.5	M3	37	26	7	3.3
RCM-25	69	34	40	34	48	M5	5	2.5	M3	43	26.5	8	4

Frame size	H5	H6	H7	H8	H9 ±0,2	H10 ±0,2	H11 ±0,2	H12 ±0,2	L1	L3	L4	L5	L6
RCM-16	2.5	5	16	21.1	3.9	6.5	11.1	13.7	140	34	18	40	8.5
RCM-20	3	5.5	19	27.1	4.4	7	11.6	14.2	156	48.5	19	43	8.5
RCM-25	3	5	21.5	31.1	3.9	6.5	11.1	13.7	206	60	22	60.5	10.5

Frame size	L7	L8	SW1	SW2	SW3	SW4	T1	T2	T3	W1	W2	X
RCM-16	17	6	19	13	7	2	4	0.7	4	90°	50°	M10x1
RCM-20	22	10	19	15	8	2.5	4	0.7	4	90°	50°	M12x1
RCM-25	24	12	23	17	10	3	4	0.7	4	90°	50°	M14x1,5

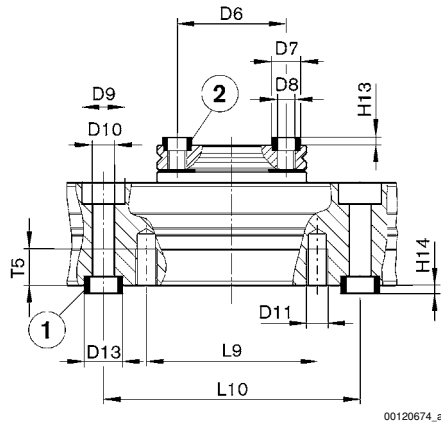
## Rotary actuators ▶ Rack-and-pinion gears

## Rotary Compact Module, Series RCM-SH

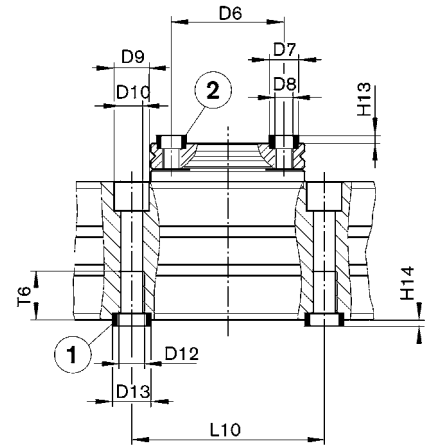
▶ angle of rotation: 0 - 180 ° ▶ Ø12 - 25 mm ▶ with magnetic piston ▶ double piston with rack ▶ Easy-2-Combine-capable ▶ cushioning: hydraulic, non-adjustable ▶ with integrated intermediate position ▶ with air duct

Mounting and assembly, RCM-12

RCM-16/.../-25



00120674\_a



00120675\_a

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

Frame size	Ø D6 ±0,02	Ø D7 k6	Ø D8	Ø D9	Ø D10	Ø D11	Ø D12	Ø D13 k6	H13 +0,2	H14 +0,2	L9	L10 ±0,02	T5
RCM-12	25	7	M4	10	5.1	M5	-	9	1.6	2.1	40	60	8.5
RCM-16	30	7	M5	10	5	-	M6	9	1.6	2.1	-	60	-
RCM-20	30	7	M5	11	6.8	-	M8	12	1.6	2.1	-	60	-
RCM-25	35	9	M6	11	6.8	-	M8	12	2.1	2.1	-	60	-

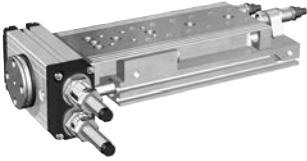
Frame size	T6												
RCM-12	-												
RCM-16	11.1												
RCM-20	15.1												
RCM-25	15.1												

## Series RCM

### Accessories

### Easy-2-Combine, Connection kit

▶ For combination: MSC / RCM



00120646

Materials:

Screws 1)

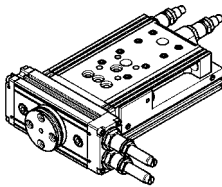
Steel, galvanized

1) ISO 4762:2004

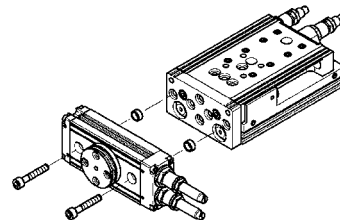
#### A) product 1, B) product 2, C) screws

A	B	C				
RCM-06	MSC-08	2 x M3x20				
RCM-08	MSC-12	2 x M4x22				
RCM-12	MSC-16	2 x M5x30				
RCM-12	MSC-20	2 x M5x30				
RCM-16	MSC-16	2 x M5x35				
RCM-16	MSC-20	2 x M5x35				
RCM-20	MSC-25	2 x M6x40				
RCM-25	MSC-25	2 x M6x45				

#### front mounting: transverse



00120597



00120598



## Rotary actuators ▶ Rack-and-pinion gears

Series RCM  
Accessories

## Centering rings



00112657

Fig. 1

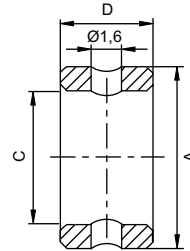
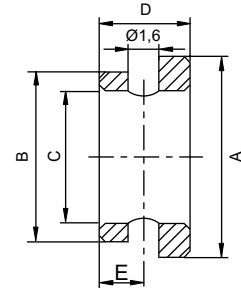


Fig. 2



00119489\_a

Part No.	A k6	B k6	C ±0,1	D −0,2	E +0,2	Material	Delivery quantity [Piece]	Fig.		
<b>R412000669</b>	5	–	3,4	3	–	Stainless steel	6	Fig. 1		
<b>R412000668</b>	7	–	5,5	3	–	Stainless steel	6	Fig. 1		
<b>R412000670</b>	9	–	6,6	4	–	Stainless steel	6	Fig. 1		
<b>R412000671</b>	12	–	9,0	4	–	Stainless steel	6	Fig. 1		
<b>R402003731</b>	16	–	11	6	–	Stainless steel	6	Fig. 1		
<b>R412004030</b>	7	5	3,4	3	1,5	Stainless steel	6	Fig. 2		
R412004032	9	5	3,4	3,5	1,5	Stainless steel	6	Fig. 2		
<b>R412004033</b>	9	7	5,5	3,5	1,5	Stainless steel	6	Fig. 2		
<b>R412004034</b>	12	9	6,6	4,0	2	Stainless steel	6	Fig. 2		
R402003736	16	12	9	5	2	Stainless steel	6	Fig. 2		

## Series RCM

### Accessories

## Sensor, Series ST4

▶ 4 mm groove ▶ with cable ▶ without wire end ferrule, tin-plated



21304

Certificates	UL (Underwriters Laboratories)
Ambient temperature min./max.	-30°C / +80°C
Protection class	IP 65, IP 67
Switching point precision [mm]	±0,1
Switching logic	NO (make contact)
Display	LED
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Mounting screw	Combination: slotted and hexagon socket
Materials:	
Housing	Polyamide, fiber-glass reinforced
Cable sheath	Polyurethane

### Technical Remarks

- The max. switching capacity must not be exceeded.

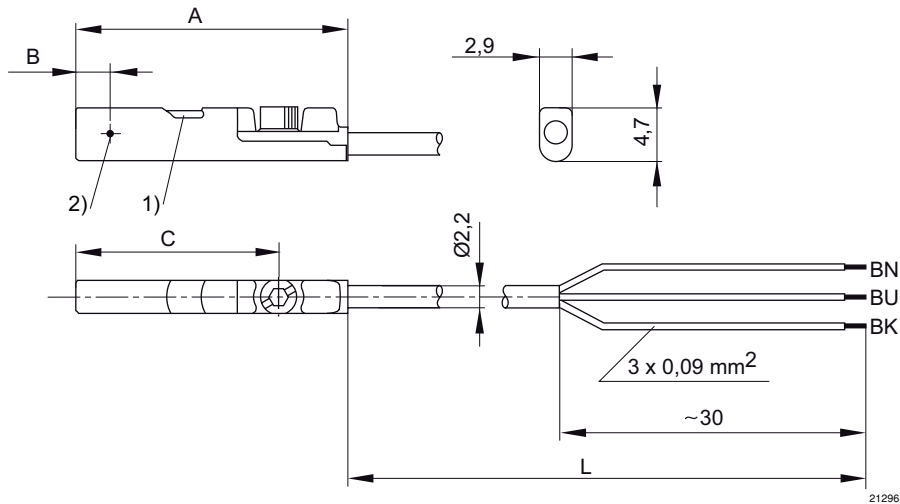
	Type of contact	Cable length	DC operating voltage min./max.	Voltage drop U at I <sub>max</sub>	DC switching current, max.	Part No.
		[m]	[V]	[V]	[A]	
	electronic PNP	3	10 / 30	≤ 2,5	0.1	R412019680
		5				R412019681
	electronic NPN	3	10 / 30	≤ 2,5	0.1	R412019684
		5				R412019685

interfaces: without wire end ferrule, tin-plated  
short circuit resistant; Protected against polarity reversal

## Rotary actuators ▶ Rack-and-pinion gears

Series RCM  
Accessories

## Dimensions



1) LED 2) Switching point  
L = cable length  
BN = brown, BK = black, BU = blue

Part No.	A	B	C									
R412019680	23.7	2.8	17.7									
R412019681	23.7	2.8	17.7									
R412019684	23.7	2.8	17.7									
R412019685	23.7	2.8	17.7									

## Sensor, Series ST4

▶ 4 mm groove ▶ with cable ▶ Plug, M8, 3-pin



Certificates  
Ambient temperature min./max.  
Protection class  
Switching point precision [mm]  
Switching logic  
Display  
LED status display  
Vibration resistance  
Shock resistance  
Mounting screw

Materials:  
Housing  
Cable sheath

UL (Underwriters Laboratories)  
-30°C / +80°C  
IP 65, IP 67  
±0,1  
NO (make contact)  
LED  
Yellow  
10 - 55 Hz, 1 mm  
30 g / 11 ms  
Combination: slotted and hexagon socket

Polyamide, fiber-glass reinforced  
Polyurethane

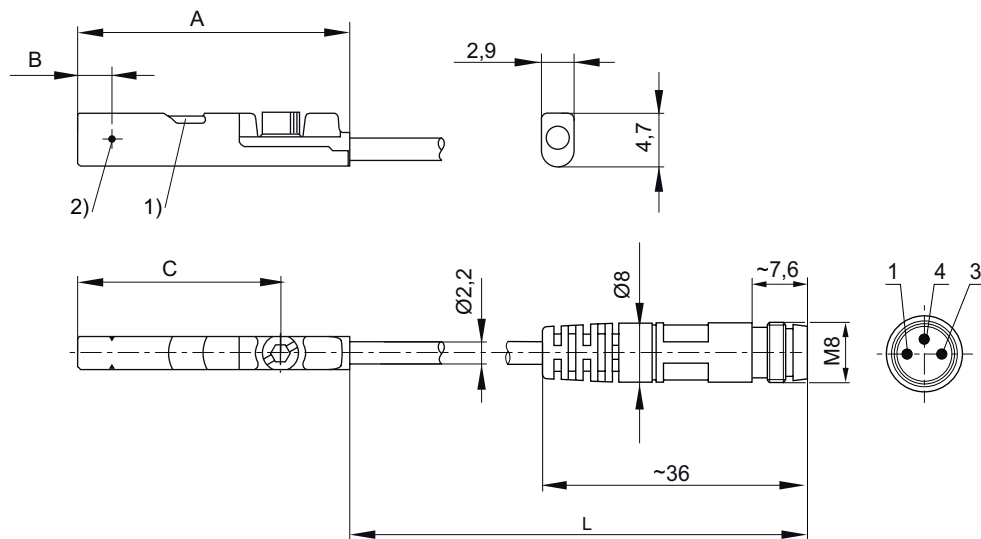
## Technical Remarks

- The max. switching capacity must not be exceeded.

**Series RCM**  
**Accessories**

	Type of contact	Cable length	DC operating voltage min./max.	Voltage drop U at I <sub>max</sub>	DC switching current, max.	Part No.
		[m]	[V]	[V]	[A]	
	electronic PNP	0.3	10 / 30	≤ 2,5	0.1	R412019683
	electronic NPN	0.3	10 / 30	≤ 2,5	0.1	R412019694

interfaces: Plug; M8; 3-pin  
short circuit resistant; Protected against polarity reversal

**Dimensions**


21297

1) LED 2) Switching point

L = cable length

Pin assignment: 1 = (+), 3 = (-), 4 = (OUT), EN 60947-5-2:1998

Part No.	A	B	C								
R412019683	23.7	2.8	17.7								
R412019694	23.7	2.8	17.7								

## Rotary actuators ▶ Rack-and-pinion gears

Series RCM  
Accessories

## Sensor, Series ST4

▶ 4 mm groove ▶ with cable ▶ Plug, M8, 3-pin, with knurled screw



21306

## Certificates

Ambient temperature min./max.

Protection class

Switching point precision [mm]

Switching logic

Display

LED status display

Vibration resistance

Shock resistance

Mounting screw

UL (Underwriters Laboratories)

-30°C / +80°C

IP 65, IP 67

±0,1

NO (make contact)

LED

Yellow

10 - 55 Hz, 1 mm

30 g / 11 ms

Combination: slotted and hexagon socket

## Materials:

Housing

Cable sheath

Polyamide, fiber-glass reinforced

Polyurethane

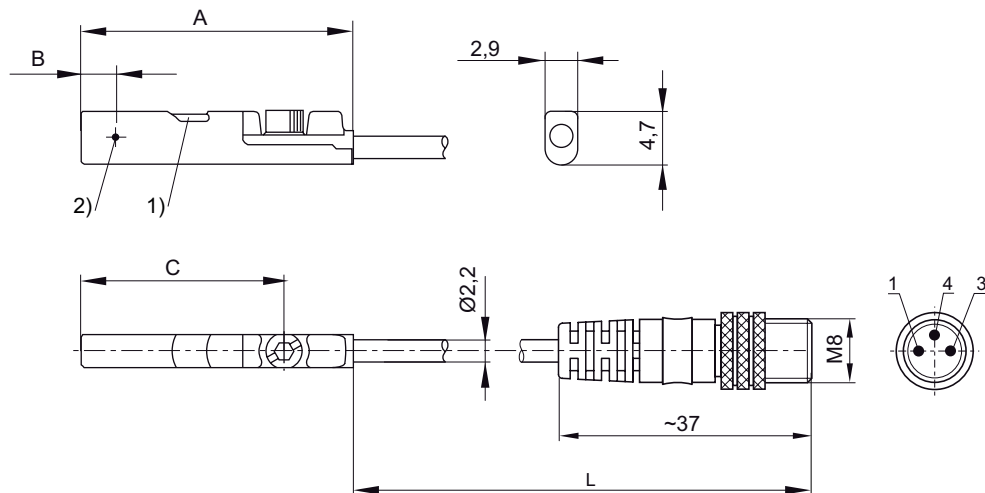
## Technical Remarks

- The max. switching capacity must not be exceeded.

	Type of contact	Cable length	DC operating voltage min./max.	Voltage drop U at I <sub>max</sub>	DC switching current, max.	Part No.
		[m]	[V]	[V]	[A]	
	electronic PNP	0.3	10 / 30	≤ 2,5	0.1	R412019493
		0.5				R412019687

interfaces: Plug; M8; 3-pin; with knurled screw  
short circuit resistant; Protected against polarity reversal

## Dimensions



21298

1) LED 2) Switching point

L = cable length

Pin assignment: 1 = (+), 3 = (-), 4 = (OUT), EN 60947-5-2:1998

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

Pneumatics catalog, online PDF, as of 2014-07-16, ©AVENTICS S.a.r.l., subject to change

## Rotary actuators ▶ Rack-and-pinion gears

### Series RCM Accessories

Part No.	A	B	C									
R412019493	23.7	2.8	17.7									
R412019687	23.7	2.8	17.7									

### Sensors, Series ST4-2P

▶ 4 mm groove ▶ number of switching points:2 ▶ with cable ▶ without wire end ferrule, tin-plated ▶ electronic PNP



00133721

Ambient temperature min./max.	-20°C / +75°C
Protection class	IP 65, IP 67
Local power consumption	<15 mA
DC operating voltage min./max.	12 V - 30 V
Repetitive precision max. measuring range	0,1 mT
Hysteresis	1 mT
Switching logic	NO (make contact)
Display	LED
LED status display	Yellow
Display	2 LED
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Mounting screw	with hexagon socket
Materials:	
Housing	Polyamide
Cable sheath	Polyurethane

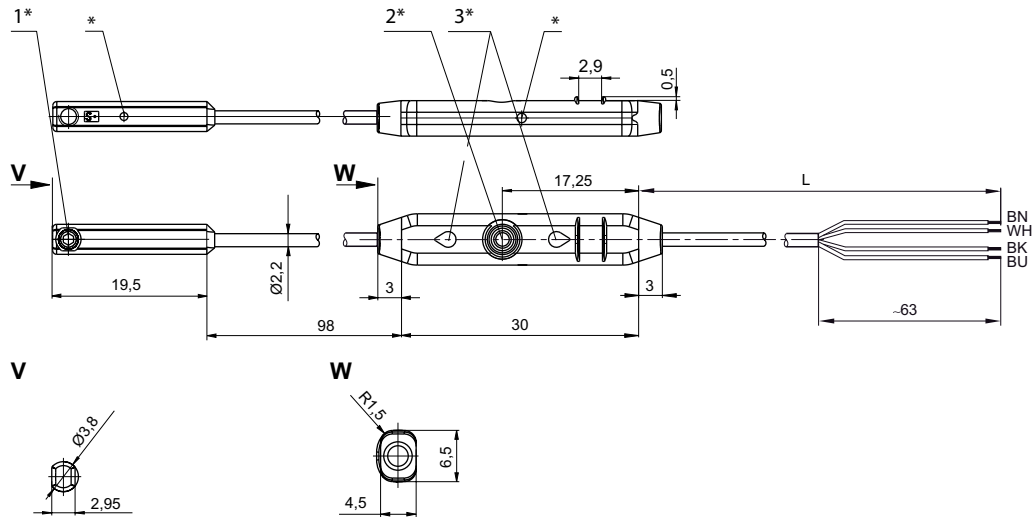
	Type of contact	Cable length	Detection range Max.	Voltage drop U at I <sub>max</sub>	DC switching current, max.	Part No.
		[m]	[mm]	[V]	[A]	
	electronic PNP	2	50	≤ 2,2	0,15	R412010139

interfaces: without wire end ferrule, tin-plated  
short circuit resistant; Protected against polarity reversal

## Rotary actuators ▶ Rack-and-pinion gears

Series RCM  
Accessories

## Dimensions



00133789

1\* = mounting screw 2\* = teach button 3\* = LED  
 L = cable length  
 (1) BN=brown (2) WH=white (3) BU=blue (4) BK=black  
 \* Switching point

## Sensors, Series ST4-2P

▶ 4 mm groove ▶ number of switching points:2 ▶ with cable ▶ Plug, M8x1, 4-pin, with knurled screw ▶ electronic PNP



00133721

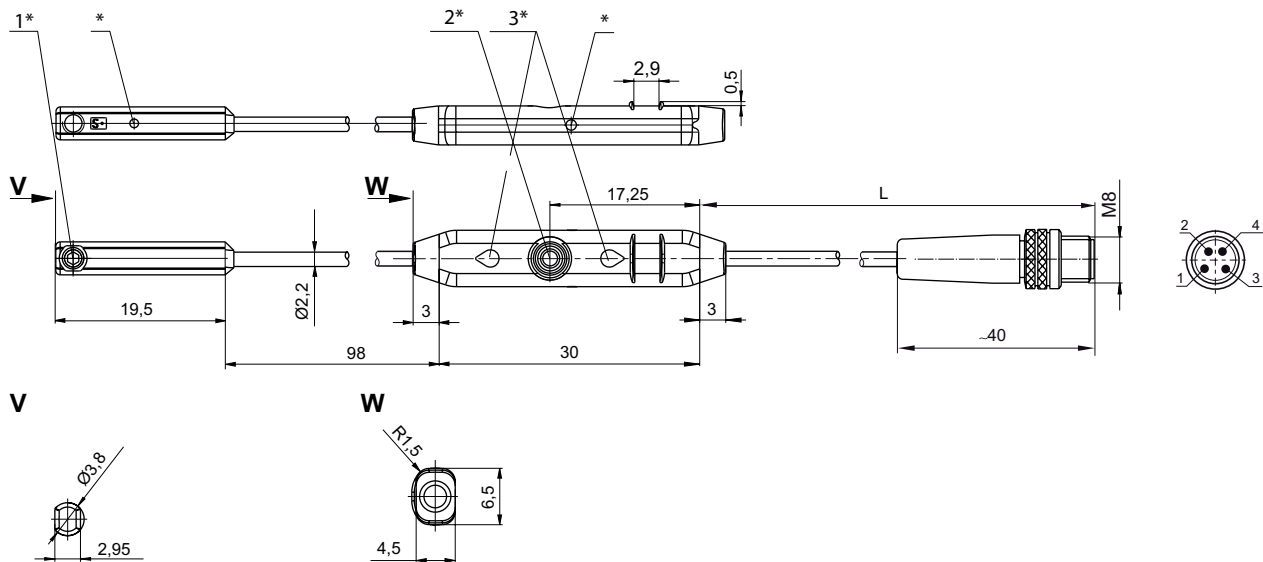
Ambient temperature min./max.	-20 °C / +75 °C
Protection class	IP 65, IP 67
Local power consumption	<15 mA
DC operating voltage min./max.	12 V - 30 V
Repetitive precision max. measuring range	0,1 mT
Hysteresis	1 mT
Switching logic	NO (make contact)
Display	LED
LED status display	Yellow
Display	2 LED
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Mounting screw	with hexagon socket
Materials:	
Housing	Polyamide
Cable sheath	Polyurethane

## Series RCM

### Accessories

	Type of contact	Cable length	Detection range Max.	Voltage drop U at I <sub>max</sub>	Part No.
		[m]	[mm]	[V]	
	electronic PNP	0.3	50	≤ 2,2	<b>R412010140</b>
interfaces: Plug; M8x1; 4-pin; with knurled screw short circuit resistant; Protected against polarity reversal					

### Dimensions



00133790

1\* = mounting screw 2\* = teach button 3\* = LED  
 L = cable length  
 Pin assignment: 1 = (+), 2 = (OUT), 3 = (-), 4 = (OUT)  
 \* Switching point



## Rotary actuators ▶ Rack-and-pinion gears

Series RCM  
Accessories

## Industrial shock absorber, Series SA2-RC

▶ for RCM-12, RCM-16, RCM-20, RCM-25 ▶ sealing for piston rod: Lip ring



00135329

Ambient temperature min./max.

Medium

Mounting

Materials:

Cylinder tube

Piston rod

Lock nut

+0°C / +60°C

Oil

Lock nut

Steel, bronzed

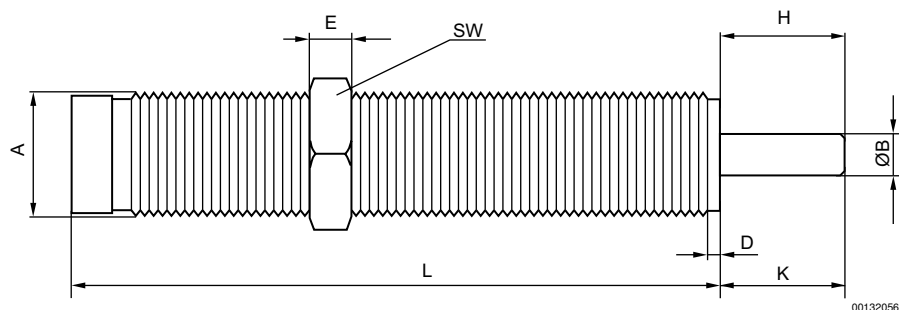
Stainless steel, hardened

Steel, bronzed

	Type	Stroke	for	Effective mass	Return spring force	Impact speed	Part No.
		[mm]		min./max.	min./max.	min./max.	
				[kg]	[N]	[m/s]	
	SA2-RC	6	RCM-12	2.8 / 70	2.5 / 6	-	<b>R412004751</b>
		6	RCM-16	6 / 280	3.5 / 8	-	<b>R412004752</b>
		8.5	RCM-20	17 / 510	3.5 / 7	-- / 0.65	<b>R412004753</b>
		9.5	RCM-25	100 / 420	23 / 35	-	R412010089

Part No.	Mounting thread	Delivery unit
<b>R412004751</b>	M8x1	1
<b>R412004752</b>	M10x1	
<b>R412004753</b>	M12x1	
R412010089	M14x1,5	

## Dimensions



00132056

H = stroke

A = mounting thread

Part No.	Type	Mounting thread	ØB	D	E	H	K	L	SW
<b>R412004751</b>	SA2-RC	M8x1	2.5	2.5	3	9	9	44	11
<b>R412004752</b>	SA2-RC	M10x1	3	2.5	3	9	9	49.5	13
<b>R412004753</b>	SA2-RC	M12x1	4	2.5	4	11	11	65	14
R412010089	SA2-RC	M14x1,5	4	2.5	5	14	14	69	17

AVENTICS GmbH  
Ulmer Straße 4  
30880 Laatzen, GERMANY  
Phone +49 511 2136-0  
Fax +49 511 2136-269  
www.aventics.com  
info@aventics.com



Дополнительные адреса  
можно найти на сайте  
www.aventics.com/contact

**Официальный дистрибьютор  
и системный интегратор  
на территории Российской Федерации**

**ООО «Акетон»  
www.pnshop.ru**

**+7 495 777-02-25  
info@aketon.ru**

**107241, Россия, г. Москва, ул. Иркутская, д. 1**

**www.pnshop.ru**

**Локализованное в России сборочное производство  
клапанных систем AVENTICS серии ES05**

Используйте представленную продукцию AVENTICS только в промышленном секторе. Перед началом использования изделия внимательно и полностью прочитайте документацию по изделию. Соблюдайте действующие инструкции и законы соответствующей страны. Для гарантии безопасного использования изделий при их интеграции в установки учитывайте данные изготовителя системы. Приведенные данные служат исключительно для описания изделия. Наши данные не могут быть использованы для заключения относительно определенного свойства или пригодности для определенной области применения. Данная информация не освобождает пользователя от собственных оценок и самостоятельных проверок. Необходимо учитывать, что изделия подвергаются естественному процессу износа и старения.

29-06-2016

Конфигурация на титульном листе представлена в качестве примера. Поставляемое изделие может отличаться от изображения на рисунке. Компания сохраняет за собой право на внесение изменений. © AVENTICS S.à r.l., все права сохраняются, в том числе в случае заявки на предоставление правовой охраны. Любое право распоряжения, такое как право копирования и передачи сохраняется за нами. PDF он-лайн