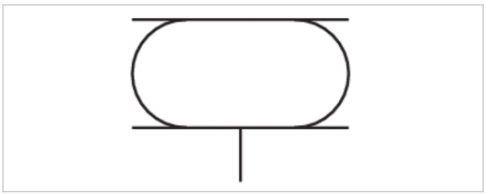
Series BCP

- Heat-resistant version
- single
- Stroke 31-107 mm



Type	Bellow actuator with cover
Functional principle	Single-acting, retracted without pressure
Working pressure min./max.	0 ... 8 bar
Ambient temperature min./max.	-20 ... 130 °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	
R412010207	108 mm	G 1/4	31 mm
R412004943	108 mm	G 1/4	54 mm
R412010208	114 mm	G 1/4	76 mm
R412007812	141 mm	G 3/4	75 mm
R412010209	141 mm	G 3/4	107 mm
R412010210	161 mm	G 3/4	74 mm
R412010211	228 mm	G 3/4	89 mm
R412010212	287 mm	G 3/4	104 mm

Part No.	Min. radial installation space	Force min./max.	Weight	Fig.	
R412010207	165 mm	3500 ... 6900 N	1,4 kg	Fig. 1	-
R412004943	180 mm	4500 ... 7500 N	1,2 kg	Fig. 1	-
R412010208	225 mm	4300 ... 10900 N	1,4 kg	Fig. 1	-
R412007812	230 mm	6100 ... 13600 N	2 kg	Fig. 1	-
R412010209	250 mm	7000 ... 14000 N	1,9 kg	Fig. 1	1)
R412010210	265 mm	9300 ... 17300 N	2,3 kg	Fig. 2	-
R412010211	340 mm	19400 ... 33300 N	3,9 kg	Fig. 2	-
R412010212	400 mm	26100 ... 50000 N	5,9 kg	Fig. 3	-

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 ≥ Hmax: only permitted upon approval by AVENTICS
Further information on vibration isolation can be found in the “Technical information” document (available in the MediaCentre).

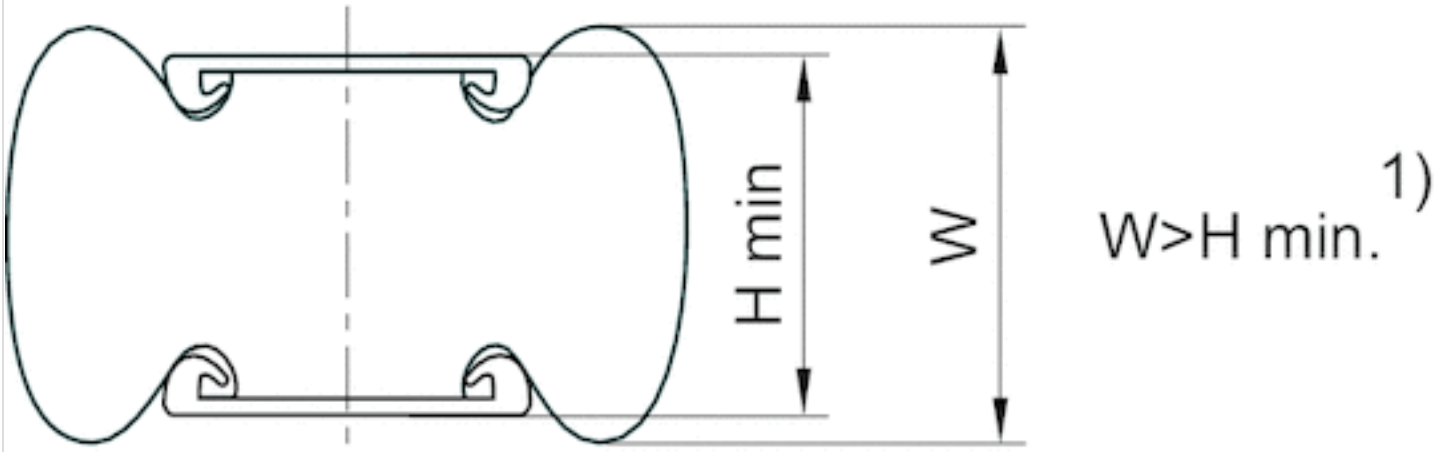
Reduced service life at a temperature greater than 115 °C

Technical information

Material	
Bellow	Epichlorohydrin rubber
Front cover	Steel, galvanized
End cover	Steel, galvanized

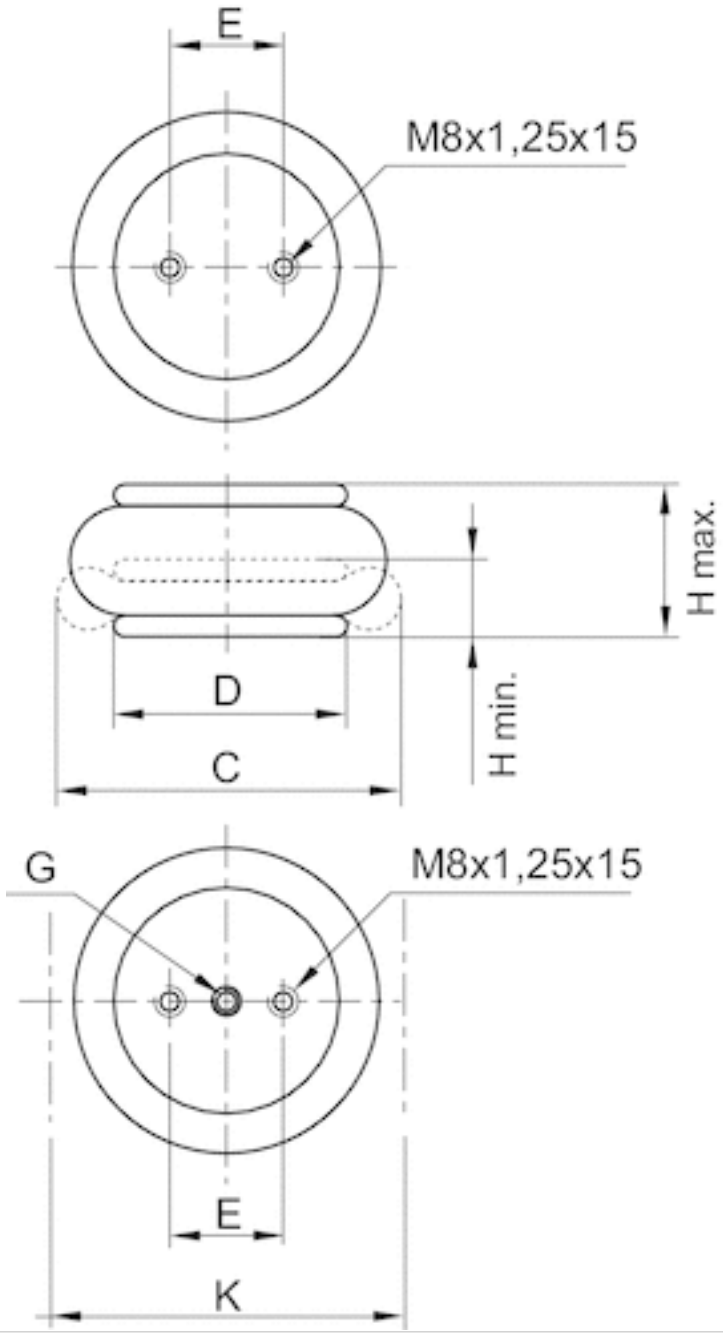
Dimensions

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 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.
1 kN = 1000 N

Fig. 1



Dimensions

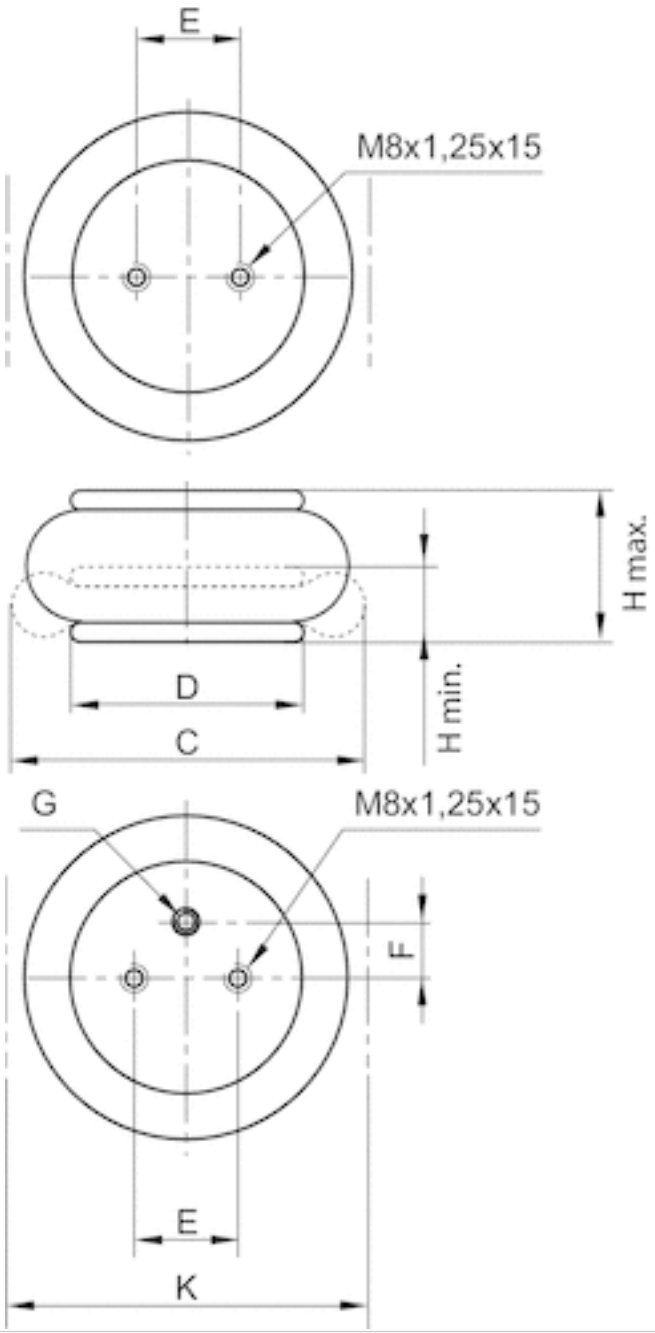
Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
R412010207	G 1/4	54 mm	85 mm	150 mm	108 mm
R412004943	G 1/4	51 mm	105 mm	165 mm	108 mm
R412010208	G 1/4	54 mm	130 mm	210 mm	114 mm
R412007812	G 3/4	50 mm	125 mm	215 mm	141 mm
R412010209	G 3/4	54 mm	158 mm	235 mm	141 mm

E ±0,5 [mm]	K mm	Return force, min. N
44.5	165 mm	250 N
44.5	180 mm	200 N
44.5	225 mm	45 N

E ±0,5 [mm]	K mm	Return force, min. N
44.5	230 mm	200 N
70	250 mm	200 N

Dimensions

Fig. 2



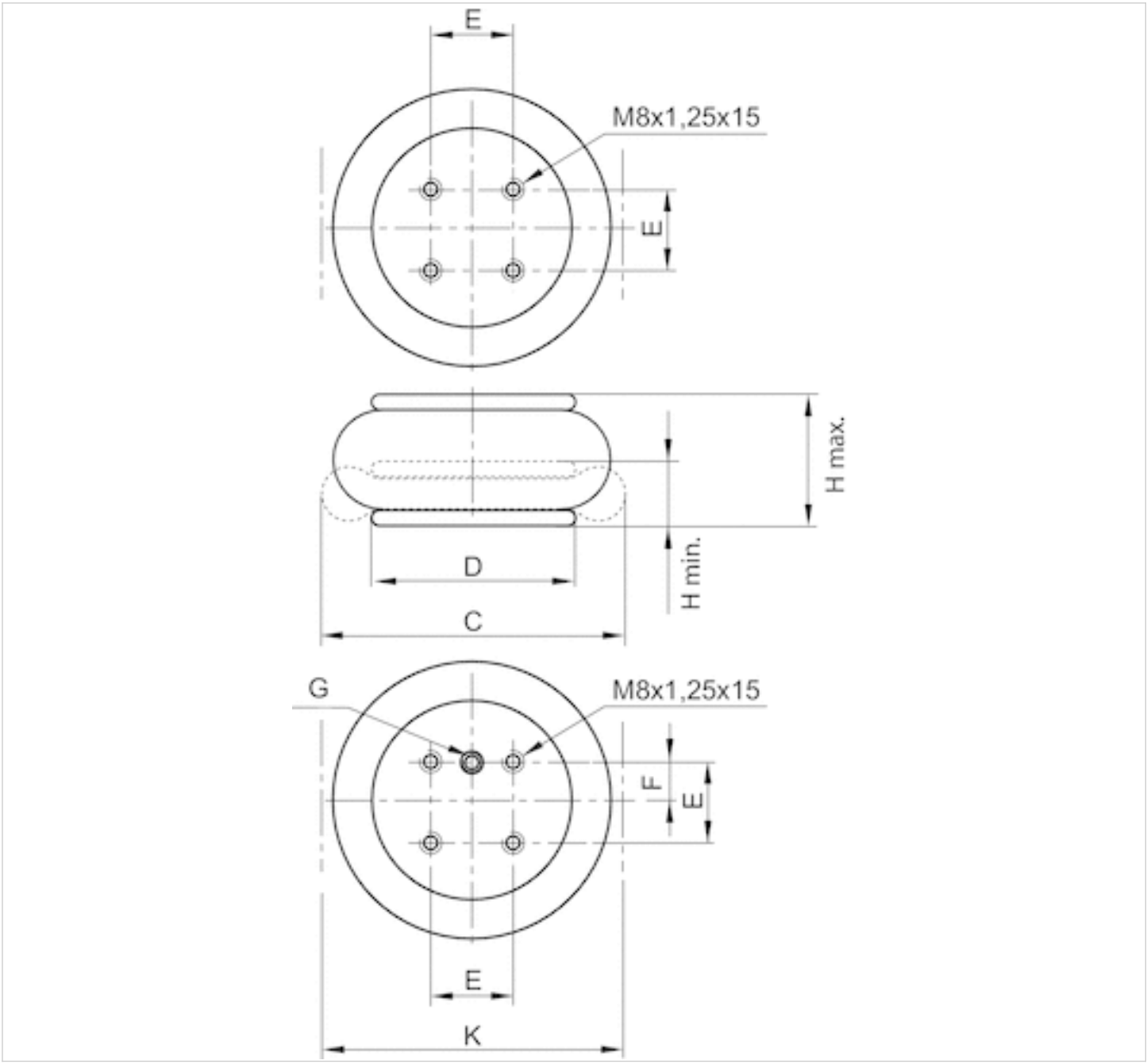
Dimensions

Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
R412010210	G 3/4	54 mm	125 mm	250 mm	161 mm
R412010211	G 3/4	54 mm	140 mm	325 mm	228 mm

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

Dimensions

Fig. 3



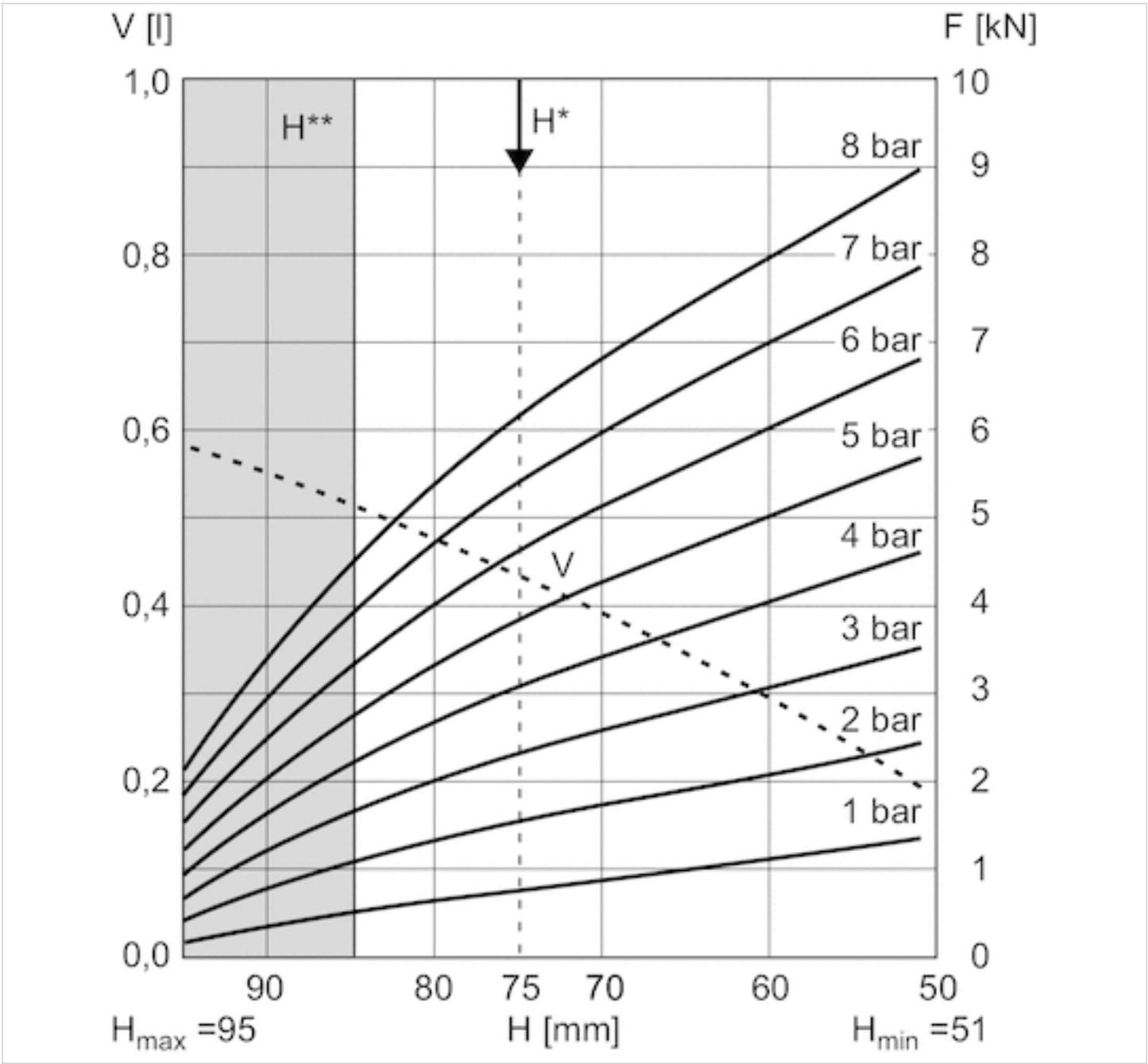
Dimensions

Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
R412010212	G 3/4	54 mm	155 mm	385 mm	287 mm

E ±0,5 [mm]	F ±0,5 [mm]	K mm	Return force, min. N
158.8	79.4	400 mm	300 N

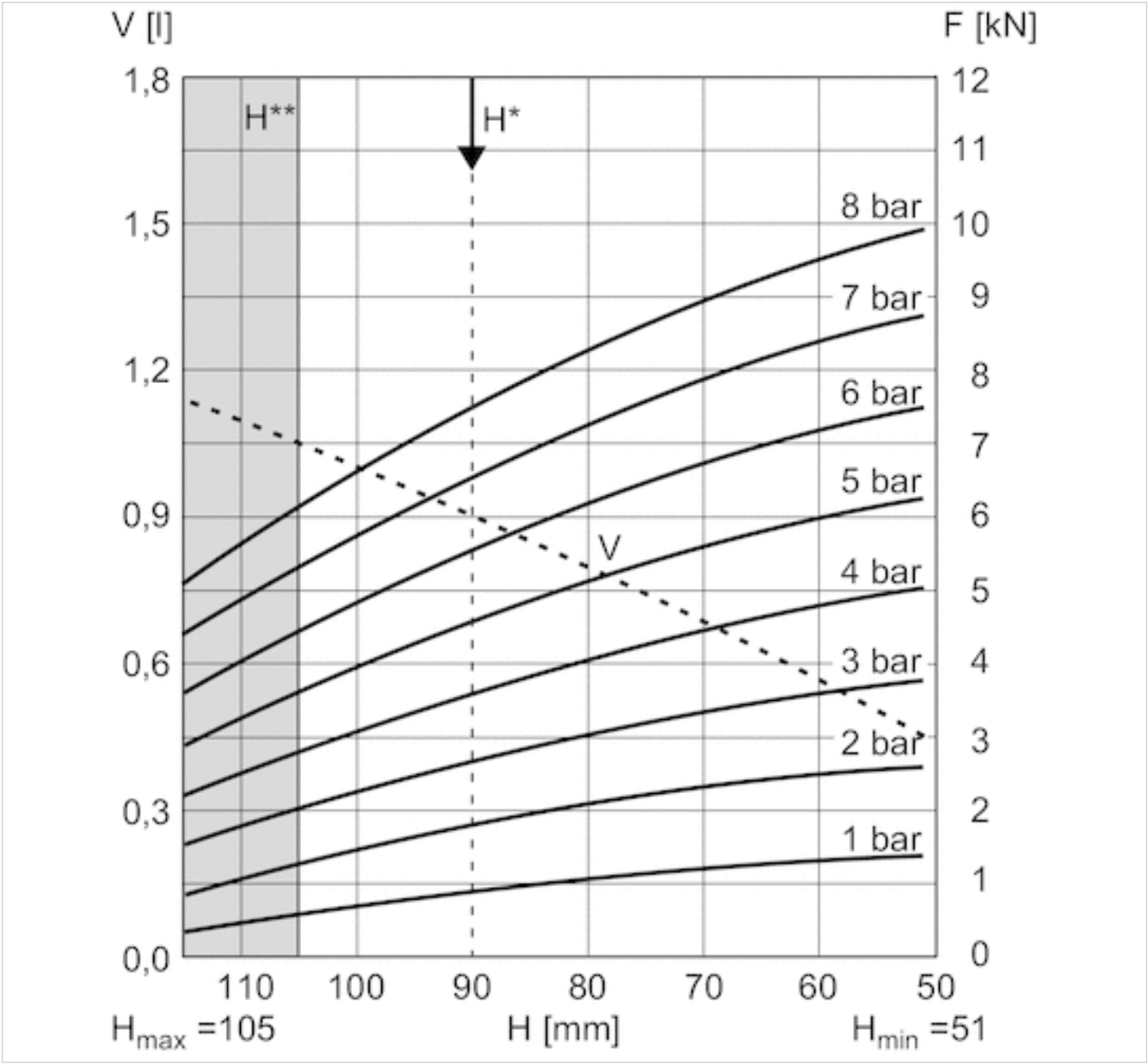
Diagrams

Force-displacement diagram, R412010207



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, R412004943



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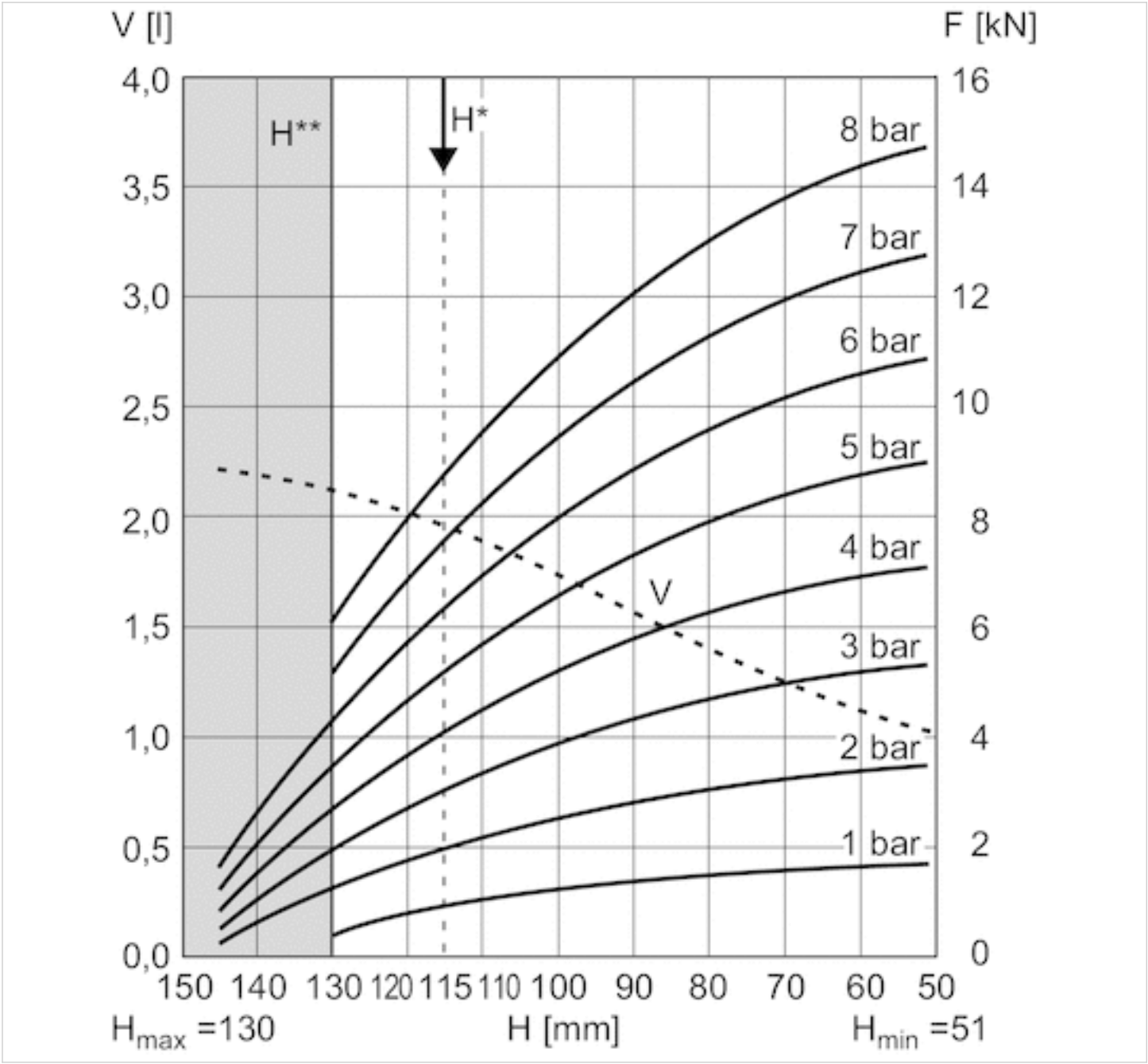
Force-displacement diagram, R412010208



V = volume
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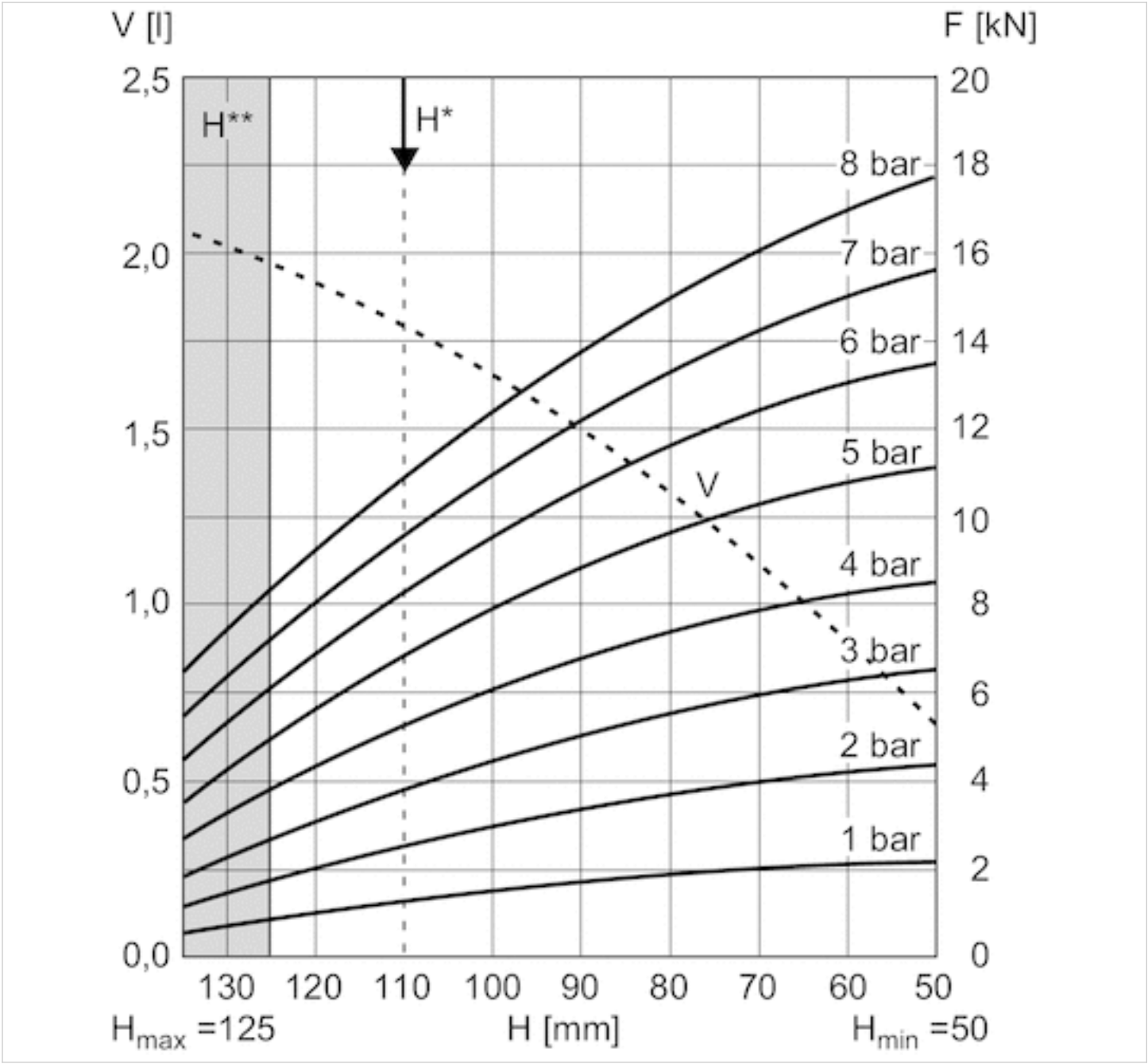
Force-displacement diagram, R412007812



V = volume
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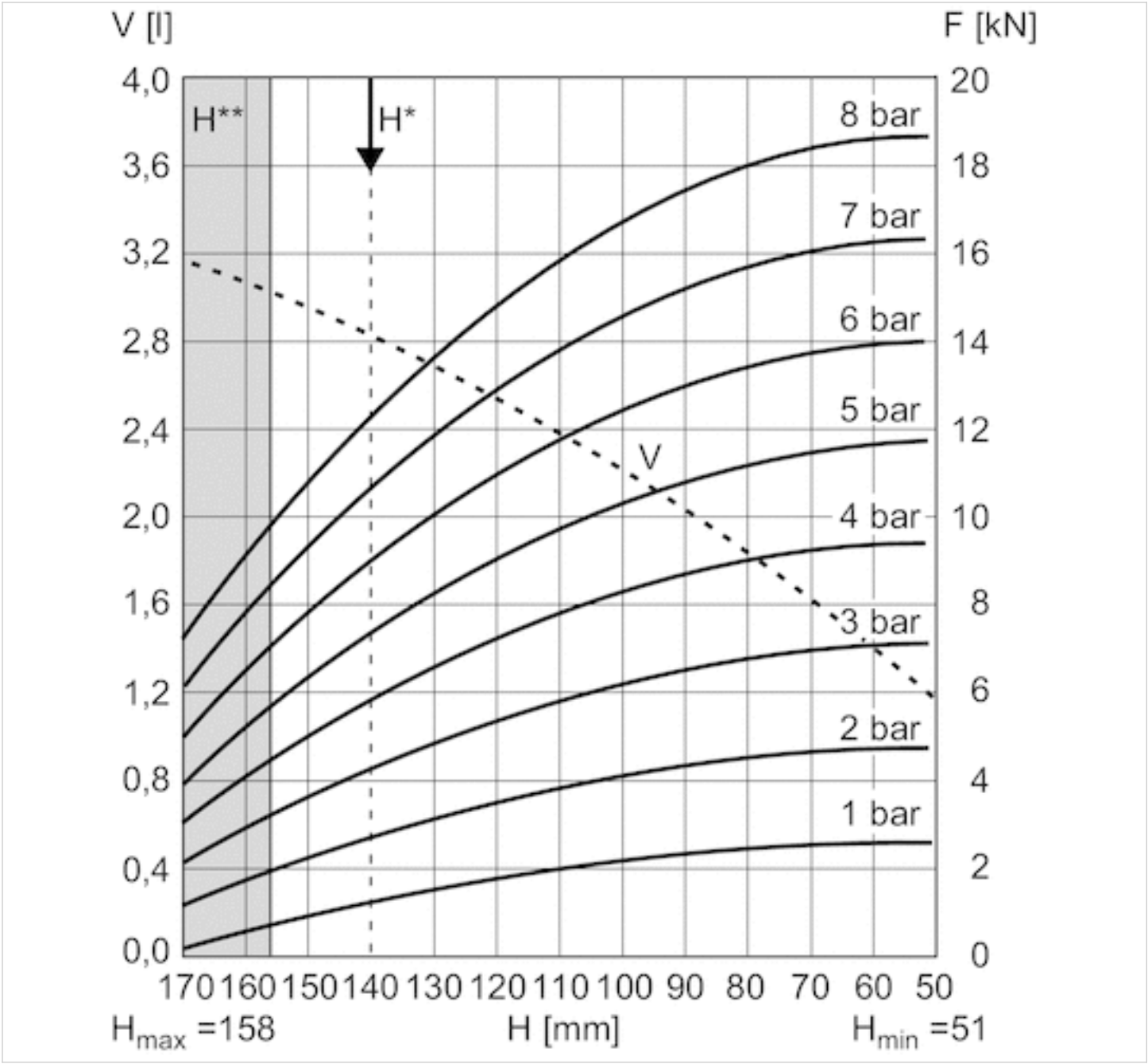
Force-displacement diagram, R412010209



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H = height
H* = recommended operating height for vibration isolation
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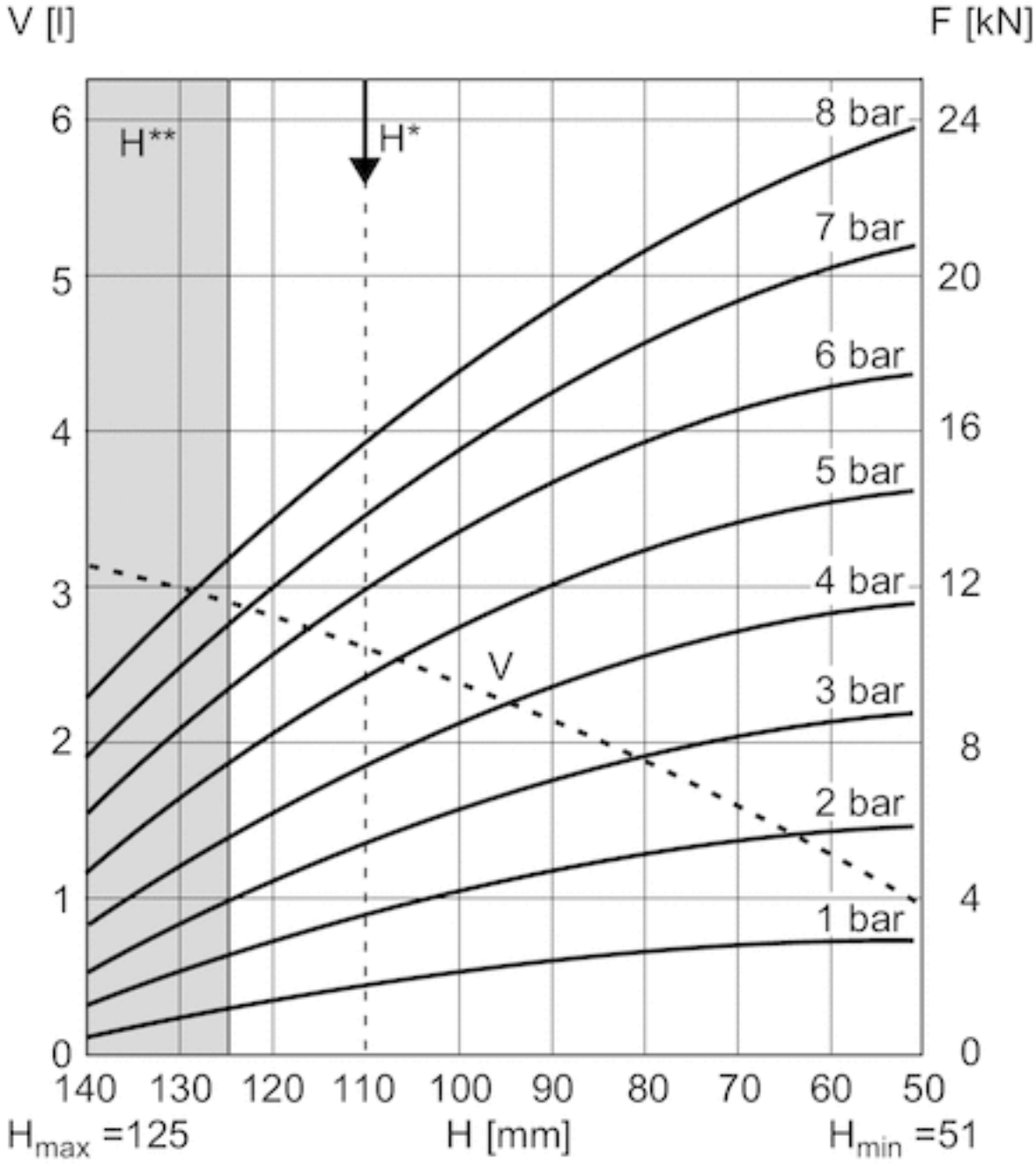
Force-displacement diagram, R412010210



V = volume
H = height
H* = recommended operating height for vibration isolation
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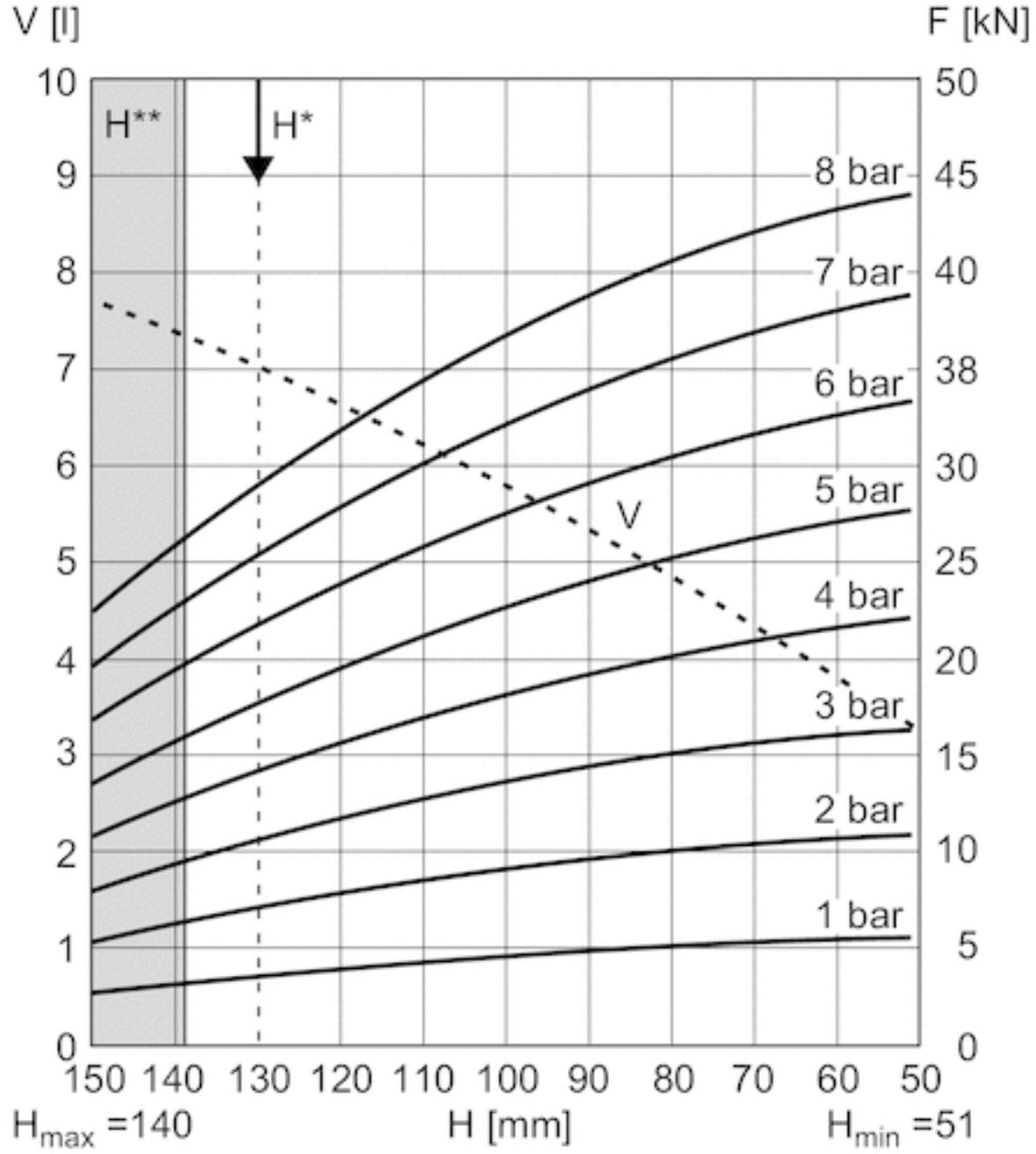
1 kN = 1000 N

Force-displacement diagram, R412010211



V = volume
H = height
H* = recommended operating height for vibration isolation
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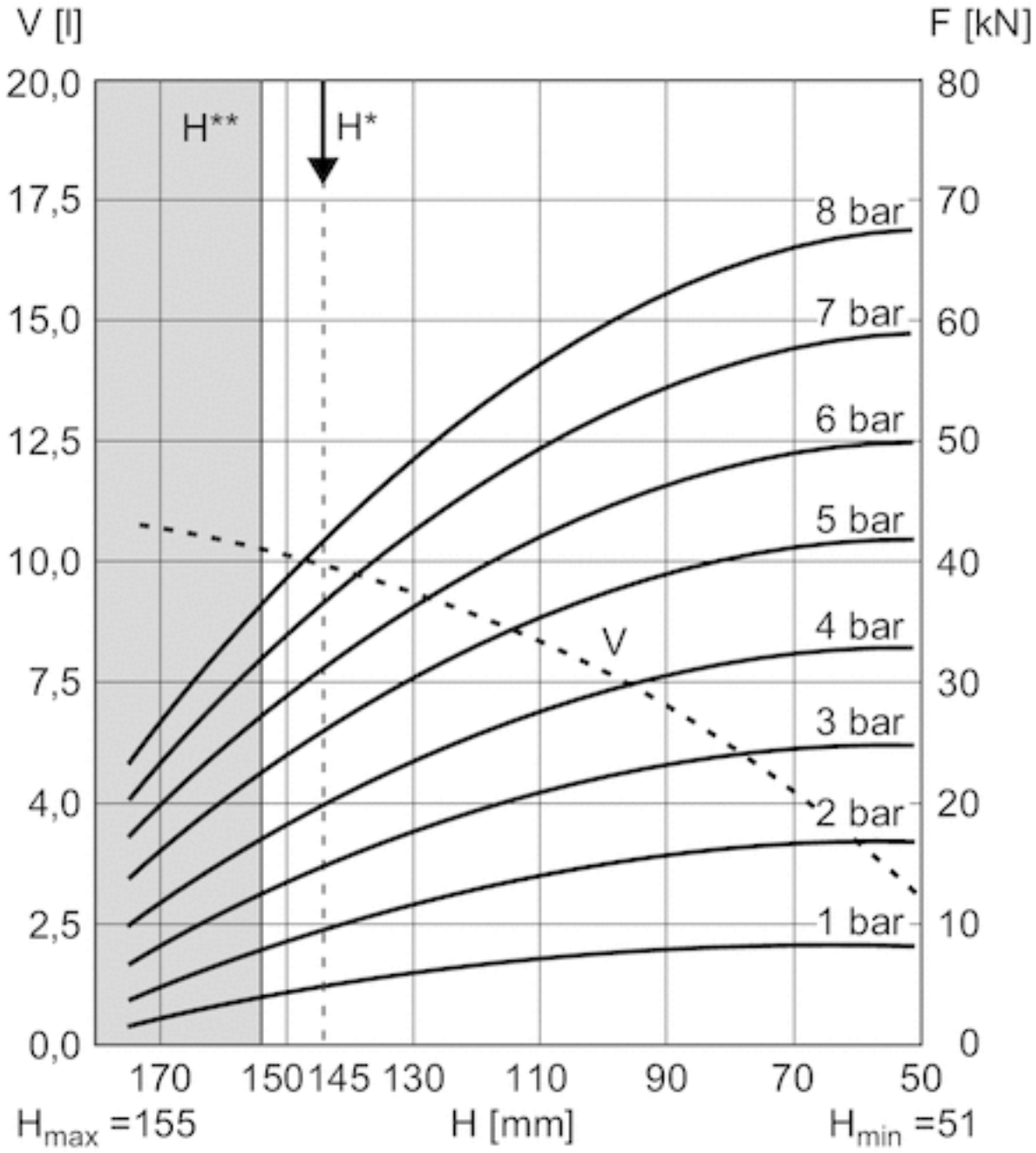
Force-displacement diagram, R412010212



V = volume
H = height
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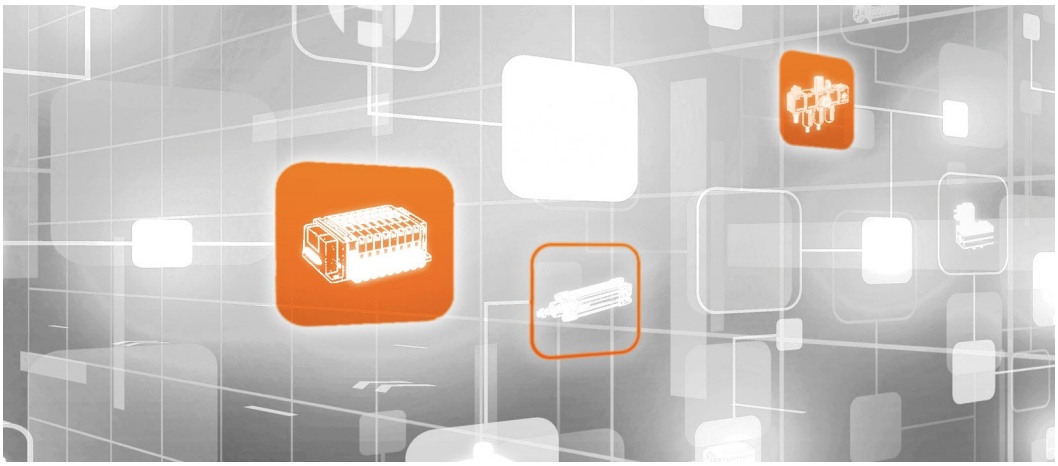

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