AVENTICS

Rodless cylinders ► Bellow actuator

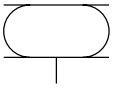
Bellow actuator with cover, series BCE

Rexroth
Pneumatics

Brochure

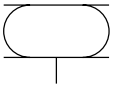
Rodless cylinders ► Bellow actuator

Bellow actuator with cover, series BCE



Bellow actuator with cover, Series BCE
► single ► Stroke: 31 - 104 mm

3



Bellow actuator with cover, Series BCE
► double ► Stroke: 102 - 147 mm

9

Accessories

Blanking screws and connectors

Filler neck
► G 1/4 - 1/4-18 NPTF ► FPT-S-RIO ► Enables use of bellow actuators for vibration isolation

12

Other accessories

Core program, Series CD07

on line

Core program, Series CD12

on line

Core program, Series TC15

on line

Compressed air tubing, Series TU1-X

on line

Series QR2-F Heat-resistant

on line

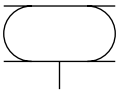
Reducing nipple

on line

Bellow actuator with cover, Series BCE

► single ► Stroke: 31 - 104 mm

00134742

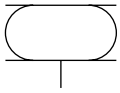


a23

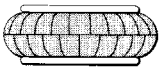
Version	Bellow actuator with cover
Functional principle	Single-acting, retracted without pressure
Max. Angle of tilt	10 ° 20 °
Working pressure min./max.	0 bar / 8 bar
Ambient temperature min./max.	-20°C / +130°C
Medium	Compressed air
Pressure for determining forces	6 bar
Materials:	
Bellow	Epichlorohydrin rubber
Front cover	Steel, galvanized
End cover	Steel, galvanized

Technical Remarks

- Compliance with the min. height Hmin. (B) and max. stroke (A) must be ensured with end stops.
- Use at operating height ≥ Hmax: only permitted upon approval by AVENTICS
- For information on vibration insulators, see ''Technical Information''
- reduced service life at a temperature greater than: 115 °C

	Compressed air connection G	Stroke	Cover diameter	Min. installation space	Weight	Force min./ max.	Fig.	Part No.
		[mm]	[mm]	[mm]	[kg]	[kN]		
	G 1/4	31	108	165	1.4	3.5 - 6.9	Fig. 1	R412010207
	G 1/4	76	114	225	1.6	4.3 - 10.9	Fig. 1	R412010208
	G 3/4	104	141	250	2.2	7 - 14	Fig. 1	R412010209
	G 3/4	71	161	265	2.5	9.3 - 17.3	Fig. 2	R412010210
	G 3/4	86	228	340	4	19.4 - 33.3	Fig. 2	R412010211
	G 3/4	101	287	400	6.1	26.1 - 50	Fig. 3	R412010212

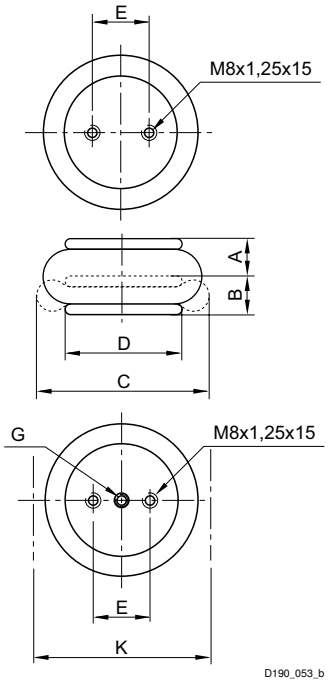
bellow type



00133710

Bellow actuator with cover, Series BCE
► single ► Stroke: 31 - 104 mm

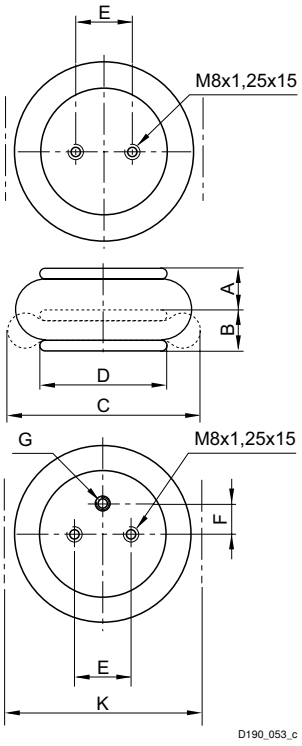
Dimensions, Fig. 1



Part No.	Compressed air connection G	A [mm]	B [mm]	C [mm]	D [mm]	E ±0,5 [mm]	K [mm]	Return force, min. [N]			
R412010207	G 1/4	31	54	150	108	44.5	165	250			
R412010208	G 1/4	76	54	210	114	44.5	225	45			
R412010209	G 3/4	104	54	235	141	70	250	200			

Bellow actuator with cover, Series BCE
► single ► Stroke: 31 - 104 mm

Dimensions, Fig. 2

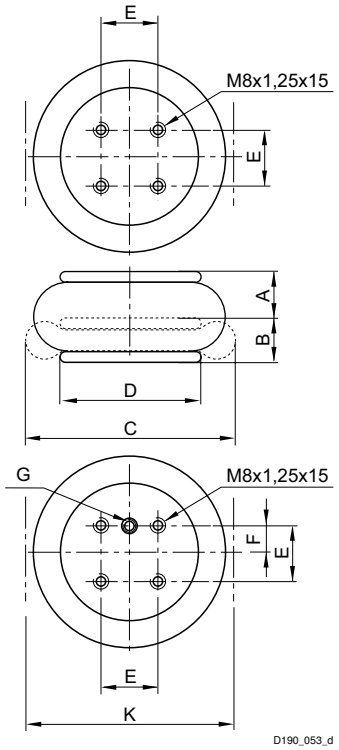


Part No.	Compressed air connection G	A [mm]	B [mm]	C [mm]	D [mm]	E ±0,5 [mm]	F ±0,5 [mm]	K [mm]	Return force, min. [N]		
R412010210	G 3/4	71	54	250	161	89	38.1	265	200		
R412010211	G 3/4	86	54	325	228	157.5	73	340	300		

Bellow actuator with cover, Series BCE

► single ► Stroke: 31 - 104 mm

Dimensions, Fig. 3



Part No.	Compressed air connection G	A [mm]	B [mm]	C [mm]	D [mm]	E ±0,5 [mm]	F ±0,5 [mm]	K [mm]	Return force, min. [N]		
R412010212	G 3/4	101	54	385	287	158.8	79.4	400	300		

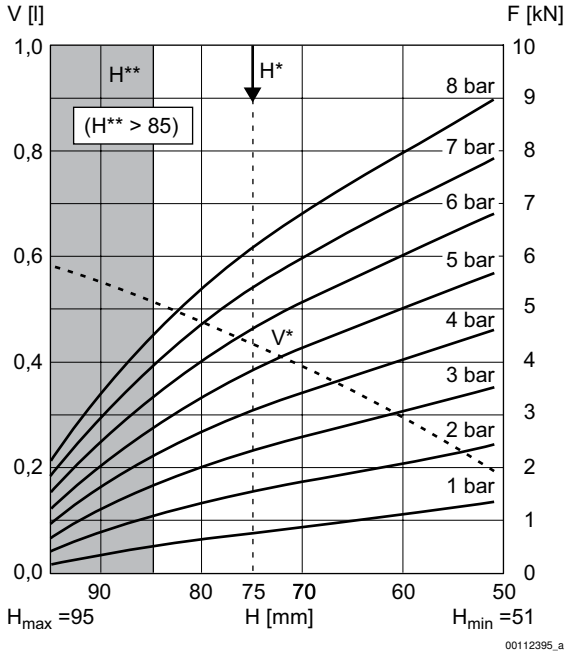
force-displacement diagram for simple bellow actuators

max. permissible parallel movement between the covers: 10 mm

Bellow actuator with cover, Series BCE

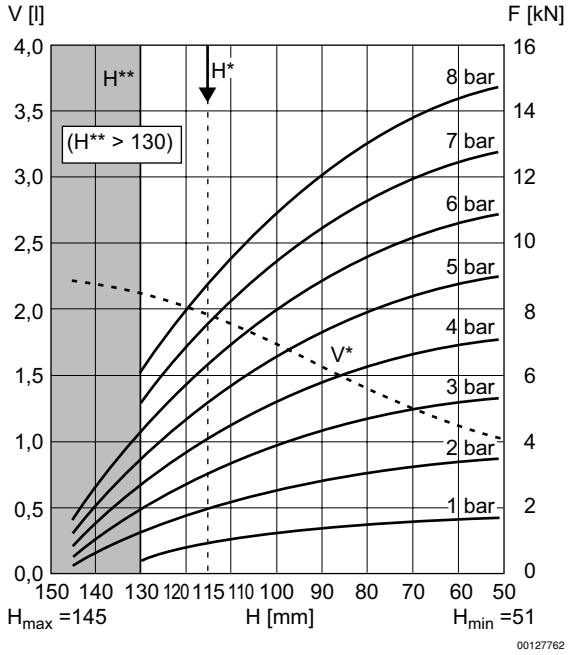
► single ► Stroke: 31 - 104 mm

force-displacement diagram, R412010207



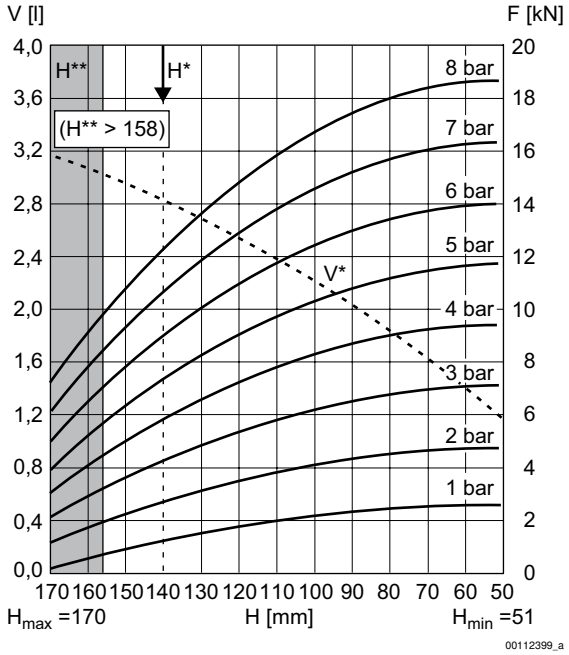
V* = volume
H* = recommended operating height for vibration insulators
H** = use permitted only upon approval by AVENTICS

force-displacement diagram, R412010208



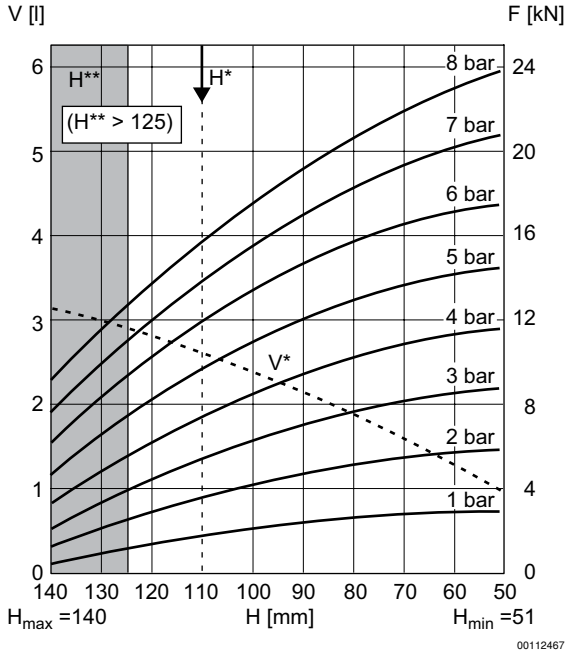
V* = volume
H* = recommended operating height for vibration insulators
H** = use permitted only upon approval by AVENTICS

force-displacement diagram, R412010209



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

force-displacement diagram, R412010210

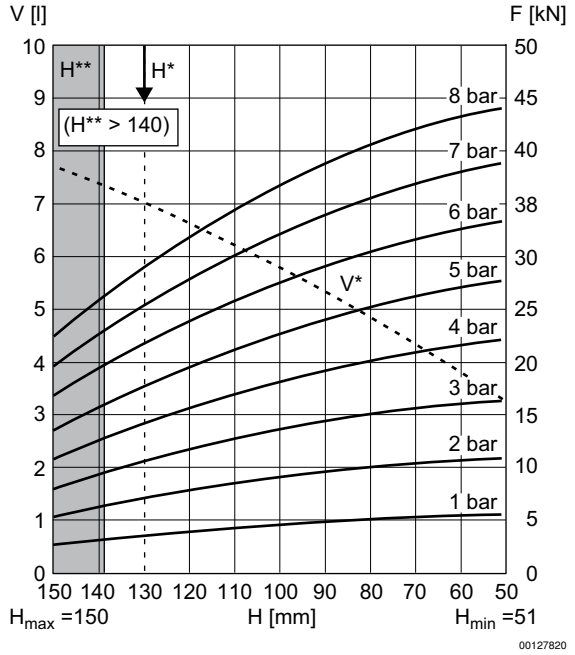


V* = volume
H* = recommended operating height for vibration insulators
H** = use permitted only upon approval by AVENTICS

Bellow actuator with cover, Series BCE

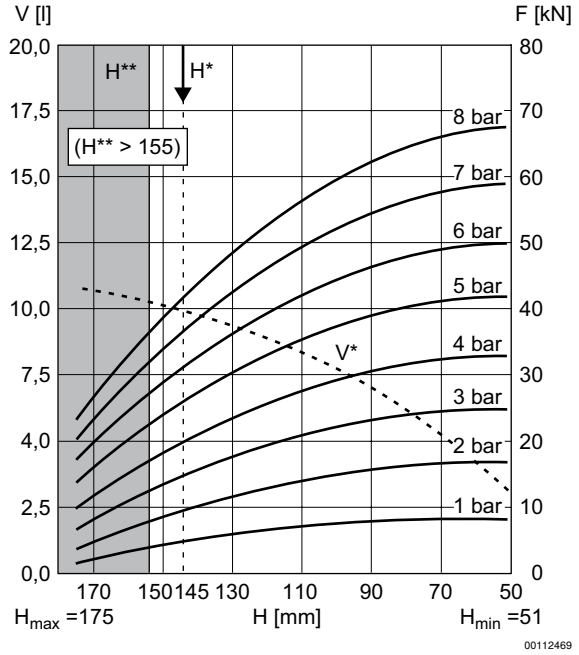
► single ► Stroke: 31 - 104 mm

force-displacement diagram, R412010211



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

force-displacement diagram, R412010212

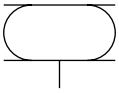


V* = volume
H* = recommended operating height for vibration insulators
H** = use permitted only upon approval by AVENTICS

Bellow actuator with cover, Series BCE

► double ► Stroke: 102 - 147 mm

00134743

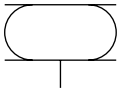


a23

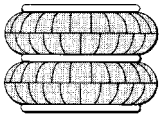
Version	Bellow actuator with cover
Functional principle	Single-acting, retracted without pressure
Max. Angle of tilt	15 ° 25 °
Working pressure min./max.	0 bar / 8 bar
Ambient temperature min./max.	-20°C / +130°C
Medium	Compressed air
Pressure for determining forces	6 bar
Materials:	
Bellow	Epichlorohydrin rubber
Front cover	Steel, galvanized
End cover	Steel, galvanized

Technical Remarks

- Compliance with the min. height Hmin. (B) and max. stroke (A) must be ensured with end stops.
- Use at operating height ≥ Hmax: only permitted upon approval by AVENTICS
- For information on vibration insulators, see ''Technical Information''
- reduced service life at a temperature greater than: 115 °C

	Compressed air connection G	Stroke	Cover diameter	Min. installation space	Weight	Force min./max.	Part No.
		[mm]	[mm]	[mm]	[kg]	[kN]	
	G 1/4	102	108	180	1.7	3.5 - 8.7	R412010213
	G 3/4	147	141	235	2.6	7.7 - 14.8	R412010214

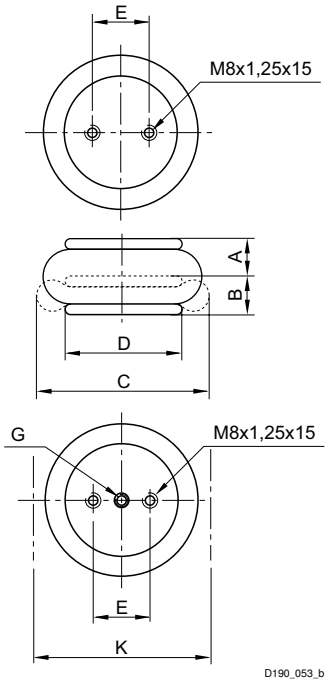
bellow type



00133711

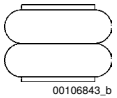
Bellow actuator with cover, Series BCE
► double ► Stroke: 102 - 147 mm

Dimensions



Part No.	Compressed air connection G	A [mm]	B [mm]	C [mm]	D [mm]	E ±0,5 [mm]	K [mm]	Return force, min. [N]			
R412010213	G 1/4	102	78	165	108	44.5	180	200			
R412010214	G 3/4	147	83	218	141	70	235	200			

force-displacement diagram for double bellow actuators

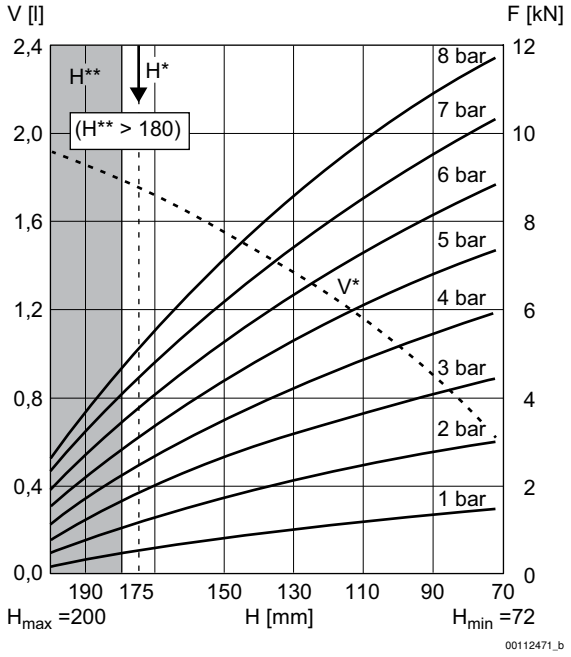


max. permissible parallel movement between the covers: 20 mm

Bellow actuator with cover, Series BCE

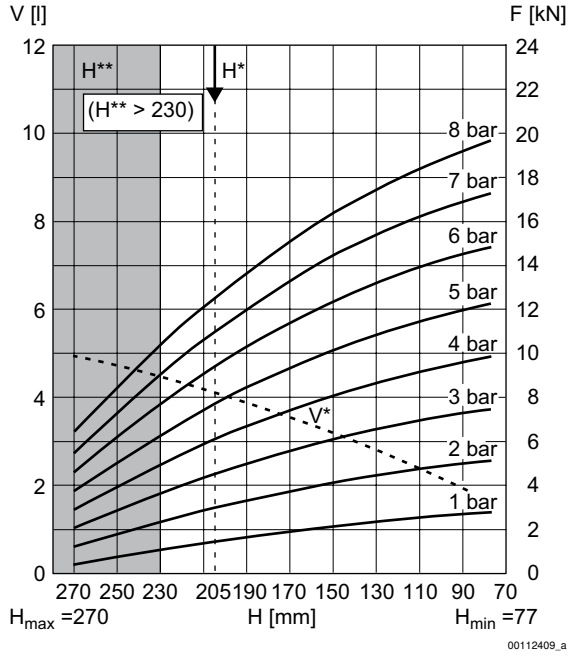
► double ► Stroke: 102 - 147 mm

force-displacement diagram, R412010213



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

force-displacement diagram, R412010214



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

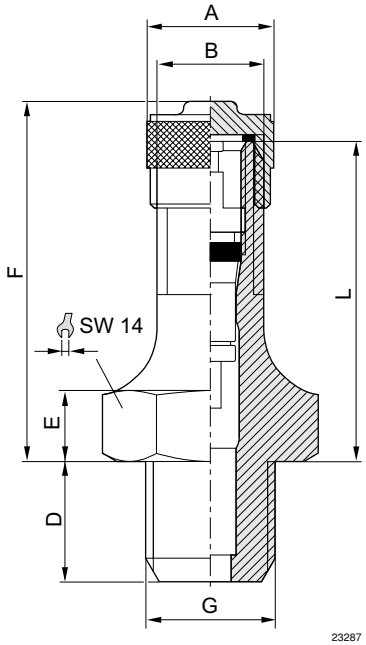
Bellow actuator with cover, Series BCE
Accessories

Filler neck
► G 1/4 - 1/4-18 NPTF ► FPT-S-RIO ► Enables use of bellow actuators for vibration isolation

23022

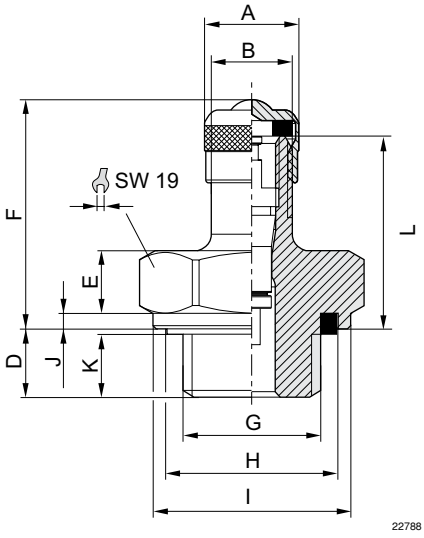
Ambient temperature min./max.	-50 °C / +130 °C
Working pressure min./max.	0 bar / 20 bar
Medium	Compressed air
Materials:	
Screw	Brass
Housing	Brass

Fig. 1



23287

Fig. 2



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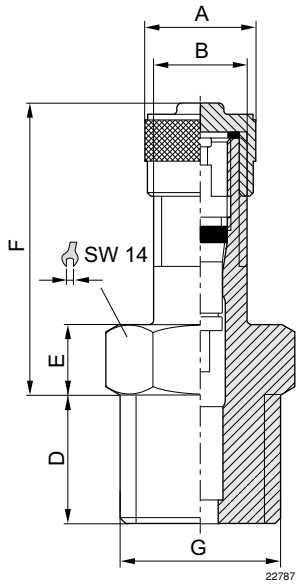
Bellow actuator with cover, Series BCE
Accessories

Fig. 3



Part No.	Port G	ØA	B 1)	D	E	F	H	I	J	K 2)	L	Fig.
3900040040	G 1/4	9	8	6.5	6	22	16.5	18.9	1.5	5.5	18.5	Fig. 2
R412010046	1/4-18 NPTF	9.5	8	11	6	25						Fig. 3

1) 8V1-1
ETRTO V0.07.3
2) Min.

Bellow actuator with cover, Series BCE
Accessories

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Find more contact information at
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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 judgment and verification.
It must be remembered that the products are subject to a natural process of wear and aging.

12-12-2014