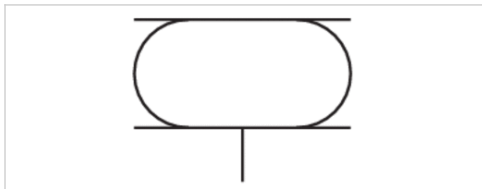


Series BCP

- standard version
- double
- Stroke 95-253 mm



Type	Bellow actuator with cover
Functional principle	Single-acting, retracted without pressure
Working pressure min./max.	0 ... 8 bar
Ambient temperature min./max.	-40 ... 70 °C
Medium	Compressed air
Permissible angle of tilt max.	20 °
Pressure for determining forces	6 bar
Weight	See table below

Technical data

Part No.	Cover diameter	Compressed air connection	Max. effective stroke
		G	
0822419040	90 mm	G 1/8	95 mm
0822419041	108 mm	G 1/4	108 mm
2999640000	141 mm	G 1/4	123 mm
0822419042	141 mm	G 3/4	130 mm
1922161000	141 mm	G 3/4	153 mm
0822419043	161 mm	G 3/4	165 mm
R412010042	161 mm	G 3/4	183 mm
2999619400	161 mm	G 3/4	223 mm
1933181000	228 mm	G 3/4	190 mm
2999638300	228 mm	G 3/4	223 mm
1938191000	287 mm	G 3/4	193 mm
R412010200	287 mm	G 3/4	223 mm
2999610900	287 mm	G 3/4	253 mm

Part No.	Min. radial installation space	Force min./max.	Weight	Fig.	
0822419040	160 mm	2100 ... 5600 N	1,3 kg	Fig. 1	-
0822419041	180 mm	3500 ... 8700 N	1,5 kg	Fig. 2	-
2999640000	215 mm	5000 ... 12600 N	2,1 kg	Fig. 2	-
0822419042	230 mm	7000 ... 13000 N	2,3 kg	Fig. 2	1)
1922161000	235 mm	7700 ... 14800 N	2,3 kg	Fig. 2	1)
0822419043	250 mm	7700 ... 20000 N	3 kg	Fig. 3	-

Part No.	Min. radial installation space	Force min./max.	Weight	Fig.	
R412010042	265 mm	8700 ... 20100 N	3,2 kg	Fig. 3	1)
2999619400	275 mm	8200 ... 19500 N	3,5 kg	Fig. 3	1)
1933181000	340 mm	17000 ... 35400 N	4,8 kg	Fig. 3	-
2999638300	355 mm	20500 ... 36800 N	5,1 kg	Fig. 3	1)
1938191000	400 mm	27400 ... 49600 N	6,9 kg	Fig. 4	-
R412010200	415 mm	27800 ... 52600 N	7,3 kg	Fig. 4	1)
2999610900	420 mm	30000 ... 55000 N	7,7 kg	Fig. 4	1)

1) Once the minimum height H min. is reached, the bead height W can fall below the lower limit. If, for these products, level mounting surfaces greater than the cover diameter are selected, the return force and force output at the start of stroke increase. In the process, the rubber bellow is also compressed by the mounting surfaces. These products require more space upward, which can, in rare cases, present a hindrance. In any case, the specifications of the data sheets apply when using mounting surfaces in the size of the bellows actuator cover.

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).

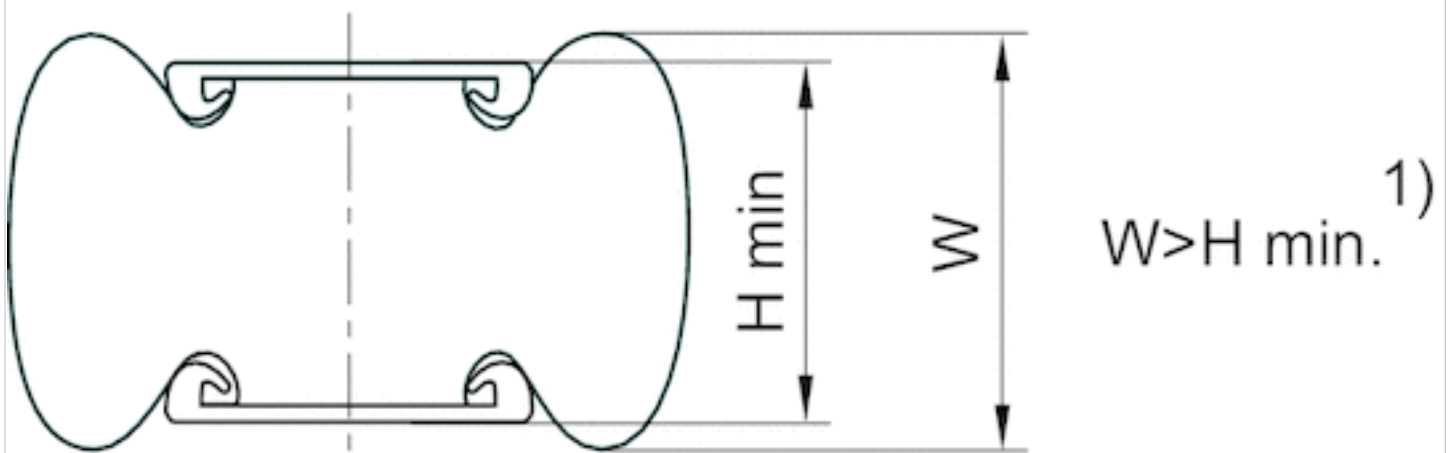
Reduced service life at a temperature greater than 50 °C

Technical information

Material	
Bellow	caoutchouc/butadiene caoutchouc
Front cover	Steel, galvanized
End cover	Steel, galvanized

Dimensions

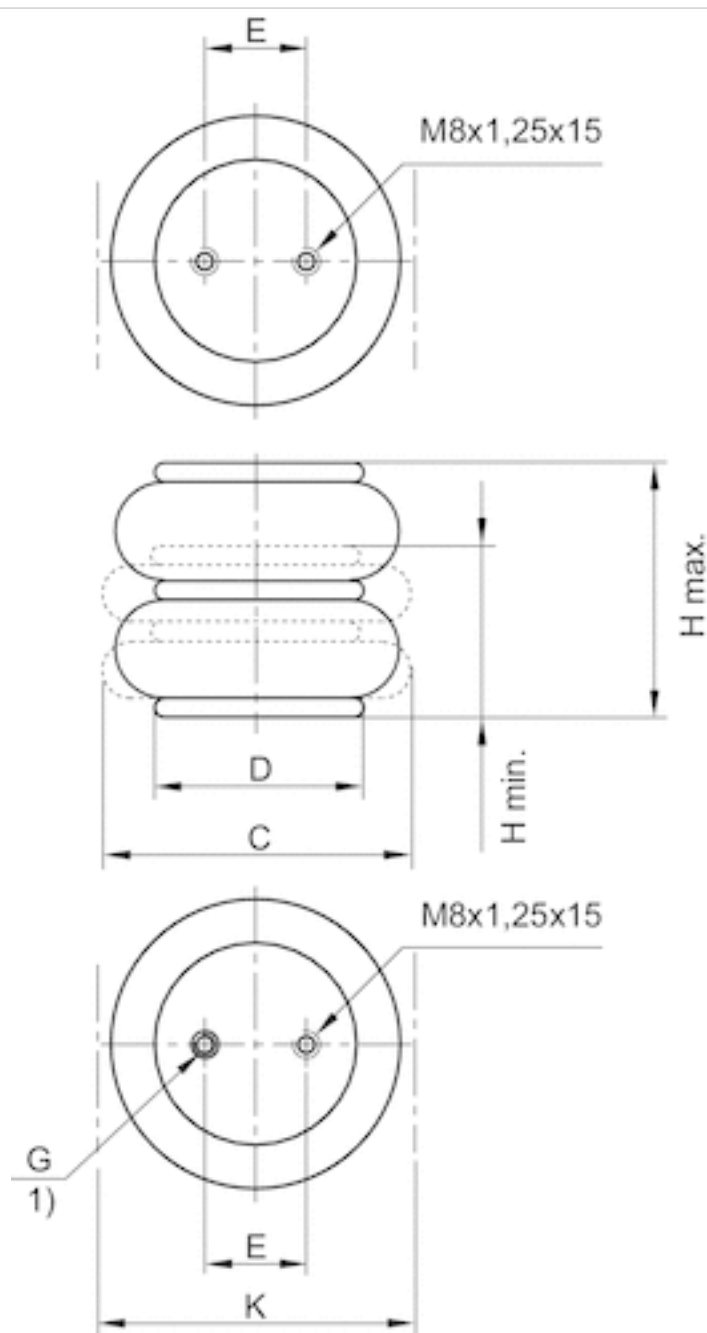
Comment



1) Once the minimum height H min. is reached, the bead height W can fall below the lower limit. If, for these products, level mounting surfaces greater than the cover diameter are selected, the return force and force output at the start of stroke increase. In the process, the rubber bellows is also compressed by the mounting surfaces. These products require more space upward, which can, in rare cases, present a hindrance. In any case, the specifications of the data sheets apply when using mounting surfaces in the size of the bellows actuator cover.

1 kN = 1000 N

Fig. 1



1) air connection in the mounting hole

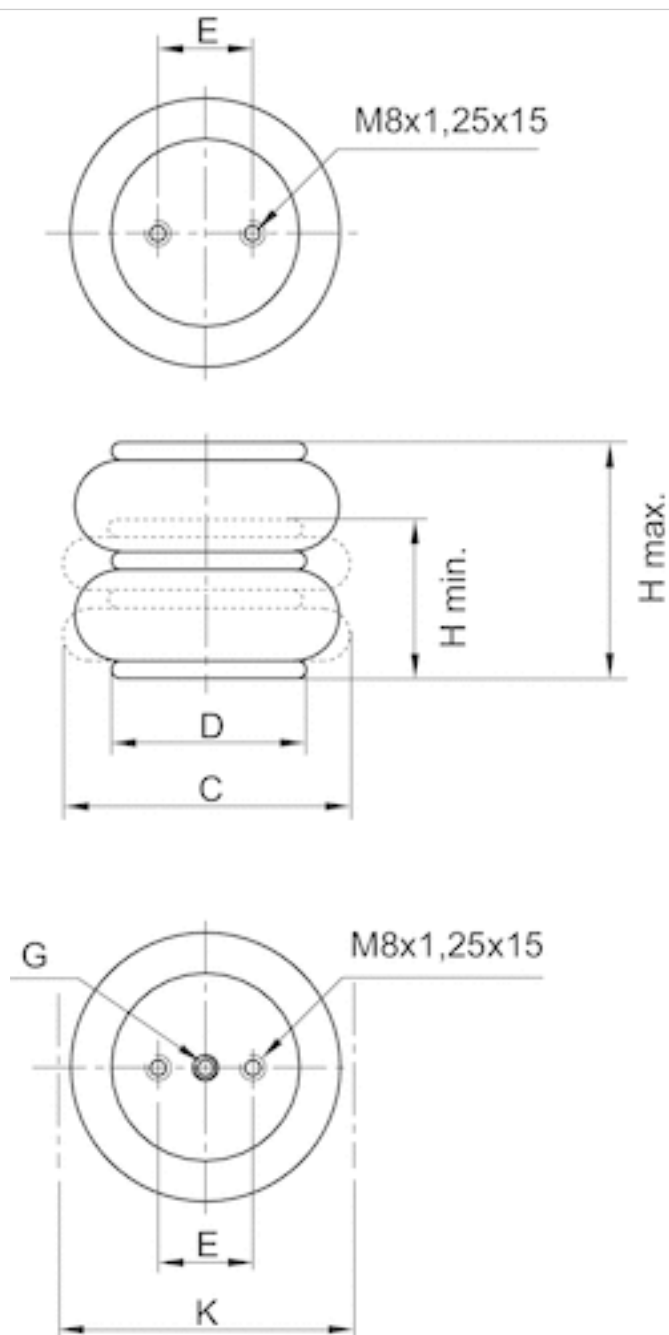
Dimensions

Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
0822419040	G 1/8	70 mm	165 mm	145 mm	90 mm

E ±0,5 [mm]	K mm	Return force, min. N
20	160 mm	200 N

Dimensions

Fig. 2



Dimensions

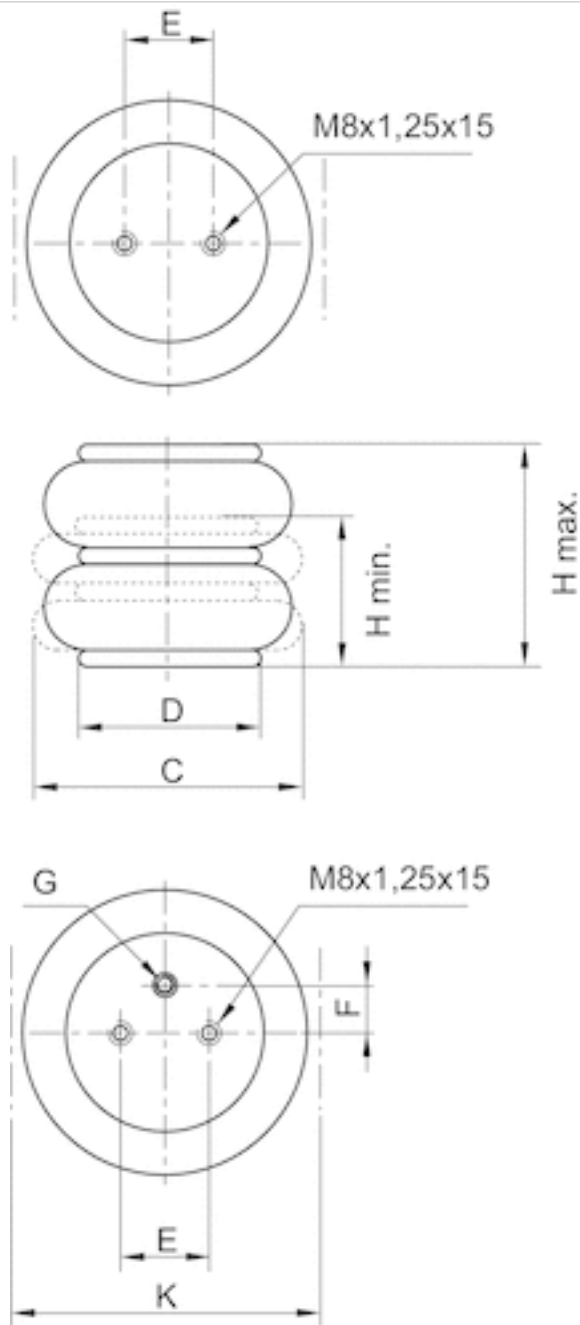
Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
0822419041	G 1/4	72 mm	180 mm	165 mm	108 mm
2999640000	G 1/4	72 mm	195 mm	203 mm	141 mm
0822419042	G 3/4	75 mm	205 mm	215 mm	141 mm
1922161000	G 3/4	77 mm	230 mm	218 mm	141 mm

E ±0,5 [mm]	K mm	Return force, min. N
44.5	180 mm	200 N
70	215 mm	200 N

E ±0,5 [mm]	K mm	Return force, min. N
70	230 mm	200 N
70	235 mm	200 N

Dimensions

Fig. 3



Dimensions

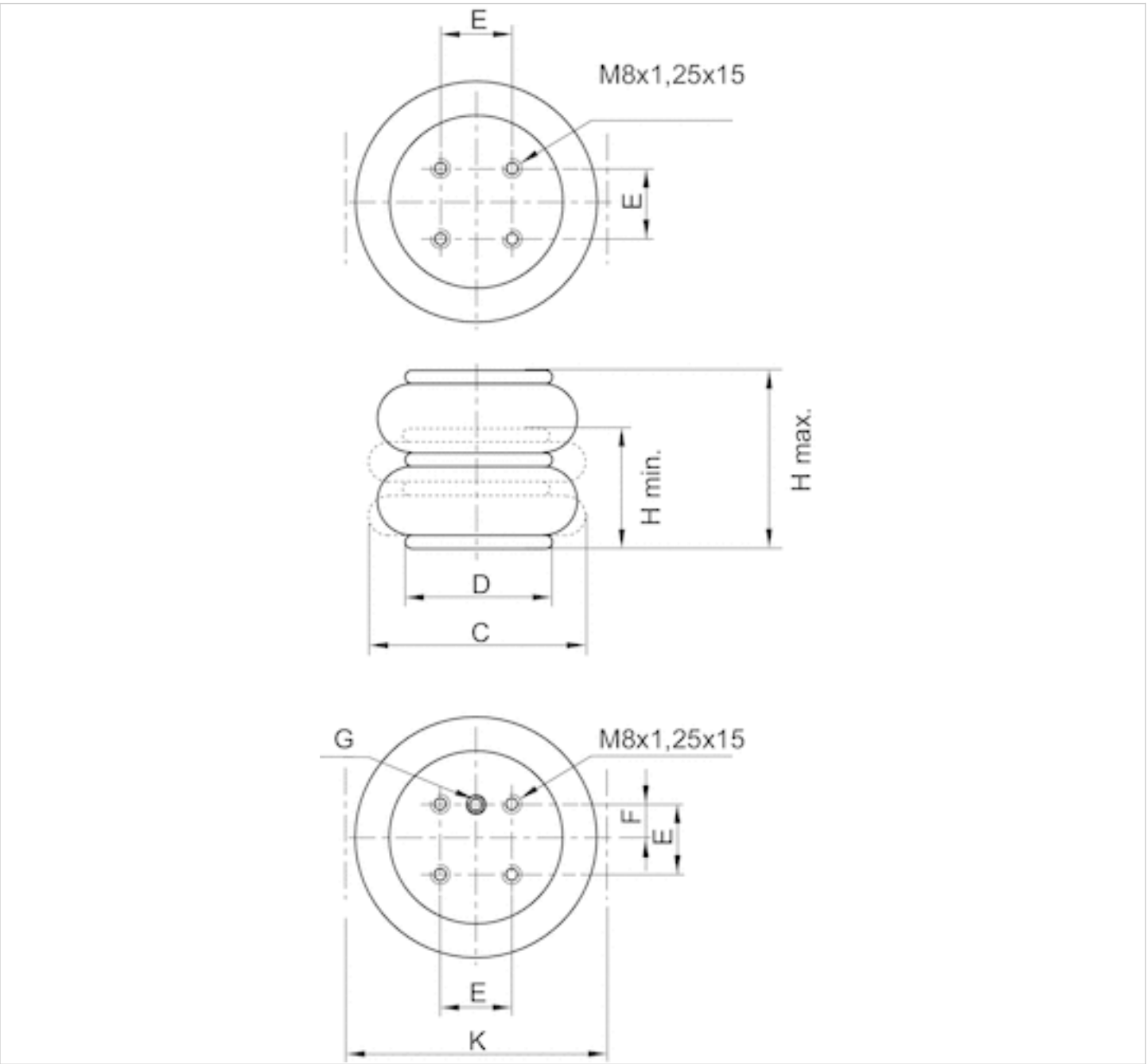
Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
0822419043	G 3/4	75 mm	240 mm	250 mm	161 mm
R412010042	G 3/4	77 mm	260 mm	255 mm	161 mm
2999619400	G 3/4	77 mm	300 mm	260 mm	161 mm
1933181000	G 3/4	75 mm	265 mm	325 mm	228 mm

Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
2999638300	G 3/4	77 mm	300 mm	340 mm	228 mm

E ±0,5 [mm]	F ±0,5 [mm]	K mm	Return force, min. N
89	38.1	250 mm	200 N
89	38.1	265 mm	200 N
89	38.1	275 mm	250 N
157.5	73	340 mm	300 N
157.5	73	355 mm	300 N

Dimensions

Fig. 4



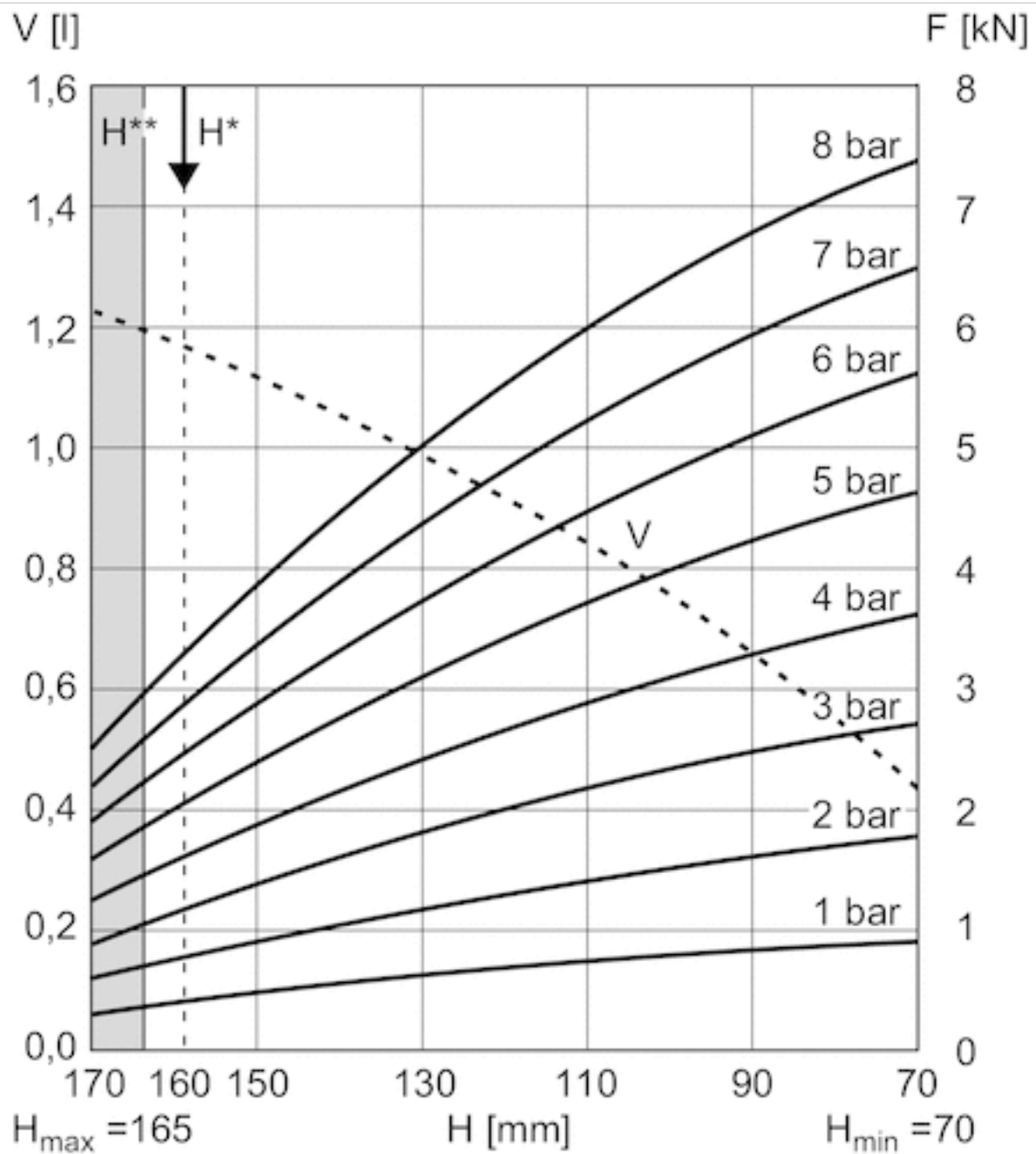
Dimensions

Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
1938191000	G 3/4	77 mm	270 mm	385 mm	287 mm
R412010200	G 3/4	77 mm	300 mm	400 mm	287 mm
2999610900	G 3/4	77 mm	330 mm	405 mm	287 mm

E ±0,5 [mm]	F ±0,5 [mm]	K mm	Return force, min. N
158.8	79.4	400 mm	400 N
158.8	79.4	415 mm	400 N
158.8	79.4	420 mm	400 N

Diagrams

Force-displacement diagram, 0822419040



V = volume

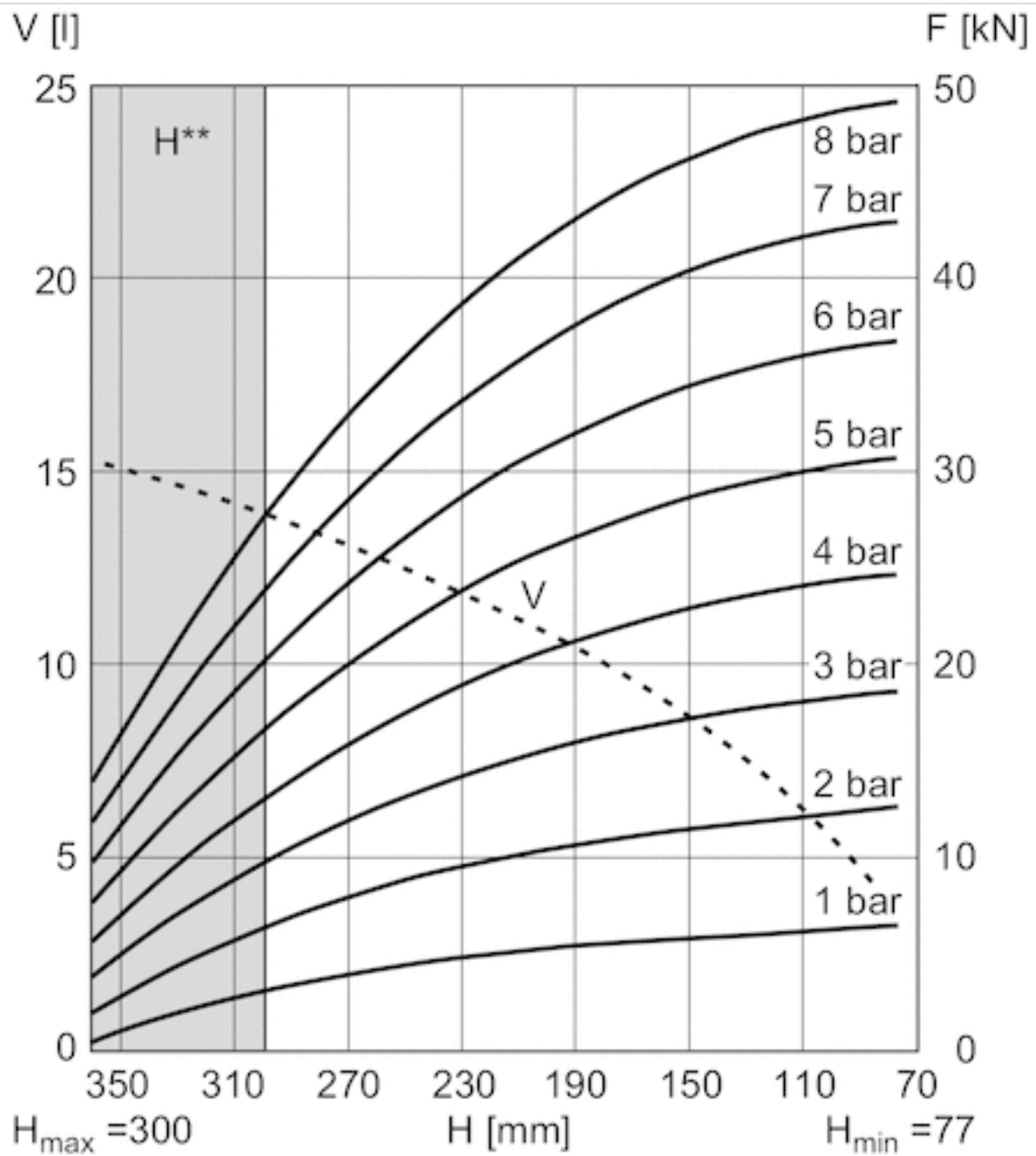
H = height

H^* = recommended operating height for vibration isolation

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

1 kN = 1000 N

Force-displacement diagram, 2999638300



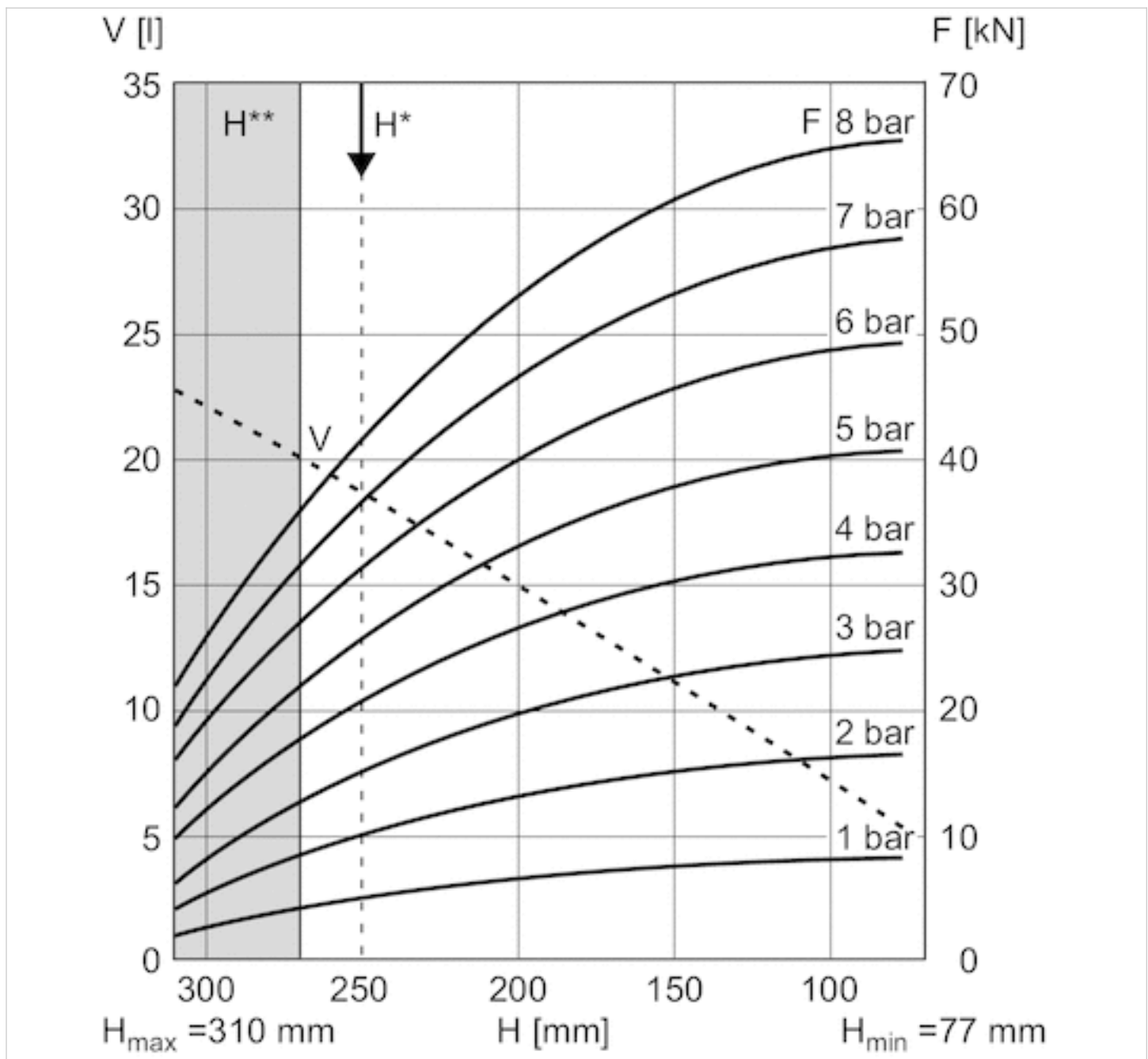
V = volume

H = height

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

1 kN = 1000 N

Force-displacement diagram, 1938191000



V = volume

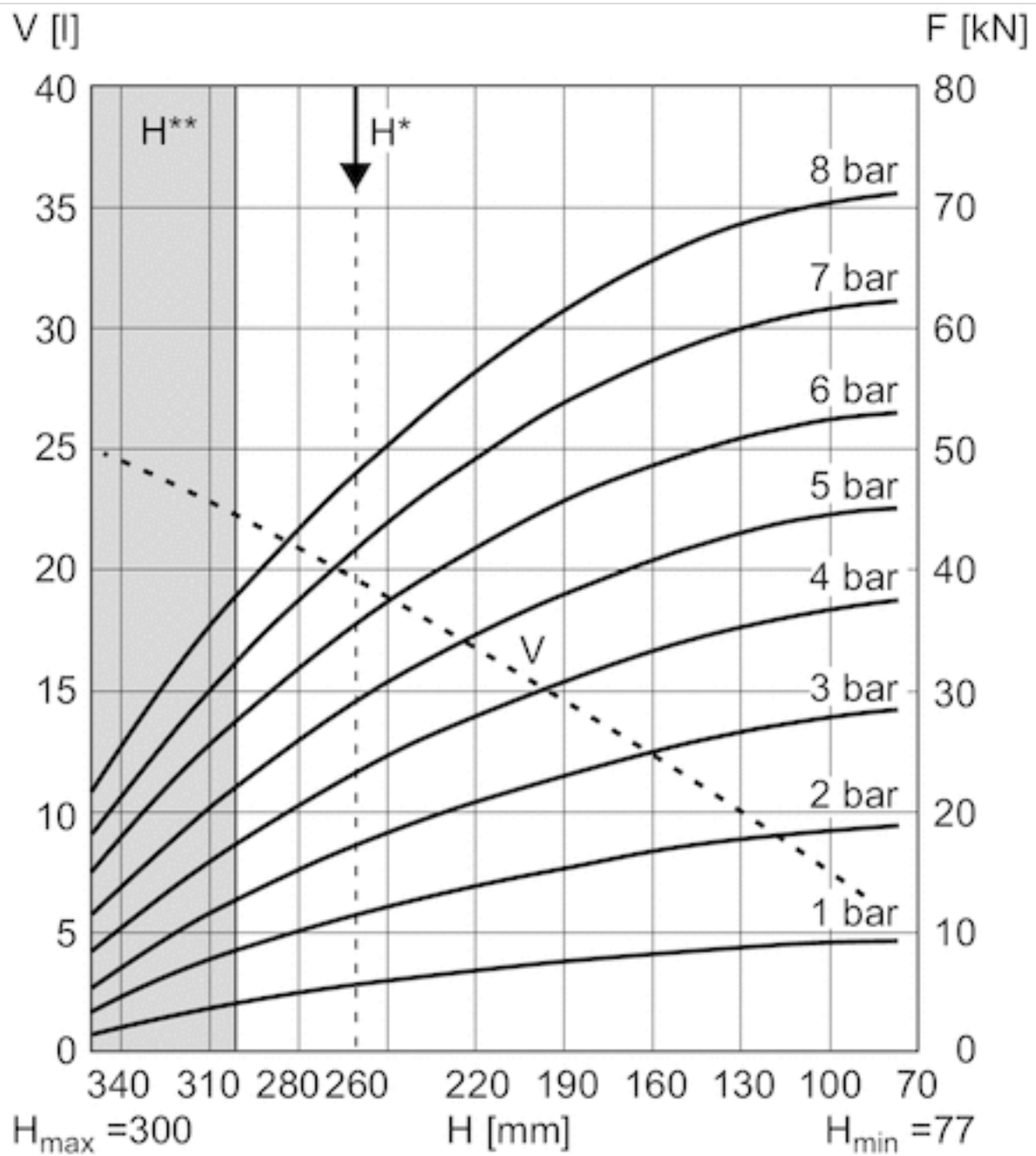
H = height

H^* = recommended operating height for vibration isolation

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

1 kN = 1000 N

Force-displacement diagram, R412010200



V = volume

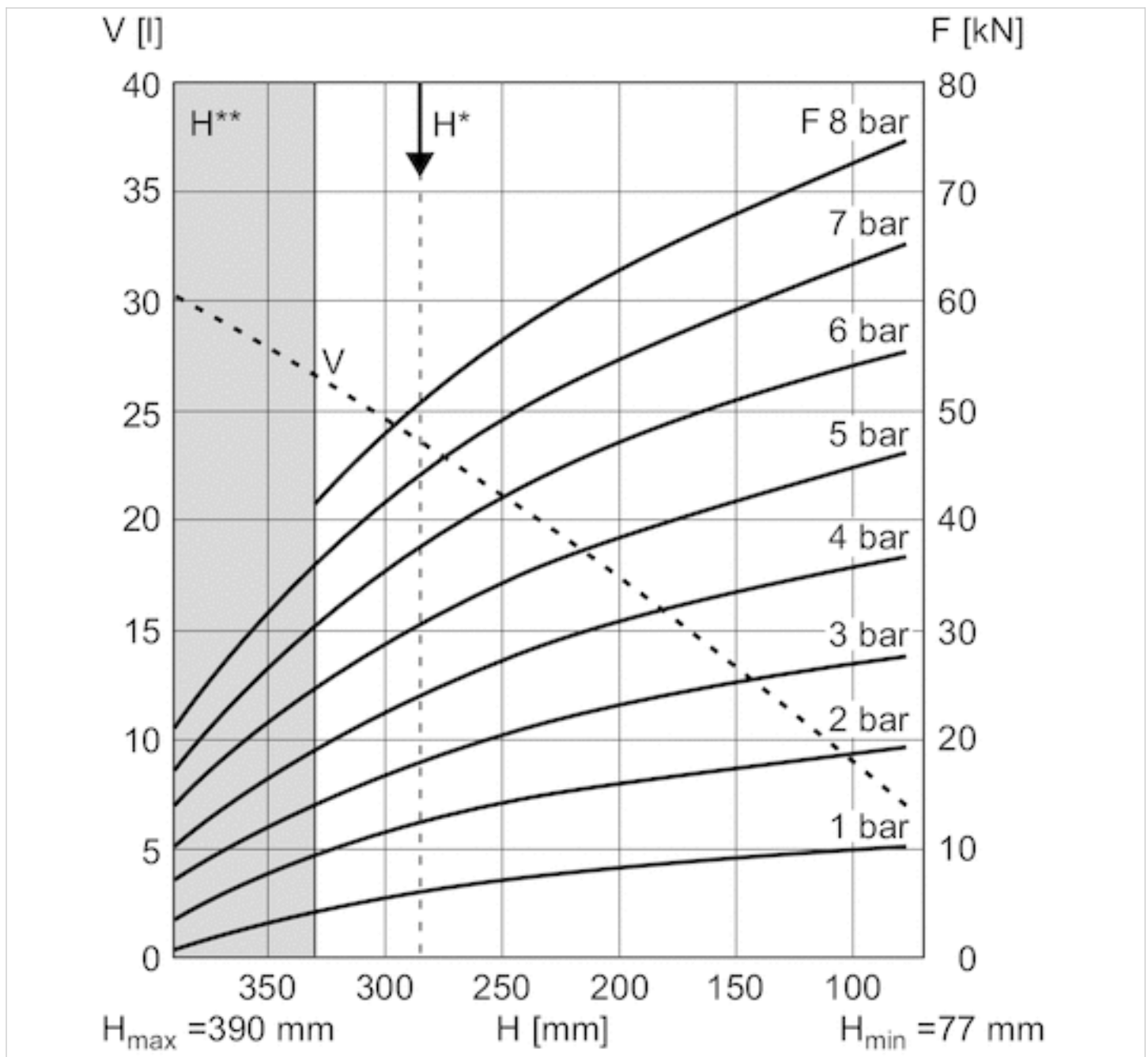
H = height

H^* = recommended operating height for vibration isolation

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

1 kN = 1000 N

Force-displacement diagram, 2999610900



V = volume

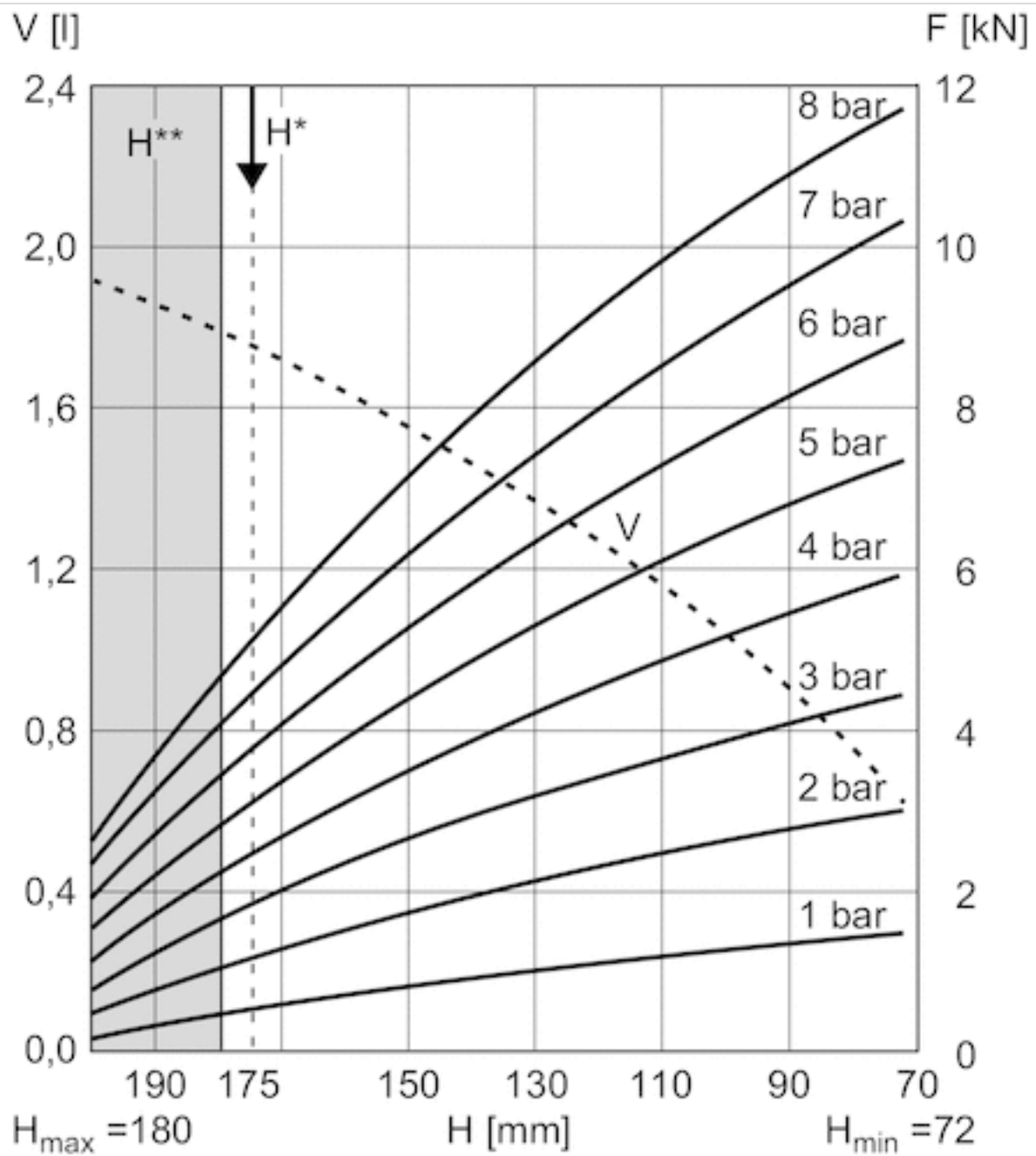
H = height

H^* = recommended operating height for vibration isolation

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

1 kN = 1000 N

Force-displacement diagram, 0822419041



V = volume

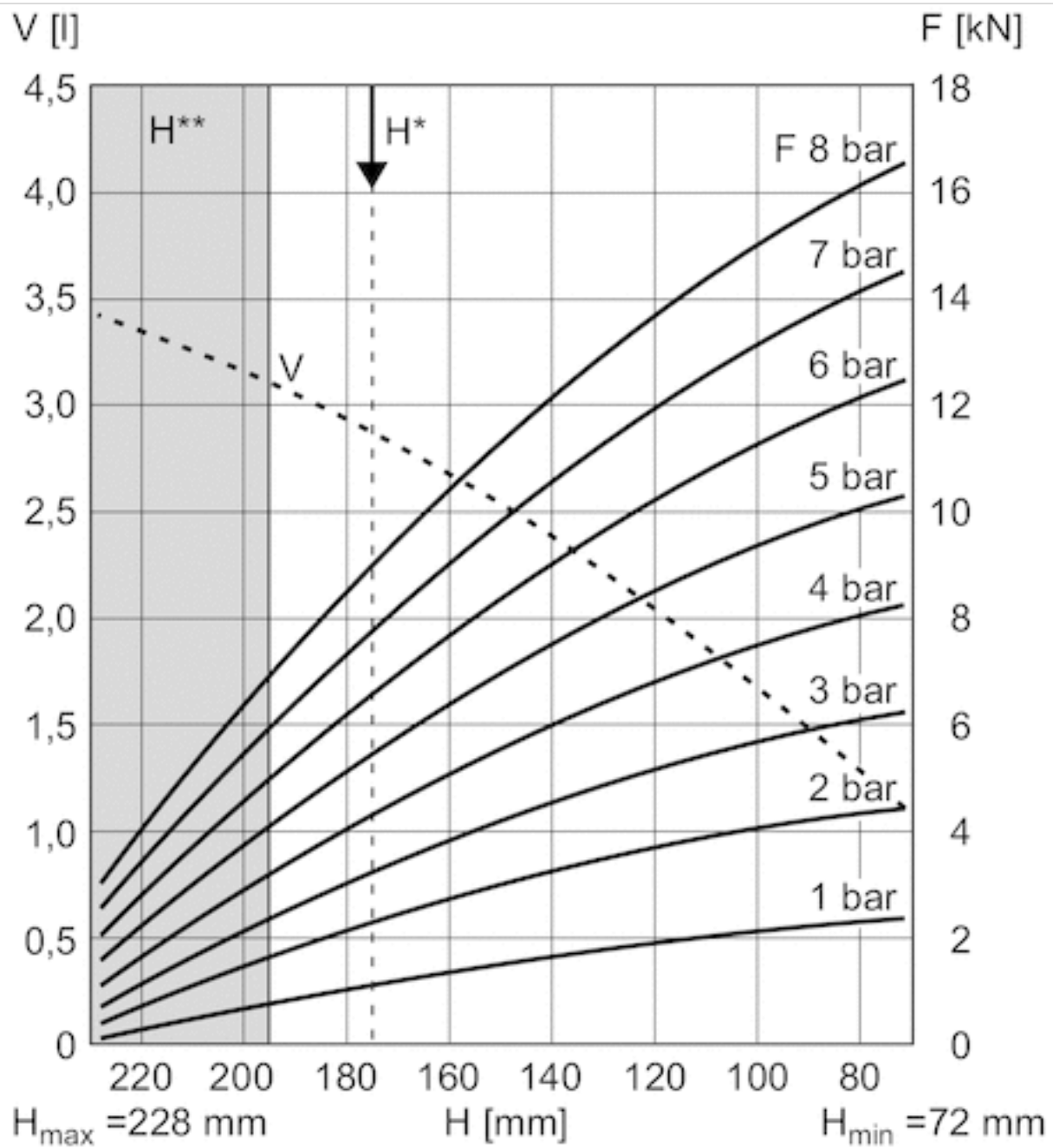
H = height

H^* = recommended operating height for vibration isolation

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

1 kN = 1000 N

Force-displacement diagram, 2999640000



V = volume

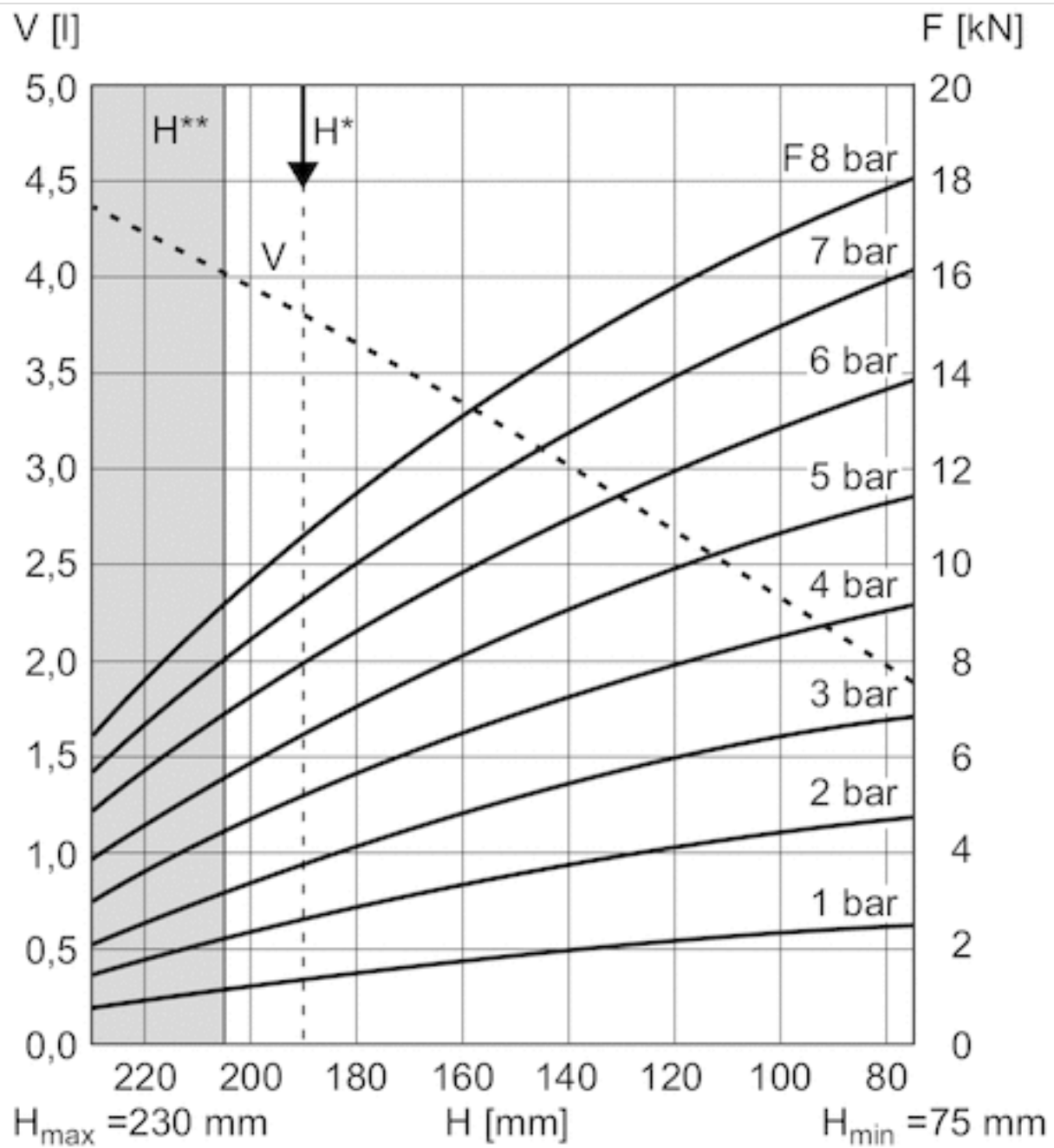
H = height

H^* = recommended operating height for vibration isolation

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

1 kN = 1000 N

Force-displacement diagram, 0822419042



V = volume

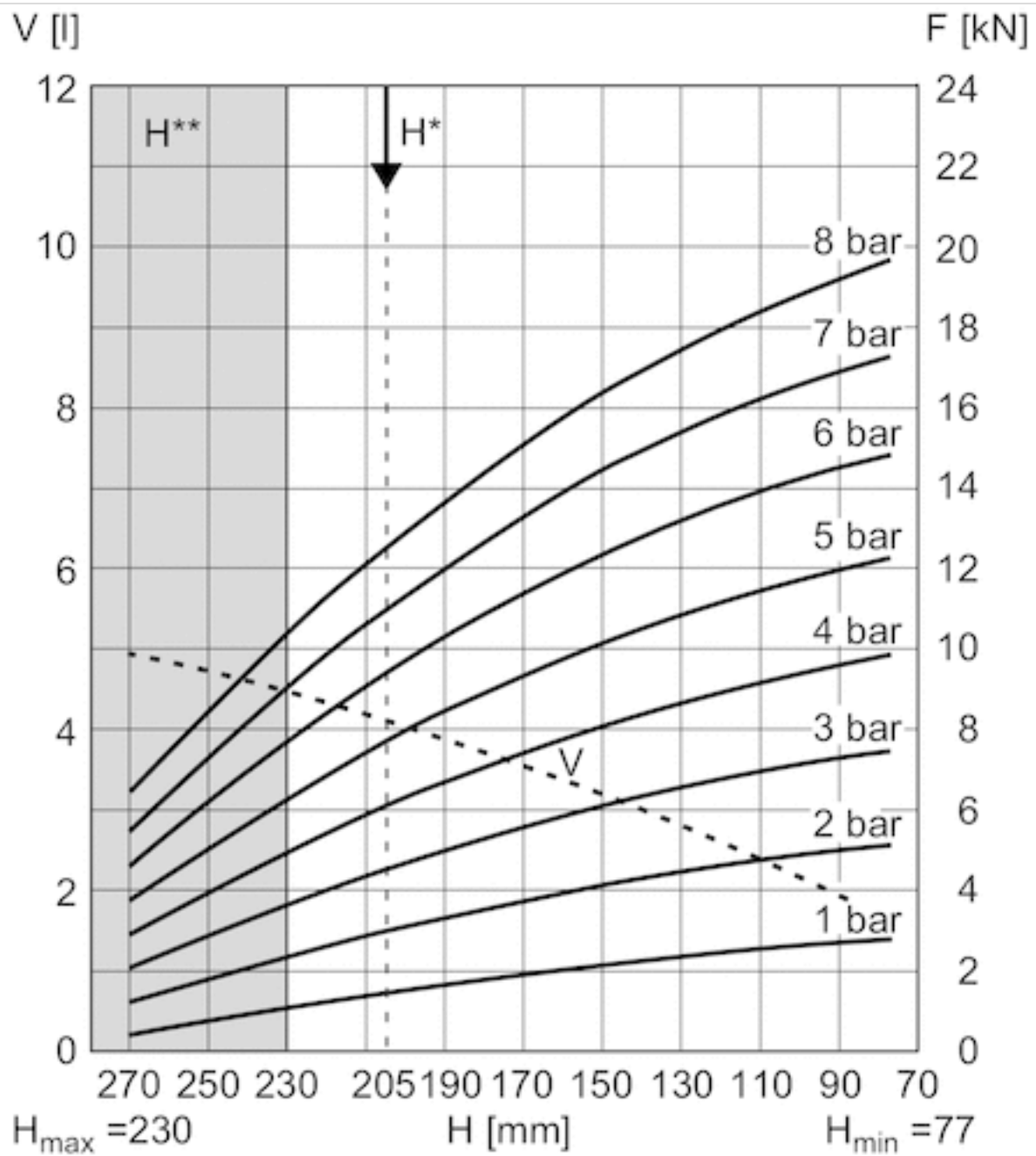
H = height

H^* = recommended operating height for vibration isolation

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

1 kN = 1000 N

Force-displacement diagram, 1922161000



V = volume

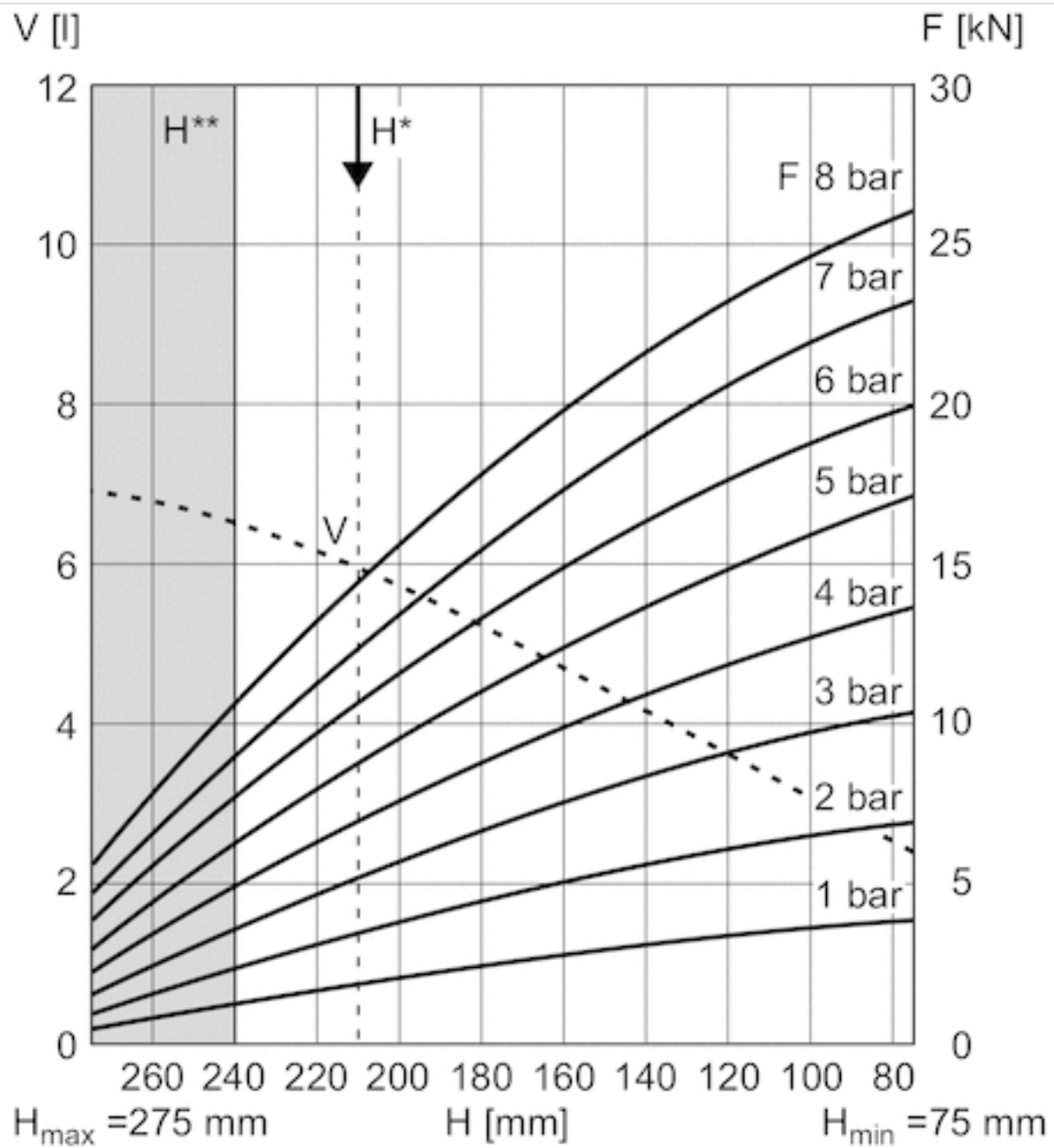
H = height

H^* = recommended operating height for vibration isolation

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

1 kN = 1000 N

Force-displacement diagram, 0822419043



V = volume

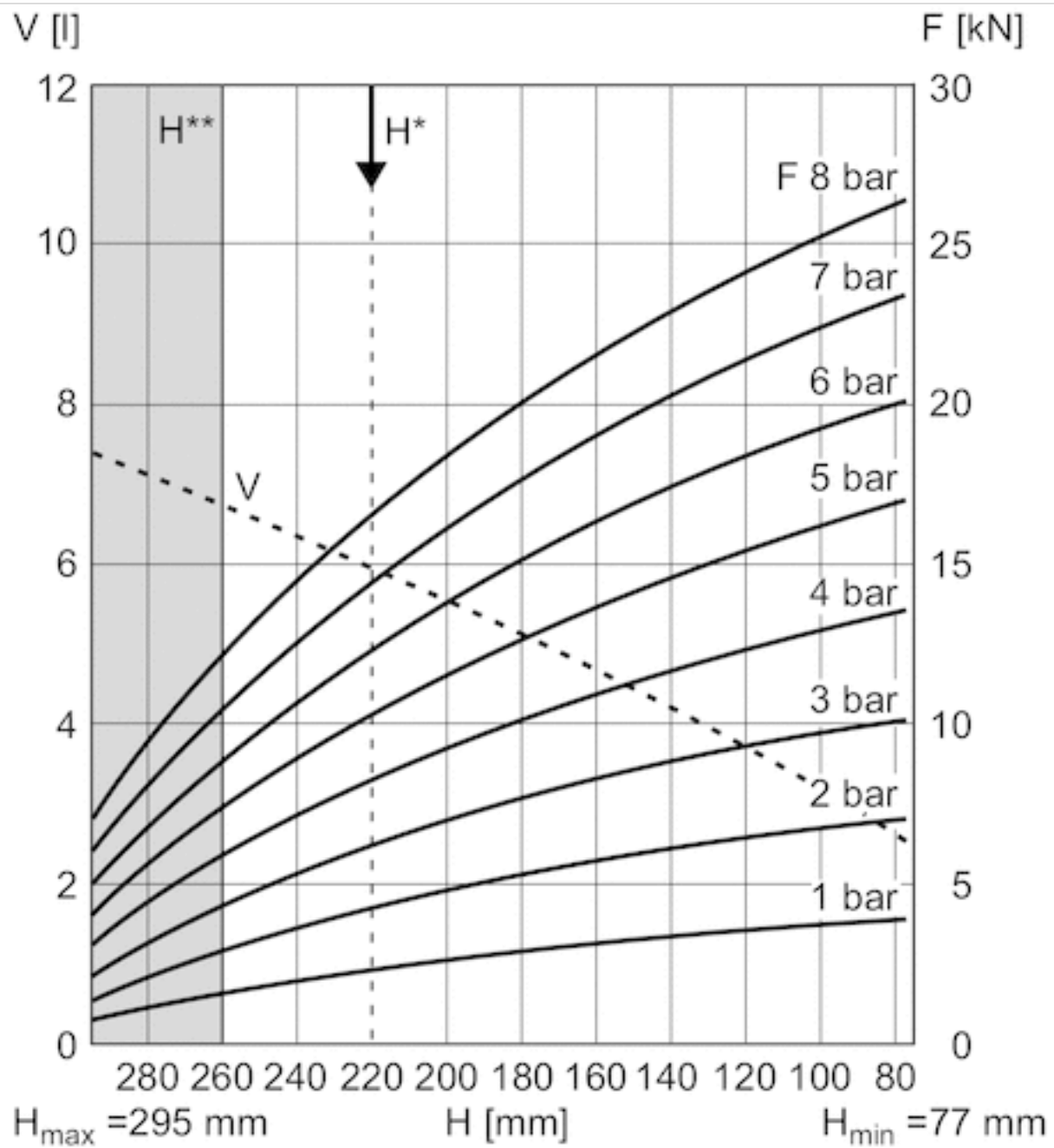
H = height

H^* = recommended operating height for vibration isolation

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

1 kN = 1000 N

Force-displacement diagram, R412010042



V = volume

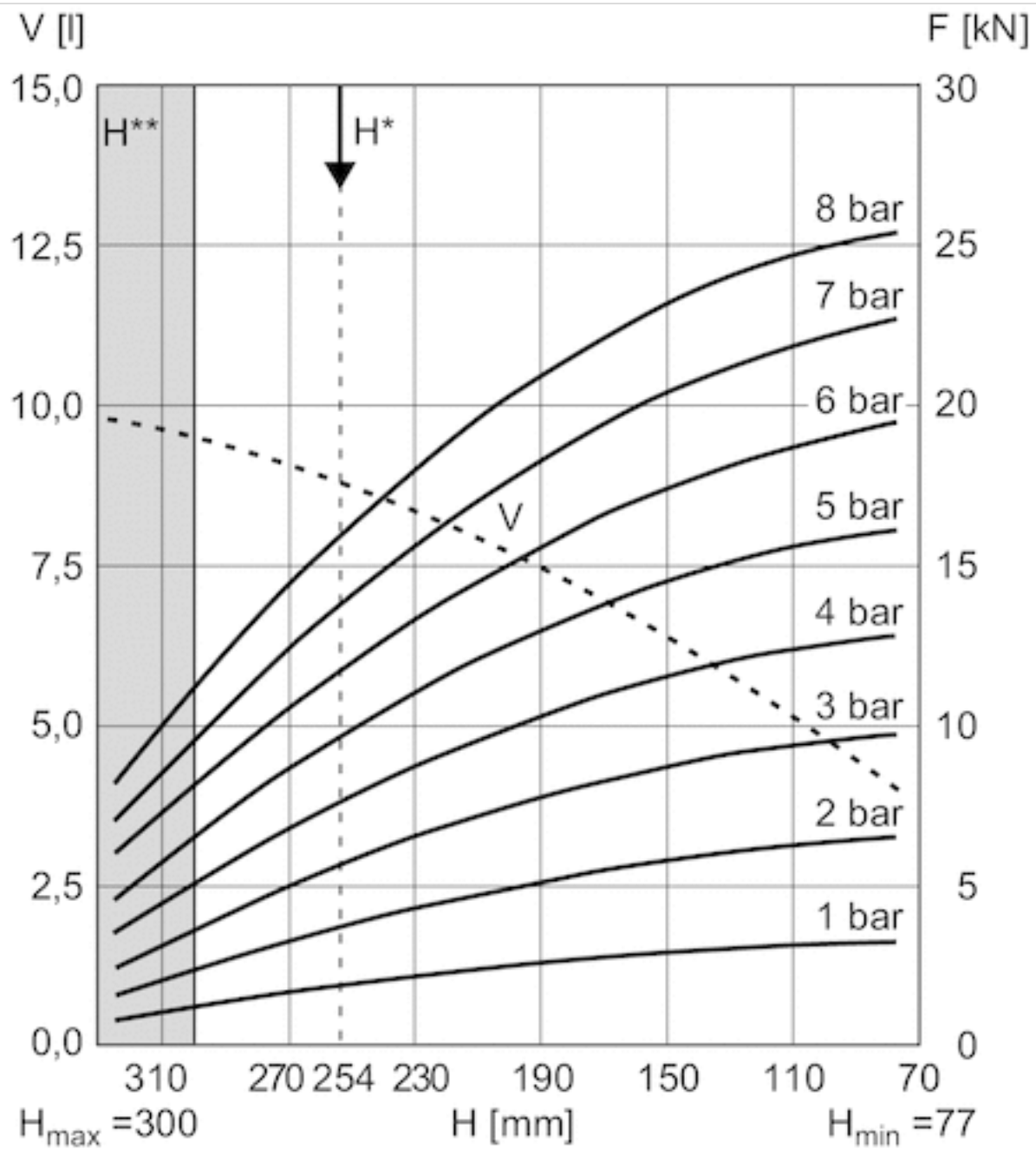
H = height

H^* = recommended operating height for vibration isolation

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

1 kN = 1000 N

Force-displacement diagram, 2999619400



V = volume

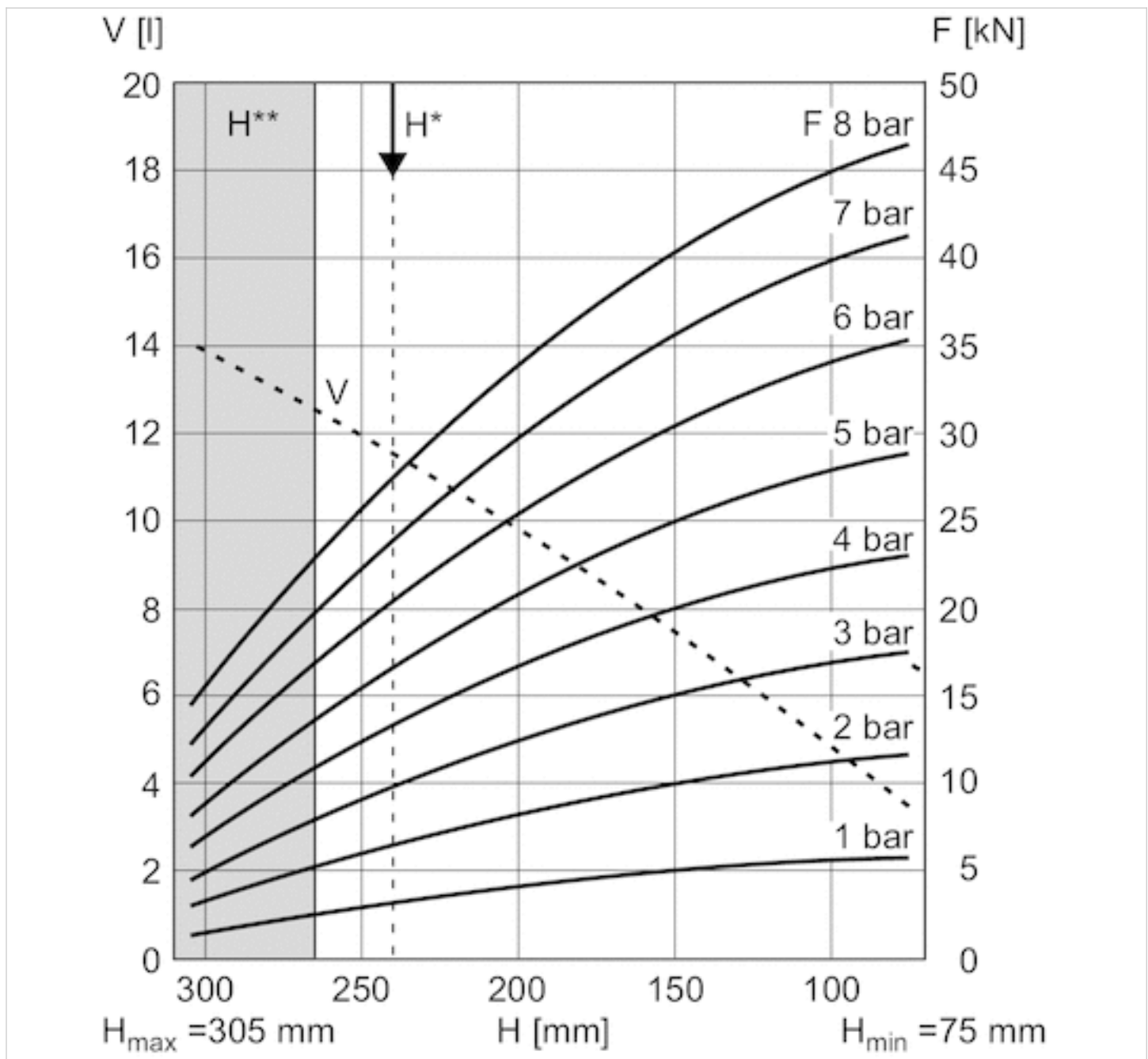
H = height

H* = recommended operating height for vibration isolation

H** = use permitted only upon approval by AVENTICS

1 kN = 1000 N

Force-displacement diagram, 1933181000



V = volume

H = height

H^* = recommended operating height for vibration isolation

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

1 kN = 1000 N

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