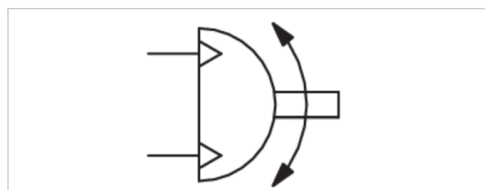


Rotary Compact Module, Series RCM-SH

- angle of rotation max. 90 180 °
- Ø 12-25 mm
- with magnetic piston
- double piston with rack
- Easy2Combine capable
- Cushioning hydraulic non-adjustable



Working pressure min./max.	2 ... 8 bar
Ambient temperature min./max.	5 ... 60 °C
Medium temperature min./max.	5 ... 60 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m ³
Cushioning	hydraulic non-adjustable
Theoretical torque at	6 bar
Weight	See table below



Technical data

Part No.	Frame size	Compressed air connection	angle of rotation	Min. swivel times
		G		
R412000369	RCM-12	M5	0-90 °	0,3 s
R412000370	RCM-12	M5	0-180 °	0,3 s
R412000371	RCM-16	M5	0-90 °	0,32 s
R412000372	RCM-16	M5	0-180 °	0,32 s
R412000373	RCM-20	M5	0-90 °	0,48 s
R412000374	RCM-20	M5	0-180 °	0,48 s
R412000375	RCM-25	M5	0-90 °	0,6 s
R412000376	RCM-25	M5	0-180 °	0,6 s

Part No.	Air consumption per rotation	Weight
R412000369	5,86 cm ³	0,46 kg
R412000370	11,72 cm ³	0,46 kg
R412000371	10,36 cm ³	0,77 kg
R412000372	20,71 cm ³	0,77 kg
R412000373	17,92 cm ³	0,96 kg
R412000374	35,84 cm ³	0,96 kg
R412000375	38,75 cm ³	1,85 kg

Part No.	Air consumption per rotation	Weight
R412000376	77,5 cm ³	1,85 kg

Technical data

Frame size	RCM-12	RCM-16	RCM-20
Max. permissible axial bearing load	330 N	490 N	620 N
Max. permissible radial bearing load	360 N	580 N	780 N
Max. permissible mass moment of inertia	10 kg cm ²	80 kg cm ²	180 kg cm ²
Repetitive precision	0,05 °	0,05 °	0,05 °
Theoretical torque	0,95 Nm	1,7 Nm	3 Nm

Frame size	RCM-25
Max. permissible axial bearing load	1160 N
Max. permissible radial bearing load	1480 N
Max. permissible mass moment of inertia	450 kg cm ²
Repetitive precision	0,05 °
Theoretical torque	6,5 Nm

Technical information

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.

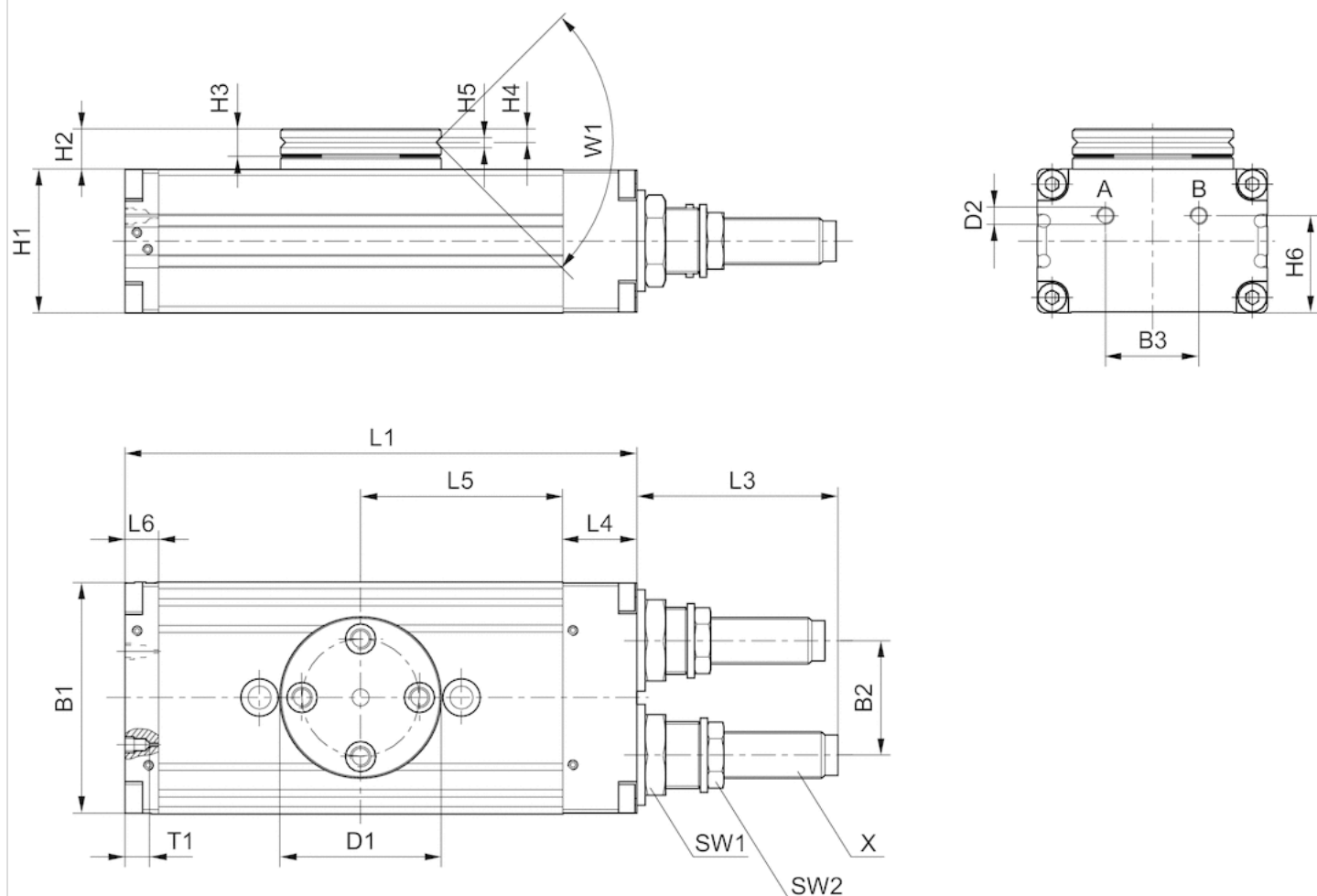
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Technical information

Material	
Housing	Aluminum, anodized
Cap	Aluminum, black anodized
Base	Aluminum, black anodized
Seal	Acrylonitrile butadiene rubber
Axis	Steel, hardened
Rotary flange	Steel, hardened

Dimensions

RCM-12/.../-25



T1 = depth of thread

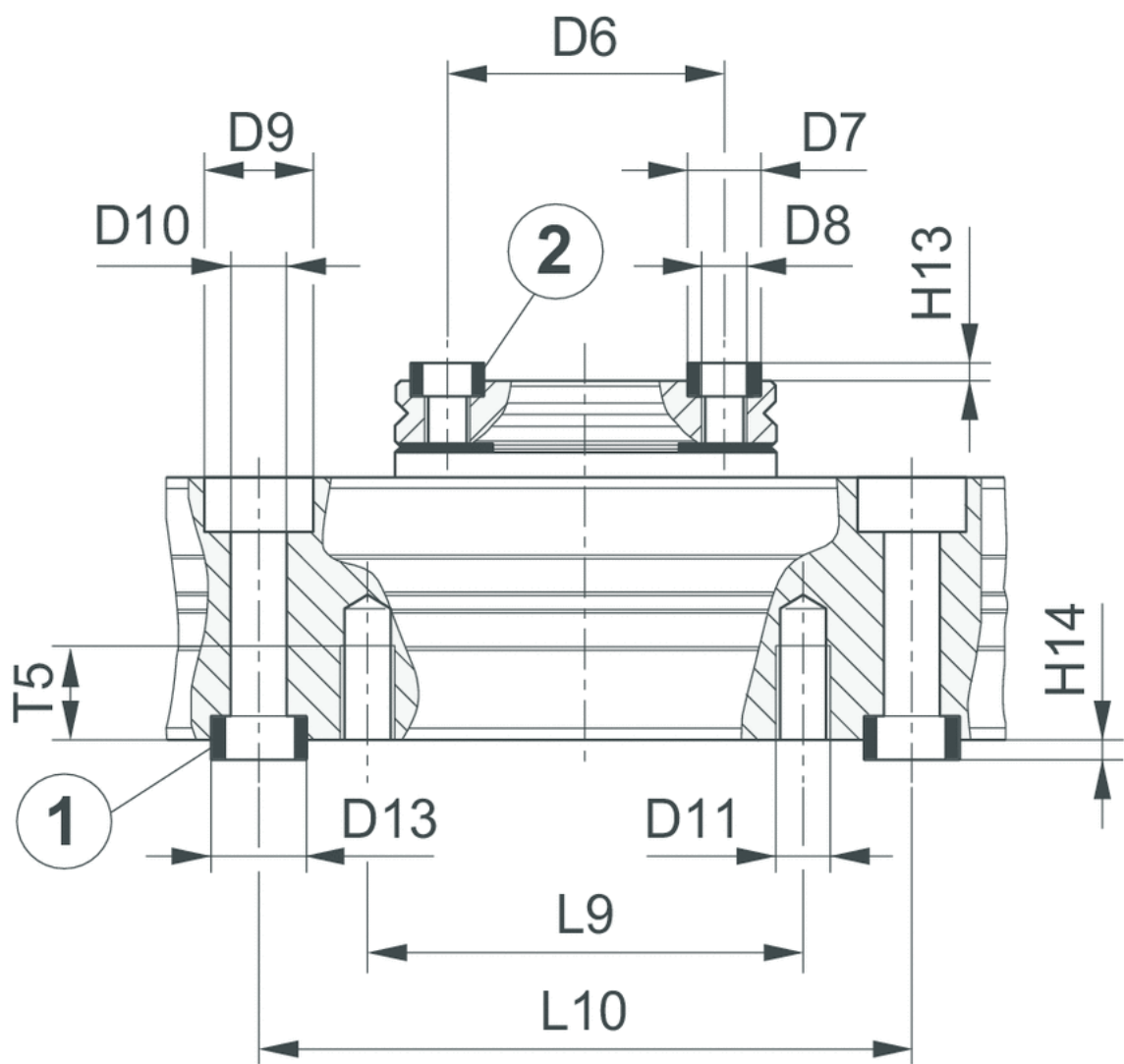
Dimensions

Frame size	B1	B2	B3	Ø D1	Ø D2	H1	H2	H3	H4	H5	H6	L1	L3	L4	L5	L6	SW1	SW2	T1	W1
RCM-12	43	18	18	35	M5	24	10.5	6	2.9	2.5	18	103	33.5	14	40	9	15	11	4	90°
RCM-16	52	24	20	40	M5	32	10	7	3.3	2.5	21	108	34	18	40	10	19	13	4	90°
RCM-20	58	30	20	42	M5	37	11	7	3.3	3	26	114	48.5	19	43	9	19	15	4	90°
RCM-25	69	34	28	48	M5	43	12	8	4	3	29	153	60	22	60.5	10	23	17	4	90°

X
M8x1
M10x1
M12x1
M14x1,5

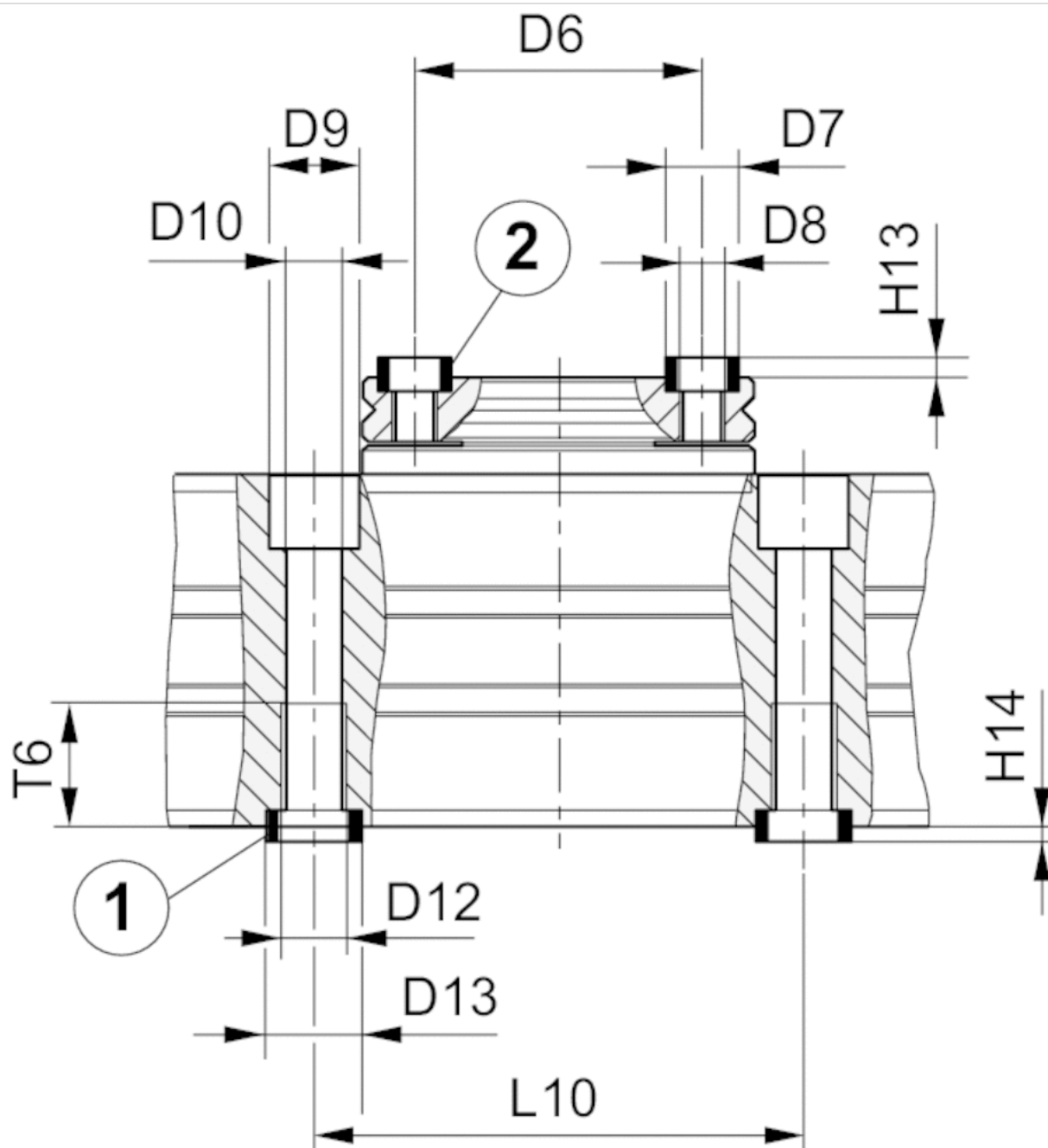
Dimensions

Mounting and assembly, RCM-12



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

Mounting and assembly, RCM 16 - 25



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

Dimensions

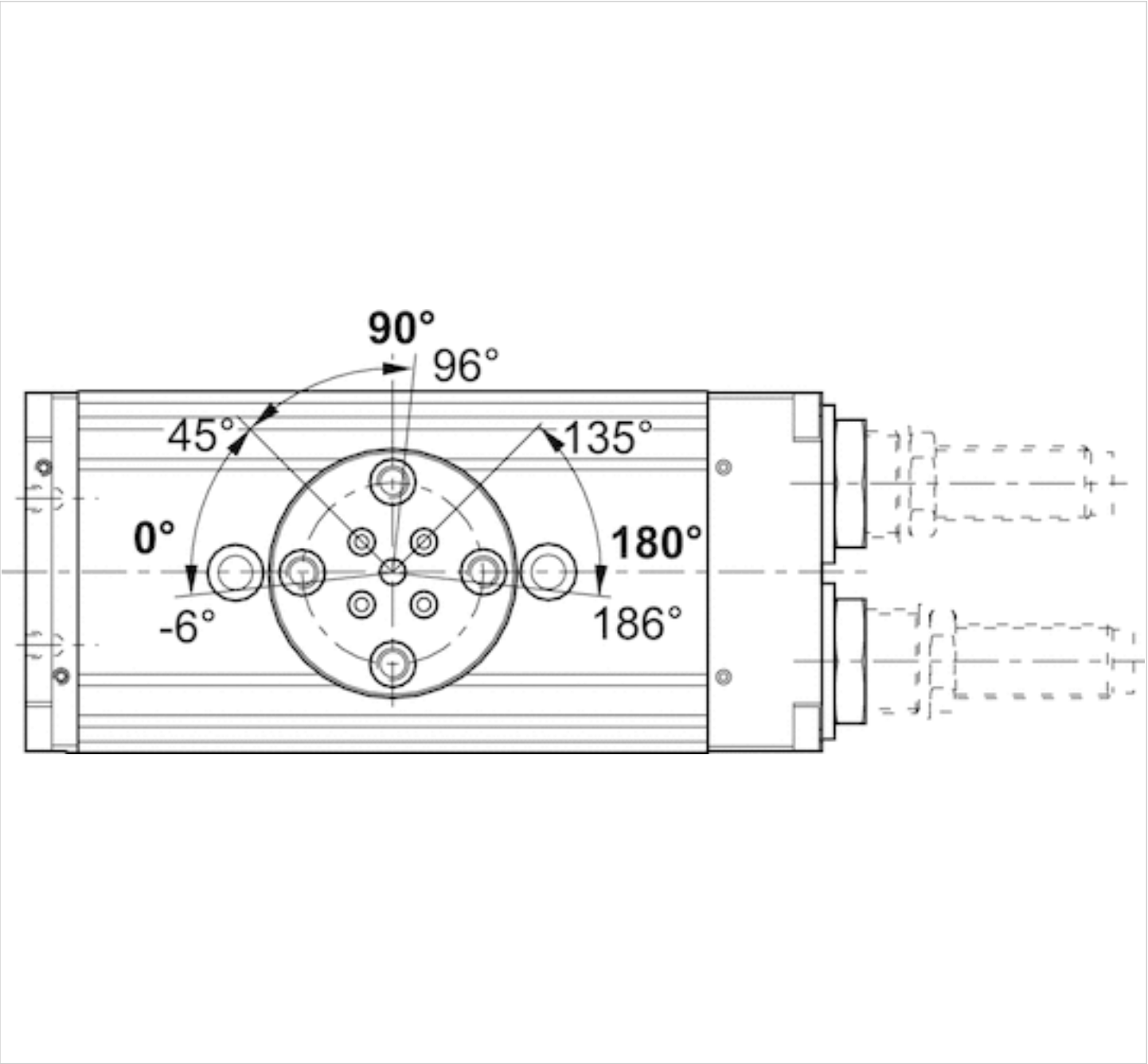
Frame size	$\varnothing D6 \pm 0,02$	$\varnothing D7 k6$	$\varnothing D8$	$\varnothing D9$	$\varnothing D10$	$\varnothing D11$	$\varnothing D12$	$\varnothing D13 k6$	$H13 +0,2$
RCM-12	25	7	M4	10	5.1	M5	–	9	1.6
RCM-16	30	7	M5	10	5	–	M6	9	1.6
RCM-20	30	7	M5	11	6.8	–	M8	12	1.6
RCM-25	35	9	M6	11	6.8	–	M8	12	2.1

Frame size	$H14 +0,2$	L9	$L10 \pm 0,02$	T5	T6
RCM-12	2.1	40	60	8.5	–
RCM-16	2.1	–	60	–	11.1

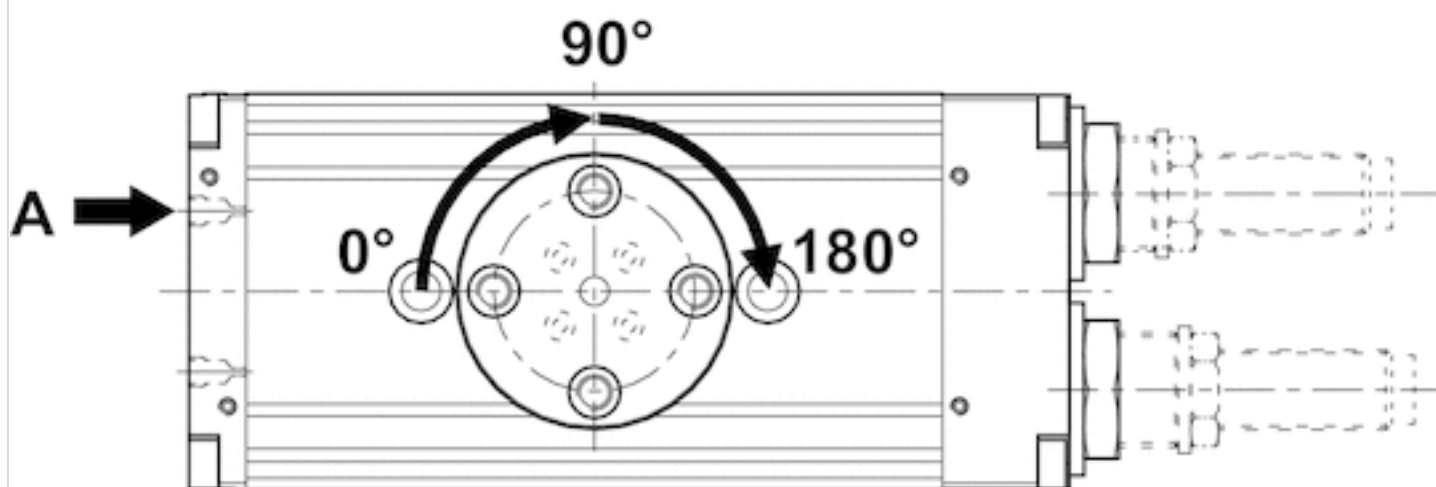
Frame size	H14 +0,2	L9	L10 ±0,02	T5	T6
RCM-20	2.1	–	60	–	15.1
RCM-25	2.1	–	60	–	15.1

Diagrams

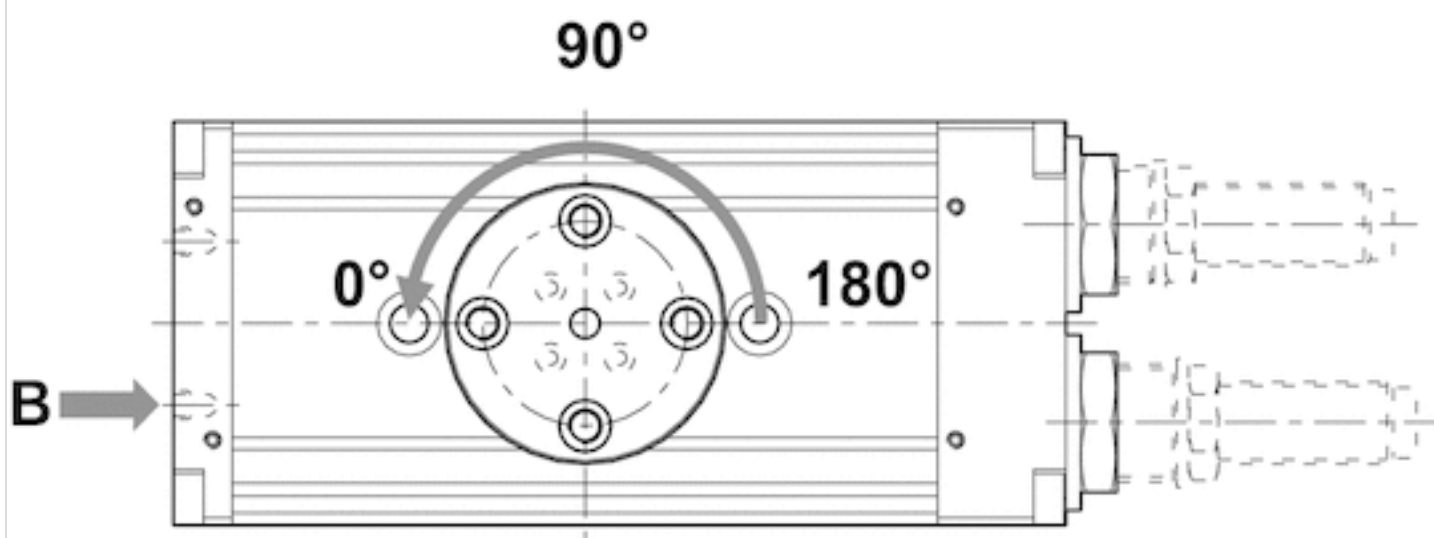
Setting range for end positions 0° / 90° / 180°



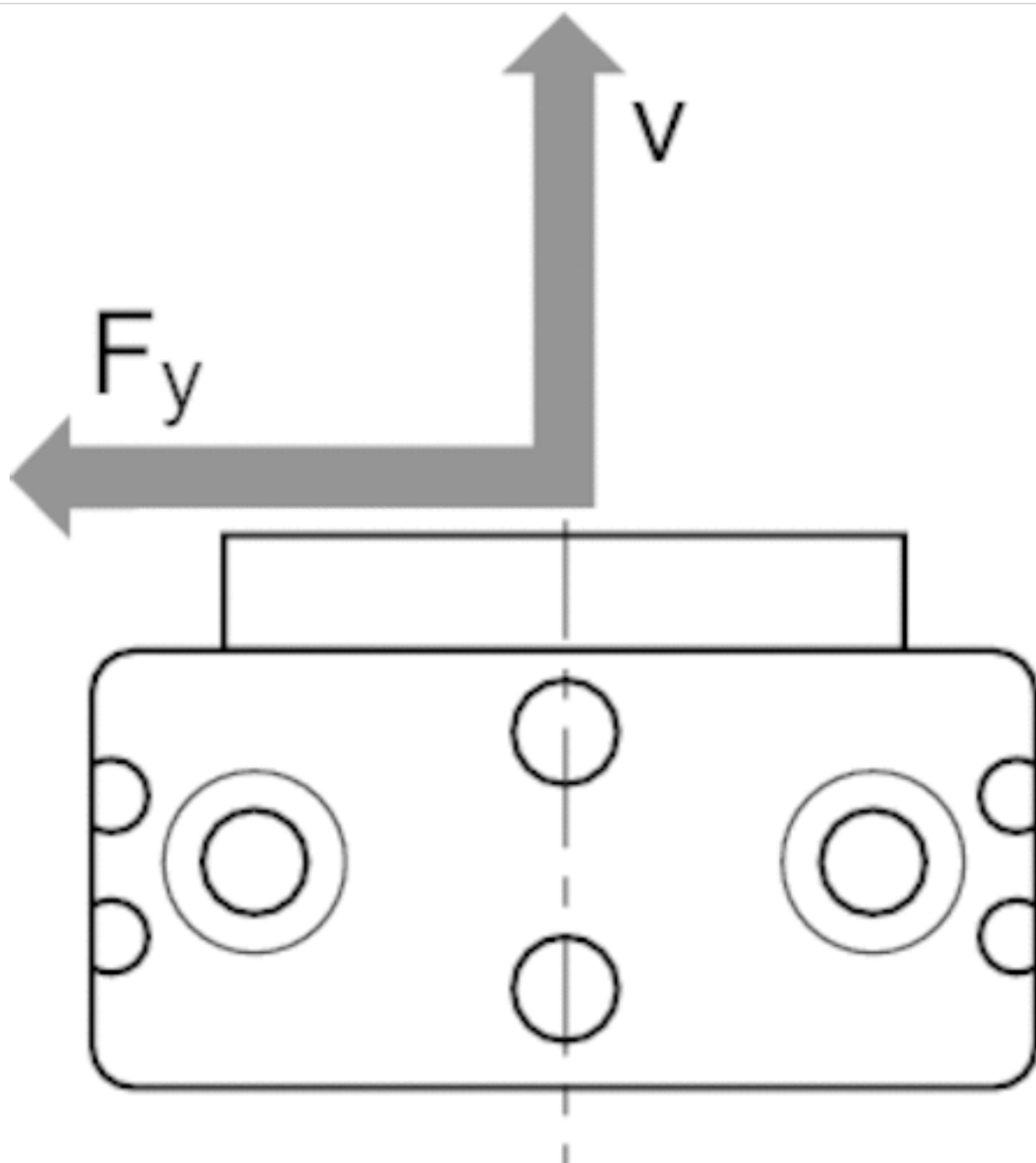
Movement into end position 90°/180°



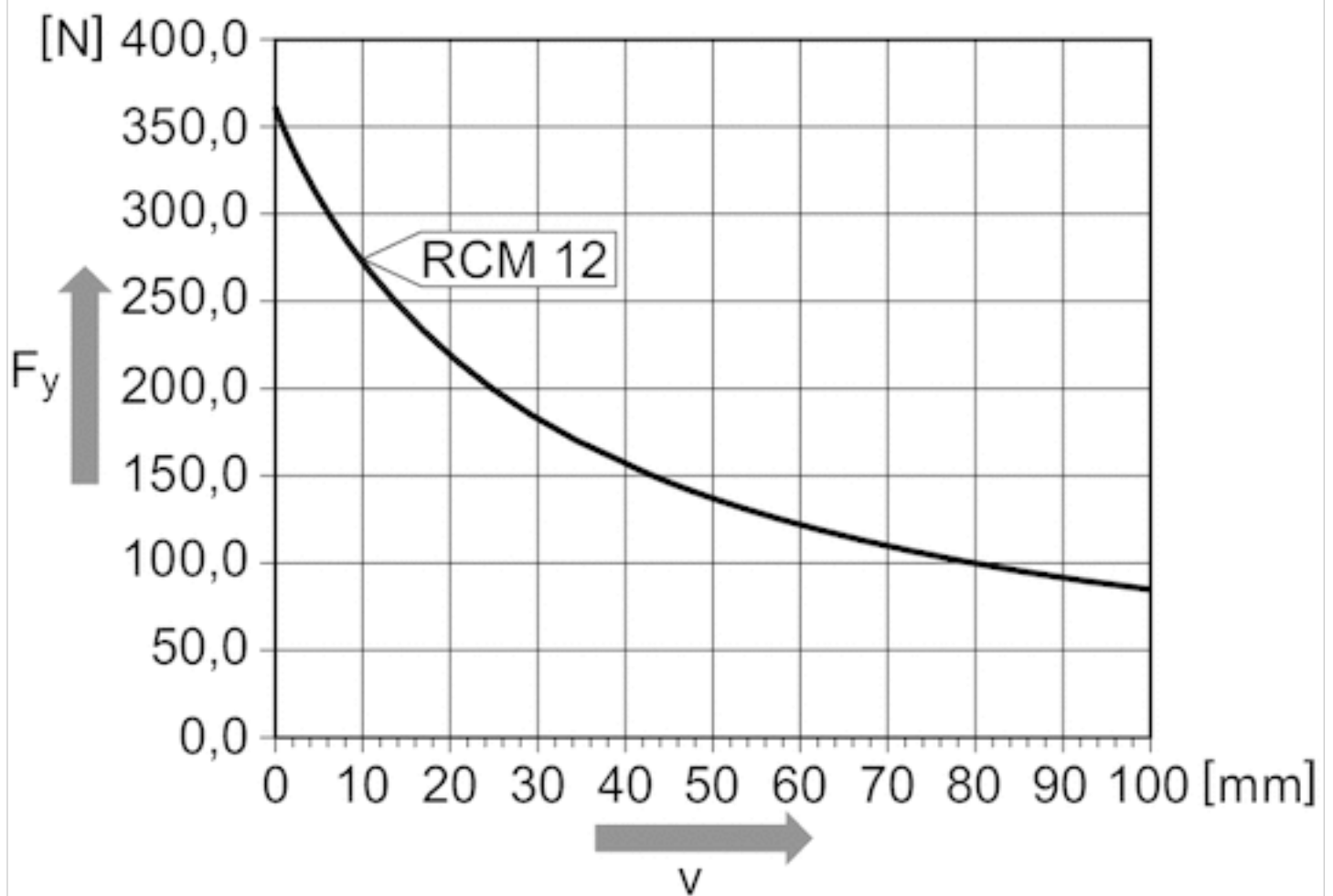
Movement into end position 0°



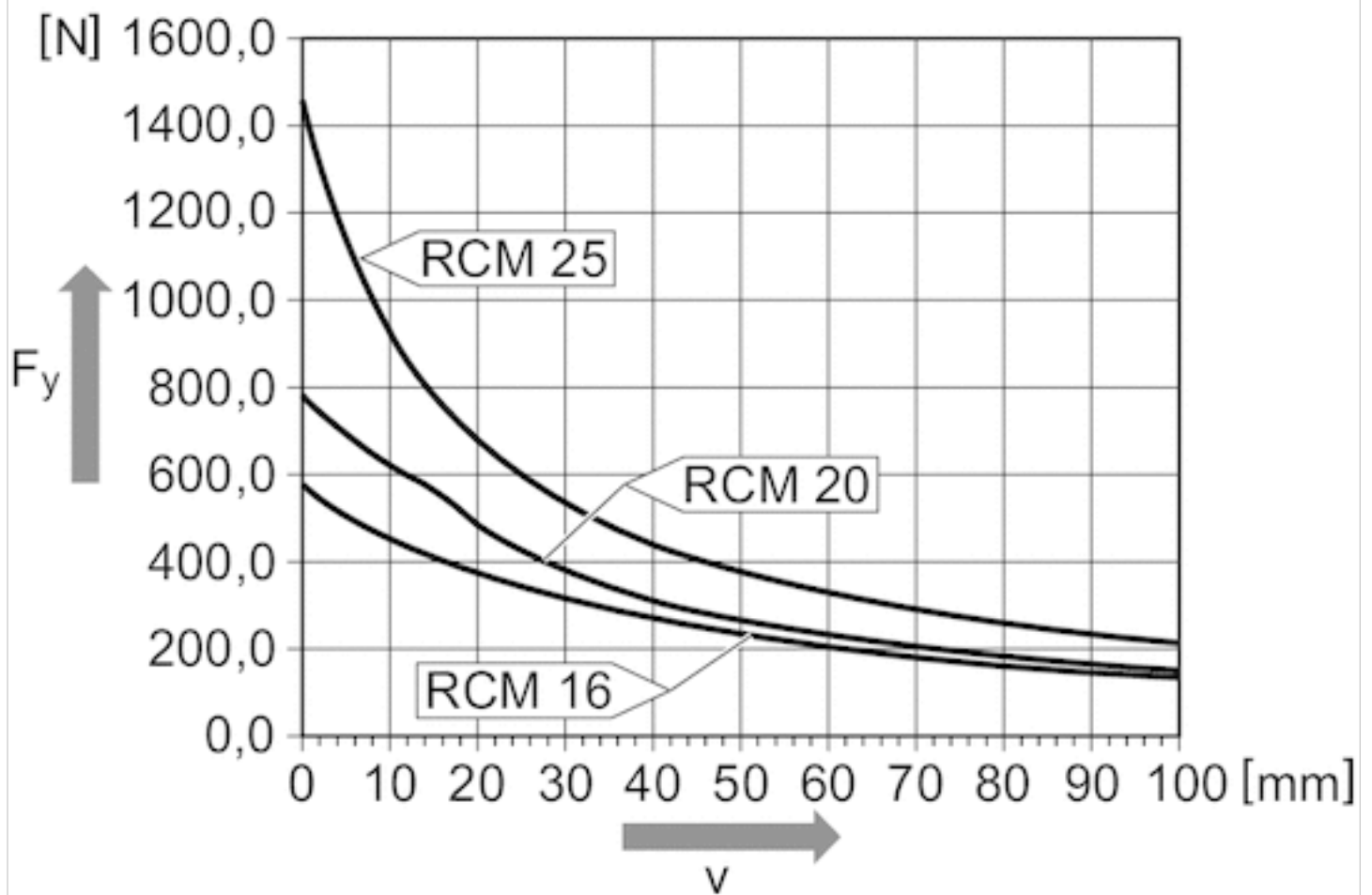
Maximum permissible radial force F_y [N] as a function of v [mm]



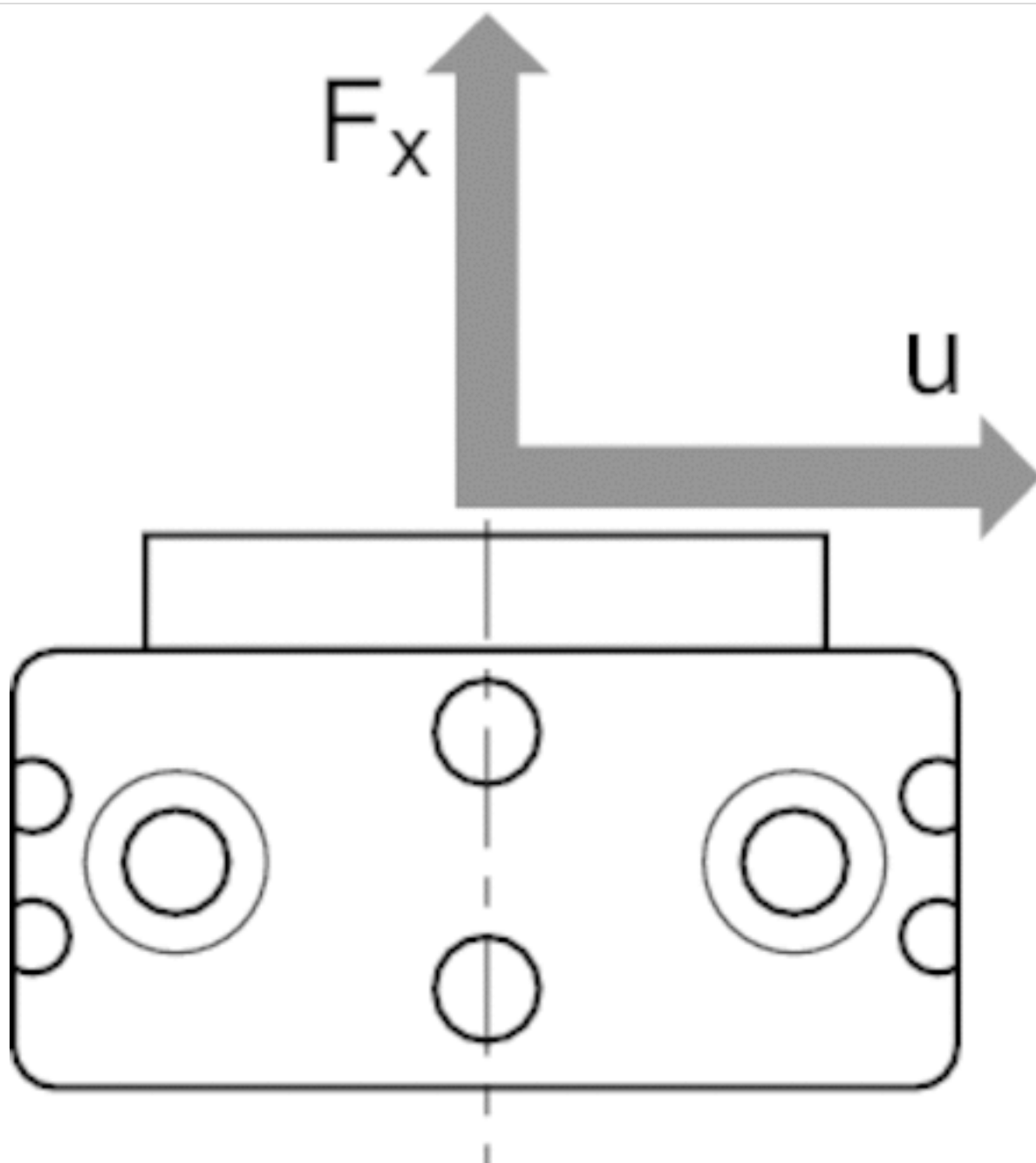
Maximum permissible radial force F_y [N] as a function of v [mm], RCM 12



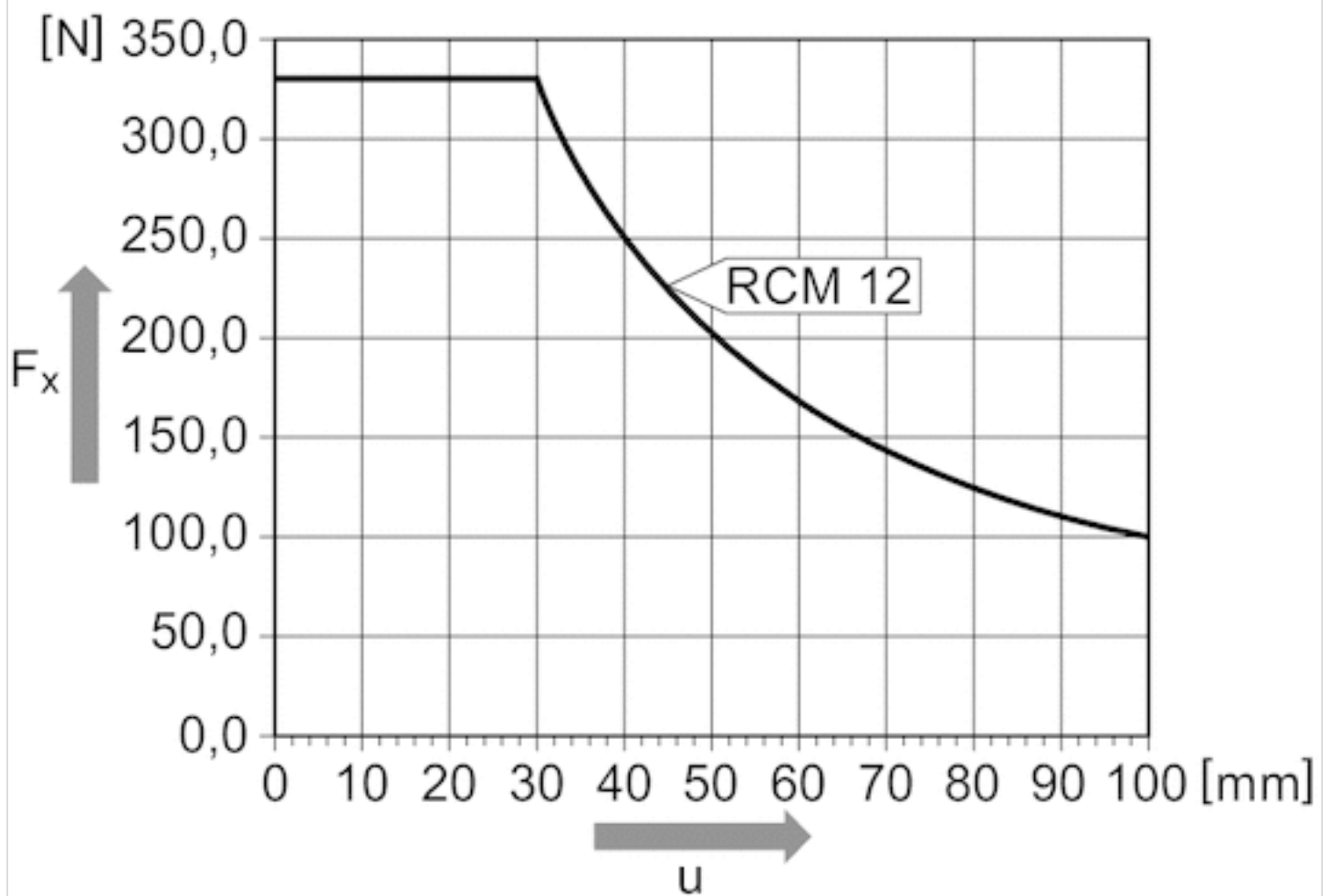
Maximum permissible radial force F_y [N] as a function of v [mm], RCM 16 – 25



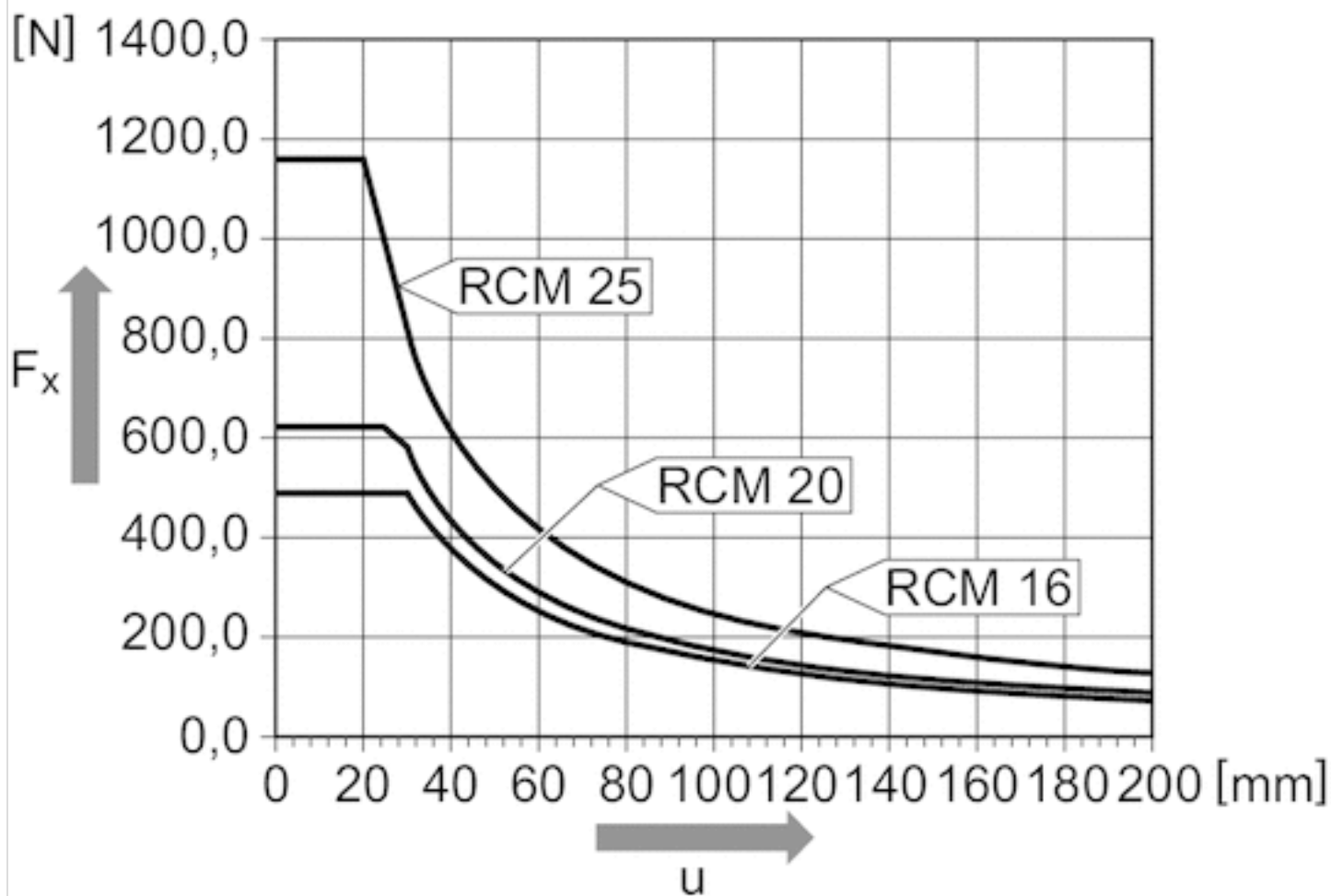
Maximum permissible axial force F_x [N] as a function of u [mm]



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



Maximum permissible axial force F_x [N] as a function of u [mm], RCM 16 – 25



Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



Visit us: [Emerson.com/Aventics](https://www.emerson.com/Aventics)

Your local contact: [Emerson.com/contactus](https://www.emerson.com/contactus)



Emerson.com



Facebook.com/EmersonAutomationSolutions



LinkedIn.com/company/Emerson-Automation-Solutions



Twitter.com/EMR_Automation

An example configuration is depicted on the title page. The delivered product may thus vary from that in the illustration. Subject to change. This Document, as well as the data, specifications and other information set forth in it, are the exclusive property of AVENTICS GmbH. It may not be reproduced or given to third parties without its consent. Only use the AVENTICS products shown in industrial applications. Read the product documentation completely and carefully before using the product. Observe the applicable regulations and laws of the respective country. When integrating the product into applications, note the system manufacturer's specifications for safe use of the product. The data specified only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgement and verification. It must be remembered that the products are subject to a natural process of wear and aging.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Brand logotype are registered trademarks of one of the Emerson family of companies. All other marks are the property of their respective owners. © 2020 Emerson Electric Co. All rights reserved.
2020-12



CONSIDER IT SOLVED™