

Series BRB



AVENTICS™

**AVENTICS Series BRB Bellow
actuators**


EMERSON™

Series BRB

The AVENTICS Series BRB cylinders are the cost-optimized variant for lower loads. They are hose rolling lobe air actuators with plastic connecting parts and bellows made of chloroprene elastomer. The Series BRB is distinguished by its lightweight and virtually constant force output over the stroke range.

- Lightweight and easy to assemble
- Nearly constant force output over the stroke range
- Flexible rolling bellow actuator made of chloroprene rubber (CR), with plastic plates
- Three different design types for optimal use

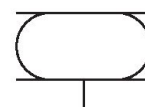


Product overview

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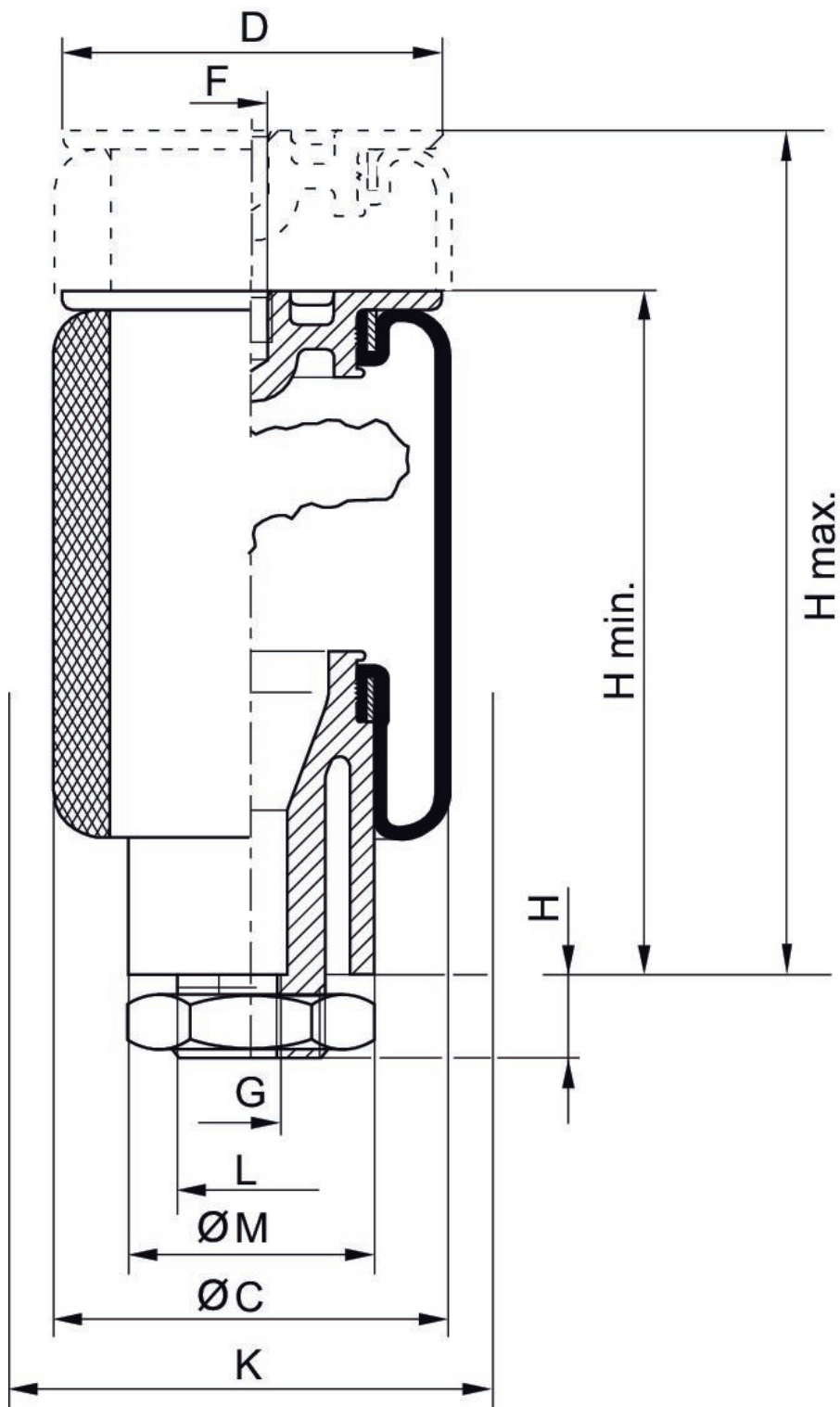
Rolling bellow, series BRB

Type: Flexible rolling bellow
 Functional principle: Single-acting, retracted without pressure
 Max. permissible angle of tilt: 15 °
 Ambient temperature min./max.: -30 °C ... 90 °C
 Working pressure min./max.: 0 bar ... 8 bar



Cover diameter [mm]	Compressed air connection	Max. effective stroke [mm]	Min. radial installation space [mm]	Material bellow	Material front cover	Force min./max. [N]	Weight [kg]	Part No.
76.5	G 3/8	100	100	Chloroprene rubber	Polyamide, fiber-glass reinforced	1710, 1700	0.4	0822419120
86.5	G 3/8	95	115	Chloroprene rubber	Polyamide, fiber-glass reinforced	2410, 2460	0.5	0822419121
106.5	G 3/8	85	140	Chloroprene rubber	Polyamide, fiber-glass reinforced	4260, 4220	0.65	0822419122
126.5	G 3/8	85	170	Chloroprene rubber	Polyamide, fiber-glass reinforced	5220, 5830	0.7	0822419123
147.9	G 3/8	90	190	Chloroprene rubber	Polyamide, fiber-glass reinforced	7540, 8230	1	0822419124

Dimensions

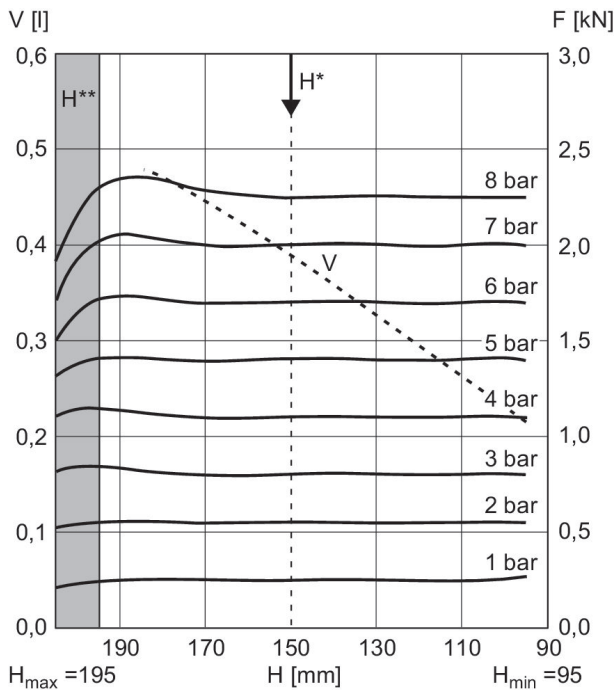


Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm	F	K mm	L	Ø M [mm]
0822419120	G 3/8	95	195	80	76,5	M8 t=10	100	M30x1.5	50
0822419121	G 3/8	95	190	97	86,5	M8 t=10	115	M30x1.5	60.5
0822419122	G 3/8	95	180	123	106,5	M8 t=10	140	M30x1.5	81
0822419123	G 3/8	95	180	151	126,5	M8 t=10	170	M30x1.5	89
0822419124	G 3/8	95	185	173	147,9	M8 t=10	190	M30x1.5	114

Part No.	Min. return force N
0822419120	350
0822419121	450
0822419122	700
0822419123	900
0822419124	1300

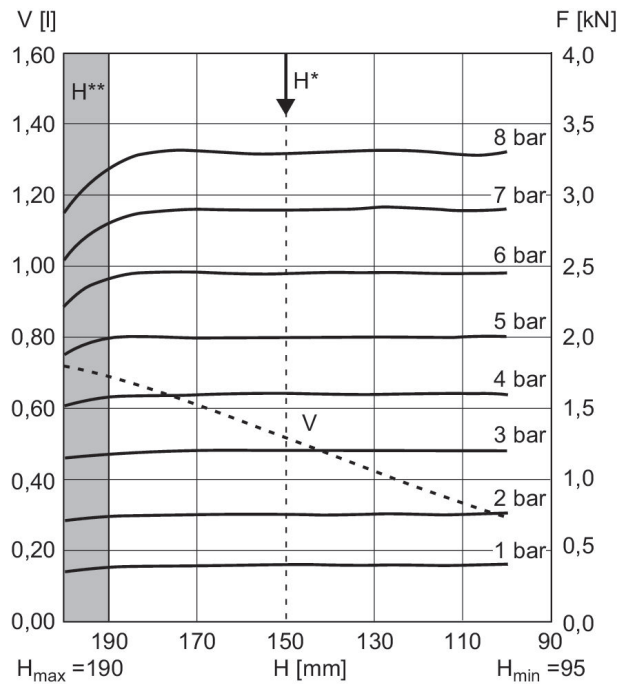
t=depth of thread

Force-displacement diagram 0822419120



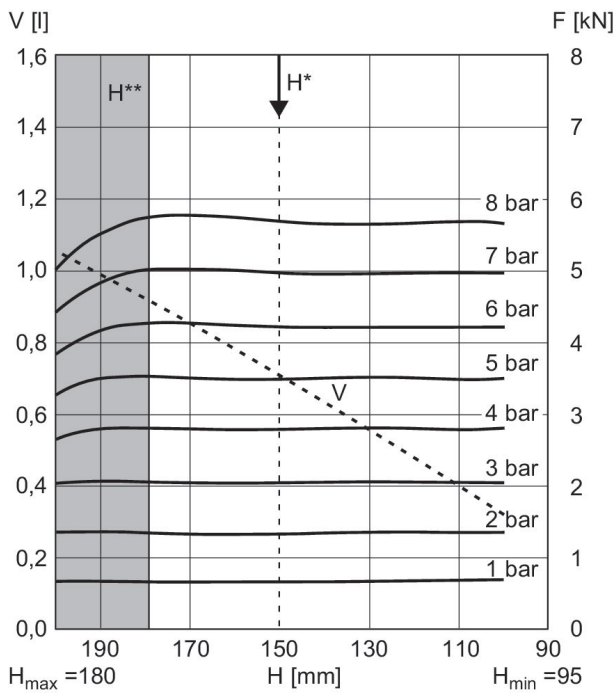
V = volume H = height H* = recommended operating height for vibration isolation H** = use permitted only upon approval by AVENTICS
1 kN = 1000 N

Force-displacement diagram 0822419121



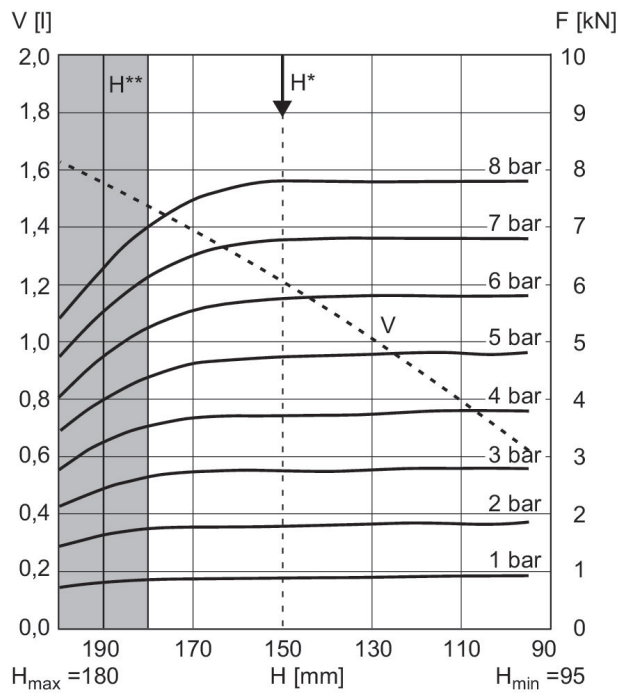
V = volume H = height H* = recommended operating height for vibration isolation H** = use permitted only upon approval by AVENTICS
1 kN = 1000 N

Force-displacement diagram 0822419122



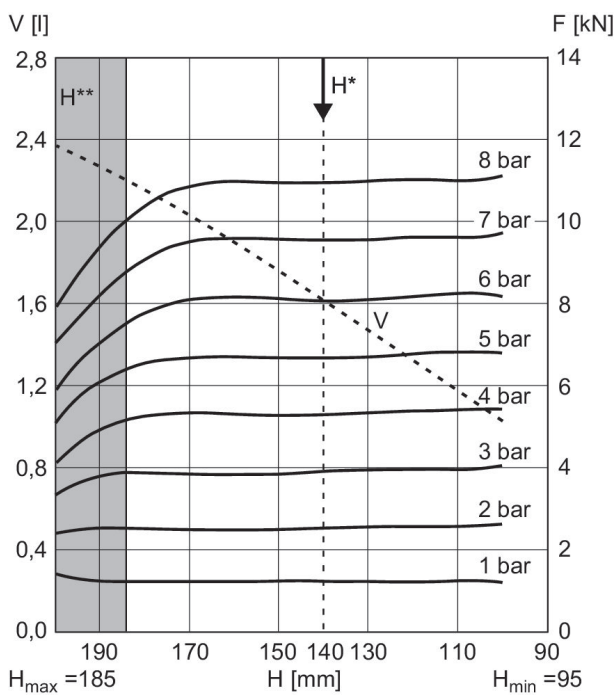
V = volume H = height H^* = recommended operating height for vibration isolation H^{**} = use permitted only upon approval by AVENTICS
1 kN = 1000 N

Force-displacement diagram 0822419123



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

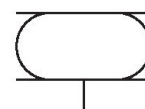
Force-displacement diagram 0822419124



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

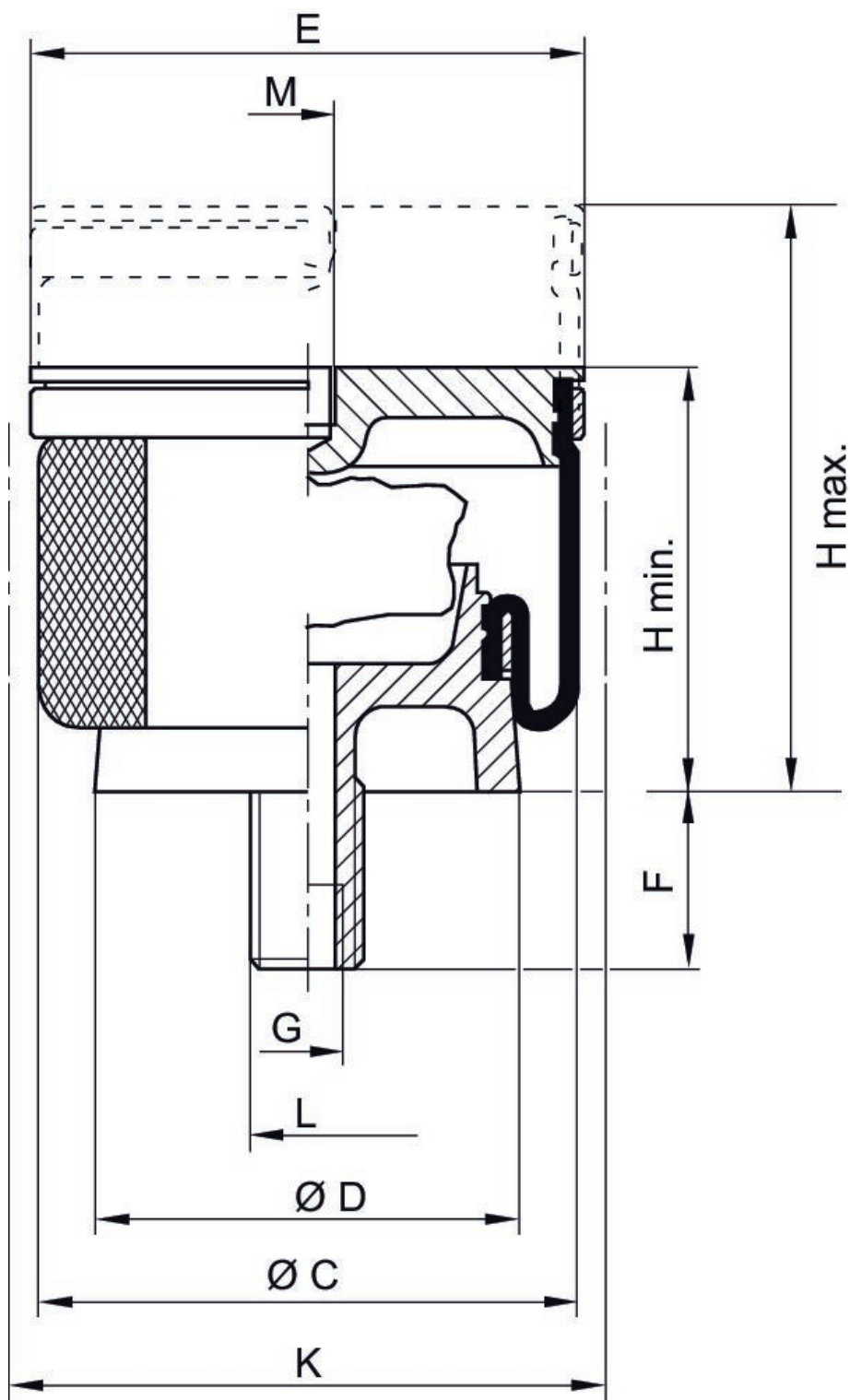
Rolling bellow, series BRB

Type: Flexible rolling bellow
 Functional principle: Single-acting, retracted without pressure
 Max. permissible angle of tilt: 15 °
 Ambient temperature min./max.: -30 °C ... 90 °C
 Working pressure min./max.: 0 bar ... 8 bar



Cover diameter [mm]	Compressed air connection	Max. effective stroke [mm]	Min. radial installation space [mm]	Material bellow	Material front cover	Force min./max. [N]	Weight [kg]	Part No.
61	G 1/8	37	100	Chloroprene rubber	Polyamide, fiber-glass reinforced	1840, 2250	0.25	1909041000
61	G 1/8	62	100	Chloroprene rubber	Polyamide, fiber-glass reinforced	1610, 2300	0.27	2999300100

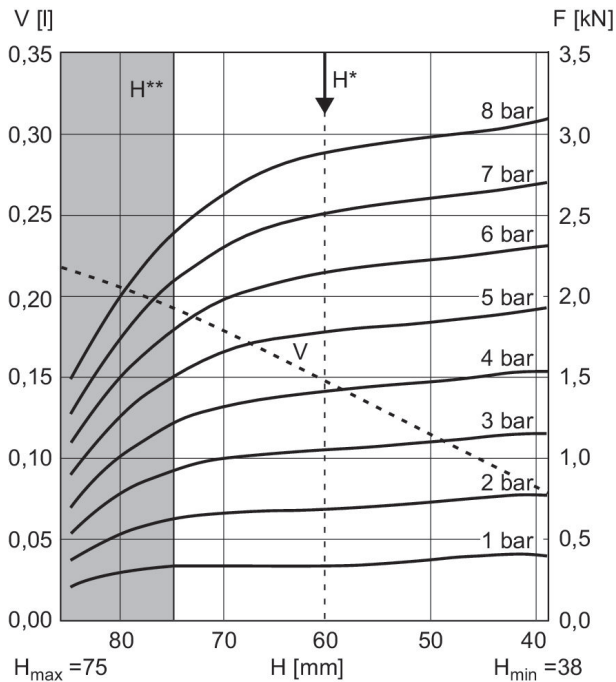
Dimensions



Part No.	Compressed air connection G	H min. mm	H max. mm	C mm	D mm	L	Ø E mm	M	F mm
1909041000	G 1/8	38	75	88	61	M16	76	M8	25
2999300100	G 1/8	38	100	88	61	M16	76	M8	25

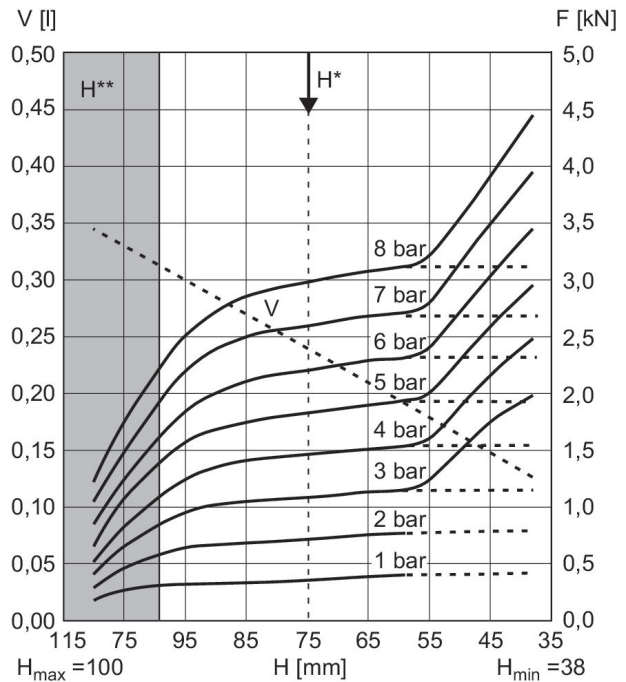
Part No.	K mm	Min. return force mm
1909041000	100	150
2999300100	100	150

Force-displacement diagram 1909041000



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

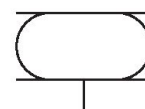
Force-displacement diagram 2999300100



V = volume H = height H* = recommended operating height for vibration isolation H** = use permitted only upon approval by AVENTICS
The dashed lines show the force of the bellow actuator with an additional cylindrical extension of 15 mm underneath the piston. This extension is not provided! Without extension, at a height of less than approx. 55 cm, the bellow will touch the underlying fastenings - this can lead to increased abrasion on the pneumatic spring bellows and should therefore be avoided. The minimum pressure for operation without extension is 3 bar.
1 kN = 1000 N

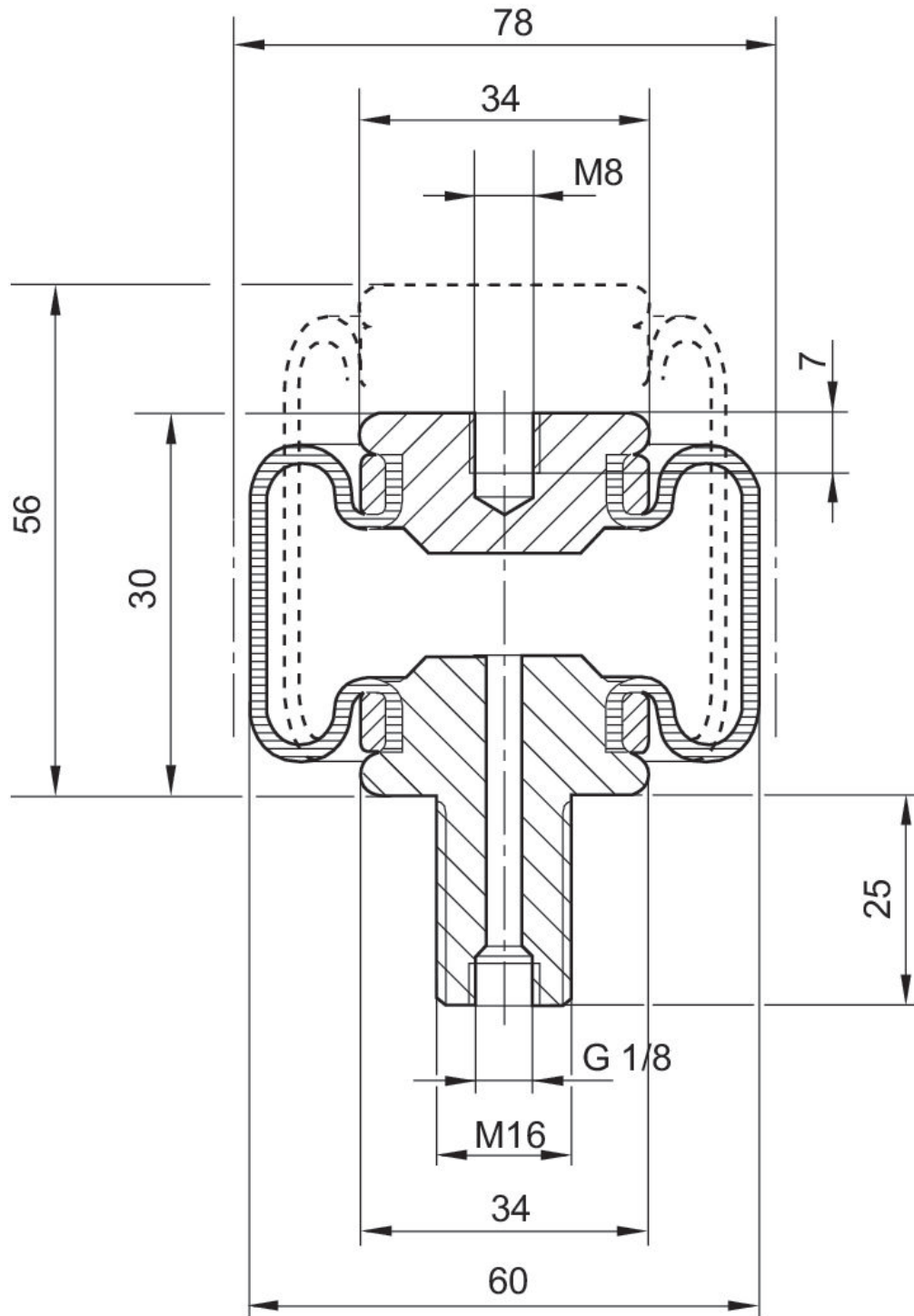
Rolling bellow, series BRB

Type: Flexible rolling bellow
 Functional principle: Single-acting, retracted without pressure
 Max. permissible angle of tilt: 15 °
 Ambient temperature min./max.: -30 °C ... 90 °C
 Working pressure min./max.: 0 bar ... 8 bar

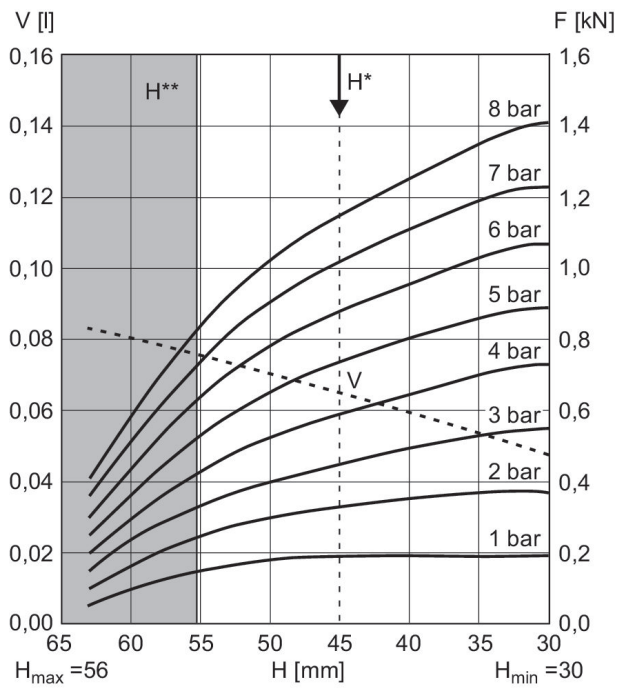


Cover diameter [mm]	Compressed air connection	Max. effective stroke [mm]	Min. radial installation space [mm]	Material bellow	Material front cover	Force min./max. [N]	Weight [kg]	Part No.
34	G 1/8	26	78	Chloroprene rubber	Polyamide, fiber-glass reinforced	620, 1070	0.07	2719060300

Dimensions



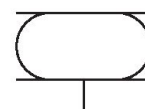
Force-displacement diagram 2719060300



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

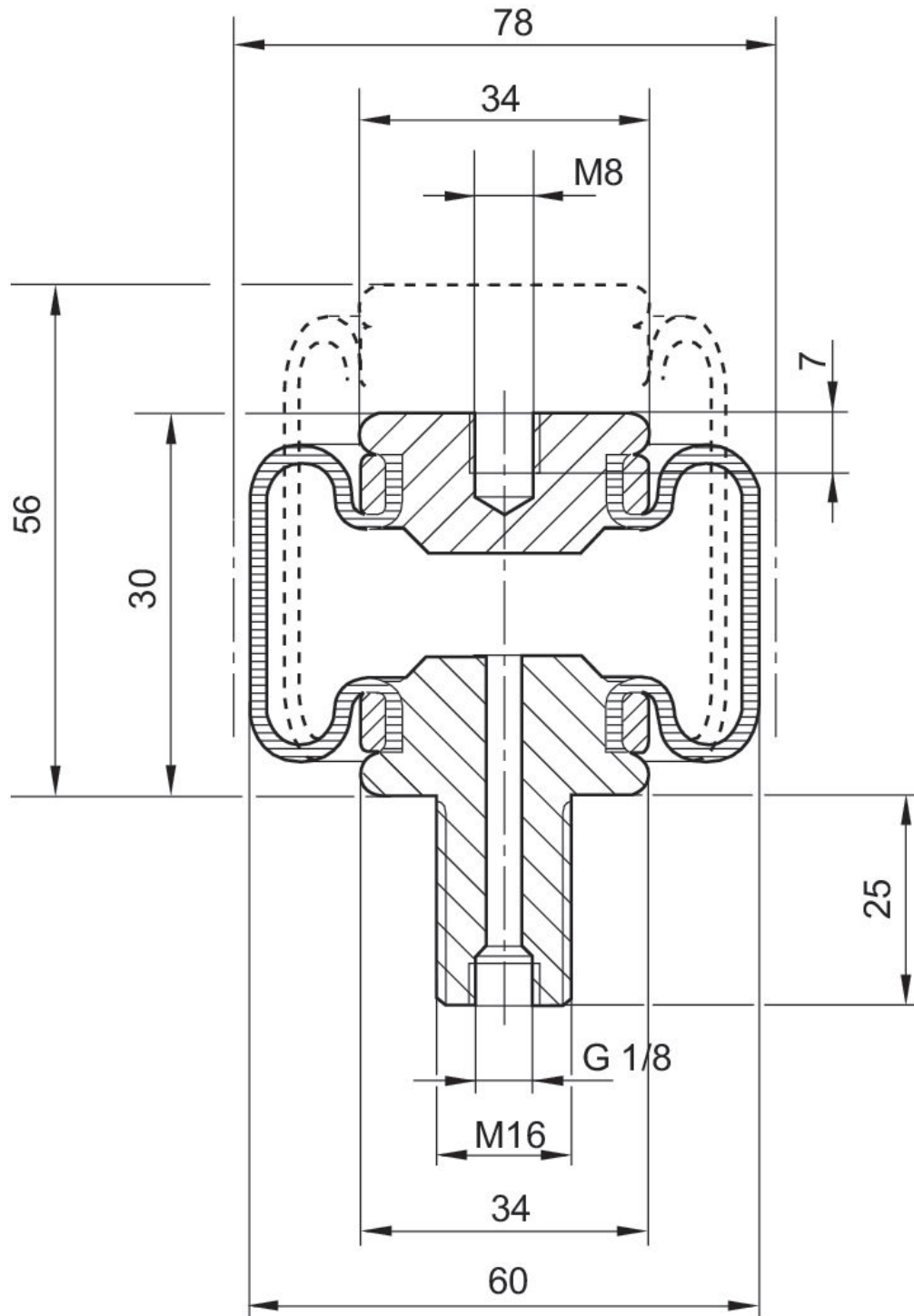
Rolling bellow, series BRB - inch

Type: Flexible rolling bellow
 Functional principle: Single-acting, retracted without pressure
 Max. permissible angle of tilt: 15 °
 Ambient temperature min./max.: -30 °C ... 90 °C
 Working pressure min./max.: 0 bar ... 8 bar

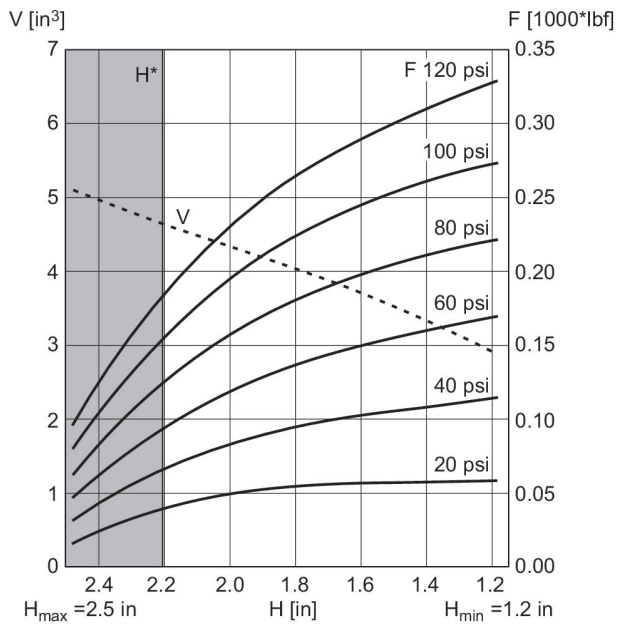


Cover diameter [mm]	Compressed air connection	Max. effective stroke [mm]	Min. radial installation space [mm]	Material bellow	Material front cover	Force min./max. [N]	Weight [kg]	Part No.
34	1/8 NPT	1.3	78	Chloroprene rubber	Polyamide, fiber-glass reinforced	620, 1070	0.07	R432039318

Dimensions



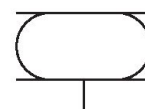
Force-displacement diagram R432039318



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

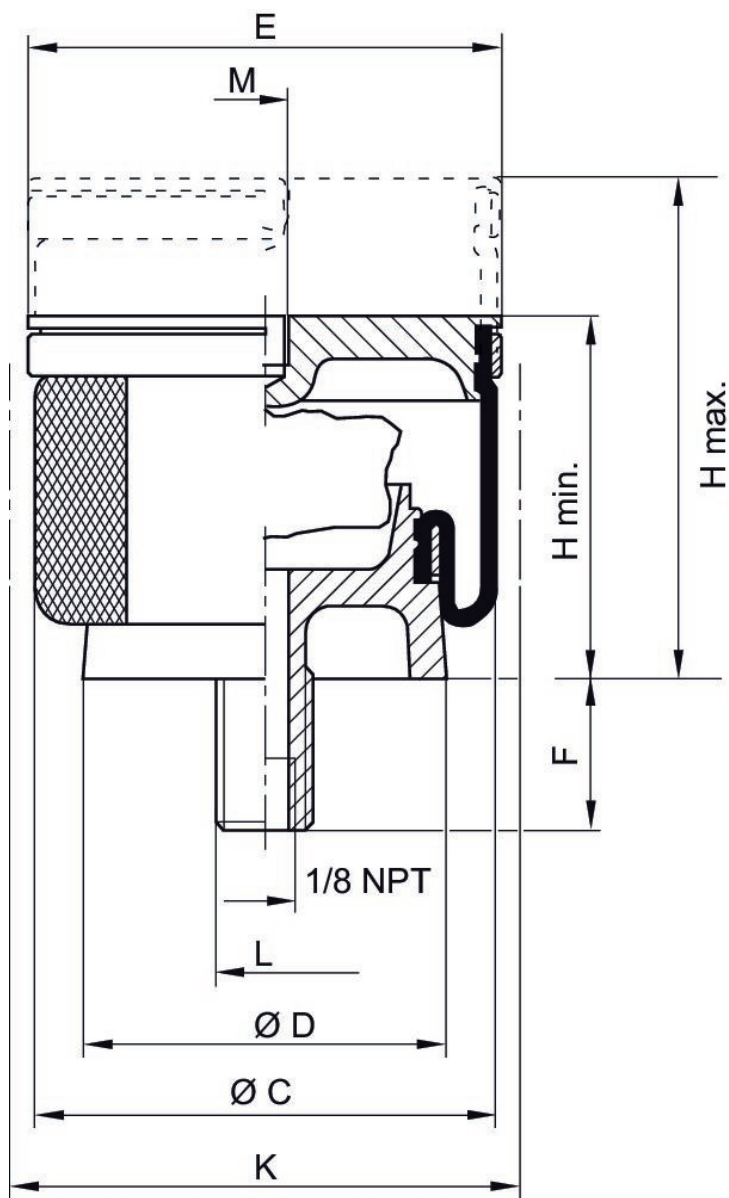
Rolling bellow, series BRB - inch

Type: Flexible rolling bellow
 Functional principle: Single-acting, retracted without pressure
 Max. permissible angle of tilt: 15 °
 Ambient temperature min./max.: -30 °C ... 90 °C
 Working pressure min./max.: 0 bar ... 8 bar



Cover diameter [mm]	Compressed air connection	Max. effective stroke [mm]	Min. radial installation space [mm]	Material bellow	Material front cover	Force min./max. [N]	Weight [kg]	Part No.
61	1/8 NPT	45.72	100	Chloroprene rubber	Polyamide, fiber-glass reinforced	1610, 2300	0.27	R432039320
61	1/8 NPT	71.12	100	Chloroprene rubber	Polyamide, fiber-glass reinforced	1610, 2300	0.27	R432039321

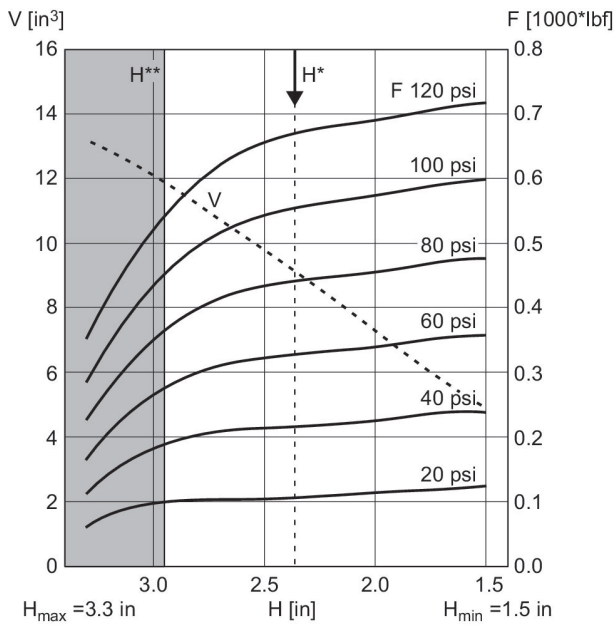
Dimensions



Part No.	Compressed air connection	H min. in	H max. in	C in	D in	Ø E in	F in	K in	L
R432039320	1/8 NPT	1.5	2.95	3.46	2.40	2.99	0.98	3.94	1/8NPT
R432039321	1/8 NPT	1.5	3.94	3.46	2.40	2.99	0.98	3.94	1/8NPT

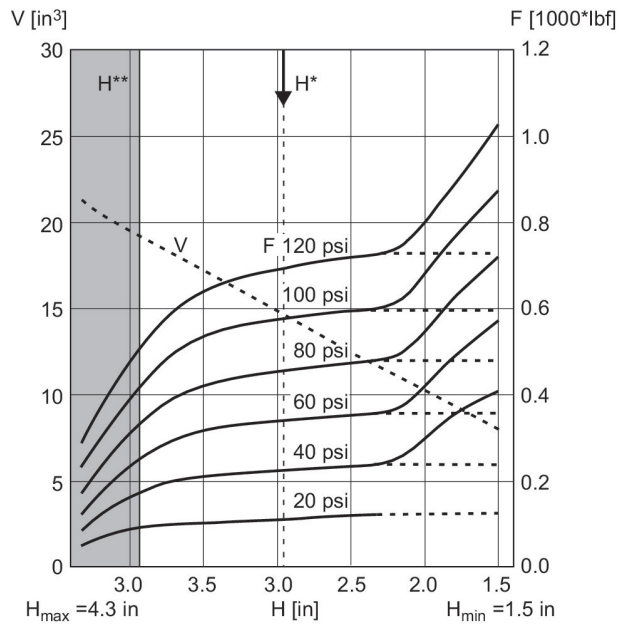
Part No.	M	Min. return force lbf
R432039320	5/16-18UNC	20
R432039321	5/16-18UNC	34

Force-displacement diagram R432039320



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

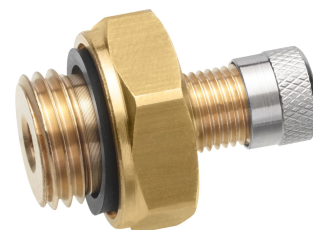
Force-displacement diagram R432039321



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

Filler neck

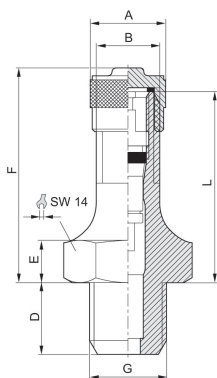
Ambient temperature min./max.: -50 °C ... 130 °C
Working pressure min./max.: 0 bar ... 20 bar



G	Part No.
G 1/8	R412007945
G 1/4	3900040040
1/4 - 18 NPTF	R412010046

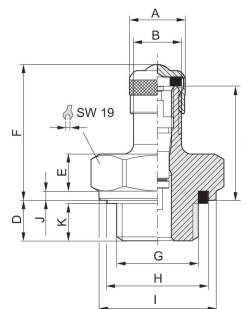
R412007945

Dimensions



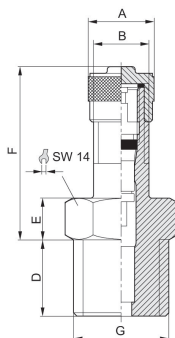
3900040040

Dimensions



R412010046





Dimensions



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



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