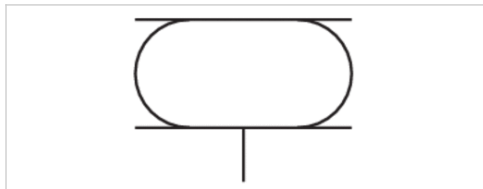


Series BCC

- double
- Stroke 39-275 mm



Type

Functional principle

Working pressure min./max.

Ambient temperature min./max.

Medium

Permissible angle of tilt max.

Pressure for determining forces

Weight

Bellow actuator with mounting ring and cover

Single-acting, retracted without pressure

0 ... 8 bar

See table below

Compressed air

25 °

6 bar

See table below

Technical data

Part No.	Cover diameter	Compressed air connection	Max. effective stroke
		G	
R412020591	78 mm	G 1/4	39 mm
R414000188	110 mm	G 3/8	75 mm
3999791030	152,5 mm	G 1/2	95 mm
R412020592	153,5 mm	G 1/2	95 mm
R412020593	184 mm	G 1/2	145 mm
R412020594	210 mm	G 1/2	170 mm
R412020595	260 mm	G 1/2	170 mm
R412020596	310 mm	G 1/2	215 mm
R412020597	310 mm	G 1/2	275 mm

Part No.	Min. radial installation space	Feature	Ambient temperature min./max.
R412020591	95 mm	2 3/4x2	-30 ... 90 °C
R414000188	140 mm	4 1/2x2	-30 ... 90 °C
3999791030	195 mm	6x2	-30 ... 90 °C
R412020592	195 mm	6x2	-30 ... 90 °C
R412020593	245 mm	8x2	-40 ... 70 °C
R412020594	300 mm	10x2	-40 ... 70 °C
R412020595	350 mm	12x2	-40 ... 70 °C
R412020596	425 mm	14 1/2x2	-40 ... 70 °C
R412020597	460 mm	16x2	-40 ... 70 °C

Part No.	Material	Material	Force min./max.	Weight
	Bellow	Cap		
R412020591	Chloroprene rubber	Aluminum	800 ... 2200 N	0,5 kg
R414000188	Chloroprene rubber	Aluminum	2400 ... 5700 N	1 kg
3999791030	Chloroprene rubber	Aluminum	4200 ... 11000 N	1,8 kg
R412020592	Chloroprene rubber	Steel galvanized	4800 ... 10800 N	2,6 kg
R412020593	caoutchouc/butadiene caoutchouc	Steel galvanized	6500 ... 18000 N	3,5 kg
R412020594	caoutchouc/butadiene caoutchouc	Steel galvanized	12000 ... 26000 N	4,7 kg
R412020595	caoutchouc/butadiene caoutchouc	Steel galvanized	20000 ... 39500 N	6,6 kg
R412020596	caoutchouc/butadiene caoutchouc	Steel galvanized	29000 ... 59500 N	8,3 kg
R412020597	caoutchouc/butadiene caoutchouc	Steel galvanized	36000 ... 62500 N	8,8 kg

Part No.	Fig.
R412020591	Fig. 1
R414000188	Fig. 2
3999791030	Fig. 3
R412020592	Fig. 4
R412020593	Fig. 4
R412020594	Fig. 4
R412020595	Fig. 4
R412020596	Fig. 4
R412020597	Fig. 4

Technical information

Compliance with the minimum height H min. as well as the maximum height H max. must be ensured with end stops.

Use at operating height $\geq H_{max}$: only permitted upon approval by AVENTICS

Further information on vibration isolation can be found in the "Technical information" document (available in the MediaCentre).

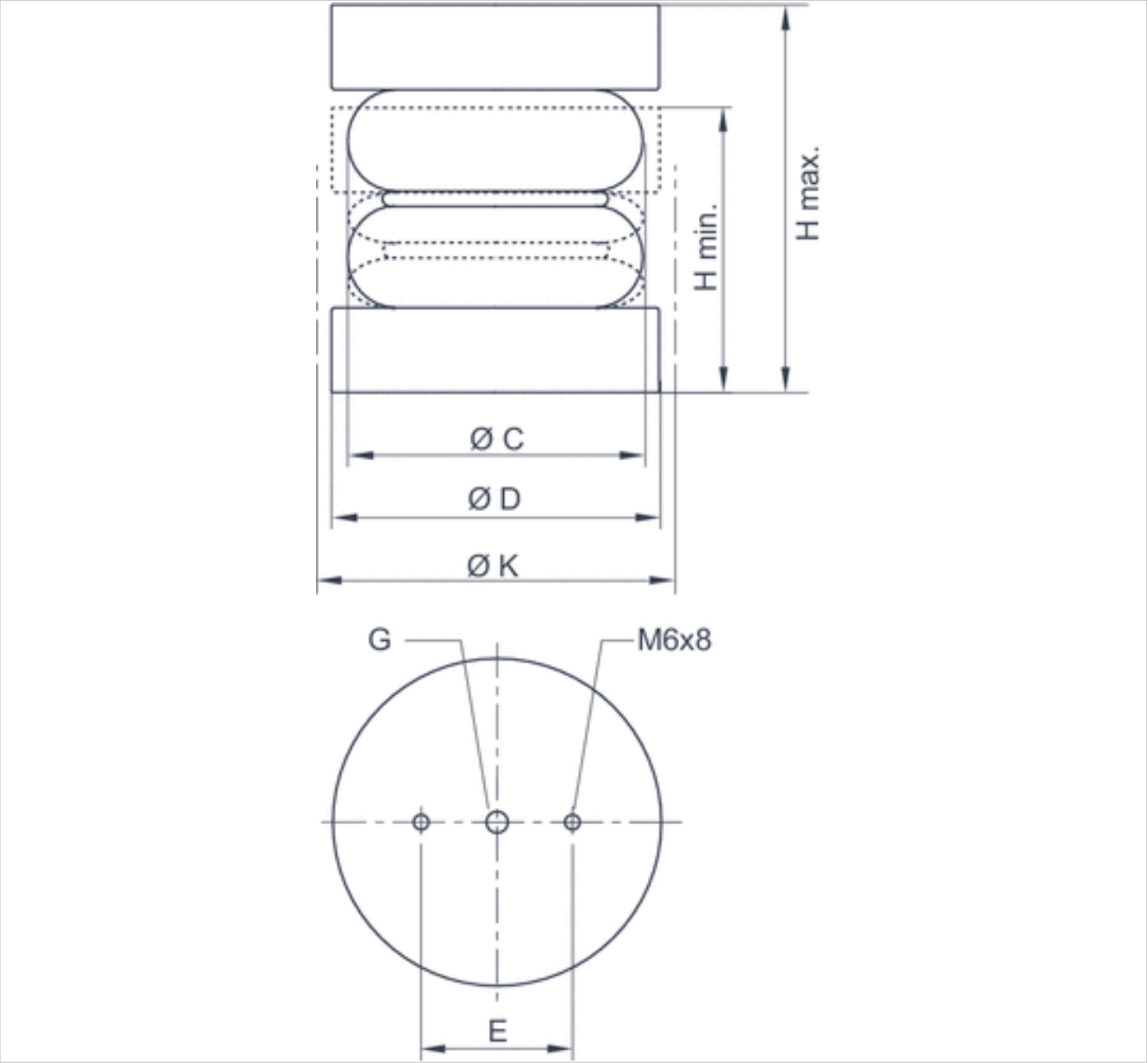
The bellow can be exchanged.

Technical information

Material	
Bellow	Chloroprene rubber caoutchouc/butadiene caoutchouc
Front cover	Aluminum Steel, galvanized
End cover	Aluminum Steel, galvanized

Dimensions

Fig. 1



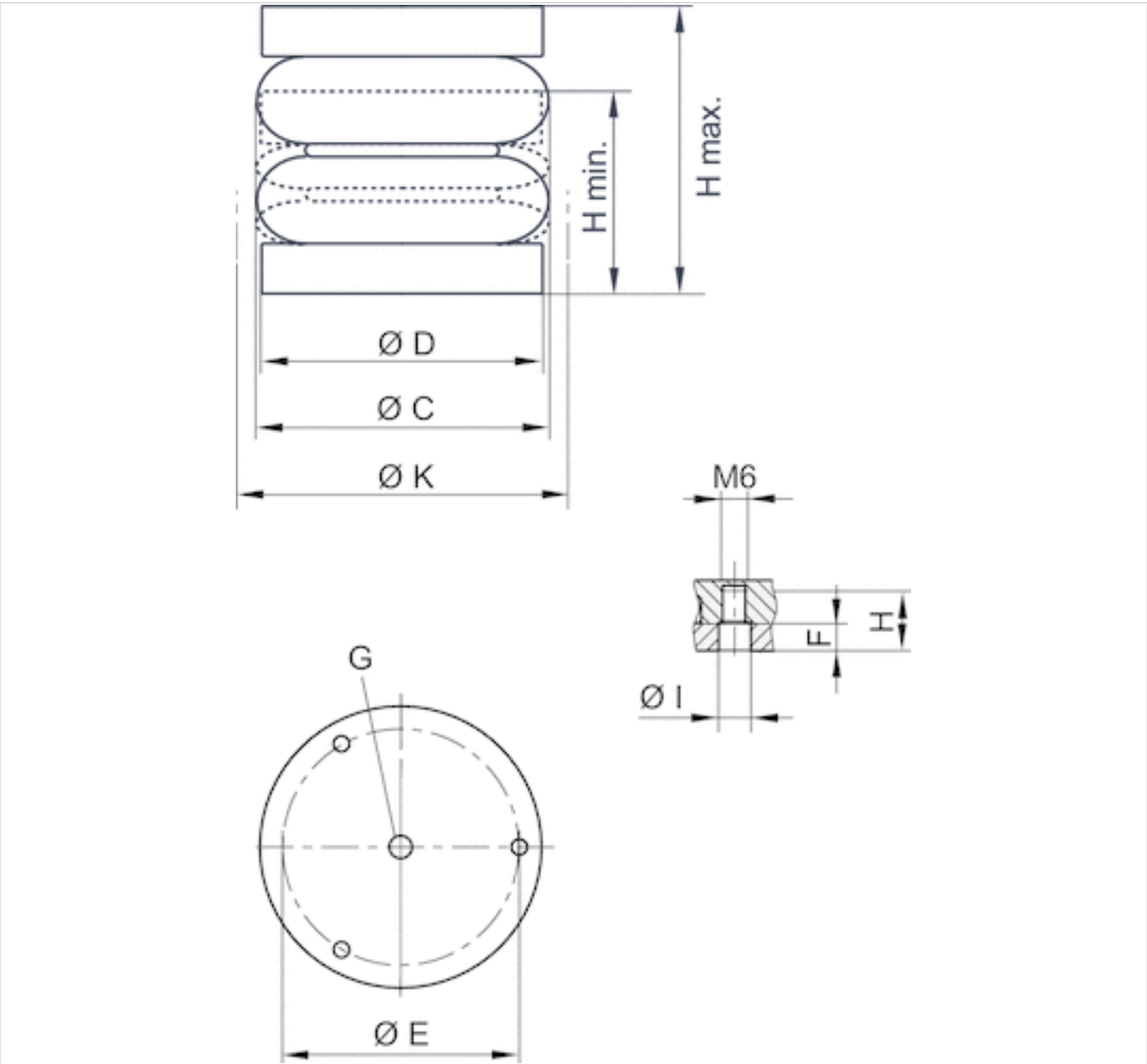
Dimensions

Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
R412020591	G 1/4	65 mm	104 mm	80 mm	78 mm

E ±0,5 [mm]	K mm	Return force, min. N
36	95 mm	200 N

Dimensions

Fig. 2



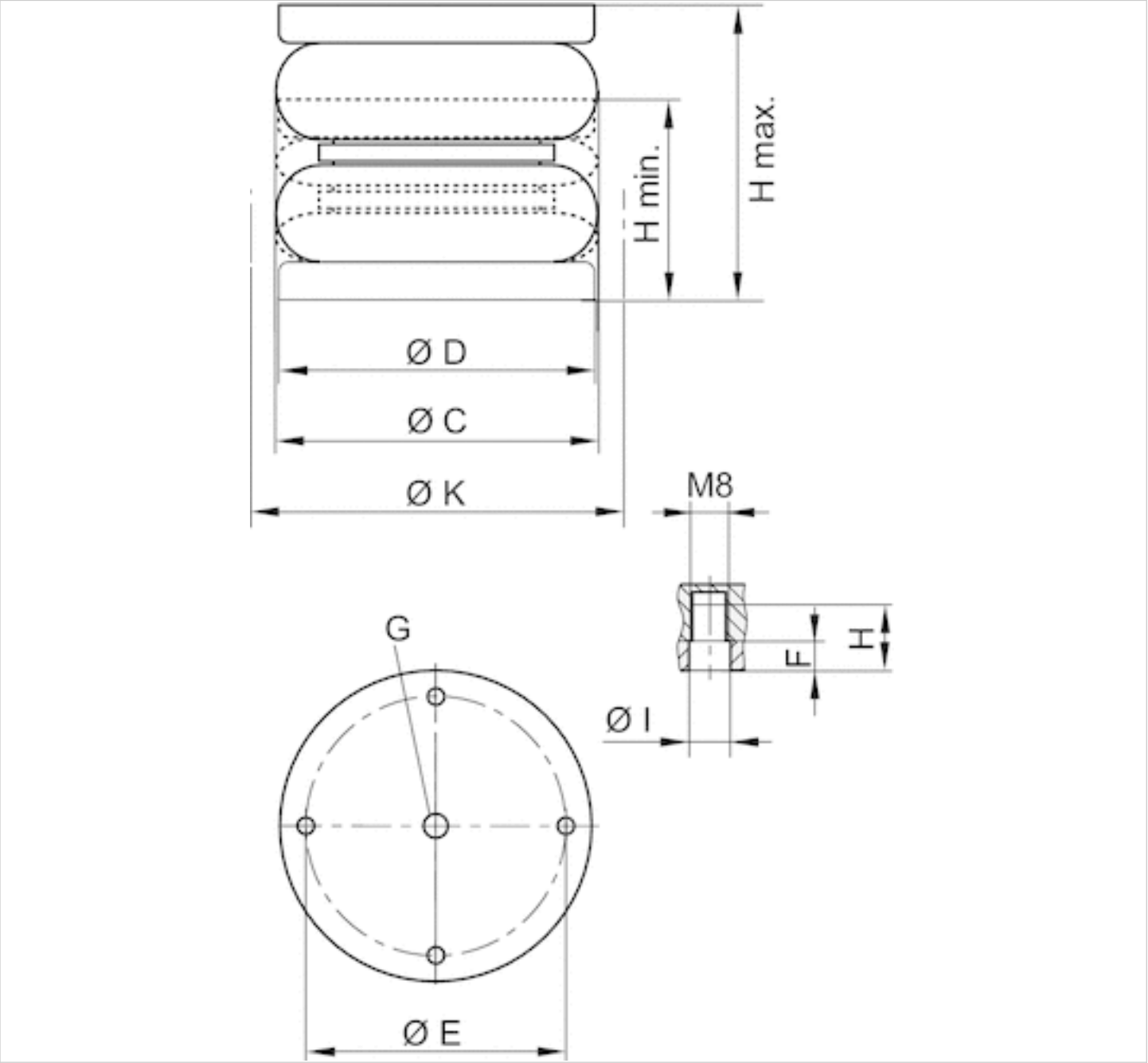
Dimensions

Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
R414000188	G 3/8	65 mm	140 mm	128 mm	110 mm

E ±0,5 [mm]	K mm	Return force, min. N
93	140 mm	150 N

Dimensions

Fig. 3

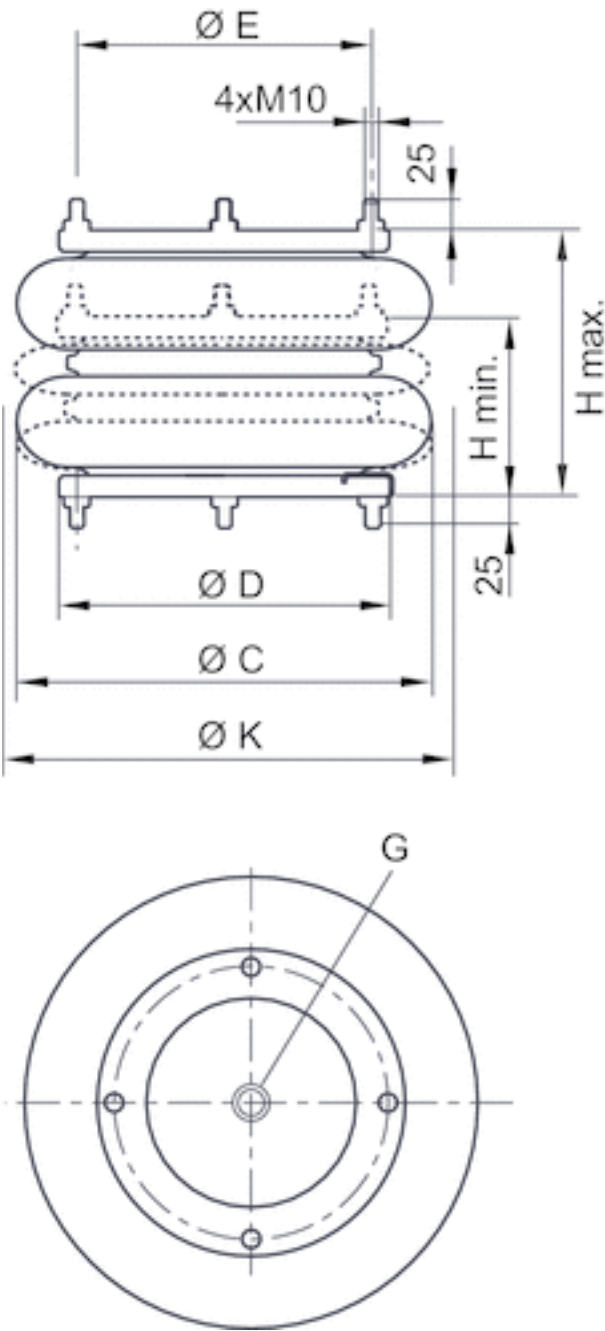


Dimensions

Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
3999791030	G 1/2	80 mm	175 mm	178 mm	152,5 mm
E ±0,5 [mm]	F	H	I	K mm	Return force, min. N
127	6	14.5	9	195 mm	180 N

Dimensions

Fig. 4



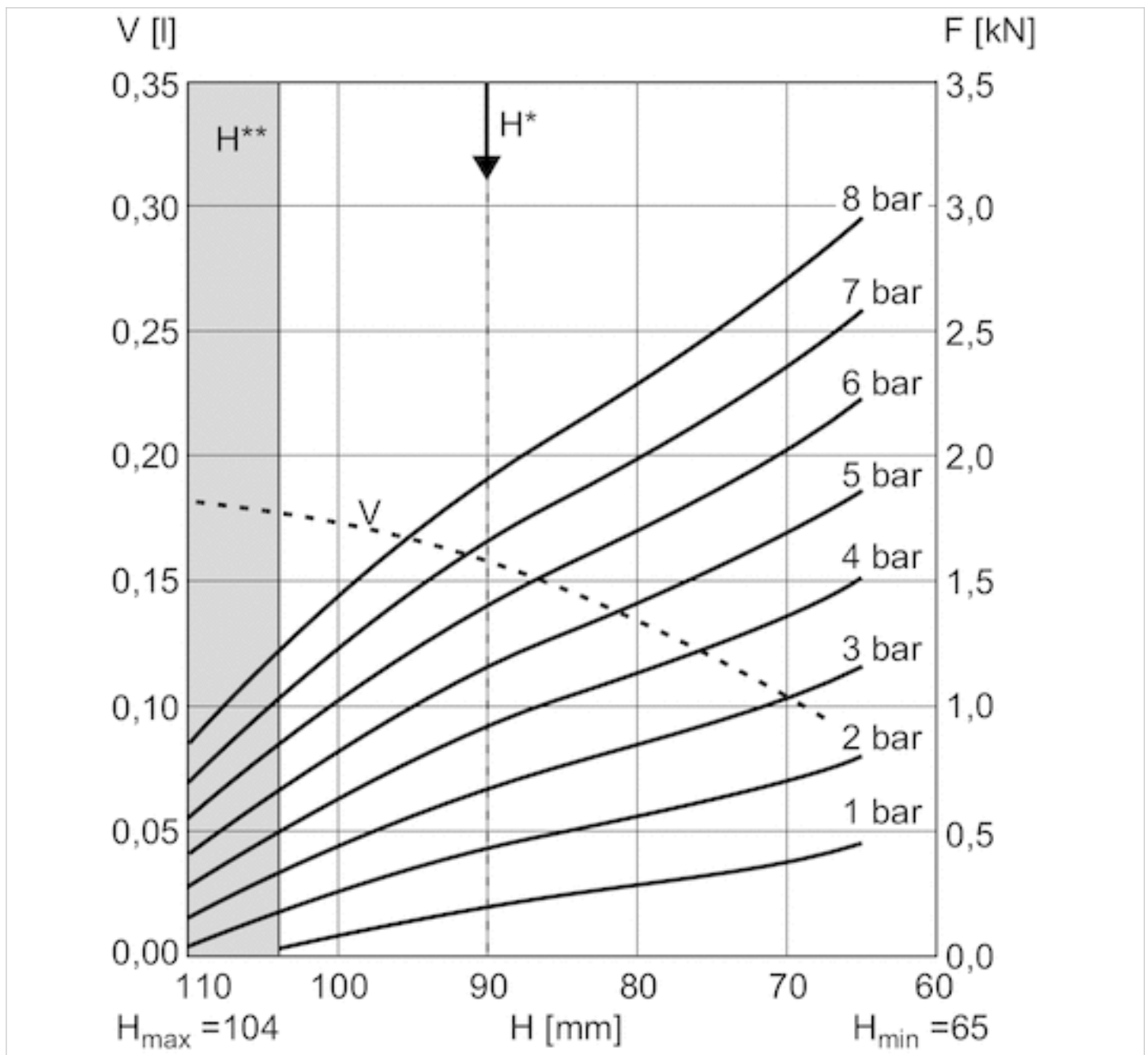
Dimensions

Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
R412020592	G 1/2	75 mm	170 mm	178 mm	153,5 mm
R412020593	G 1/2	75 mm	220 mm	230 mm	184 mm
R412020594	G 1/2	75 mm	245 mm	270 mm	210 mm
R412020595	G 1/2	75 mm	245 mm	330 mm	260 mm
R412020596	G 1/2	75 mm	290 mm	400 mm	310 mm
R412020597	G 1/2	75 mm	350 mm	435 mm	310 mm

E	K mm	Return force, min. N
127	195 mm	180 N
155.5	245 mm	300 N
181	300 mm	220 N
232	350 mm	250 N
282.5	425 mm	280 N
282.5	460 mm	250 N

Diagrams

Force-displacement diagram, R412020591



V = volume

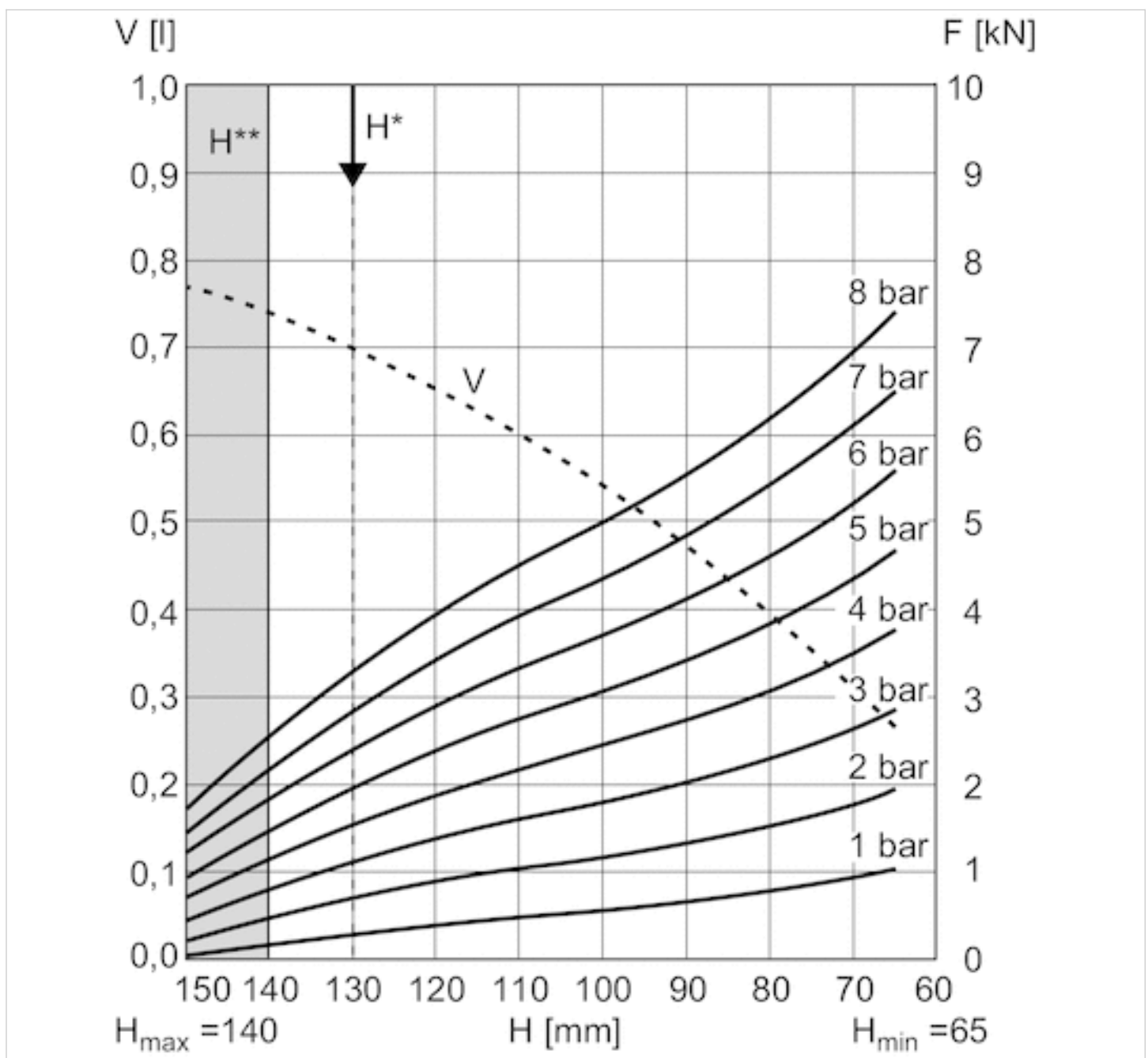
H = height

H* = recommended operating height for vibration isolation

H** = use permitted only upon approval by AVENTICS

1 kN = 1000 N

Force-displacement diagram, R414000188



V = volume

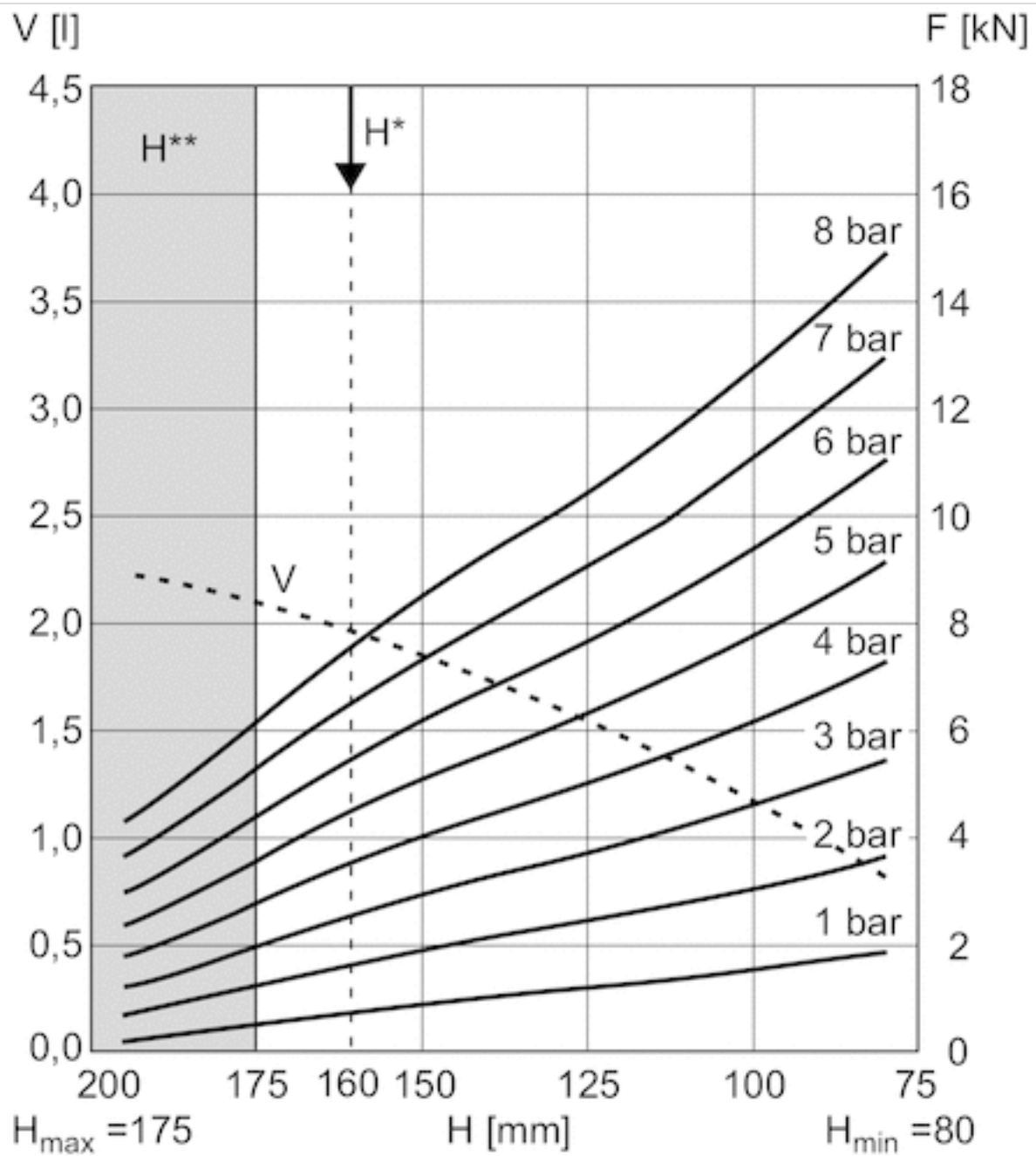
H = height

H^* = recommended operating height for vibration isolation

H^{**} = use permitted only upon approval by AVENTICS

1 kN = 1000 N

Force-displacement diagram, 3999791030



V = volume

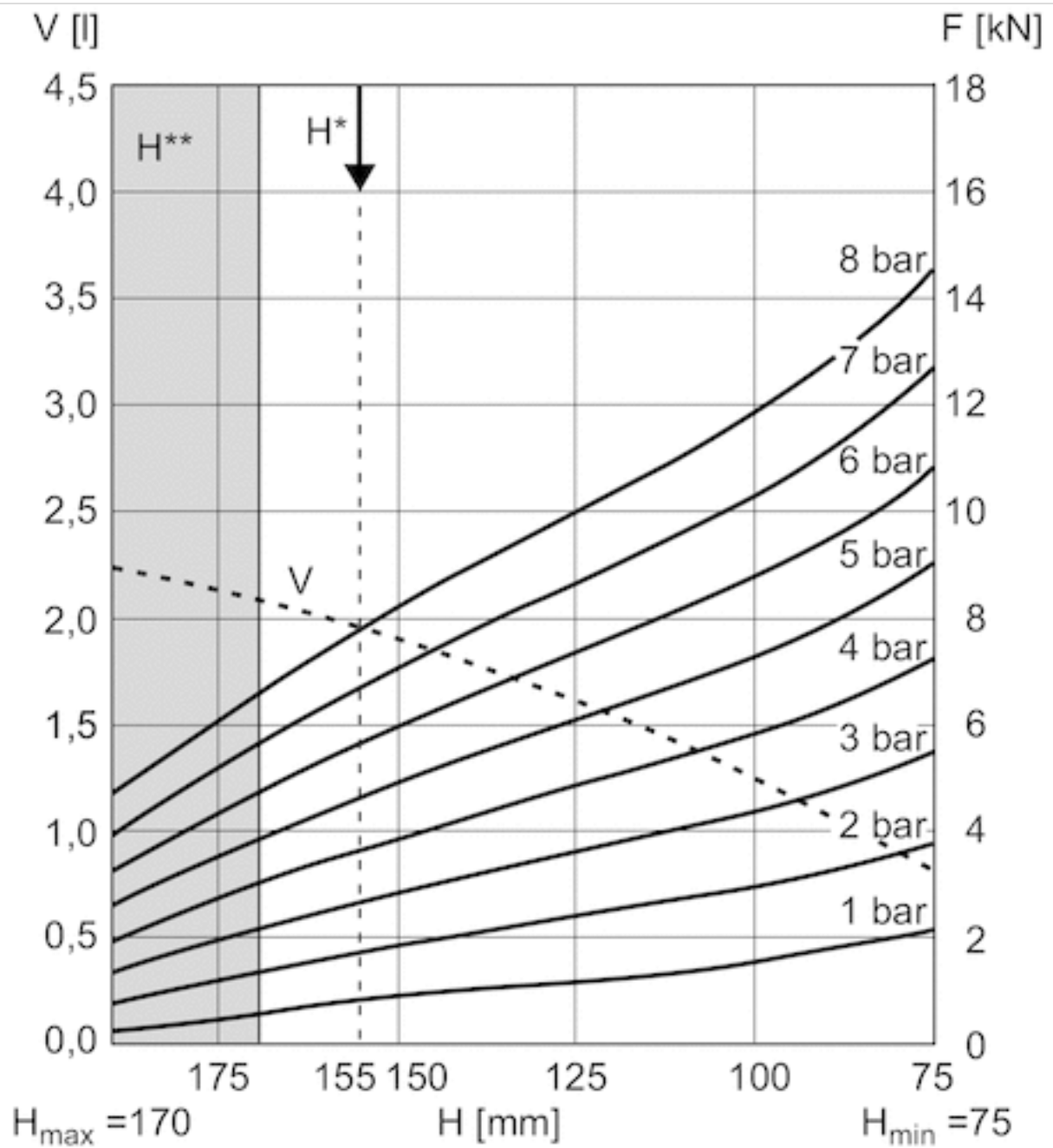
H = height

H^* = recommended operating height for vibration isolation

H^{**} = use permitted only upon approval by AVENTICS

1 kN = 1000 N

Force-displacement diagram, R412020592



V = volume

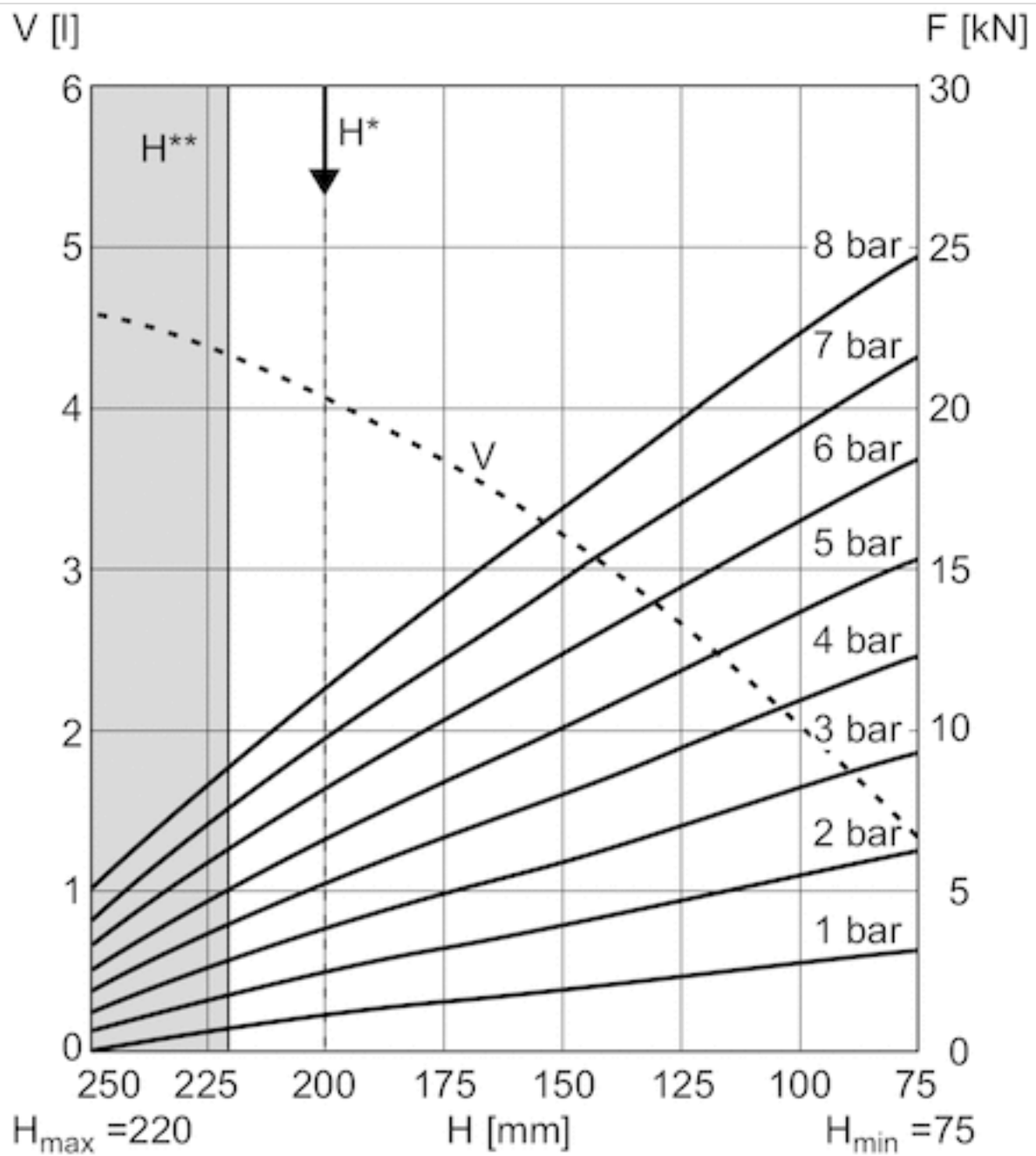
H = height

H^* = recommended operating height for vibration isolation

H^{**} = use permitted only upon approval by AVENTICS

1 kN = 1000 N

Force-displacement diagram, R412020593



V = volume

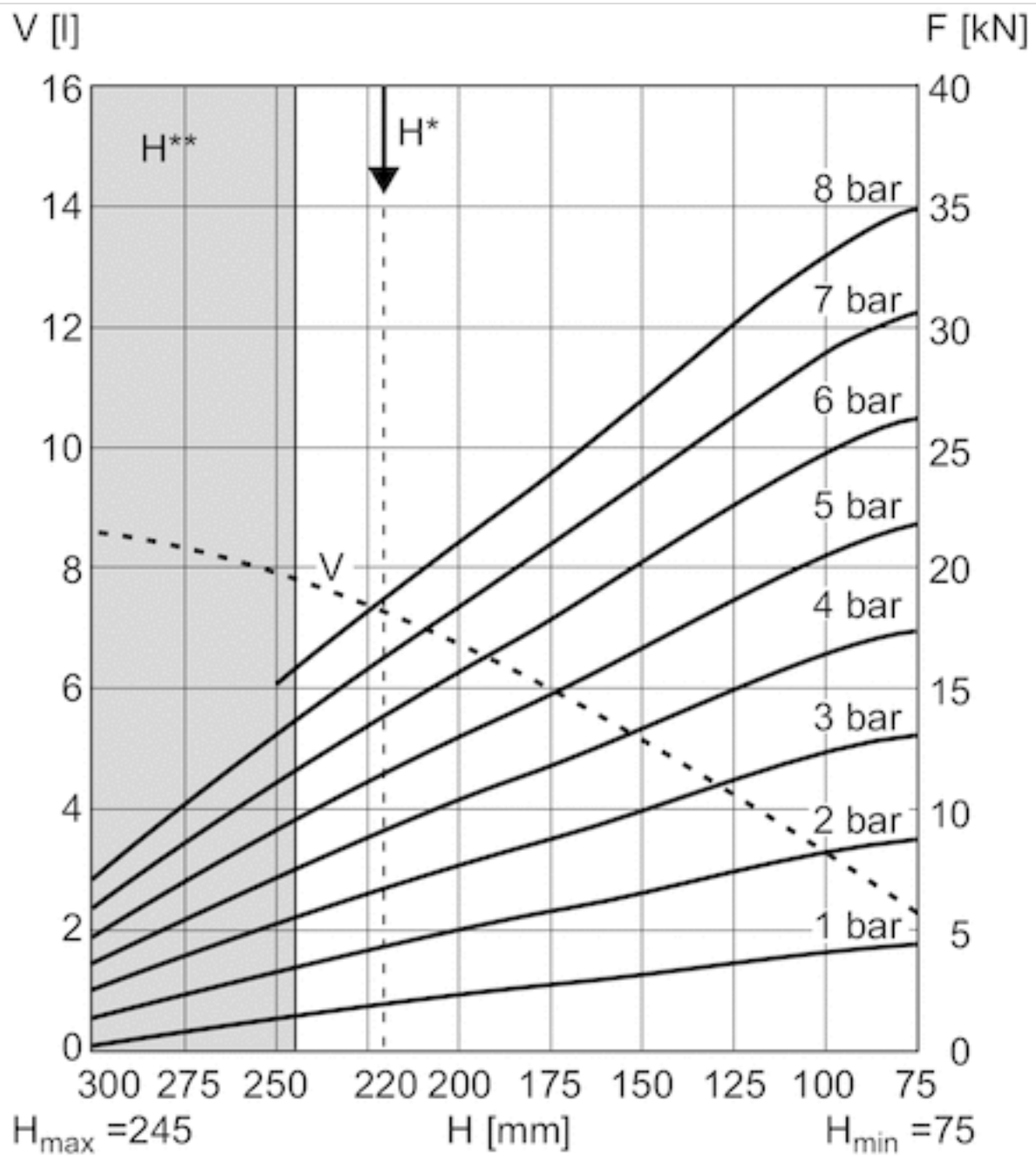
H = height

H^* = recommended operating height for vibration isolation

H^{**} = use permitted only upon approval by AVENTICS

1 kN = 1000 N

Force-displacement diagram, R412020594



V = volume

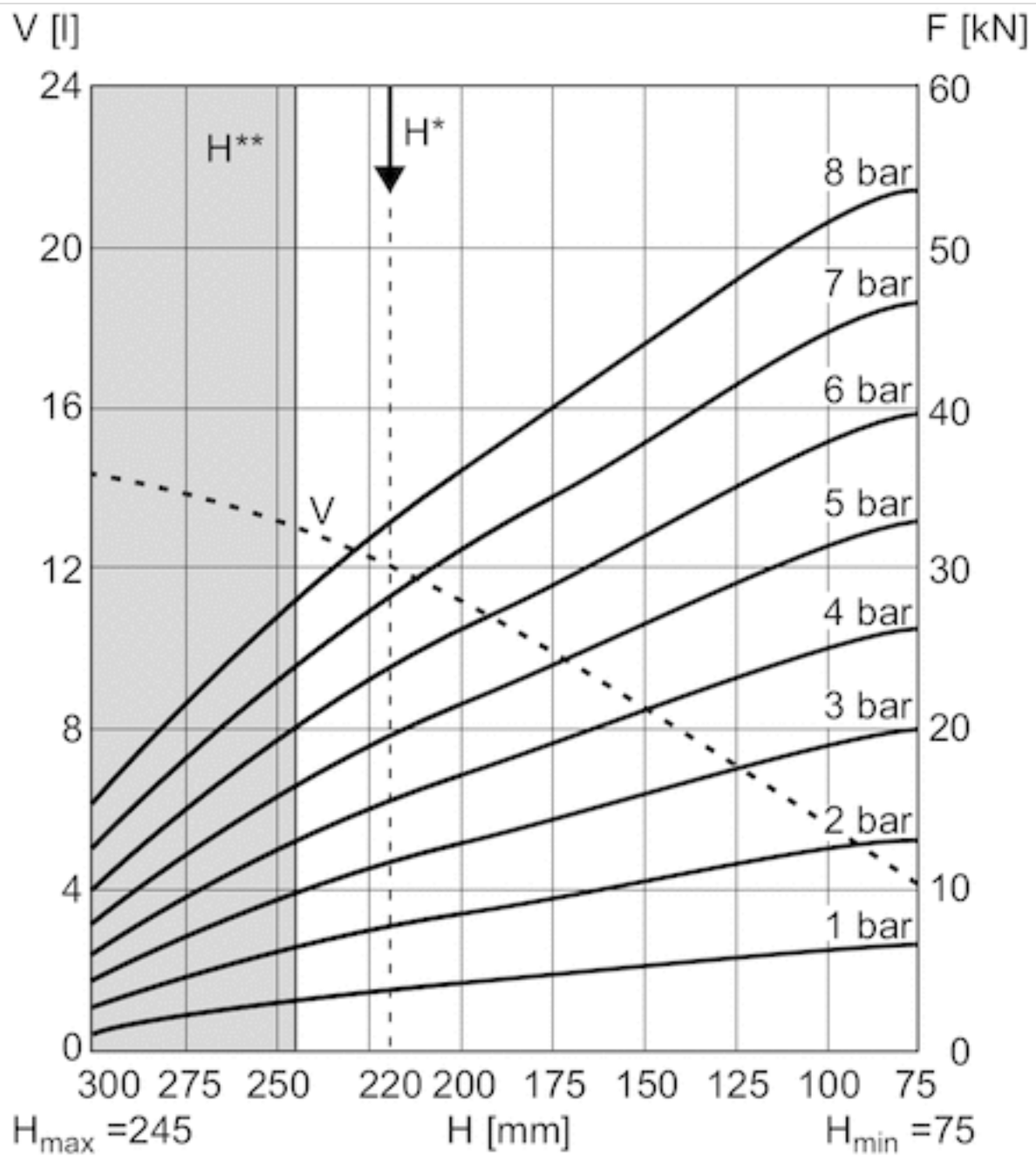
H = height

H^* = recommended operating height for vibration isolation

H^{**} = use permitted only upon approval by AVENTICS

1 kN = 1000 N

Force-displacement diagram, R412020595



V = volume

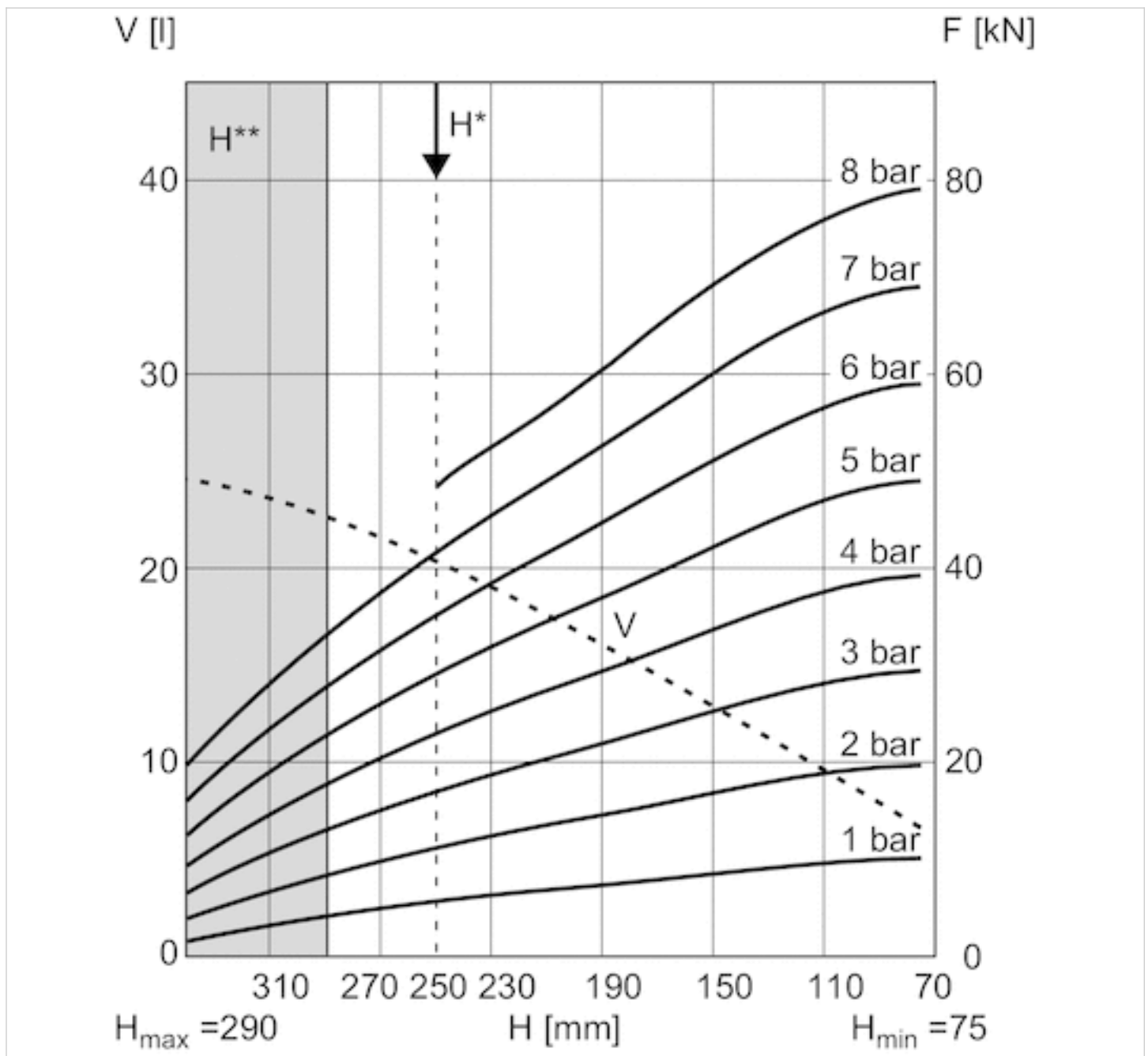
H = height

H^{*} = recommended operating height for vibration isolation

H^{**} = use permitted only upon approval by AVENTICS

1 kN = 1000 N

Force-displacement diagram, R412020596



V = volume

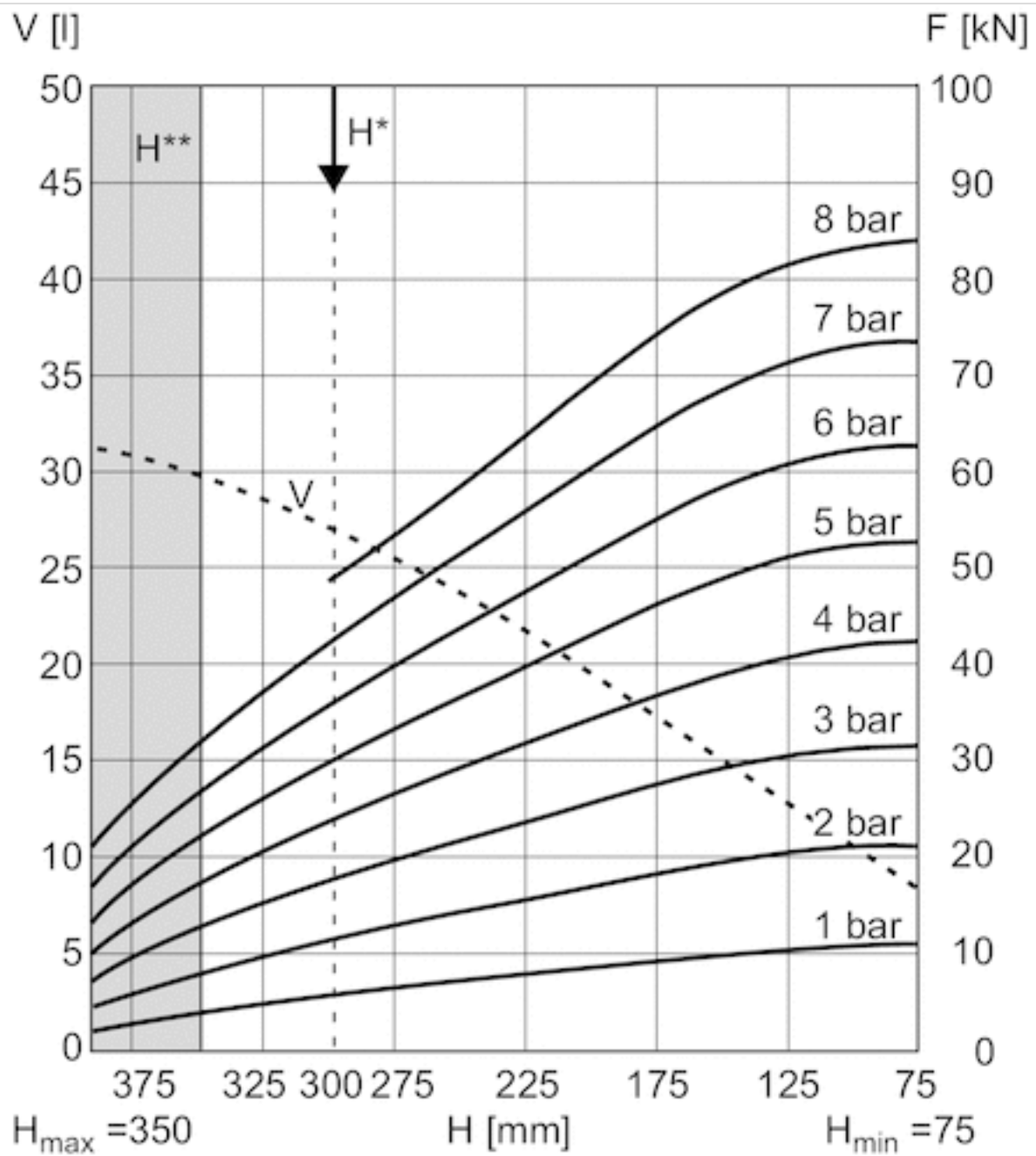
H = height

H^* = recommended operating height for vibration isolation

H^{**} = use permitted only upon approval by AVENTICS

1 kN = 1000 N

Force-displacement diagram, R412020597



V = volume

H = height

H^* = recommended operating height for vibration isolation

H^{**} = use permitted only upon approval by AVENTICS

1 kN = 1000 N

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™