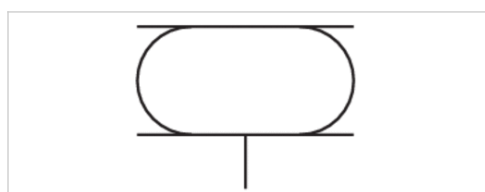


Series BCP

- standard version
- single
- Stroke 34-109 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.	15 °
Pressure for determining forces	6 bar
Weight	See table below

Technical data

Part No.	Cover diameter	Compressed air connection		Max. effective stroke
		G		
0822419001	90 mm	G 1/8		50 mm
R412010198	108 mm	G 1/4		34 mm
0822419002	108 mm	G 1/4		54 mm
R412010199	114 mm	G 1/4		79 mm
0822419003	141 mm	G 3/4		75 mm
1923061000	141 mm	G 3/4		79 mm
R412010197	141 mm	G 3/4		107 mm
0822419004	161 mm	G 3/4		74 mm
1933091000	228 mm	G 3/4		89 mm
1938091000	287 mm	G 3/4		104 mm
2999636900	287 mm	G 3/4		109 mm

Part No.	Min. radial installation space	Force min./max.	Weight	Fig.	
0822419001	160 mm	2500 ... 5500 N	1,2 kg	Fig. 1	-
R412010198	165 mm	3500 ... 6900 N	1,2 kg	Fig. 2	-
0822419002	180 mm	4500 ... 7500 N	1,2 kg	Fig. 2	-
R412010199	225 mm	4300 ... 10900 N	1,4 kg	Fig. 2	-
0822419003	230 mm	6100 ... 13600 N	2 kg	Fig. 2	-
1923061000	245 mm	6900 ... 14700 N	1,9 kg	Fig. 2	1)
R412010197	250 mm	7000 ... 14000 N	1,9 kg	Fig. 2	1)
0822419004	265 mm	9300 ... 17300 N	2,3 kg	Fig. 3	-

Part No.	Min. radial installation space	Force min./max.	Weight	Fig.	
1933091000	340 mm	19400 ... 33300 N	3,9 kg	Fig. 3	-
1938091000	400 mm	26100 ... 50000 N	5,9 kg	Fig. 4	-
2999636900	420 mm	35200 ... 52200 N	6,1 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).

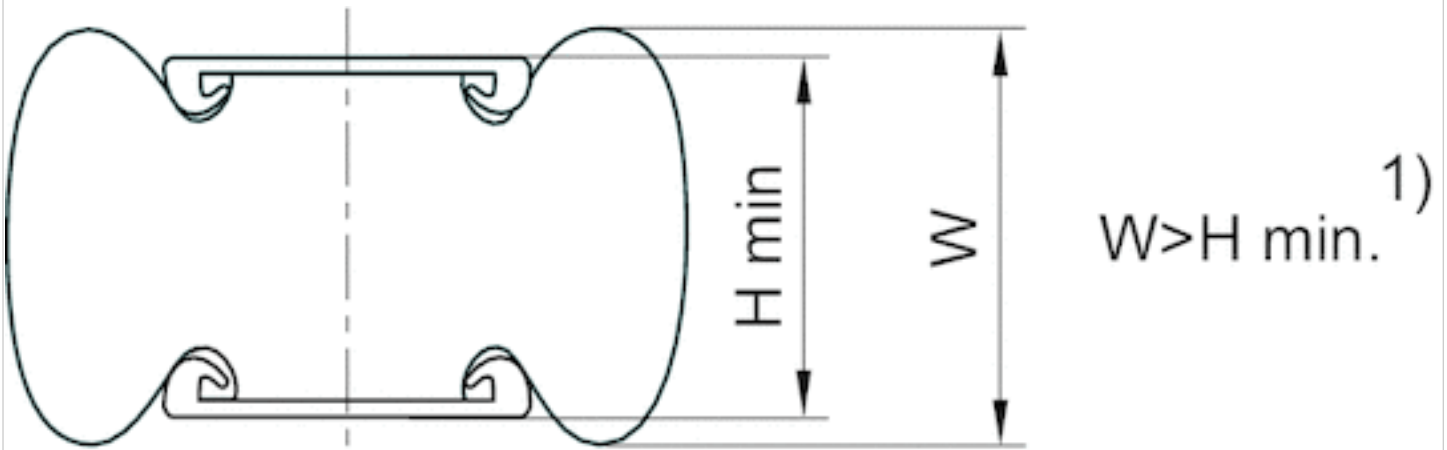
Reduced service life at a temperature greater than 50 °C

Technical information

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

Dimensions

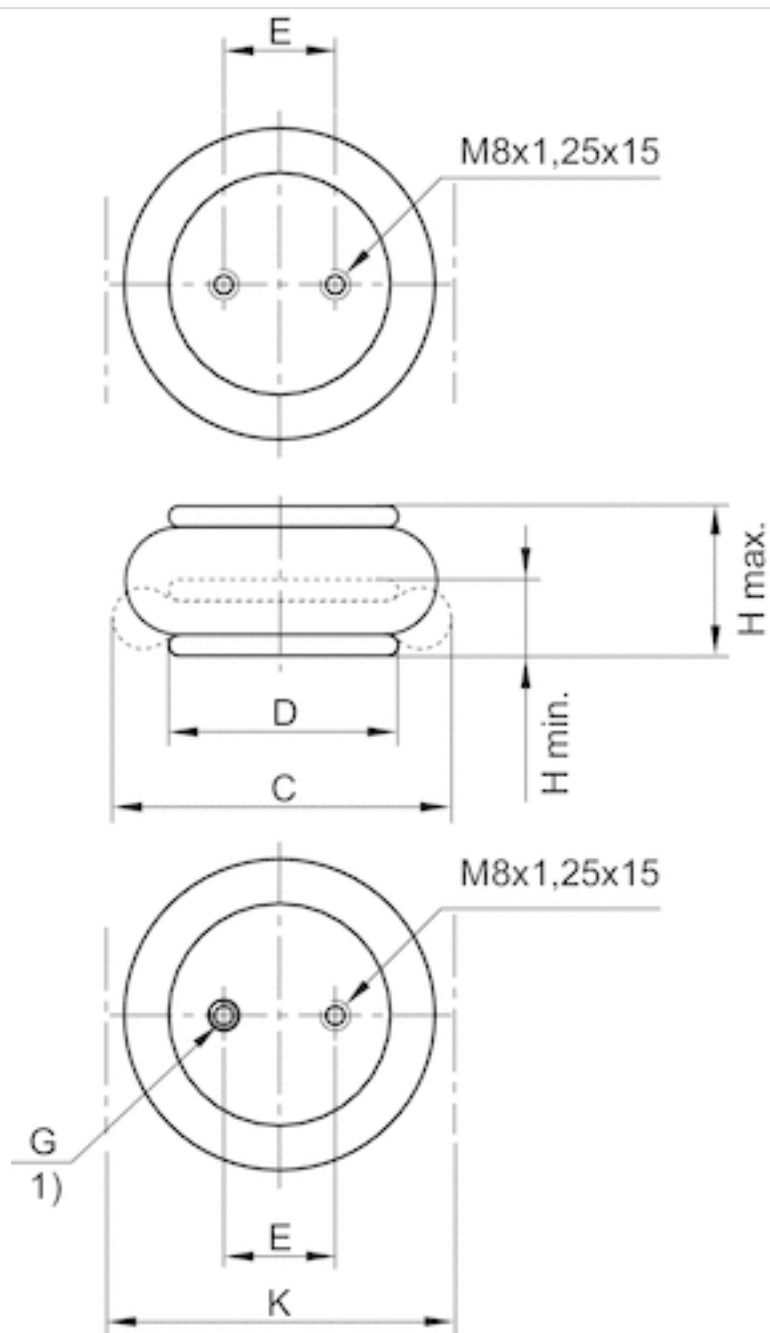
Comment



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

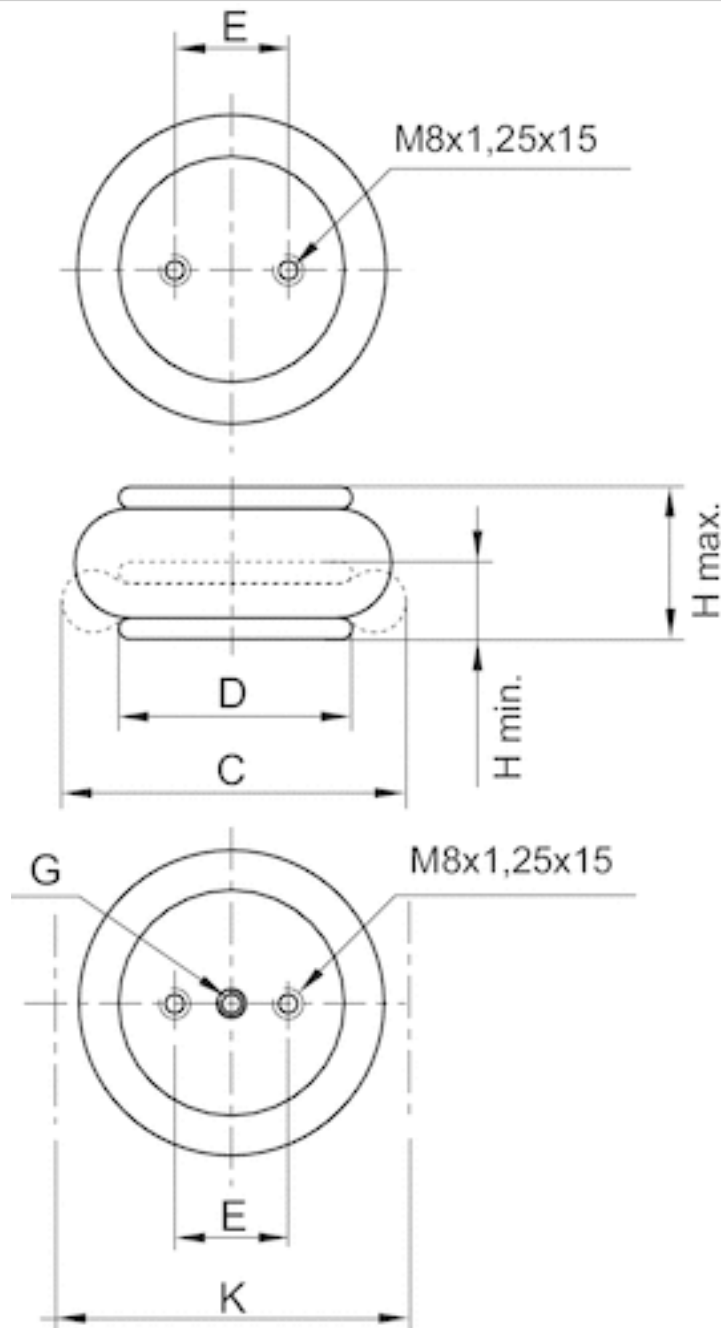
Dimensions

Part No.	Compressed air connection G	H min mm	H max mm	C mm	D mm
0822419001	G 1/8	50 mm	100 mm	145 mm	90 mm

E ±0,5 [mm]	K mm	Return force, min. N
20	160 mm	120 N

Dimensions

Fig. 2



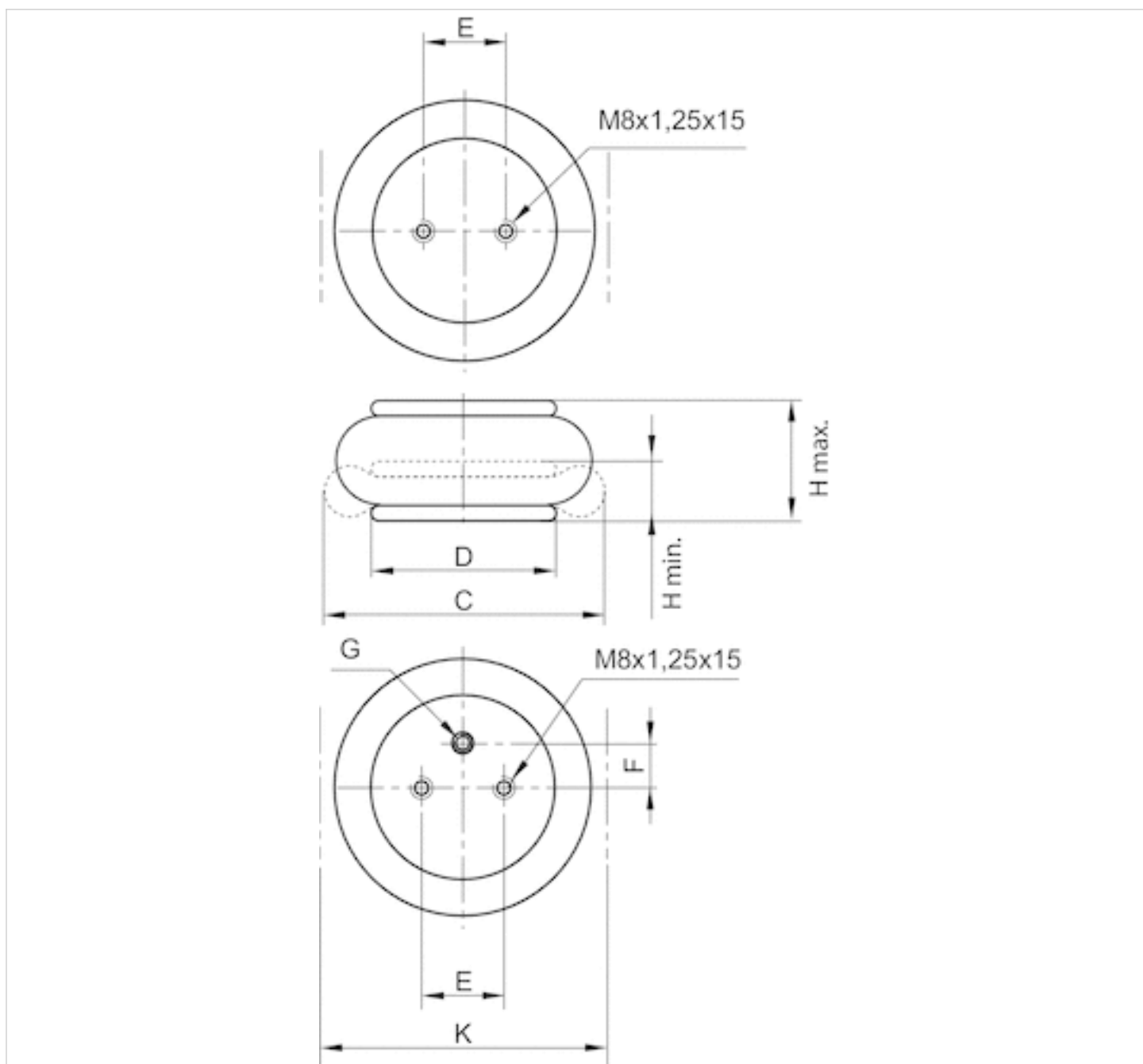
Dimensions

Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
R412010198	G 1/4	51 mm	85 mm	150 mm	108 mm
0822419002	G 1/4	51 mm	105 mm	165 mm	108 mm
R412010199	G 1/4	51 mm	130 mm	210 mm	114 mm
0822419003	G 3/4	50 mm	125 mm	215 mm	141 mm
1923061000	G 3/4	51 mm	130 mm	231 mm	141 mm
R412010197	G 3/4	51 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
70	230 mm	200 N
70	245 mm	200 N
70	250 mm	200 N

Dimensions

Fig. 3



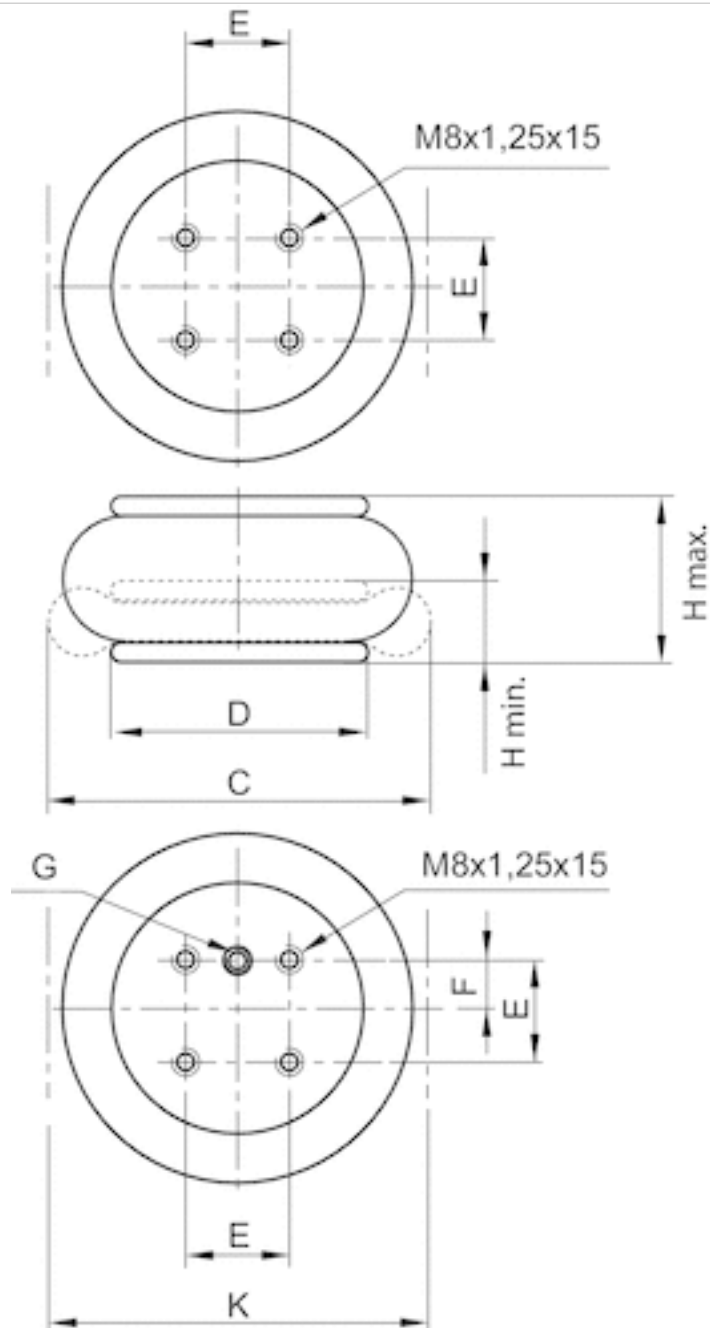
Dimensions

Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
0822419004	G 3/4	51 mm	125 mm	250 mm	161 mm
1933091000	G 3/4	51 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. 4



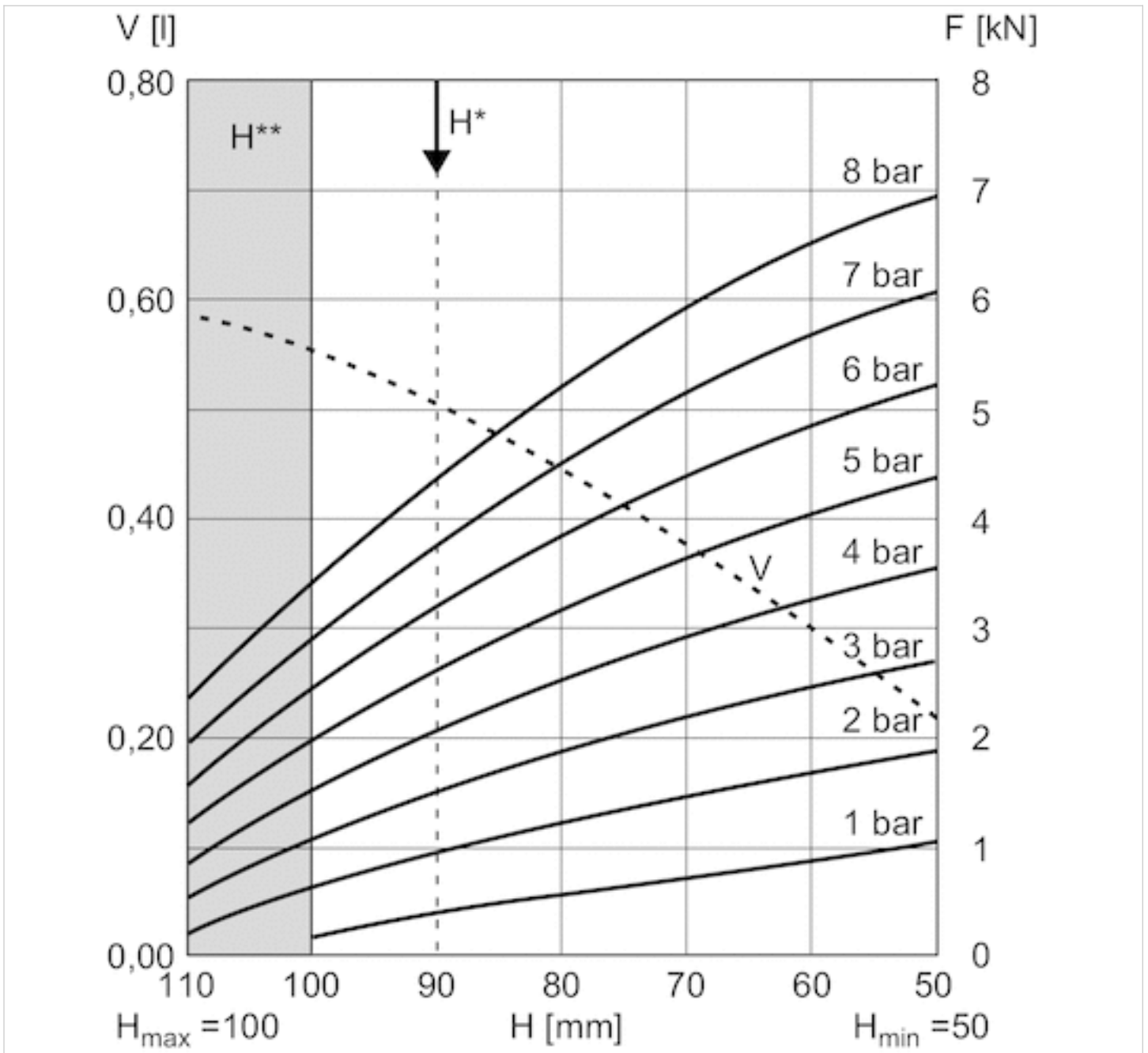
Dimensions

Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm
1938091000	G 3/4	51 mm	155 mm	385 mm	287 mm
2999636900	G 3/4	51 mm	160 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	300 N
158.8	79.4	420 mm	300 N

Diagrams

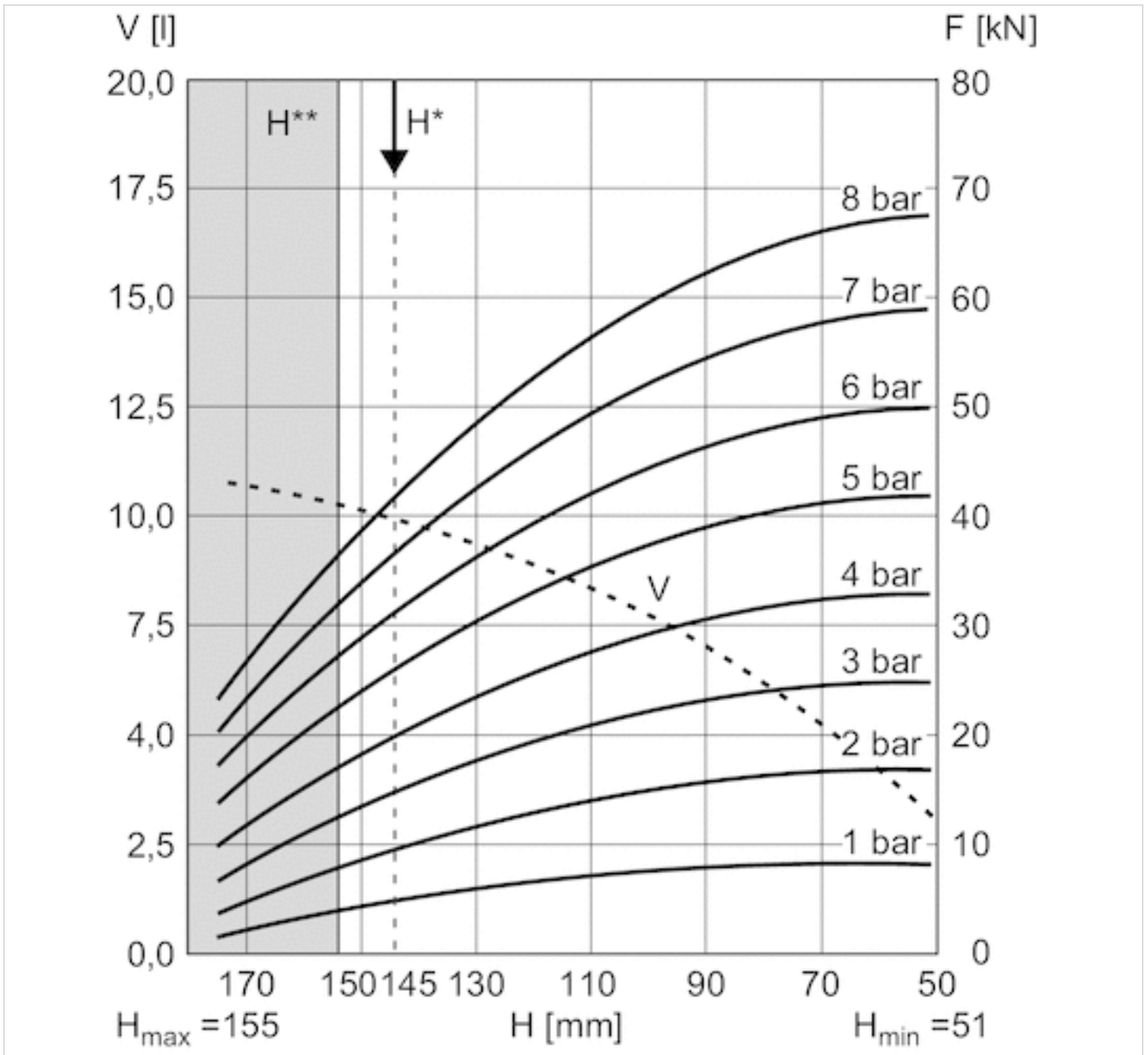
Force-displacement diagram, 0822419001



V = volume
H = height

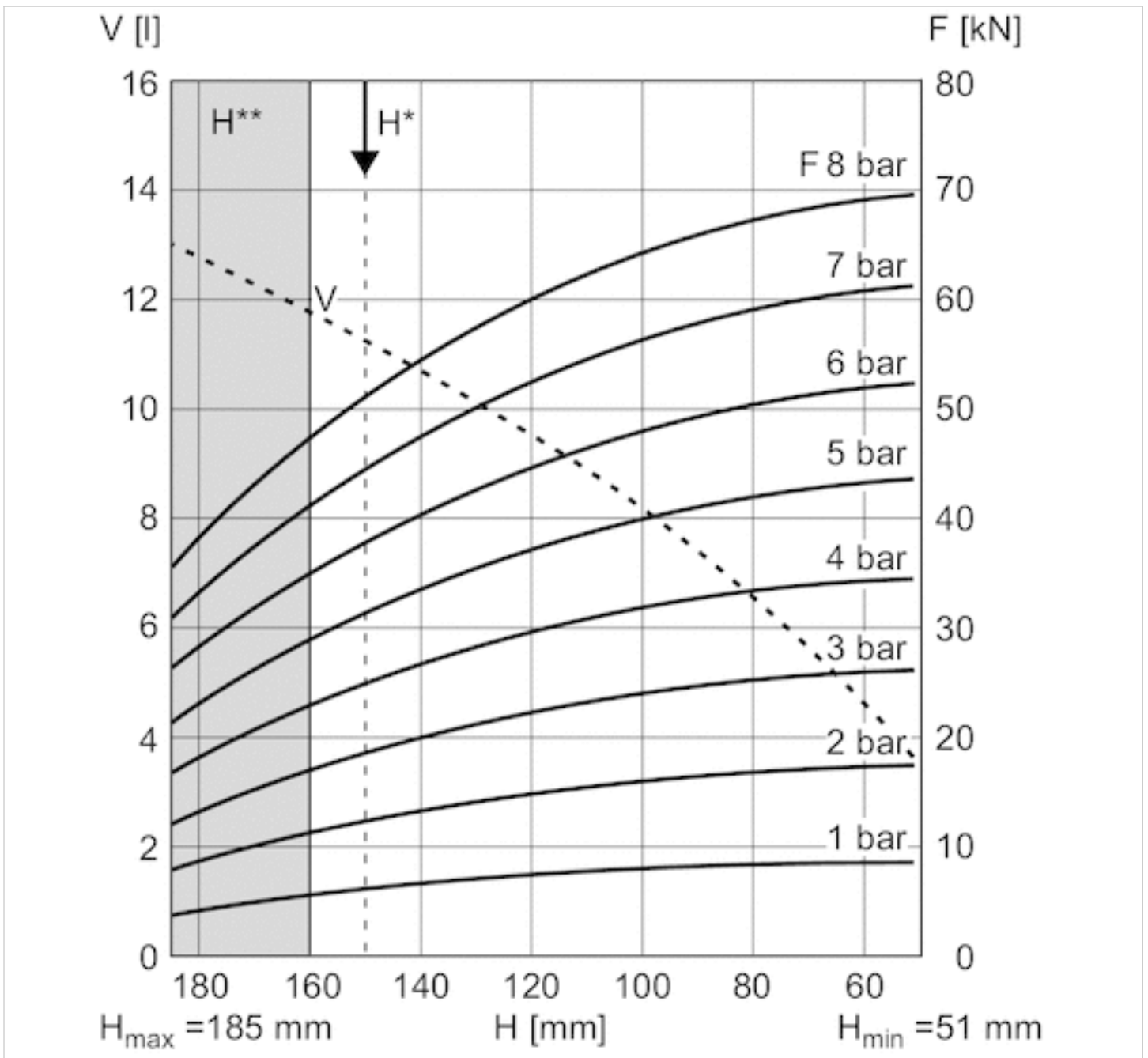
H* = recommended operating height for vibration isolation
 H** = use permitted only upon approval by AVENTICS
 1 kN = 1000 N

Force-displacement diagram, 1938091000



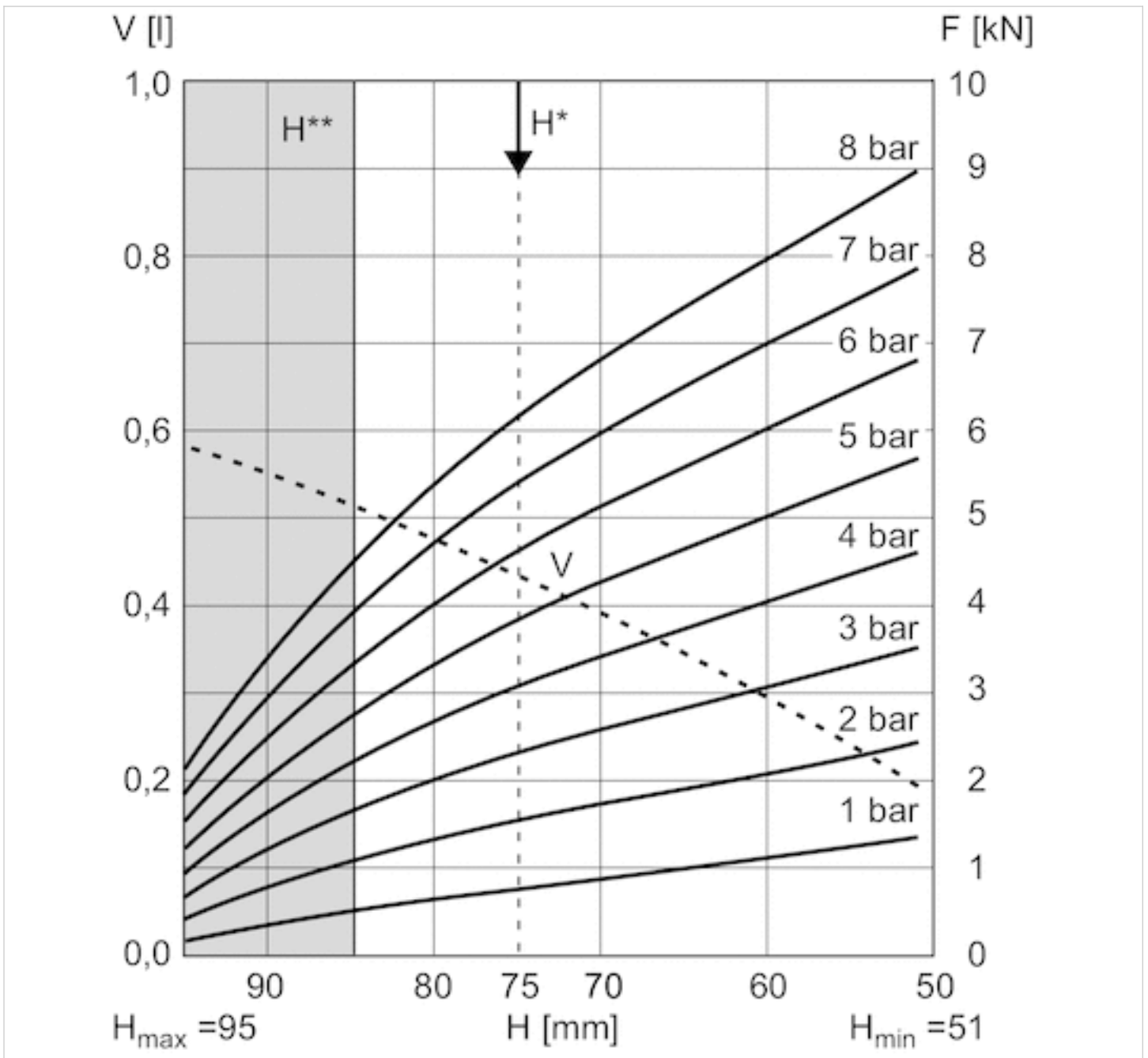
V = volume
 H = height
 H* = recommended operating height for vibration isolation
 H** = use permitted only upon approval by AVENTICS
 1 kN = 1000 N

Force-displacement diagram, 2999636900



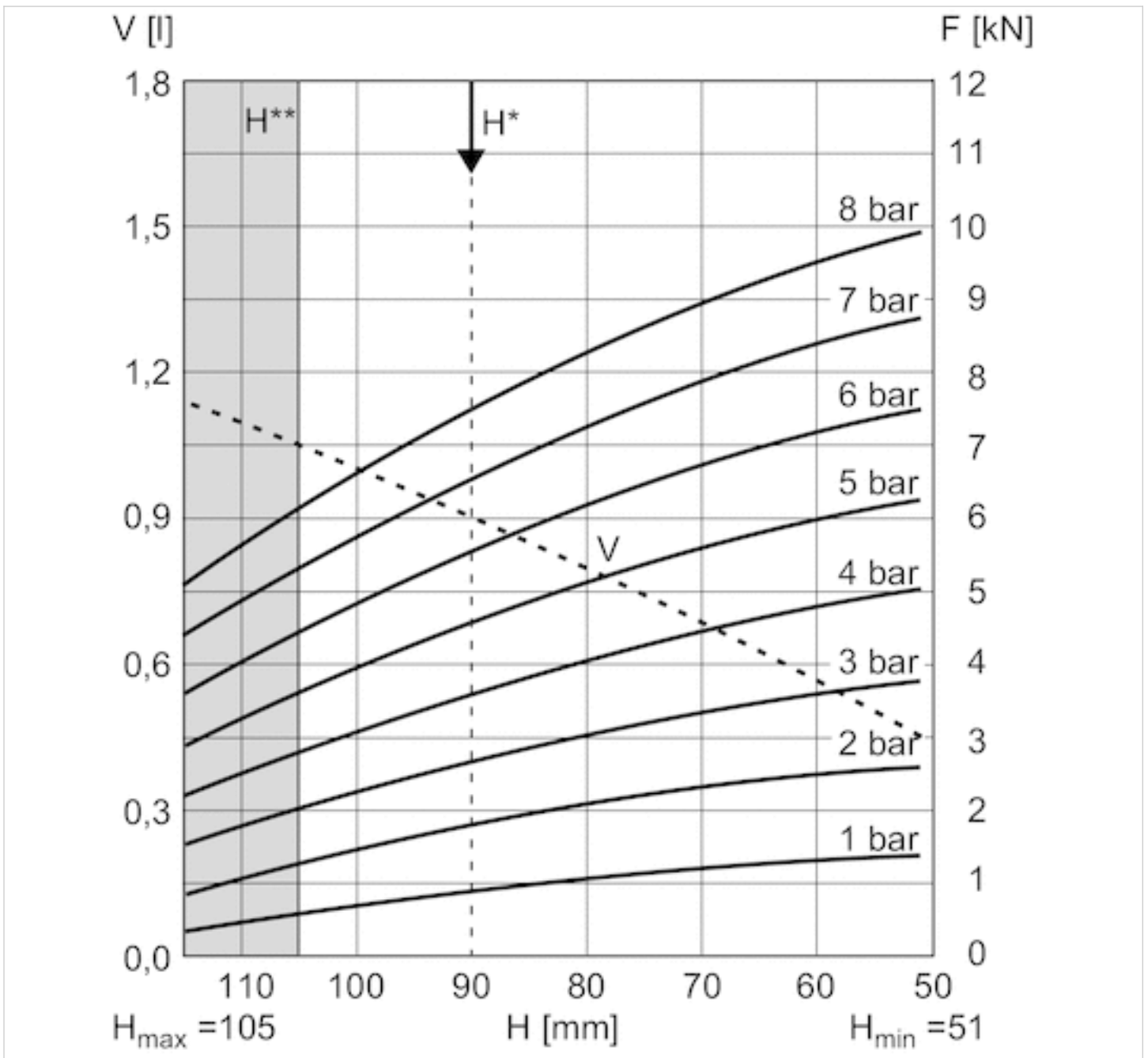
V = volume
 H = height
 H* = recommended operating height for vibration isolation
 H** = use permitted only upon approval by AVENTICS
 1 kN = 1000 N

Force-displacement diagram, R412010198



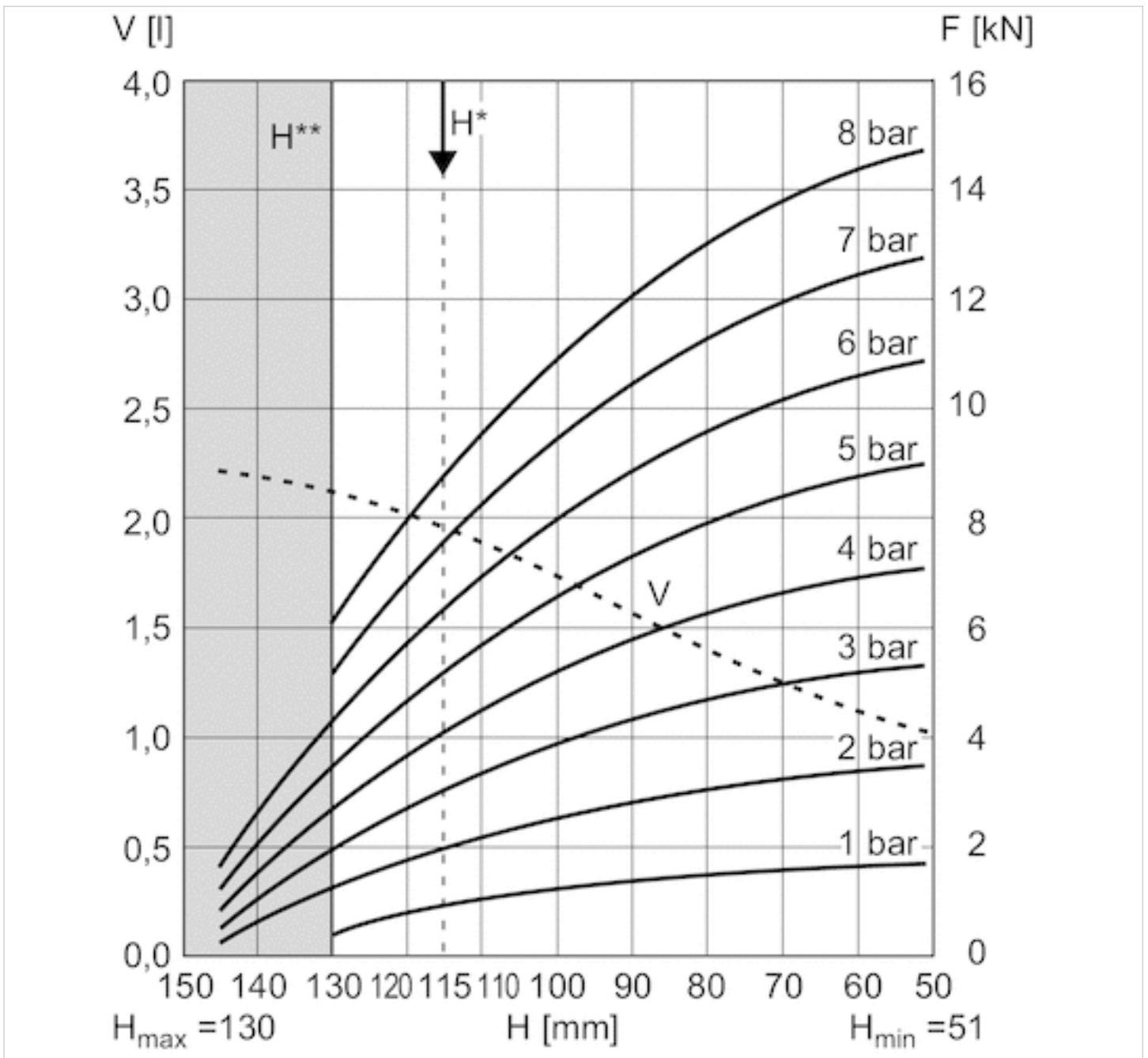
V = volume
 H = height
 H* = recommended operating height for vibration isolation
 H** = use permitted only upon approval by AVENTICS
 1 kN = 1000 N

Force-displacement diagram, 0822419002



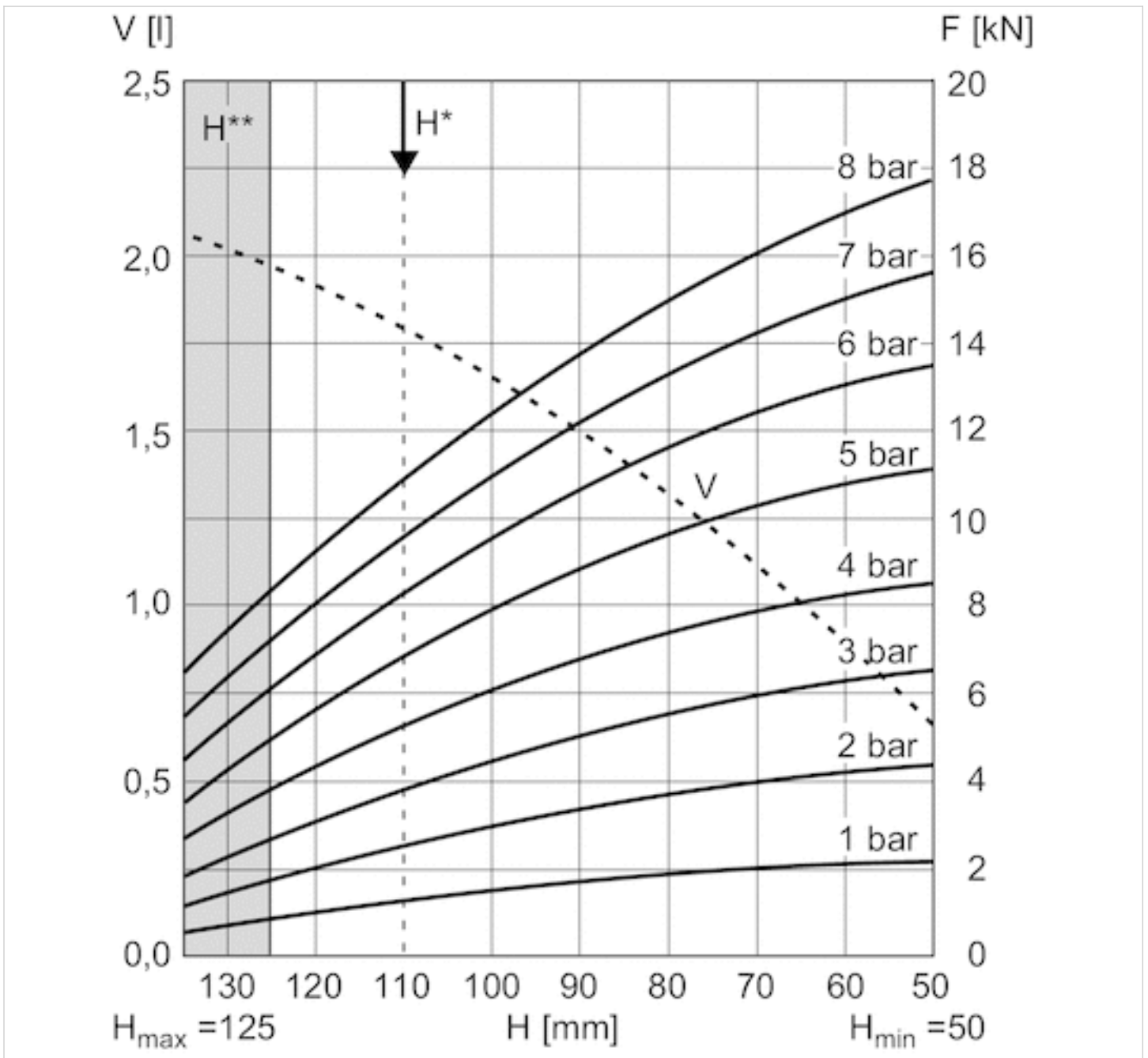
V = volume
 H = height
 H* = recommended operating height for vibration isolation
 H** = use permitted only upon approval by AVENTICS
 1 kN = 1000 N

Force-displacement diagram, R412010199



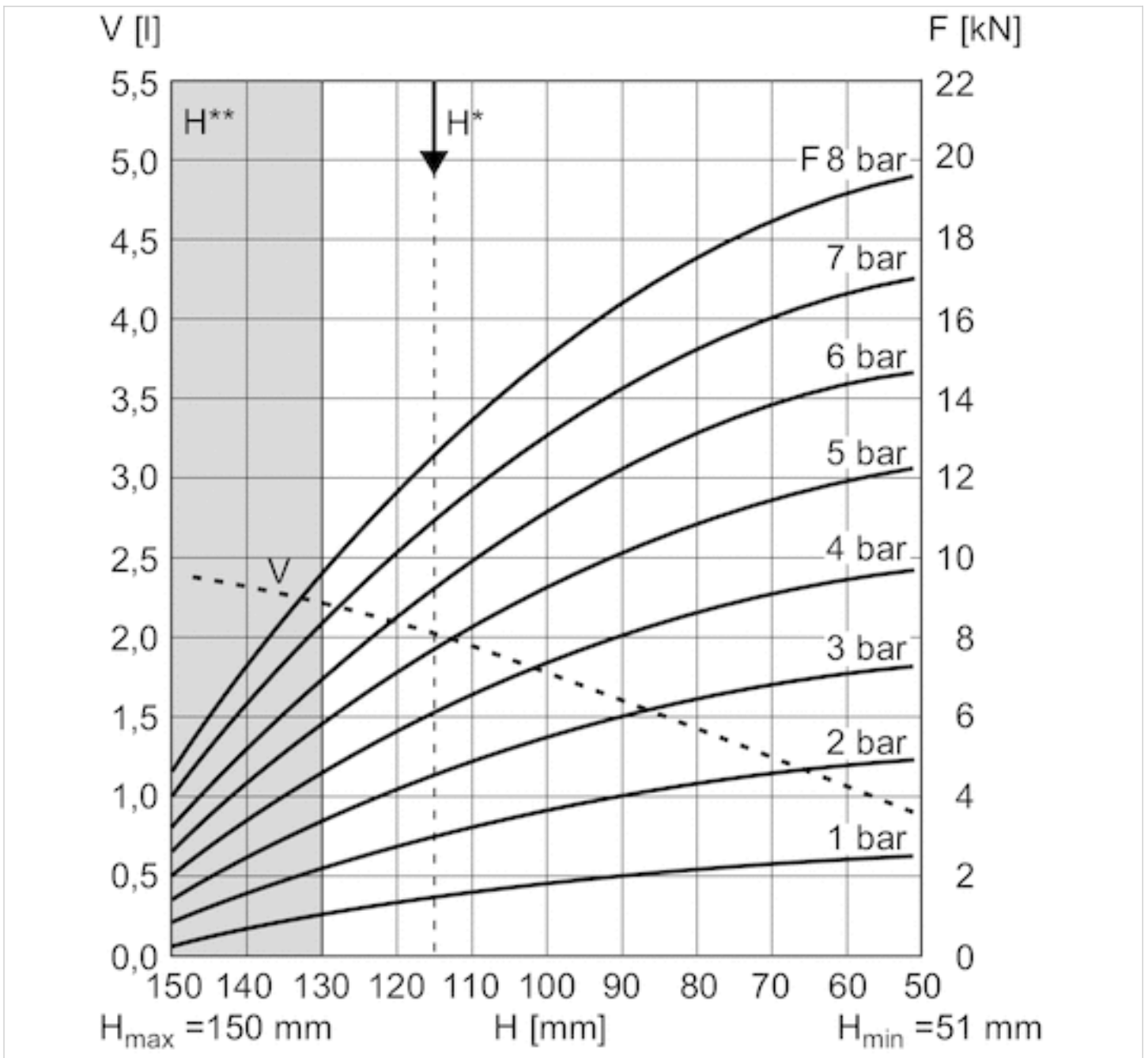
V = volume
 H = height
 H* = recommended operating height for vibration isolation
 H** = use permitted only upon approval by AVENTICS
 1 kN = 1000 N

Force-displacement diagram, 0822419003



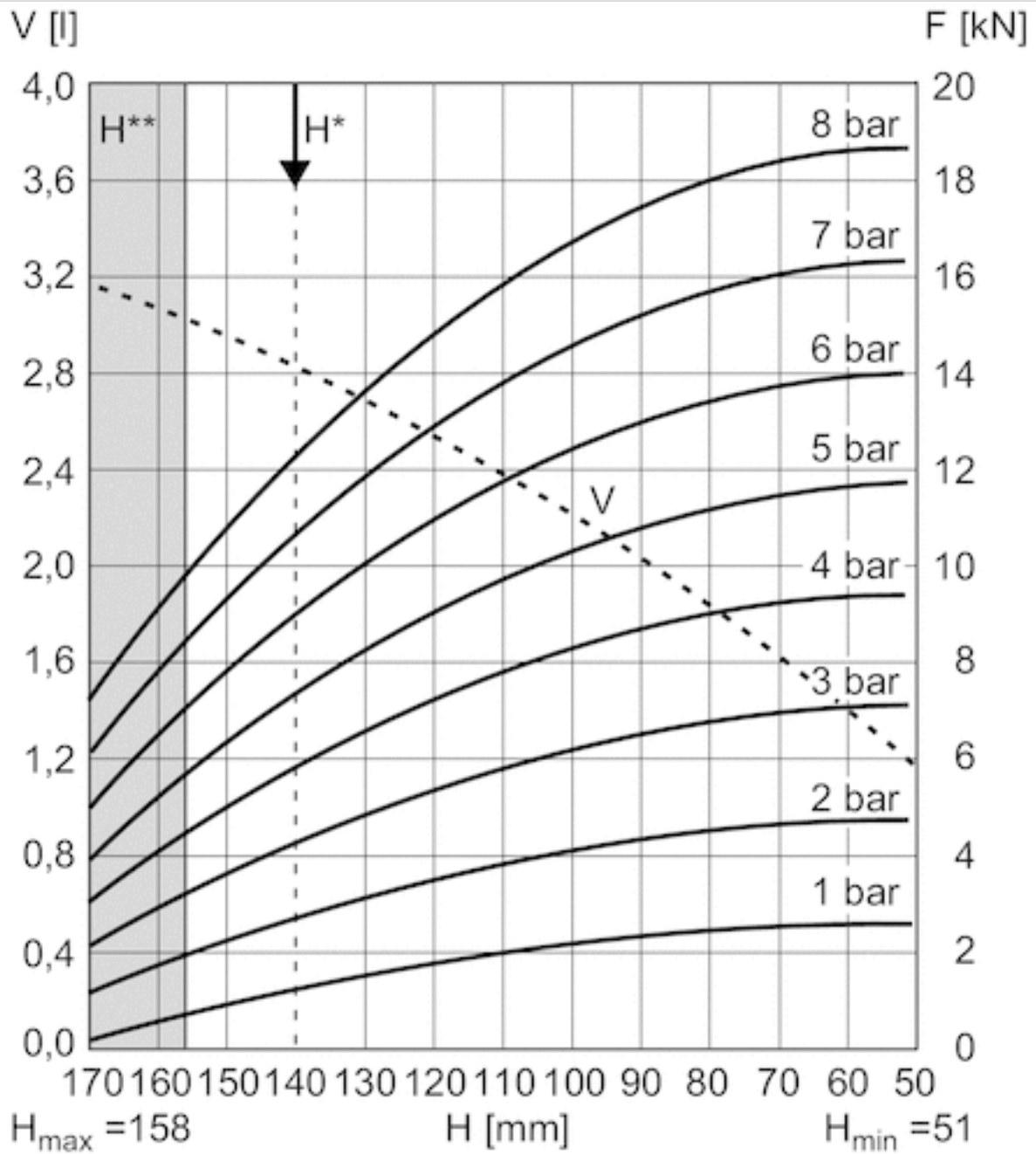
V = volume
 H = height
 H^* = recommended operating height for vibration isolation
 H^{**} = use permitted only upon approval by AVENTICS
 1 kN = 1000 N

Force-displacement diagram, 1923061000



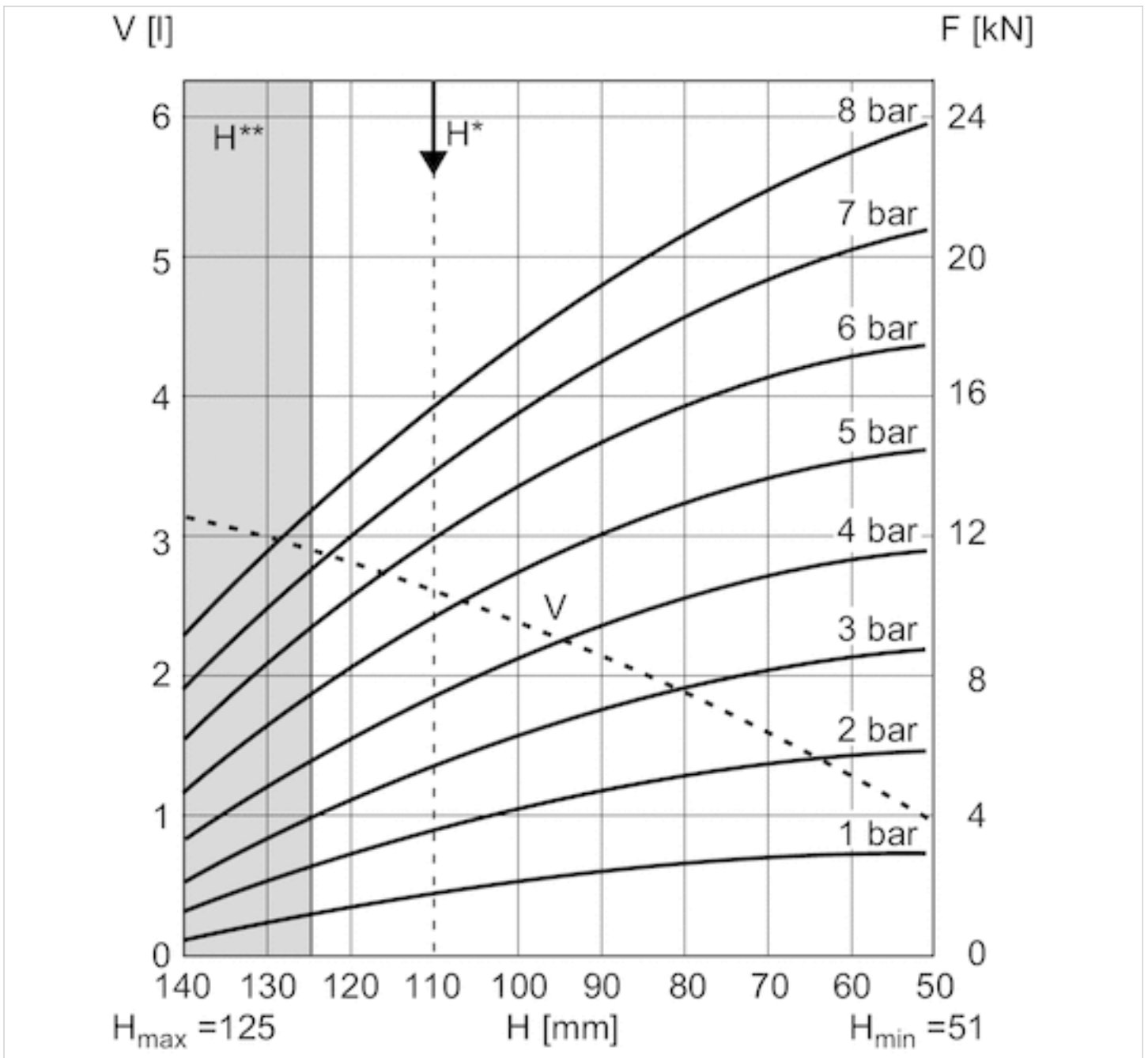
V = volume
 H = height
 H* = recommended operating height for vibration isolation
 H** = use permitted only upon approval by AVENTICS
 1 kN = 1000 N

Force-displacement diagram, R412010197



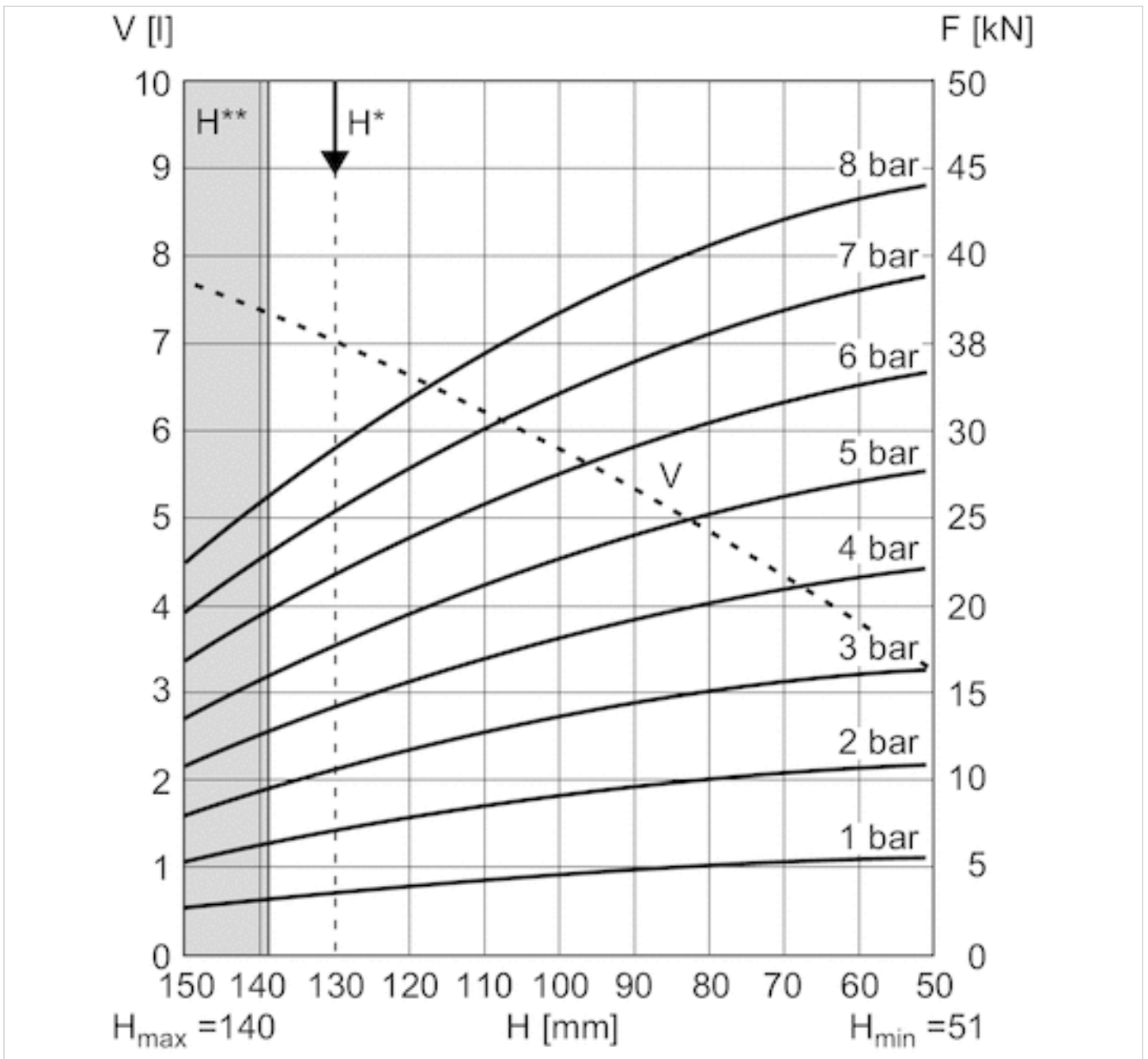
V = volume
 H = height
 H* = recommended operating height for vibration isolation
 H** = use permitted only upon approval by AVENTICS
 1 kN = 1000 N

Force-displacement diagram, 0822419004



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, 1933091000



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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