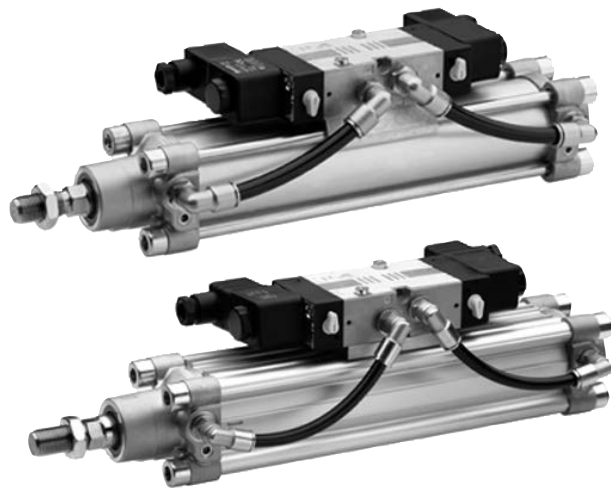


Piston rod cylinders ▶ Cylinder valve units





Series CVI

Brochure



Piston rod cylinders ▶ Cylinder valve units

Series CVI






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Piston rod cylinders ▶ Cylinder valve units

Series CVI

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Piston rod cylinders ▶ Cylinder valve units

Series CVI

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Piston rod cylinders ▶ Cylinder valve units
Series CVI

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Piston rod cylinders ▶ Cylinder valve units

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Piston rod cylinders ▶ Cylinder valve units
Series CVI

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Piston rod cylinders ▶ Cylinder valve units

Series CVI**Electrical connectors**

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▶ 18 mm ▶ ISO 4400 ▶ form A

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

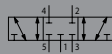
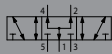
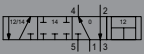


Electrical connector, Series CN1
▶ 8 mm ▶ ISO 15217 ▶ form C



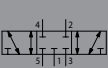
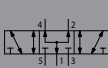

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Piston rod cylinders ▶ Cylinder valve units

Configuration overview, CVI series with profile cylinder PRA

Valve series	Valve function				
					
	5/2-directional valve single solenoid	5/2-directional valve double solenoid	5/3-directional valve closed center	5/3-directional valve pressurized center	5/4-directional valve 1-4 priority position
740	✓	✓	✓	-	✓
TC08	✓	✓	✓	-	-
TC15	✓	✓	✓	-	-
CD07	✓	✓	✓	✓	-
CD12	✓	✓	✓	-	-

Configuration overview, CVI series with tie rod cylinder TRB

Valve series	Valve function				
					
	5/2-directional valve single solenoid	5/2-directional valve double solenoid	5/3-directional valve closed center	5/3-directional valve pressurized center	5/4-directional valve 1-4 priority position
740	✓	✓	✓	-	✓
TC08	✓	✓	✓	-	-
TC15	✓	✓	✓	-	-
CD07	✓	✓	✓	✓	-
CD12	✓	✓	✓	-	-

Piston rod cylinders ▶ Cylinder valve units

Cylinder valve units, Series CVI

- ▶ with PRA cylinder series ▶ Ø 32 - 125 mm ▶ double-acting ▶ retracted or extended ▶ with magnetic piston
- ▶ Cushioning: pneumatically ▶ ATEX optional ▶ For valve series: CD07, CD12, TC08, TC15, 740



00138845

Standards	ISO 15552
Connector standard	ISO 6952
Working pressure min./max.	See table below
Ambient temperature min./max.	See table below
Medium temperature min./max.	See table below
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pressure for determining piston forces	6,3 bar

Cylinder series	PRA
Cylinder series	Profile cylinder

Materials:

Cylinder tube	Aluminum, anodized
Front cover	Aluminum
End cover	Aluminum
Piston rod	Stainless steel
Nut for piston rod	Steel, galvanized
Seals	Polyurethane
Connector	Brass, nickel-plated
Plastic tubing	Polyamide
Mounting plate	Aluminum
mounting screws	Steel galvanized
Scraper	Polyurethane

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- For technical data and valve materials, see the technical data for the cylinder valve unit and the configuration overview with a link to the valve catalog pages.
- ATEX-certified cylinder valve units can be generated for series CD07 and 740 using the Internet configurator.
- ATEX ID: Only mechanical components: II 2G2D c IIB T4 IP65 T135 °C X With electrical components: II 3G3D c IIB T4 IP65 T135 °C X For ATEX-certified cylinders, the stated temperature range does not apply, but instead: -10 °C ≤ Ta ≤ 50 °C For the CD07 series with 5/3-directional valve, the temperature range is 0 °C ≤ Ta ≤ 50 °C!
- NOTICE: For the part numbers 5727515302 and 5727565302 in the 740 series with 5/4-directional valve, the minimum working pressure of 3 bar must be observed!

Piston rod cylinders ▶ Cylinder valve units
Cylinder valve units, Series CVI

▶ with PRA cylinder series ▶ Ø 32 - 125 mm ▶ double-acting ▶ retracted or extended ▶ with magnetic piston
 ▶ Cushioning: pneumatically ▶ ATEX optional ▶ For valve series: CD07, CD12, TC08, TC15, 740

Piston Ø		[mm]	32	40	50	63	80
Piston force	retracting	[N]	435	660	1035	1765	2855
	extracting	[N]	505	790	1235	1960	3165
Cushioning length	-	[mm]	11.5	15	17	16.5	19.5
Weight	0 mm stroke	[kg]	0.7	0.89	1.3	1.68	2.9
	+10 mm stroke	[kg]	0.02	0.03	0.04	0.05	0.09
Stroke max.	-	[mm]	1600	1900	2100	2500	2800

Piston Ø		[mm]	100	125			
Piston force	retracting	[N]	4635	7220			
	extracting	[N]	4945	7725			
Cushioning length	-	[mm]	19.5	22			
Weight	0 mm stroke	[kg]	4.06	7.27			
	+10 mm stroke	[kg]	0.1	0.15			
Stroke max.	-	[mm]	2800	2750			

Configurable product


This product is configurable. Please use our Internet configurator at <http://www.aventics.com> or contact the nearest AVENTICS sales office.

Technical data for the cylinder valve unit

Valve series	Cylinders Ø [mm]	Tubing connection [mm]	Valve flow rate [l/min]	Operating pressure [bar]	°C**	Weight* [kg]
740	32 - 63	Ø8x1	700	1,5 / 3 - 10***	-15 - 50	0,19 - 0,27
740	40 - 125	Ø10x1	950	1,5 / 3 - 10***	-15 - 50	0,19 - 0,28
TC08	32 - 50	Ø8x1	700 - 800	3 - 10	-10 - 50	0,15 - 0,19
CD07	32 - 63 40 - 125	Ø8x1 Ø10x1	950 - 1200	3 - 10	-20 - 50**	0,50 - 0,58
TC15	50 - 125	Ø10x1	1300 - 1500	3 - 10	-10 - 50	0,24 - 0,29
CD12	80 80 - 125	Ø10x1 Ø14x1,5	3800 - 4100	2 / 3 - 10***	-15 - 70	0,86 - 0,95

*Weight = weight of the assembly, consisting of valve, fitting, tubing and mountings. See above table for cylinder weight.

**°C = ambient and medium temperature. With 5/3-directional valve: 0 - [50 °C]

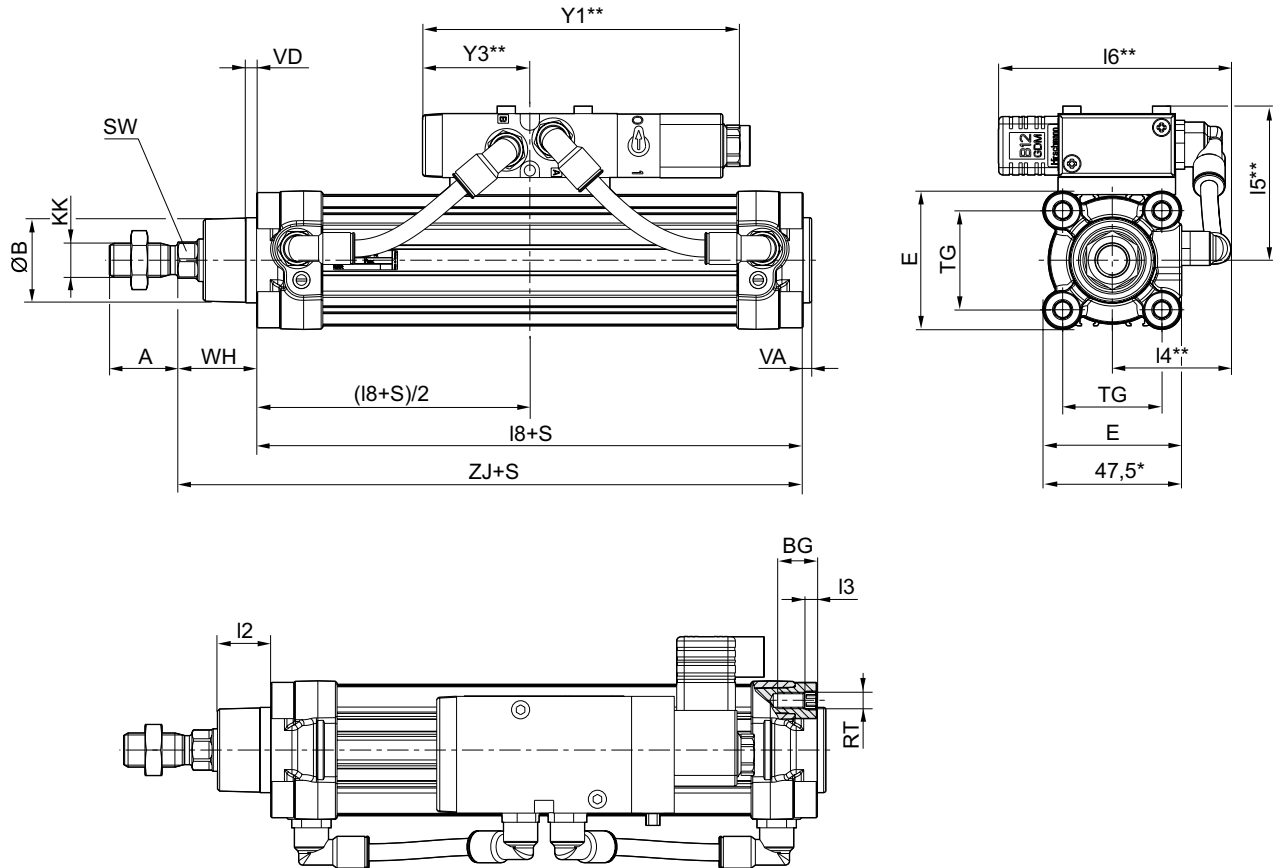
*** With 5/2-directional valve: min. working pressure = 1.5 bar or 2 bar, with 5/3-directional valve: min. working pressure = 3 bar

Piston rod cylinders ▶ Cylinder valve units

Cylinder valve units, Series CVI

- ▶ with PRA cylinder series ▶ Ø 32 - 125 mm ▶ double-acting ▶ retracted or extended ▶ with magnetic piston
- ▶ Cushioning: pneumatically ▶ ATEX optional ▶ For valve series: CD07, CD12, TC08, TC15, 740

Dimensions of cylinder/valve unit with single solenoid valve



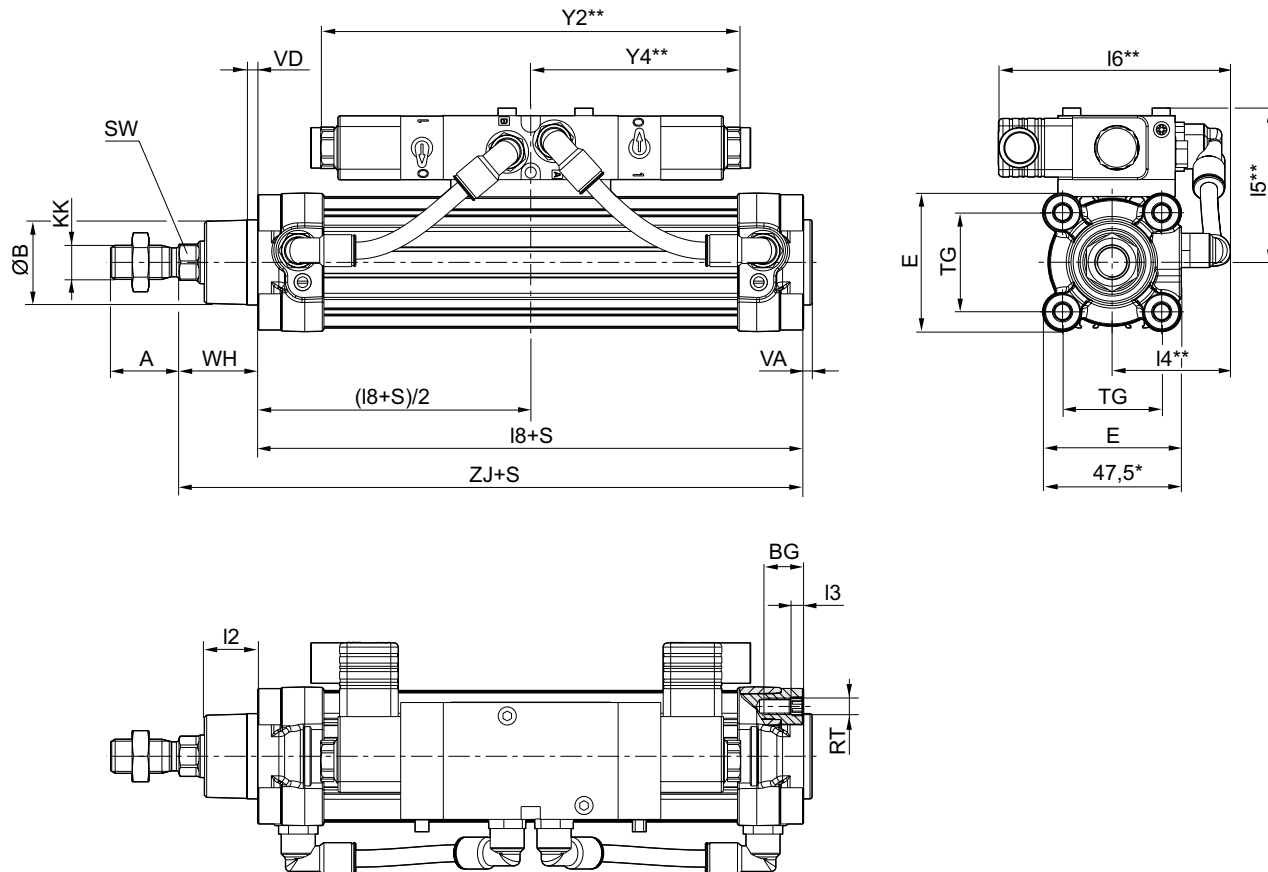
S=stroke
 * Only for Ø32
 ** See valve dimensions

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Cylinder valve units, Series CVI

▶ with PRA cylinder series ▶ Ø 32 - 125 mm ▶ double-acting ▶ retracted or extended ▶ with magnetic piston
 ▶ Cushioning: pneumatically ▶ ATEX optional ▶ For valve series: CD07, CD12, TC08, TC15, 740

Dimensions of cylinder/valve unit with double solenoid valve



00138364

S=stroke

* Only for Ø32

** See valve dimensions

Ø	A -2	ØB d11	BG 1)	E	KK	I2	I3 2)	I8	RT	S	SW
32	22	30	16	46.5	M10x1,25	16.25	4.5	94±0,4	M6	40 1) / 1600 2)	10
40	24	35	16	53	M12x1,25	18.25	4.5	105±0,7	M6	40 1) / 1900 2)	13
50	32	40	16	65	M16x1,5	25	4.5	106±0,7	M8	40 1) / 2100 2)	17
63	32	45	16	75	M16x1,5	25	4.5	121±0,8	M8	40 1) / 2500 2)	17
80	40	45	17	95	M20x1,5	33	0	128±0,8	M10	40 1) / 2800 2)	22
100	40	55	17	115	M20x1,5	36	0	138±1	M10	40 1) / 2800 2)	22
125	54	60	20	140	M27x2	45	0	160±1	M12	40 1) / 2750 2)	27

Ø	TG	VA -1	VD 1)	WH	ZJ						
32	32,5±0,5	4	5	26±1,4	120						
40	38±0,5	4	5	30±1,4	135						
50	46,5±0,6	4	5	37±1,4	143						
63	56,5±0,7	4	5	37±1,8	158						
80	72±0,7	4	5	46±1,8	174						
100	89±0,7	4	5	51±1,8	189						
125	110±1,1	6	7	65±2,2	225						

1) Min.

2) Max.

Piston rod cylinders ▶ Cylinder valve units

Cylinder valve units, Series CVI

- ▶ with PRA cylinder series ▶ Ø 32 - 125 mm ▶ double-acting ▶ retracted or extended ▶ with magnetic piston
- ▶ Cushioning: pneumatically ▶ ATEX optional ▶ For valve series: CD07, CD12, TC08, TC15, 740

valve dimensions

CD07-Ø	Y1	Y2	Y3	Y4	I4	I5	I6					
32	149	198	50.5	98.5	51	64	111					
40	149	198	50.5	98.5	53	68	113					
50	149	198	50.5	98.5	60	73	114					
63	149	198	50.5	98.5	65	78	114					
80	149	198	50.5	98.5	78	92	118					
100	149	198	50.5	98.5	87	99	118					
125	149	198	50.5	98.5	99	109	120					
CD12-Ø	Y1	Y2	Y3	Y4	I4	I5	I6					
80	237	317	72	164.5	83	104	106					
120	237	317	72	164.5	90	115	106					
125	237	317	72	164.5	102	125	107					
TC08-Ø	Y1	Y2	Y3	Y4	I4	I5	I6					
32	147	214	43	104	48	50	62					
40	147	214	43	104	51	54	62					
50	147	214	43	104	56	59	65					
TC15-Ø	Y1	Y2	Y3	Y4	I4	I5	I6					
50	167	234	54	113	57	64	82					
63	167	234	54	113	63	69	82					
80	167	234	54	113	73	83	82					
100	167	234	54	113	84	90	82					
125	167	234	54	113	97	100	82					
740-Ø	Y1	Y2	Y3	Y4	I4	I5	I6					
32	120	187	33.5	86	51	69	113					
40	120	187	33.5	86	55	73	115					
50	120	187	33.5	86	61	78	117					
63	120	187	33.5	86	67	83	117					
80	120	187	33.5	86	78	96	120					
100	120	187	33.5	86	90	104	121					
125	120	187	33.5	86	100	114	123					

Cylinder valve units, Series CVI

- ▶ with TRB cylinder series ▶ Ø 32 - 125 mm ▶ double-acting ▶ retracted or extended ▶ with magnetic piston
 ▶ Cushioning: pneumatically ▶ ATEX optional ▶ For valve series: CD07, CD12, TC08, TC15, 740



00138847

Standards	ISO 15552
Connector standard	ISO 4400
Working pressure min./max.	See table below
Ambient temperature min./max.	See table below
Medium temperature min./max.	See table below
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³
Pressure for determining piston forces	6,3 bar
Cylinder series	TRB
Cylinder series	Tie rod cylinder

Materials:	
Cylinder tube	Aluminum, anodized
Front cover	Aluminum
End cover	Aluminum
Piston rod	Stainless steel
Nut for piston rod	Steel, galvanized
Seals	Polyurethane
Connector	Brass, nickel-plated
Plastic tubing	Polyamide
Mounting plate	Aluminum
mounting screws	Steel galvanized
Scraper	Polyurethane

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- For technical data and valve materials, see the technical data for the cylinder valve unit and the configuration overview with a link to the valve catalog pages.
- ATEX-certified cylinder valve units can be generated for series CD07 and 740 using the Internet configurator.
- ATEX ID: Only mechanical components: II 2G2D c IIB T4 IP65 T135 °C X With electrical components: II 3G3D c IIB T4 IP65 T135 °C X For ATEX-certified cylinders, the stated temperature range does not apply, but instead: -10 °C ≤ Ta ≤ 50 °C For the CD07 series with 5/3-directional valve, the temperature range is 0 °C ≤ Ta ≤ 50 °C!
- NOTICE: For the part numbers 5727515302 and 5727565302 in the 740 series with 5/4-directional valve, the minimum working pressure of 3 bar must be observed!

Piston rod cylinders ▶ Cylinder valve units
Cylinder valve units, Series CVI

- ▶ with TRB cylinder series ▶ Ø 32 - 125 mm ▶ double-acting ▶ retracted or extended ▶ with magnetic piston
 ▶ Cushioning: pneumatically ▶ ATEX optional ▶ For valve series: CD07, CD12, TC08, TC15, 740

Piston Ø		[mm]	32	40	50	63	80
Piston force	retracting	[N]	435	660	1035	1765	2855
	extracting	[N]	505	790	1235	1960	3165
Cushioning length	-	[mm]	11.5	15	17	16.5	19.5
Weight	0 mm stroke	[kg]	0.64	0.9	1.36	1.63	2.74
	+10 mm stroke	[kg]	0.02	0.03	0.04	0.05	0.06
Stroke max.	-	[mm]	1600	1900	2100	2500	2800

Piston Ø		[mm]	100	125		
Piston force	retracting	[N]	4635	7220		
	extracting	[N]	4945	7725		
Cushioning length	-	[mm]	19.5	22		
Weight	0 mm stroke	[kg]	3.8	7.56		
	+10 mm stroke	[kg]	0.07	0.21		
Stroke max.	-	[mm]	2800	2750		

Configurable product


This product is configurable. Please use our Internet configurator at <http://www.aventics.com> or contact the nearest AVENTICS sales office.

Technical data for the cylinder valve unit

Valve series	Cylinders Ø [mm]	Tubing connection [mm]	Valve flow rate [l/min]	Operating pressure [bar]	°C**	Weight* [kg]
740	32 - 125	Ø8x1	700	1,5 / 3 - 10***	-15 - 50	0,19 - 0,27
740	40 - 125	Ø10x1	950	1,5 / 3 - 10***	-15 - 50	0,19 - 0,28
TC08	32 - 50	Ø8x1	700 - 800	3 - 10	-10 - 50	0,15 - 0,19
CD07	32 - 80 40 - 125	Ø8x1 Ø10x1	950 - 1200	3 - 10	-20 - 50**	0,50 - 0,58
TC15	50 - 125	Ø10x1	1300 - 1500	3 - 10	-10 - 50	0,24 - 0,29
CD12	100 - 125 80 - 125	Ø10x1 Ø14x1,5	3800 - 4100	2 / 3 - 10***	-15 - 70	0,86 - 0,95

*Weight = weight of the assembly, consisting of valve, fitting, tubing and mountings. See above table for cylinder weight.

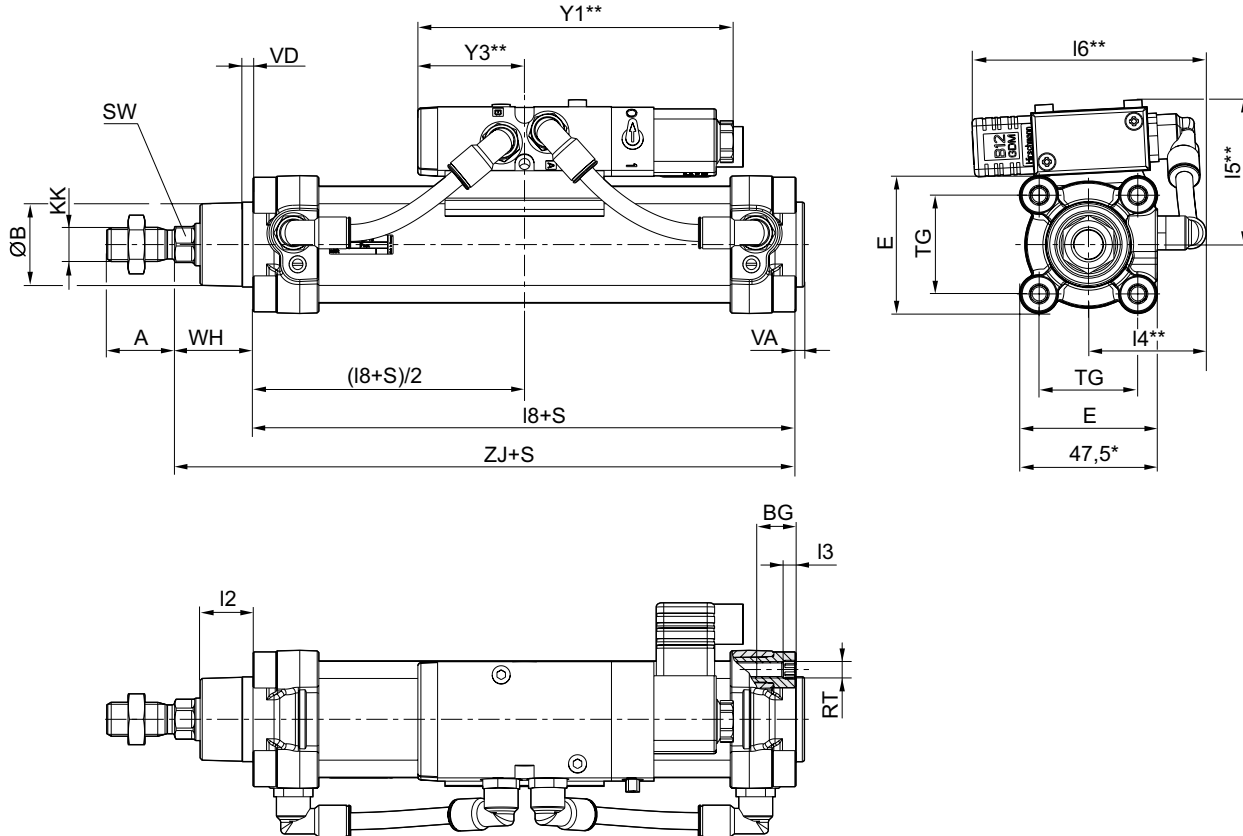
**°C = ambient and medium temperature. With 5/3-directional valve: 0 - [50 °C]

*** With 5/2-directional valve: min. working pressure = 1.5 bar or 2 bar, with 5/3-directional valve: min. working pressure = 3 bar

Cylinder valve units, Series CVI

- ▶ with TRB cylinder series ▶ Ø 32 - 125 mm ▶ double-acting ▶ retracted or extended ▶ with magnetic piston
- ▶ Cushioning: pneumatically ▶ ATEX optional ▶ For valve series: CD07, CD12, TC08, TC15, 740

Dimensions of cylinder/valve unit with single solenoid valve



- S = stroke
- * Only for Ø32
- ** See valve dimensions

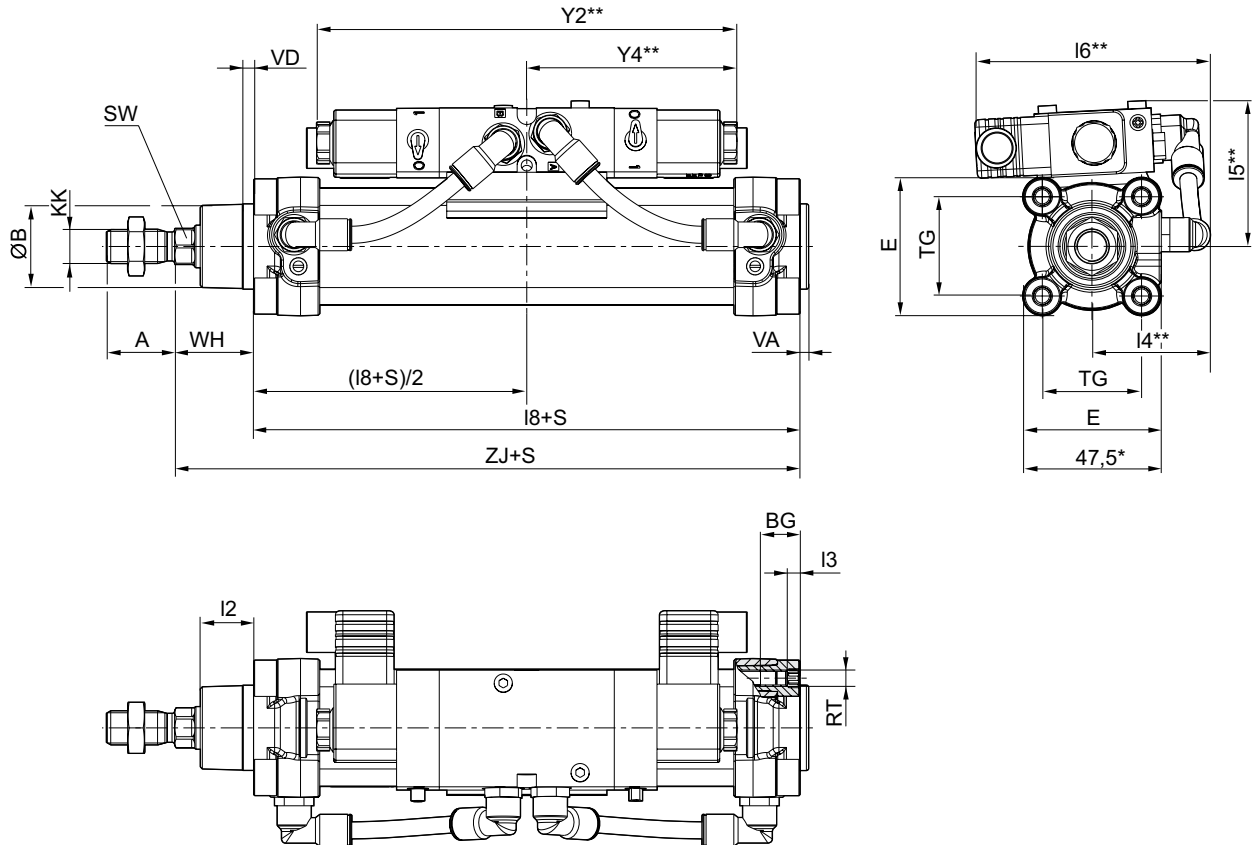
00138361

Piston rod cylinders ▶ Cylinder valve units

Cylinder valve units, Series CVI

- ▶ with TRB cylinder series ▶ Ø 32 - 125 mm ▶ double-acting ▶ retracted or extended ▶ with magnetic piston
- ▶ Cushioning: pneumatically ▶ ATEX optional ▶ For valve series: CD07, CD12, TC08, TC15, 740

Dimensions of cylinder/valve unit with double solenoid valve



S = stroke

* Only for Ø32

** See valve dimensions

00138362

Ø	A -2	ØB d11	BG 1)	E	KK	I2	I3 2)	I8	RT	S	SW
32	22	30	16	46.5	M10x1,25	16.25	4.5	94±0,4	M6	40 1) / 1600 2)	10
40	24	35	16	53	M12x1,25	18.25	4.5	105±0,7	M6	40 1) / 1900 2)	13
50	32	40	16	65	M16x1,5	25	4.5	106±0,7	M8	40 1) / 2100 2)	17
63	32	45	16	75	M16x1,5	25	4.5	121±0,8	M8	40 1) / 2500 2)	17
80	40	45	17	95	M20x1,5	33	0	128±0,8	M10	40 1) / 2800 2)	22
100	40	55	17	115	M20x1,5	36	0	138±1	M10	40 1) / 2800 2)	22
125	54	60	20	140	M27x2	45	0	160±1	M12	40 1) / 2750 2)	27

Ø	TG	VA -1	VD 1)	WH	ZJ						
32	32,5±0,5	4	5	26±1,4	120						
40	38±0,5	4	5	30±1,4	135						
50	46,5±0,6	4	5	37±1,4	143						
63	56,5±0,7	4	5	37±1,8	158						
80	72±0,7	4	5	46±1,8	174						
100	89±0,7	4	5	51±1,8	189						
125	110±1,1	6	7	65±2,2	225						

1) Min.

2) Max.

Cylinder valve units, Series CVI

▶ with TRB cylinder series ▶ Ø 32 - 125 mm ▶ double-acting ▶ retracted or extended ▶ with magnetic piston

▶ Cushioning: pneumatically ▶ ATEX optional ▶ For valve series: CD07, CD12, TC08, TC15, 740

valve dimensions

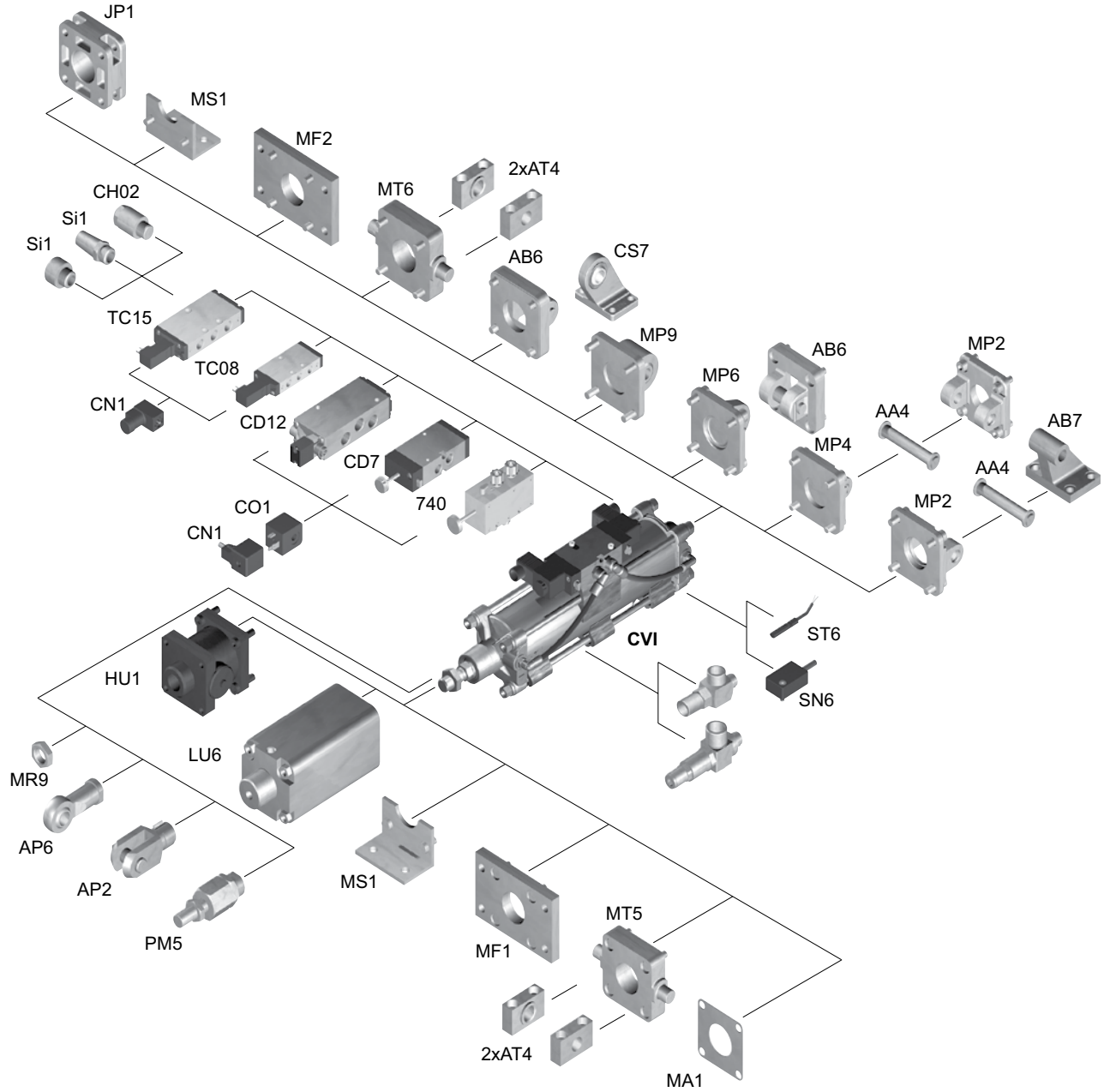
CD07-Ø	Y1	Y2	Y3	Y4	I4	I5	I6					
32	149	198	50.5	98.5	51	64	111					
40	149	198	50.5	98.5	53	68	113					
50	149	198	50.5	98.5	60	73	114					
63	149	198	50.5	98.5	65	78	114					
80	149	198	50.5	98.5	78	92	118					
100	149	198	50.5	98.5	87	99	118					
125	149	198	50.5	98.5	99	109	120					
CD12-Ø	Y1	Y2	Y3	Y4	I4	I5	I6					
80	237	317	72	164.5	83	104	106					
120	237	317	72	164.5	90	115	106					
125	237	317	72	164.5	102	125	107					
TC08-Ø	Y1	Y2	Y3	Y4	I4	I5	I6					
32	147	214	43	104	48	50	62					
40	147	214	43	104	51	54	62					
50	147	214	43	104	56	59	65					
TC15-Ø	Y1	Y2	Y3	Y4	I4	I5	I6					
50	167	234	54	113	57	64	82					
63	167	234	54	113	63	69	82					
80	167	234	54	113	73	83	82					
100	167	234	54	113	84	90	82					
125	167	234	54	113	97	100	82					
740-Ø	Y1	Y2	Y3	Y4	I4	I5	I6					
32	120	187	33.5	86	51	69	113					
40	120	187	33.5	86	55	73	115					
50	120	187	33.5	86	61	78	117					
63	120	187	33.5	86	67	83	117					
80	120	187	33.5	86	78	96	120					
100	120	187	33.5	86	90	104	121					
125	120	187	33.5	86	100	114	123					

Piston rod cylinders ▶ Cylinder valve units

Series CVI
Accessories

Accessories overview

CVI series with TRB cylinder series



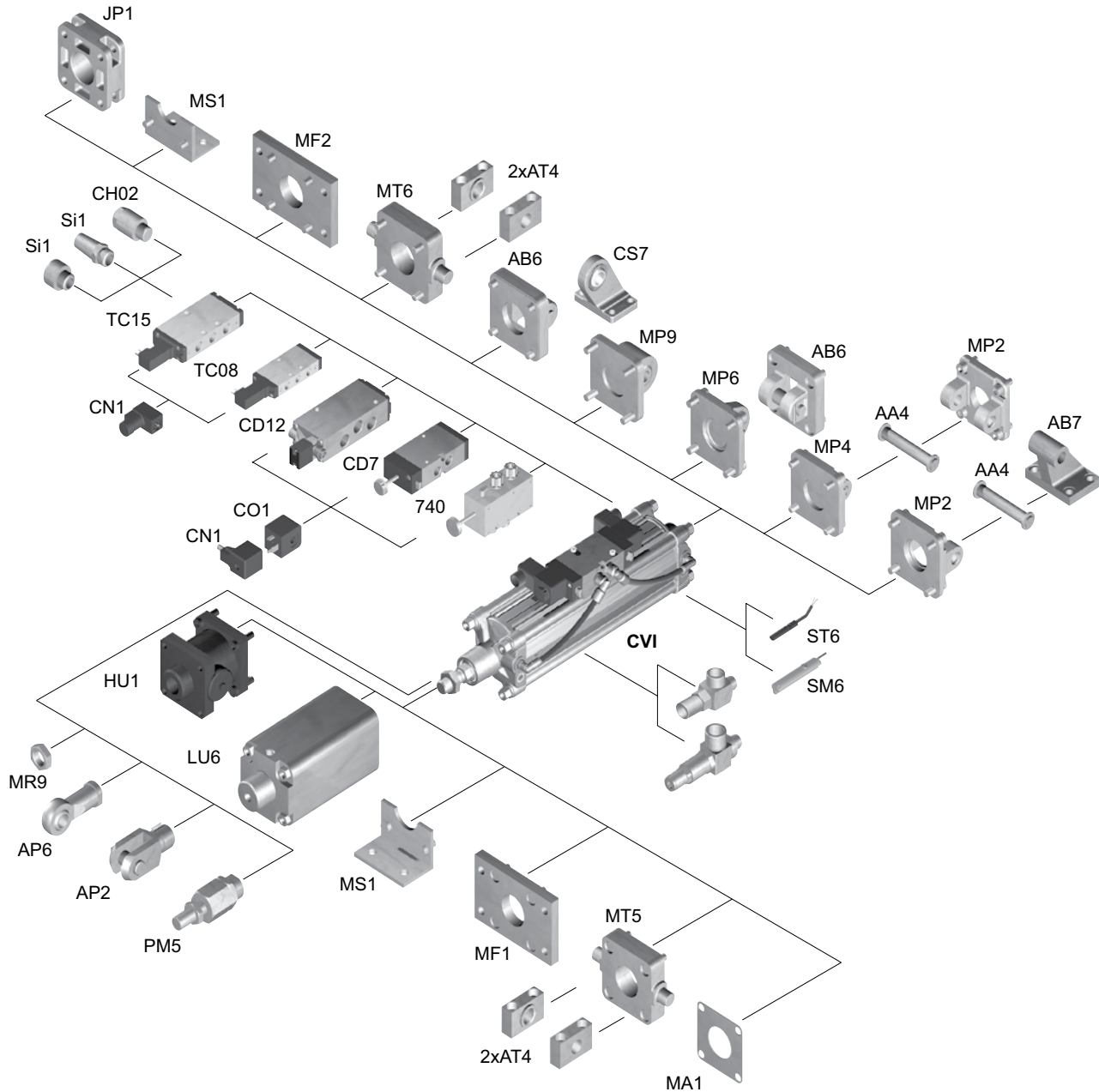
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NOTE:

This overview drawing is only for orientation to see where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

Series CVI Accessories

CVI series with PRA cylinder series



00138361_c

NOTE:

This overview drawing is only for orientation to see where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

5/2-directional valve, Series 740

▶ Qn = 700 - 950 l/min ▶ pipe connection ▶ Compressed air connection output: Ø 8x1 - Ø 10x1 ▶ Electr. connection: Plug, EN 175301-803, form A ▶ with throttle ▶ Can be assembled into blocks ▶ Manual override: without detent, with detent ▶ single solenoid ▶ Pilot: internal ▶ ATEX optional



00134324

Version	Diaphragm poppet valve
Sealing principle	Soft sealing
Blocking principle	Single base plate principle, Plate principle
Mounting on manifold strip	PRS strip
Working pressure min./max.	2 bar / 10 bar
Ambient temperature min./max.	-15°C / +50°C
Medium temperature min./max.	-15°C / +50°C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Nominal flow Qn	See table below
Connector standard	EN 175301-803:2006
Protection class with connection	IP65
Compatibility index	14
Duty cycle	100 %
Typ. switch-on time	16 ms
Typ. switch-off time	36 ms
Weight	See table below
Materials:	
Housing	Polyarylamide; Polyoxymethylene
Seals	Acrylonitrile butadiene rubber

Technical Remarks

- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

		Power consumption
		DC
		W
		2.1

	MO	Compressed air connection			Power consumption	Flow rate value	Weight	Part No.
		Input	Output	Exhaust				
		Ø 8x1	Ø 8x1	M14x1	2.1	700	0.221	5727405302
		Ø 10x1	Ø 10x1					

MO = Manual override
Basic valve without coil
Nominal flow Qn at 6 bar and Δp = 1 bar

Series CVI Accessories

Dimensions

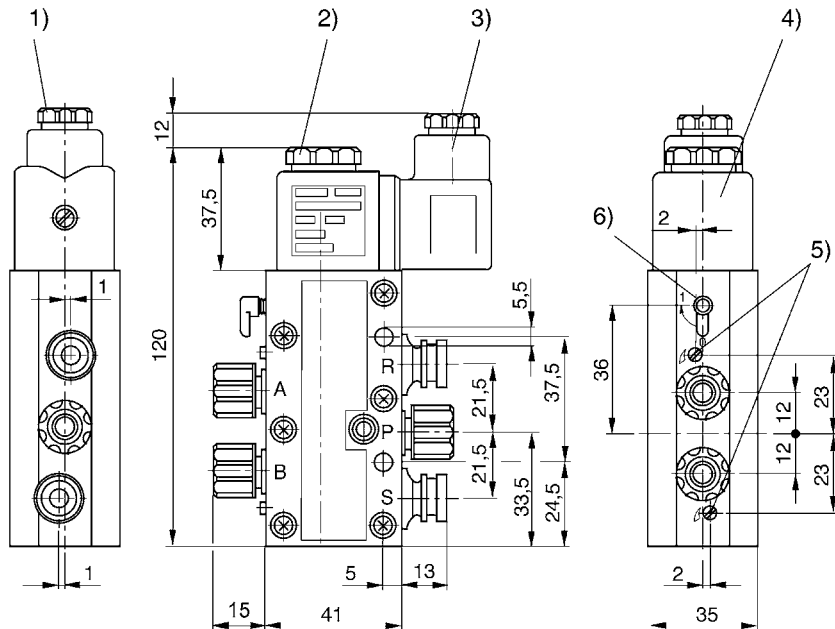
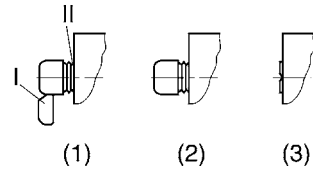


Fig. 1



- 1) gland fitting M16x1,5
- 2) M5 internal thread accessible under cap
- 3) el. connector can be rotated at 90° intervals
- 4) coil can be plugged at 45° intervals
- 5) throttle screw for exhausts 5 (R) and 3 (S) (S)
- 6) manual override and position indicator

Fig. 1: manual override:

manual actuation: (1) with detent - push and turn into position 1 (2) without detent - remove segment 1 - push only
actuation by tool: (3) with detent - remove segments up to II - push with tool and turn into position 1

D572_740

Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

5/2-directional valve, Series 740

▶ Qn = 700 - 950 l/min ▶ pipe connection ▶ Compressed air connection output: Ø 8x1 - Ø 10x1 ▶ Electr. connection: Plug, EN 175301-803, form A ▶ with throttle ▶ Can be assembled into blocks ▶ Manual override: with detent ▶ double solenoid ▶ Pilot: internal ▶ ATEX optional



Version	Diaphragm poppet valve
Sealing principle	Soft sealing
Blocking principle	Plate principle, Single base plate principle
Mounting on manifold strip	PRS strip
Working pressure min./max.	2 bar / 10 bar
Ambient temperature min./max.	-15°C / +50°C
Medium temperature min./max.	-15°C / +50°C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Nominal flow Qn	See table below
Connector standard	EN 175301-803:2006
Protection class with connection	IP65
Compatibility index	14
Duty cycle	100 %
Typ. switch-on time	40 ms
Weight	See table below
Materials:	
Housing	Polyoxymethylene
Seals	Acrylonitrile butadiene rubber

Technical Remarks

- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

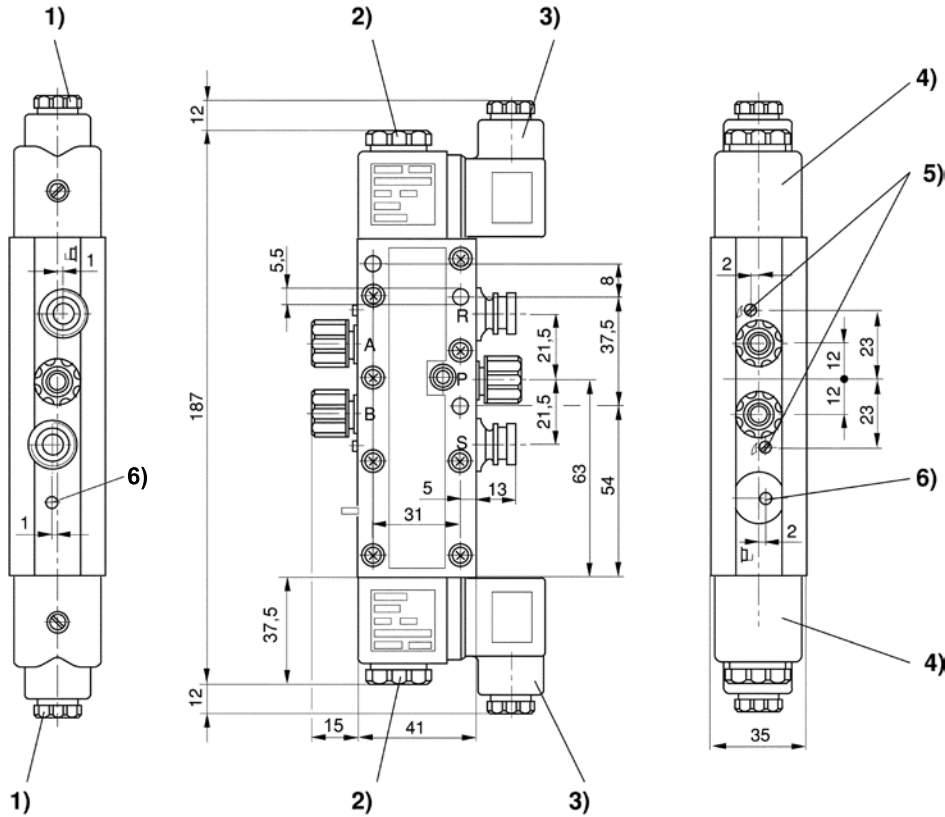
		Power consumption
		DC
		W
		2.1

	MO	Compressed air connection			Power consumption	Flow rate value	Weight	Part No.
		Input	Output	Exhaust				
					DC	Qn		
					[W]	[l/min]	[kg]	
		Ø 8x1	Ø 8x1	M14x1	2.1	700	0.319	5727415302
		Ø 10x1	Ø 10x1			950	0.316	5727465302

MO = Manual override
Basic valve without coil
Nominal flow Qn at 6 bar and Δp = 1 bar

Series CVI Accessories

Dimensions



D572_741

- 1) gland fitting M16x1,5
- 2) M5 internal thread accessible under cap
- 3) el. connector can be rotated at 90° intervals
- 4) coil can be plugged at 45° intervals
- 5) throttle screw for exhausts 5 (R) and 3 (S) (S)
- 6) manual override and position indicator

Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

5/4-directional valve, Series 740

- ▶ Qn = 700 - 950 l/min ▶ pipe connection ▶ Compressed air connection output: Ø 8x1 - Ø 10x1 ▶ Electr. connection: Plug, EN 175301-803, form A ▶ Can be assembled into blocks ▶ Manual override: without detent
- ▶ Pilot: internal ▶ ATEX optional



00134169

Version	Diaphragm poppet valve
Sealing principle	Soft sealing
Blocking principle	Plate principle, Single base plate principle
Mounting on manifold strip	PRS strip
Working pressure min./max.	3 bar / 10 bar
Ambient temperature min./max.	-15°C / +50°C
Medium temperature min./max.	-15°C / +50°C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Nominal flow Qn	See table below
Connector standard	EN 175301-803:2006
Protection class with connection	IP65
Compatibility index	14
Duty cycle	100 %
Typ. switch-on time	20 ms
Typ. switch-off time	54 ms
Weight	See table below
Materials:	
Housing	Polyoxymethylene
Seals	Acrylonitrile butadiene rubber

Technical Remarks

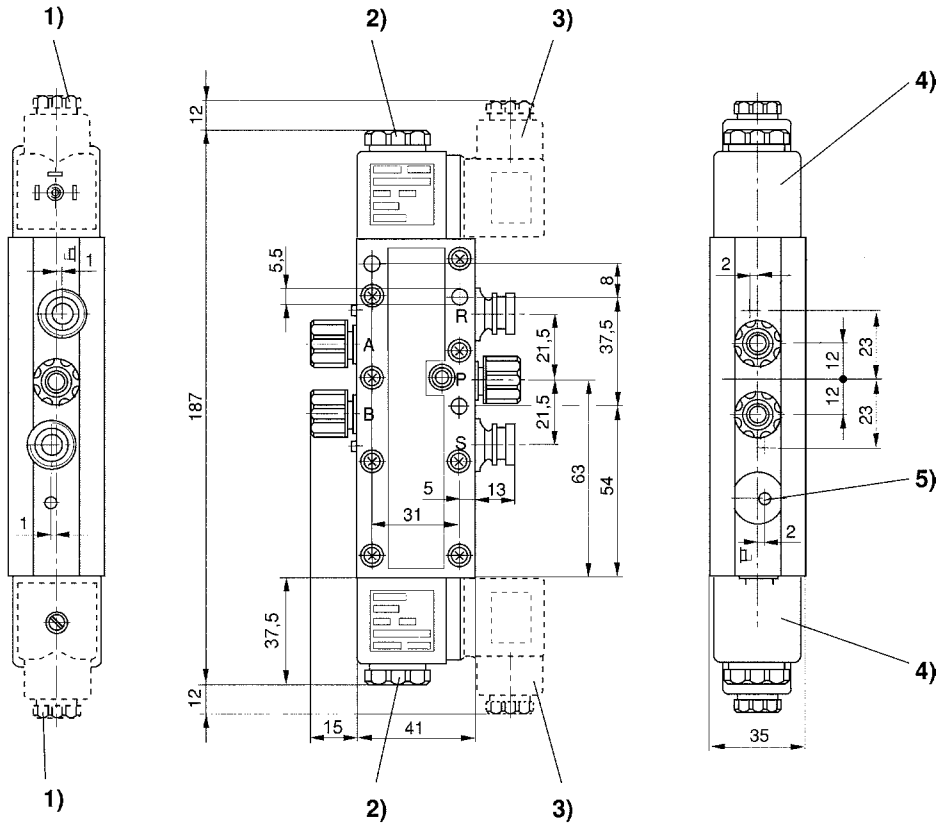
- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.
- NOTE: In order to ensure the operating function of the valve, do not fall below the minimum operating pressure of 3 bar!

	MO	Compressed air connection			Flow rate value	Weight	Fig.	Part No.
		Input	Output	Exhaust	Qn			
					[l/min]	[kg]		
		Ø 8x1	Ø 8x1	M14x1	700	0.318	Fig. 1	5727505302
		Ø 10x1	Ø 10x1		950	0.317		5727555302
		Ø 10x1	Ø 10x1	M14x1	950	0.318	-	5727565302
		Ø 8x1	Ø 8x1		700	0.317	Fig. 1	5727515302

MO = Manual override
 Basic valve without coil
 Nominal flow Qn at 6 bar and Δp = 1 bar

Series CVI Accessories

Fig. 1

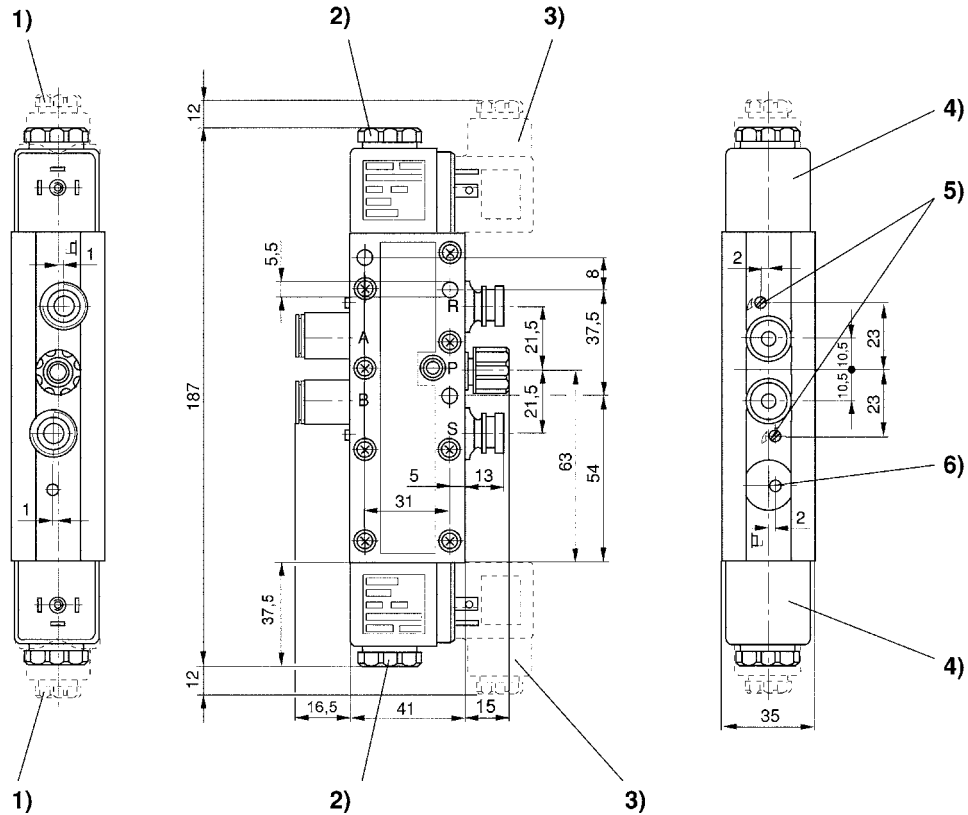


- 1) gland fitting M16x1,5
- 2) M5 internal thread accessible under cap
- 3) el. connector can be fixed at 90° intervals
- 4) coil can be mounted at 45° intervals
- 5) throttle screw for exhausts 5 (R) and 3 (S)
- 6) manual override and position indicator

D572_750

Series CVI
Accessories

Fig. 2



- 1) gland fitting M16x1,5
- 2) M5 internal thread accessible under cap
- 3) el. connector can be rotated at 90° intervals
- 4) coil can be plugged at 45° intervals
- 5) throttle screw for exhausts 5 (R) and 3 (S) (S)
- 6) manual override and position indicator

D572_748

Series CVI Accessories

5/2-directional valve, Series TC08

- ▶ Qn = 800 l/min ▶ Pilot valve width: 15 mm ▶ pipe connection ▶ Compressed air connection output: G 1/8
- ▶ Electr. connection: Plug, ISO 15217, form C ▶ Manual override: with detent ▶ single solenoid, double solenoid
- ▶ Pilot: internal



00137794

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Mounting on manifold strip	P-strip
Working pressure min./max.	See table below
Control pressure min./max.	See table below
Ambient temperature min./max.	-10 °C / +50 °C
Medium temperature min./max.	-10 °C / +50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Nominal flow Qn	800 l/min
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Generic emission standard in accordance with	EN 50081:1992
Mounting screw tightening torque	2 Nm
Weight	See table below
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber; Polyurethane
Front plate	Polyamide, fiber-glass reinforced
Threaded bushing	Brass, nickel-plated; Die cast zinc, chrome-plated

Technical Remarks

- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.

Operational voltage			Voltage tolerance			Power consumption	Switch-on power		Holding power	
DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz
						W	VA	VA	VA	VA
24 V	-	-	-10% / +10%	-	-	2	-	-	-	-
-	230 V	230 V	-	-10% / +10%	-10% / +10%	-	2.2	2	1.6	1.4

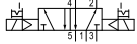

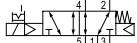

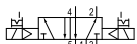

MO	Compressed air connection			Operating voltage			Power consumption	Hold- ing power	Part No.
	Input	Output	Exhaust	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	
							[W]	[VA]	
	G 1/8	G 1/8	G 1/8	24 V	-	-	2	-	0820060026

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

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Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

	MO	Compressed air connection			Operating voltage			Power consumption		Part No.
		Input	Output	Exhaust	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	
								[W]	[VA]	
		G 1/8	G 1/8	G 1/8	24 V	-	-	2	-	0820060501
		G 1/8	G 1/8	G 1/8	-	230 V	230 V	-	1.6	0820060028
		G 1/8	G 1/8	G 1/8	-	230 V	230 V	-	1.6	0820060503

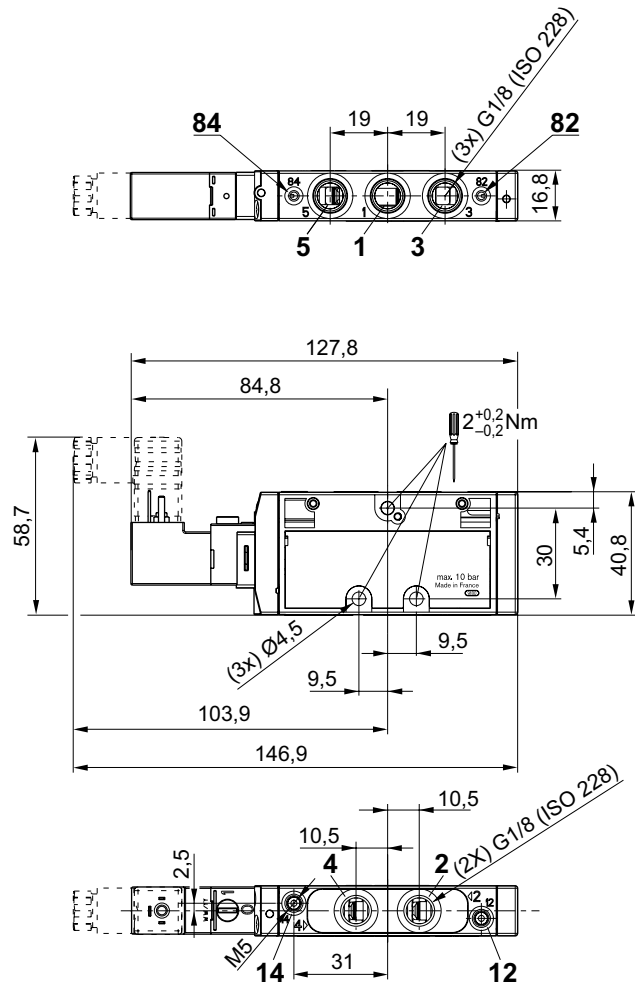
Part No.	Hold- ing power	Switch- on power	Switch- on power	Flow conduc- tance		Nom- inal resis- tance	Work- ing pressure min./max.	Control pressure min./max.	Switch-on time	Switch-off time	Weight
				b	C						
				AC 60 Hz	AC 50 Hz						
0820060026	-	-	-	0.36	3.5	280	3 / 10	3 / 10	14	17	0.14
0820060501	-	-	-	0.36	3.5	280	2 / 10	2 / 10	10	10	0.172
0820060028	1.4	2.2	2	0.36	3.5	14700	3 / 10	3 / 10	14	17	0.14
0820060503	1.4	2.2	2	0.36	3.5	14700	2 / 10	2 / 10	10	10	0.172

MO = Manual override

Nominal flow Qn at 6 bar and Δp = 1 bar

Series CVI Accessories

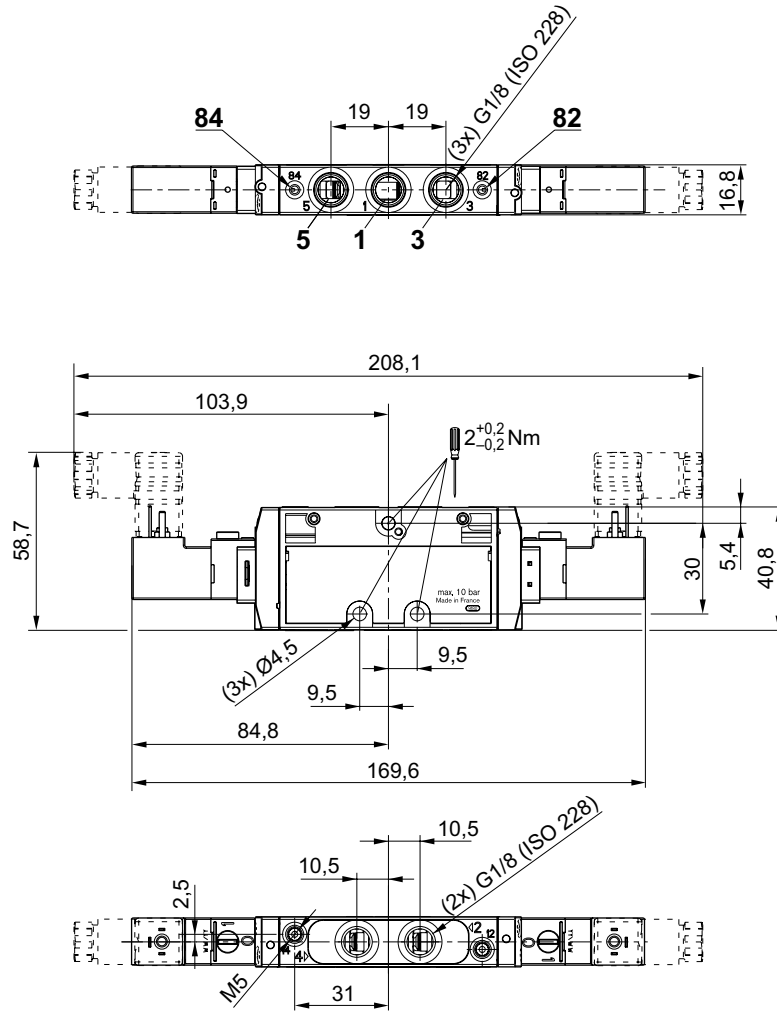
Dimensions, single solenoid



00111317_a

Series CVI
Accessories

Dimensions, double solenoid



00111318_a

Series CVI Accessories

5/3-directional valve, Series TC08

▶ Qn = 700 l/min ▶ Pilot valve width: 15 mm ▶ closed center ▶ pipe connection ▶ Compressed air connection
output: G 1/8 ▶ Electr. connection: Plug, ISO 15217, form C ▶ Manual override: with detent ▶ double solenoid
▶ Pilot: internal



00137798

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Mounting on manifold strip	P-strip
Working pressure min./max.	-- / 10 bar
Control pressure min./max.	3 bar / 10 bar
Ambient temperature min./max.	-10 °C / +50 °C
Medium temperature min./max.	-10 °C / +50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Nominal flow Qn	700 l/min
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	10 ms
Typ. switch-off time	11 ms
Generic emission standard in accordance with	EN 50081:1992
Mounting screw tightening torque	2 Nm
Weight	0.178 kg
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber; Polyurethane
Front plate	Polyamide, fiber-glass reinforced
Threaded bushing	Brass, nickel-plated; Die cast zinc, chrome-plated

Technical Remarks

- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.

Operational voltage			Voltage tolerance			Power consumption	Switch-on power		Holding power	
DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz
						W	VA	VA	VA	VA
24 V	-	-	-10% / +10%	-	-	2	-	-	-	-
-	230 V	230 V	-	-10% / +10%	-10% / +10%	-	2.2	2	1.6	1.4

Piston rod cylinders ▶ Cylinder valve units

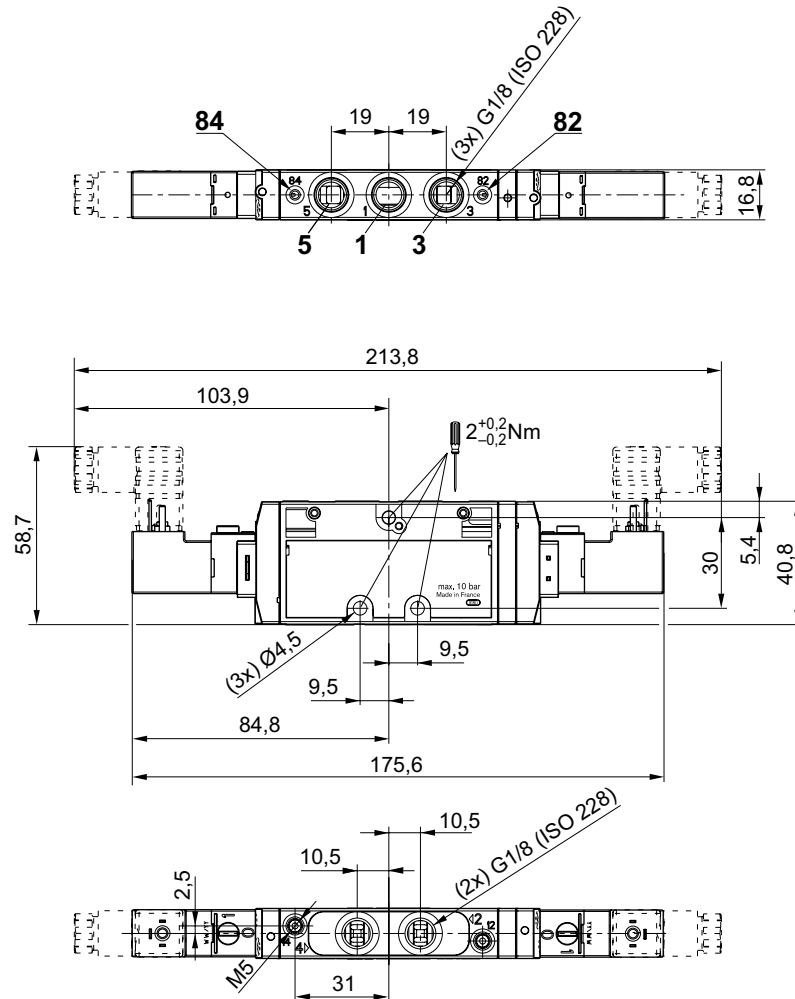
Series CVI
Accessories

	MO	Compressed air connection			Operating voltage			Power consumption		Part No.
		Input	Output	Exhaust	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	
								[W]	[VA]	
		G 1/8	G 1/8	G 1/8	24 V	-	-	2	-	0820061001
					-	230 V	230 V	-	1.6	0820061003

Part No.	Holding power		Switch-on power		Flow conductance		Nominal resistance	
	AC 60 Hz		AC 50 Hz		b			C
	[VA]	[VA]	[VA]	[VA]		[l/(s*bar)]		[Ω]
0820061001	-	-	-	-	0.34	3	280	
0820061003	1.4	2.2	2	-			14700	

MO = Manual override
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



00111319_a

Series CVI Accessories

5/2-directional valve, Series CD07

▶ Qn = 1200 l/min ▶ Pilot valve width: 30 mm ▶ pipe connection ▶ Compressed air connection output: G 1/4
▶ Electr. connection: Plug, EN 175301-803, form A ▶ Manual override: with detent ▶ single solenoid ▶ Pilot:
internal ▶ ATEX optional



00134143

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Mounting on manifold strip	P-strip, PRS strip
Working pressure min./max.	-- / 10 bar
Control pressure min./max.	3 bar / 10 bar
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Nominal flow Qn	1200 l/min
Nominal flow 1 ▶ 2	1200 l/min
Nominal flow 2 ▶ 3	1200 l/min
Compressed air connection	according to ISO 228-1 with directional pilot air exhaust EN 175301-803:2006 Protected against polarity reversal
Connector standard	EN 175301-803:2006 Protected against polarity reversal
Compatibility index	13, 14
Duty cycle	100 %
Materials:	
Housing	Die cast zinc; Polyamide, fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber

Technical Remarks

- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

	MO	Compressed air connection			Ambient temperature min./max.	Medium temperature min./max.	Part No.
		Input	Output	Exhaust			
					[°C]	[°C]	
		G 1/4	G 1/4	G 1/4	-25 °C / +50 °C	-25 °C / +50 °C	5776075302

MO = Manual override

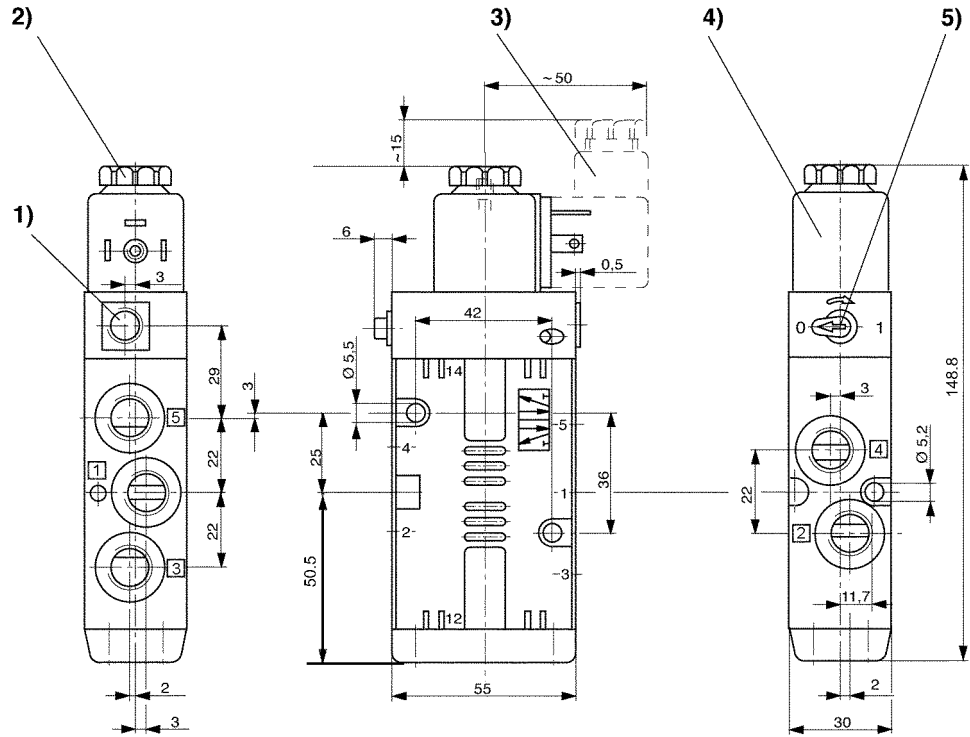
1) Nickel-plated armature guide (only suitable for DC variant), i.e. the base must not be equipped with AC coils.

Basic valve without coil

Nominal flow Qn at 6 bar and Δp = 1 bar

Series CVI
Accessories

Dimensions



D577_608

- 1) only with separate pilot control G 1/8
- 2) after removal of cap M 5 internal thread M5
- 3) el. connector can
- 4) coil can be plugged at 45° intervals
- 5) manual override

Series CVI Accessories

5/2-directional valve, Series CD07

▶ Qn = 1200 l/min ▶ Pilot valve width: 30 mm ▶ pipe connection ▶ Compressed air connection output: G 1/4
▶ Electr. connection: Plug, EN 175301-803, form A ▶ Manual override: with detent ▶ double solenoid ▶ Pilot:
internal ▶ ATEX optional



00134144

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Mounting on manifold strip	P-strip, PRS strip
Working pressure min./max.	-- / 10 bar
Control pressure min./max.	2 bar / 10 bar
Ambient temperature min./max.	-25 °C / +50 °C
Medium temperature min./max.	-25 °C / +50 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Nominal flow Qn	1200 l/min
Nominal flow 1 ▶ 2	1200 l/min
Nominal flow 2 ▶ 3	1200 l/min
Compressed air connection	according to ISO 228-1 with directional pilot air exhaust
Connector standard	EN 175301-803:2006
Compatibility index	Protected against polarity reversal 13, 14
Duty cycle	100 %
Materials:	
Housing	Die cast zinc; Polyamide, fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber

Technical Remarks

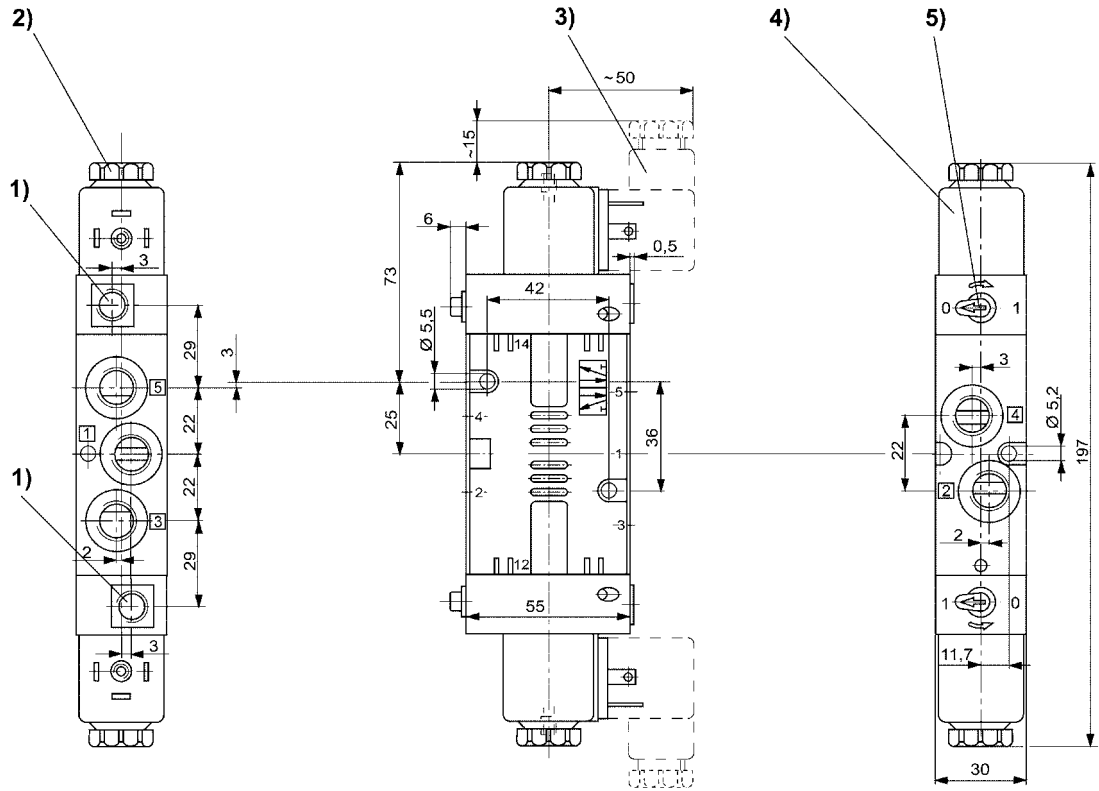
- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

	MO	Compressed air connection			Part No.
		Input	Output	Exhaust	
		G 1/4	G 1/4	G 1/4	5776275302

MO = Manual override
Basic valve without coil
Nominal flow Qn at 6 bar and Δp = 1 bar

Series CVI Accessories

Dimensions



D577_628

- 1) only with separate pilot control G 1/8
- 2) after removal of cap M 5 internal thread M5
- 3) el. connector can
- 4) coil can be plugged at 45° intervals
- 5) manual override

Series CVI Accessories

5/3-directional valve, Series CD07

▶ Qn = 900 - 1070 l/min ▶ Pilot valve width: 30 mm ▶ pipe connection ▶ Compressed air connection output: G 1/4 ▶ Electr. connection: Plug, EN 175301-803, form A ▶ Manual override: with detent ▶ double solenoid ▶ Pilot: internal ▶ ATEX optional



00134145

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Mounting on manifold strip	P-strip, PRS strip
Working pressure min./max.	-- / 10 bar
Control pressure min./max.	3 bar / 10 bar
Ambient temperature min./max.	+0 °C / +50 °C
Medium temperature min./max.	+0 °C / +50 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 1 mg/m³
Nominal flow Qn	900 l/min
Nominal flow 1 ▶ 2	See table below
Nominal flow 2 ▶ 3	See table below
Compressed air connection	according to ISO 228-1 with directional pilot air exhaust
Connector standard	EN 175301-803:2006
Compatibility index	Protected against polarity reversal
Duty cycle	13, 14
Materials:	100 %
Housing	Die cast zinc; Polyamide, fiber-glass reinforced

Technical Remarks

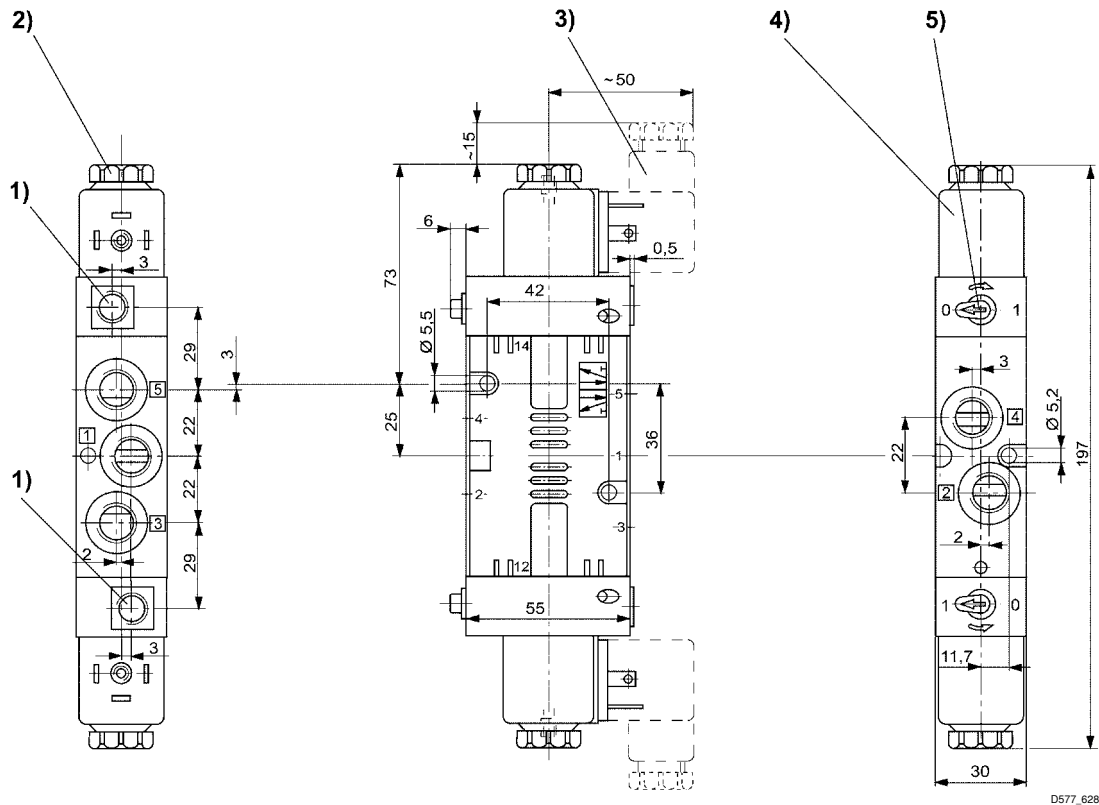
- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

	MO	Compressed air connection				Flow rate value		Fig.	Part No.
		Input	Output	Exhaust	Pilot Exhaust	Qn 1▶2	Qn 2▶3		
		[l/min]							
		G 1/4	G 1/4	G 1/4	M5	1070	950	Fig. 2	577775302
		G 1/4	G 1/4	G 1/4	M5	960	900	Fig. 1	5777755302

MO = Manual override
Basic valve without coil
Seals: Acrylonitrile butadiene rubber
Nominal flow Qn at 6 bar and Δp = 1 bar

Series CVI Accessories

Fig. 1

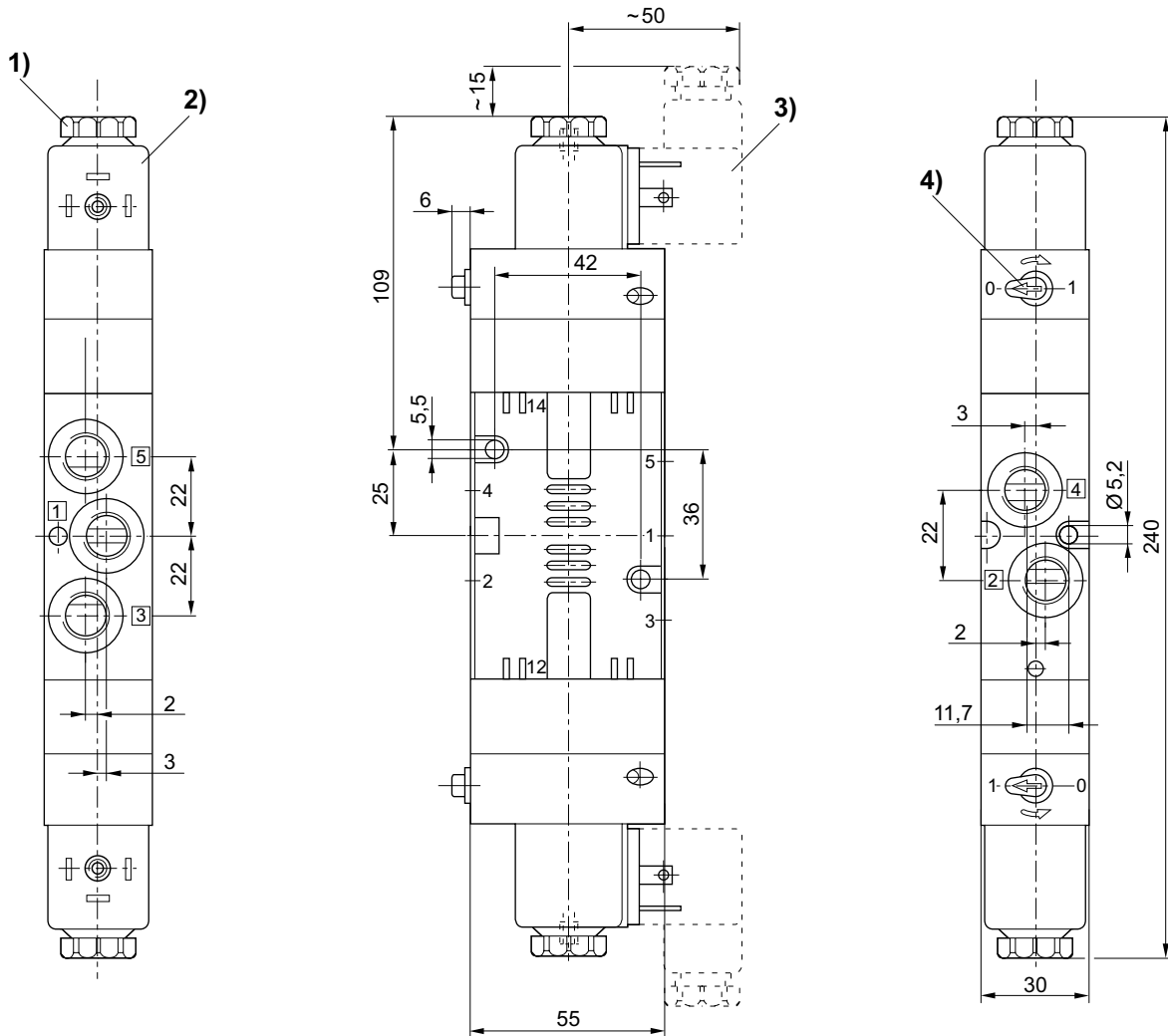


D577_628

- 1) only with separate pilot control G 1/8
- 2) after removal of cap M 5 internal thread M5
- 3) el. connector can be plugged at 90° intervals
- 4) coil can be plugged at 45° intervals
- 5) manual override

Series CVI Accessories

Fig. 2



00138175

- 1) after removal of cap M 5 internal thread 2) coil can be plugged at 45° intervals 3) el. connector
4) manual override

Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

5/2-directional valve, Series TC15

- ▶ Qn = 1500 l/min ▶ Pilot valve width: 15 mm ▶ pipe connection ▶ Compressed air connection output: G 1/4
- ▶ Electr. connection: Plug, ISO 15217, form C ▶ Manual override: with detent ▶ single solenoid, double solenoid
- ▶ Pilot: internal



00137795

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Mounting on manifold strip	P-strip
Working pressure min./max.	See table below
Control pressure min./max.	See table below
Ambient temperature min./max.	-10 °C / +50 °C
Medium temperature min./max.	-10 °C / +50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Nominal flow Qn	1500 l/min
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Generic emission standard in accordance with	EN 50081:1992
Mounting screw tightening torque	2.5 Nm
Weight	See table below
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber; Hydrogenated nitrile butadiene rubber
Front plate	Polyamide, fiber-glass reinforced

Technical Remarks

- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.

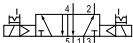

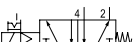

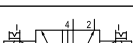

Operational voltage			Voltage tolerance			Power consumption	Switch-on power		Holding power	
DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz
						W	VA	VA	VA	VA
24 V	-	-	-10% / +10%	-	-	2	-	-	-	-
-	230 V	230 V	-	-10% / +10%	-10% / +10%	-	2.2	2	1.6	1.4

MO	Compressed air connection			Operating voltage			Power consumption	Holding power	Part No.
	Input	Output	Exhaust	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	
							[W]	[VA]	
	G 1/4	G 1/4	G 1/4	24 V	-	-	2	-	0820058026

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

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Series CVI
Accessories

	MO	Compressed air connection			Operating voltage			Power consumption		Part No.
		Input	Output	Exhaust	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	
								[W]	[VA]	
		G 1/4	G 1/4	G 1/4	24 V	-	-	2	-	0820058501
		G 1/4	G 1/4	G 1/4	-	230 V	230 V	-	1.6	0820058028
		G 1/4	G 1/4	G 1/4	-	230 V	230 V	-	1.6	0820058503

Part No.	Holding power	Switch-on power			Flow conductance		Nominal resistance	Working pressure min./max.	Control pressure min./max.	Switch-on time	Switch-off time	Weight
		AC 60 Hz	AC 50 Hz	AC 60 Hz	b	C						
		[VA]	[VA]	[VA]		[l/(s*bar)]						
0820058026	-	-	-	0.33	6.8	280	3 / 10	3 / 10	12	35	0.235	
0820058501	-	-	-	0.33	6.8	280	2 / 10	2 / 10	10	10	0.263	
0820058028	1.4	2.2	2	0.33	6.8	14700	3 / 10	3 / 10	12	35	0.235	
0820058503	1.4	2.2	2	0.33	6.8	14700	2 / 10	2 / 10	10	10	0.263	

MO = Manual override

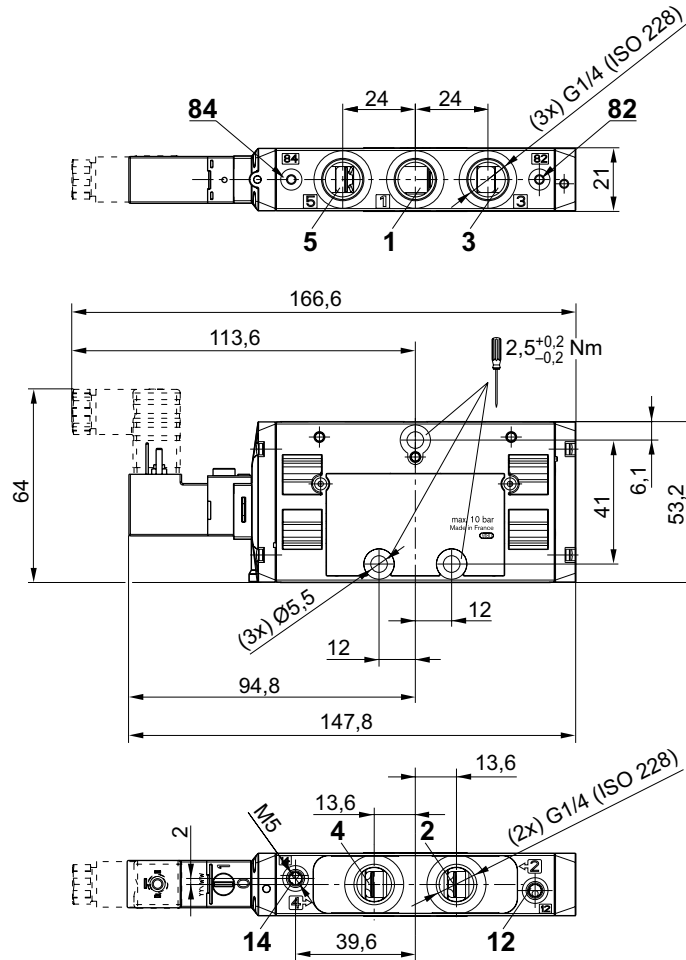
push-in fitting: Brass, nickel-plated; Die cast zinc, chrome-plated

Nominal flow Qn at 6 bar and Δp = 1 bar

Piston rod cylinders ▶ Cylinder valve units

Series CVI
Accessories

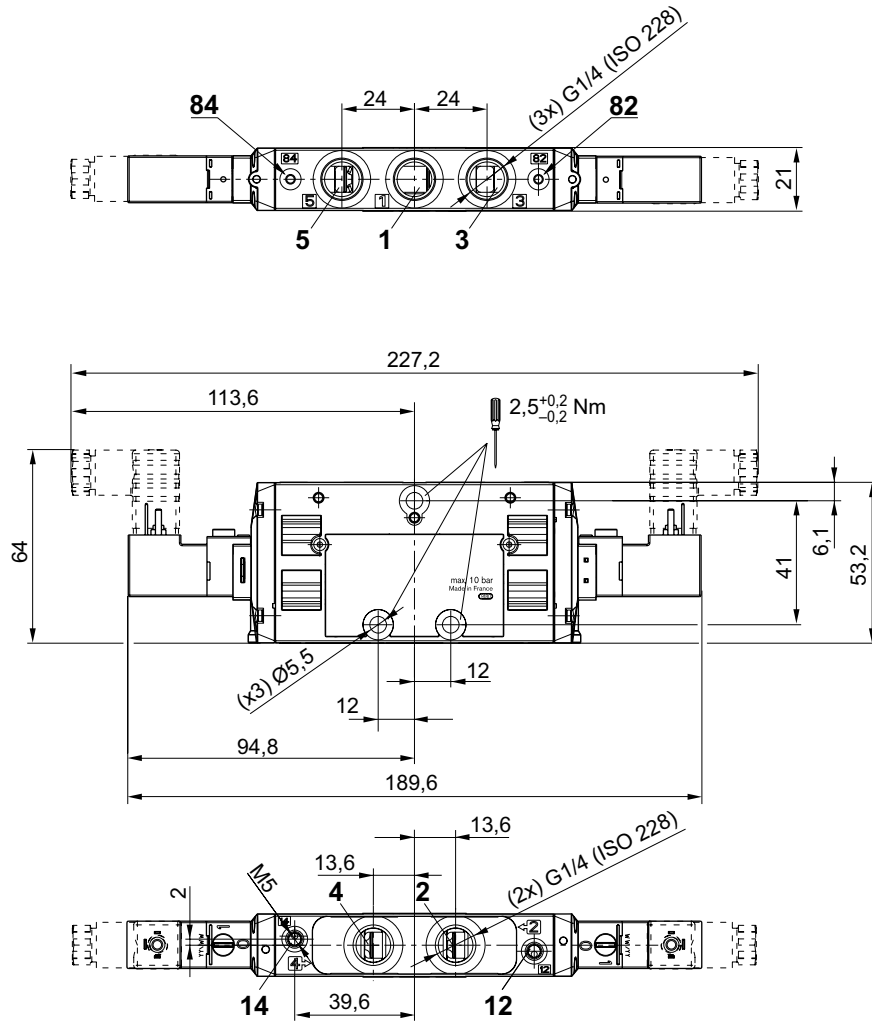
Dimensions, single solenoid



00111341_a

Series CVI Accessories

Dimensions, double solenoid



00111342_a

Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

5/3-directional valve, Series TC15

- ▶ Qn = 1300 l/min ▶ Pilot valve width: 15 mm ▶ closed center ▶ pipe connection ▶ Compressed air connection
- output: G 1/4 ▶ Electr. connection: Plug, ISO 15217, form C ▶ Manual override: with detent ▶ double solenoid
- ▶ Pilot: internal



00137800

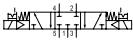

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Mounting on manifold strip	P-strip
Working pressure min./max.	-- / 10 bar
Control pressure min./max.	3 bar / 10 bar
Ambient temperature min./max.	-10 °C / +50 °C
Medium temperature min./max.	-10 °C / +50 °C
Medium	Compressed air
Max. particle size	5 μm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³
Nominal flow Qn	1300 l/min
Connector standard	ISO 15217
Protection class with connection	IP65
Duty cycle	100 %
Typ. switch-on time	12 ms
Typ. switch-off time	13 ms
Generic emission standard in accordance with	EN 50081:1992
Mounting screw tightening torque	2.5 Nm
Weight	0.278 kg
Materials:	
Housing	Polyamide, fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber; Hydrogenated nitrile butadiene rubber
Front plate	Polyamide, fiber-glass reinforced

Technical Remarks

- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.

Operational voltage			Voltage tolerance			Power consumption	Switch-on power		Holding power	
DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz
						W	VA	VA	VA	VA
24 V	-	-	-10% / +10%	-	-	2	-	-	-	-
-	230 V	230 V	-	-10% / +10%	-10% / +10%	-	2.2	2	1.6	1.4

Series CVI
Accessories

	MO	Compressed air connection			Operating voltage			Power consumption		Holding power	Part No.
		Input	Output	Exhaust	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz		
								[W]	[VA]		
		G 1/4	G 1/4	G 1/4	24 V -	- 230 V	- 230 V	2 -	- 1.6	0820059001 0820059003	

Part No.	Holding power		Switch-on power		Flow conductance		Nominal resistance
	AC 60 Hz		AC 50 Hz		AC 60 Hz		
	[VA]	[VA]	[VA]	[VA]	b	C	
0820059001	-	-	-	-	0.31	5.9	280
0820059003	1.4	2.2	2	2			14700

MO = Manual override

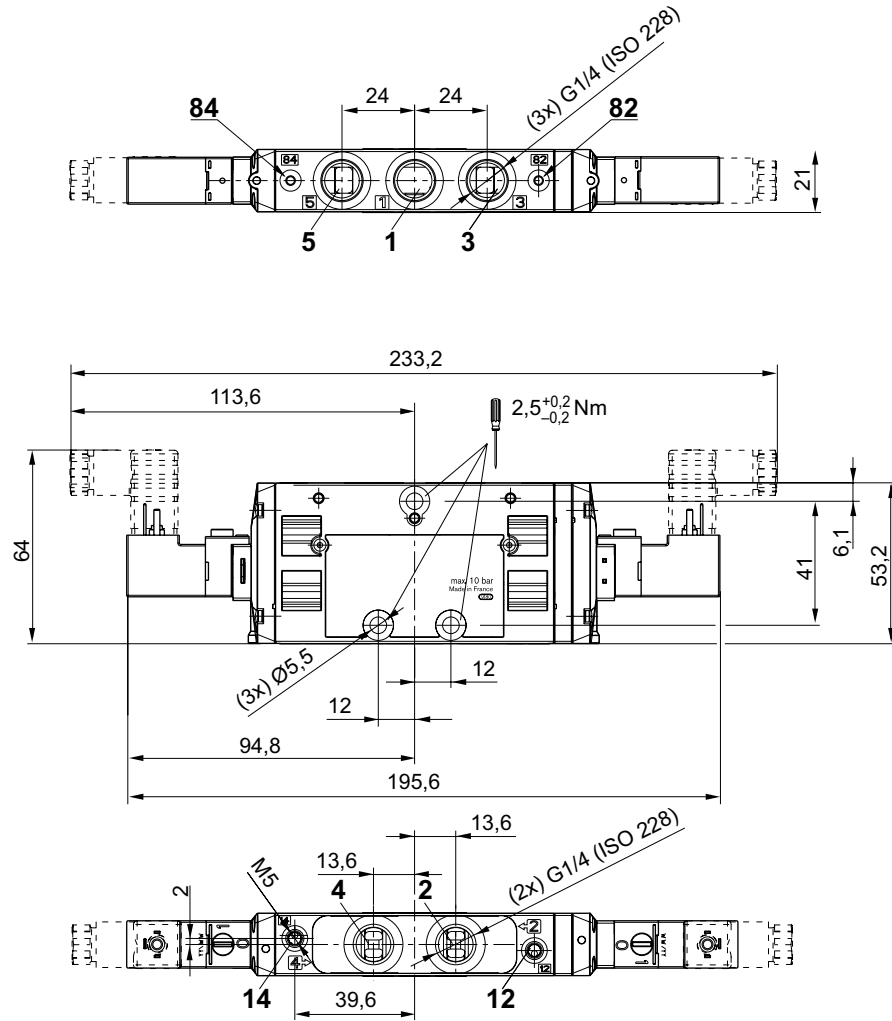
push-in fitting: Brass, nickel-plated; Die cast zinc, chrome-plated

Nominal flow Q_n at 6 bar and Δp = 1 bar

Piston rod cylinders ▶ Cylinder valve units

Series CVI
Accessories

Dimensions



00111343_a

Series CVI

Accessories

5/2-directional valve, Series CD12

- ▶ Qn = 4100 l/min ▶ Pilot valve width: 30 mm ▶ pipe connection ▶ Compressed air connection output: G 1/2
 ▶ Electr. connection: Plug, EN 175301-803, form A ▶ single solenoid ▶ Pilot: internal ▶ ATEX optional

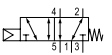



00134157

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Control pressure min./max.	2 bar / --
Ambient temperature min./max.	-15 °C / --
Medium temperature min./max.	-15 °C / --
Medium	Compressed air
Max. particle size	50 μm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Nominal flow Qn	4100 l/min
Compressed air connection	according to ISO 228-1 with directional pilot air exhaust
Connector standard	EN 175301-803:2006
Duty cycle	100 %
Materials:	
Housing	Aluminum; Polyamide, fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber; Polyurethane

Technical Remarks

- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

	MO	Compressed air connection			Working pressure min./max.	Compatibility index	Weight	Note	Part No.
		Input	Output	Exhaust					
					[bar]		[kg]		
		G 1/2	G 1/2	G 1/2	2 / 10	13, 14	0.85	2)	R412008096

MO = Manual override

1) temperature range for ATEX application: -10 °C ... 60 °C

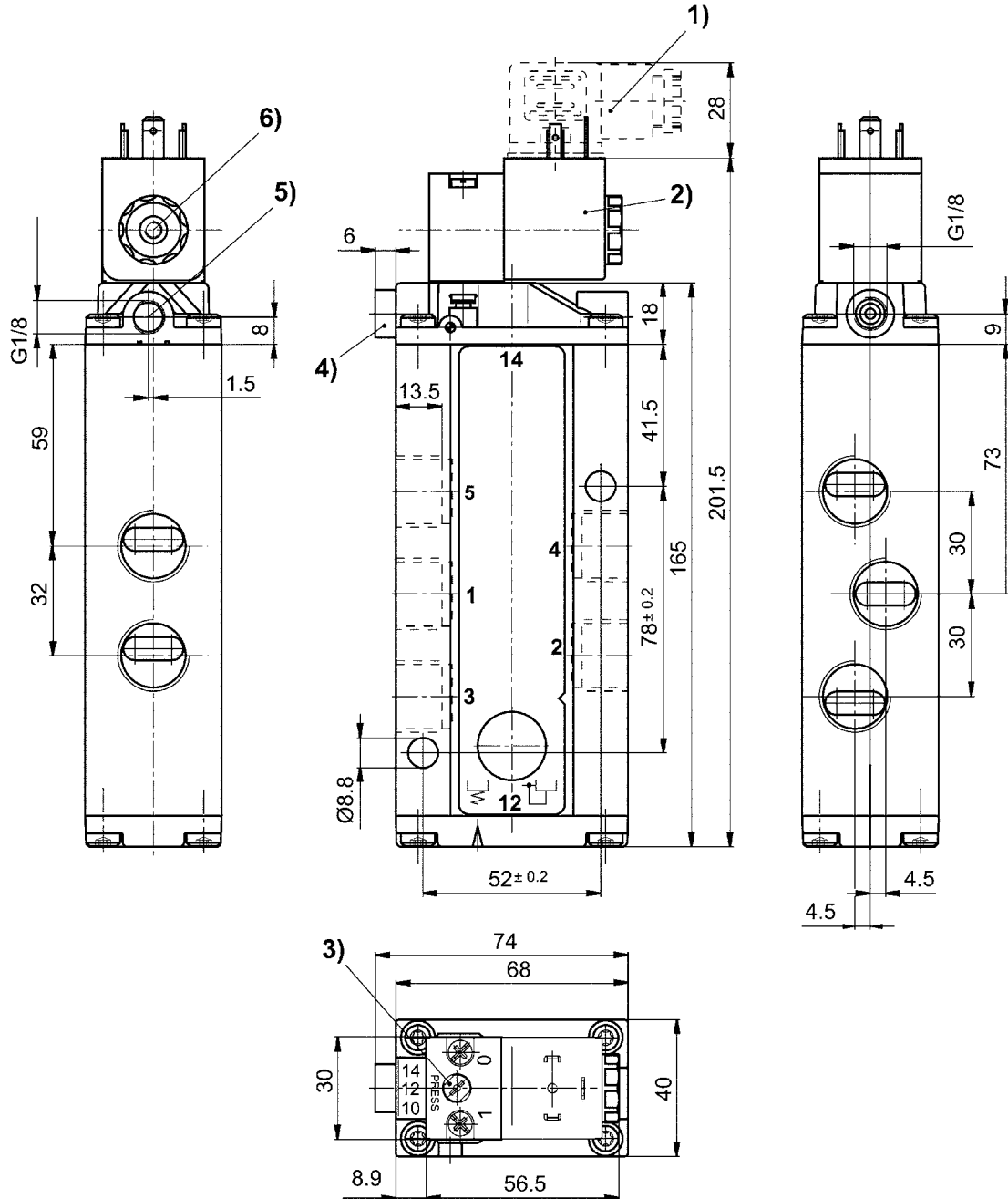
2) Exhaust cap

Basic valve without coil

Nominal flow Qn at 6 bar and Δp = 1 bar

Series CVI Accessories

Dimensions



- 1) electrical connector 2) each coil can be rotated by 90° 3) manual override
 4) port X (only for externally piloted valves) 5) vent port of piston 6) pilot exhaust port, M5

D572_545

Series CVI Accessories

5/2-directional valve, Series CD12

▶ Qn = 4100 l/min ▶ Pilot valve width: 30 mm ▶ pipe connection ▶ Compressed air connection output: G 1/2
▶ Electr. connection: Plug, EN 175301-803, form A ▶ Manual override: with detent, without detent ▶ double solenoid ▶ Pilot: internal ▶ ATEX optional

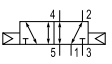



00134158

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Control pressure min./max.	2 bar / --
Ambient temperature min./max.	-15 °C / --
Medium temperature min./max.	-15 °C / --
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Nominal flow Qn	4100 l/min
Compressed air connection	according to ISO 228-1 with directional pilot air exhaust
Connector standard	EN 175301-803:2006
Duty cycle	100 %
Materials:	
Housing	Aluminum; Polyamide, fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber; Polyurethane

Technical Remarks

- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

	MO	Compressed air connection			Working pressure min./max.	Compatibility index	Weight	Note	Part No.
		Input	Output	Exhaust					
					[bar]		[kg]		
		G 1/2	G 1/2	G 1/2	2 / 10	13, 14	0.9	1)	R412008097

MO = Manual override

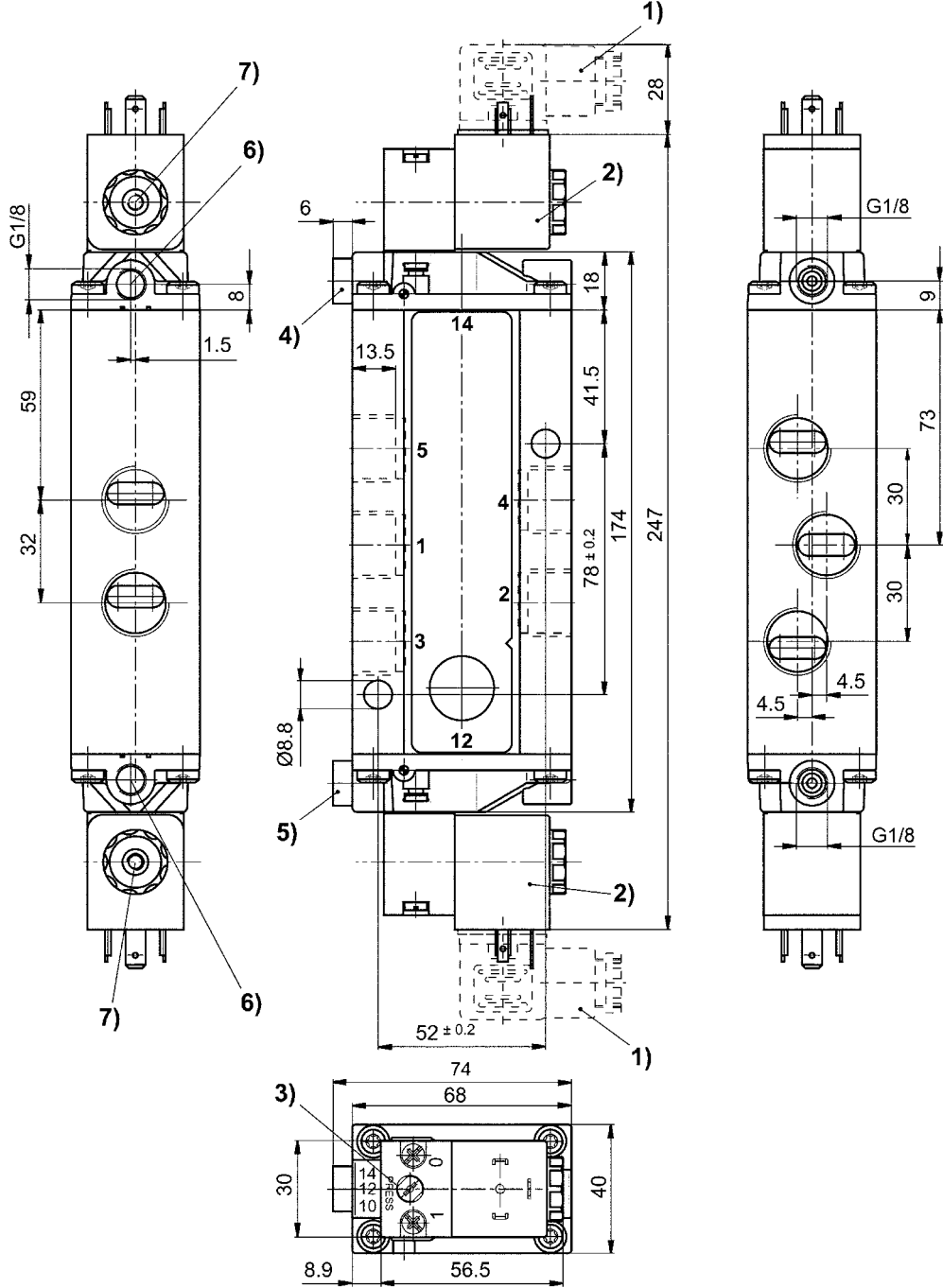
1) Exhaust cap

Basic valve without coil

Nominal flow Qn at 6 bar and Δp = 1 bar

Series CVI
Accessories

Dimensions



- 1) el. connector 2) coil can be rotated at 90° intervals 3) manual override
- 4) port X, side 14 5) port X, side 12 6) port without function 7) pilot exhaust port, M5

D572_555

Series CVI Accessories

5/3-directional valve, Series CD12

▶ Qn = 3800 l/min ▶ Pilot valve width: 30 mm ▶ closed center ▶ pipe connection ▶ Compressed air connection
output: G 1/2 ▶ Electr. connection: Plug, EN 175301-803, form A ▶ Manual override: with detent, without detent
▶ double solenoid ▶ Pilot: internal ▶ ATEX optional



00134159

Version	Spool valve, zero overlap
Sealing principle	Soft sealing
Control pressure min./max.	3 bar / --
Ambient temperature min./max.	-15 °C / --
Medium temperature min./max.	-15 °C / --
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m ³ - 1 mg/m ³
Compressed air connection	according to ISO 228-1 with directional pilot air exhaust
Connector standard	EN 175301-803:2006
Duty cycle	100 %
Materials:	
Housing	Aluminum; Polyamide, fiber-glass reinforced
Seals	Acrylonitrile butadiene rubber; Polyurethane

Technical Remarks

- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

	MO	Compressed air connection				Flow rate value			Working pressure min./max.	Part No.
		Input	Output	Exhaust	Pilot Exhaust	Qn	Qn 1▶2	Qn 2▶3		
						[l/min]			[bar]	
		G 1/2	G 1/2	G 1/2	M5	3800	3800	3800	3 / 10	R412008098

Part No.	Compatibility index	Weight	Note
		[kg]	
R412008098	13, 14	1	1)

MO = Manual override

1) Exhaust cap

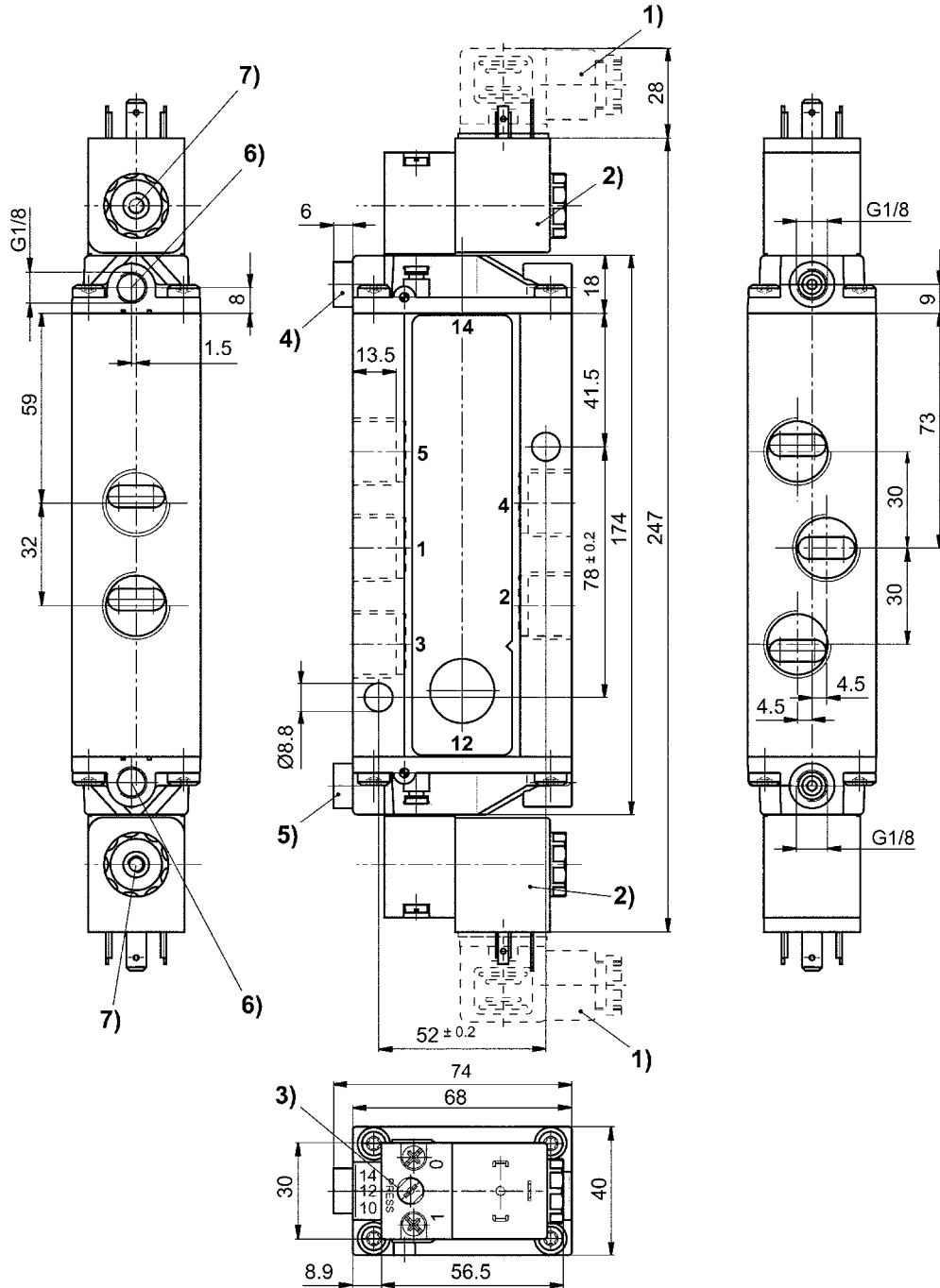
Basic valve without coil

Nominal flow Qn at 6 bar and Δp = 1 bar

Piston rod cylinders ▶ Cylinder valve units

Series CVI
Accessories

Dimensions



- 1) el. connector 2) coil can be rotated at 90° intervals 3) manual override
- 4) port X, side 14 5) port X, side 12 6) port without function 7) pilot exhaust port, M5

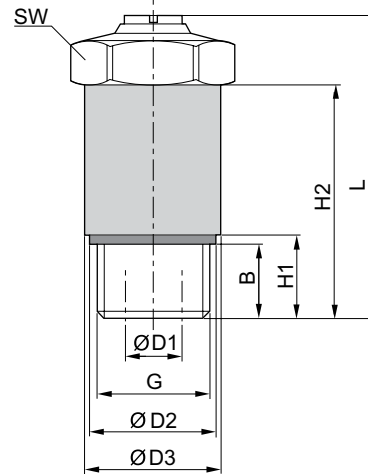
D572_555

Series CVI
 Accessories

Throttle valve, Series CH02

 ▶ $Q_n = 700 - 4100$ l/min ▶ Throttle valve with silencer ▶ external thread


00108473



00128135

	Port 1	Qn	Tightening torque for silencer max.	Weight	Part No.
	G 1/8	700	3	0.025	0821201102
	G 1/4	1700	8	0.045	0821201103
	G 1/2	4100	16	0.135	0821201105

Nominal flow Q_n at 6 bar and $\Delta p = 1$ bar

Part No.	Port G	Ø D1	Ø D2	Ø D3	H1	H2	B	L 1)	SW	Weight kg
0821201102	G 1/8	4	13	16	7	24	5.5	31.5	13	0.025
0821201103	G 1/4	6.5	17.9	20	10	30	8	37.5	17	0.045
0821201105	G 1/2	12	26.5	30	12	42	10	52	24	0.135

1) Max.

Piston rod cylinders ▶ Cylinder valve units

Series CVI
Accessories

Stop valve

▶ Qn = 340 - 680 l/min ▶ Internal thread / external thread ▶ thread-in



00108487

Version
Working pressure min./max.
Ambient temperature min./max.
Medium temperature min./max.
Medium

Poppet valve
2 bar / 10 bar
-20°C / +80°C
-20°C / +80°C
Compressed air
Compressed air

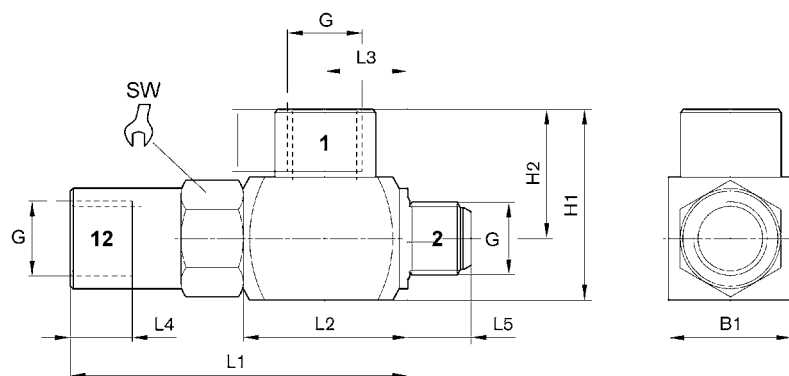
Materials:
Housing
Seals

Brass, nickel-plated
Acrylonitrile butadiene rubber

	Port 1	Port 2	Port 12	Qn 2▶1 [l/min]	Weight [kg]	Part No.
	G 1/8	G 1/8	G 1/8	340	0.059	0821003075
	G 1/4	G 1/4	G 1/4	680	0.103	0821003076

Sealing material: Acrylonitrile butadiene rubber
Nominal flow Qn at 6 bar and Δp = 1 bar

Dimensions



00109128_a

Part No.	Port G	L1	L2	L3	L4	L5	H1	H2	B1	SW	Weight kg
0821003075	G 1/8	50.5	25.4	12.7	8	7.5	24.5	16	17	15	0.059
0821003076	G 1/4	59.6	29	14.5	12	11.4	34	23	22	18	0.103

Series CVI
 Accessories

Pressure regulator

▶ Qn = 400 - 750 l/min ▶ Internal thread, external thread ▶ Poppet valve



00111948_a

Working pressure min./max.	1 bar / 16 bar
Ambient temperature min./max.	-10°C / +70°C
Medium temperature min./max.	-10°C / +70°C
Medium	Compressed air

Materials:	
Housing	Brass, galvanized; Polyamide; Aluminum, black anodized
Seals	Acrylonitrile butadiene rubber

Technical Remarks

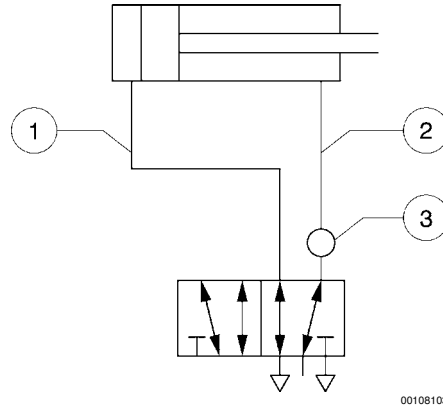
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.

	Compressed air connection		Adjustment range min./max.	Nominal flow	Weight	Fig.	Part No.
	Input	Output					
	G 1/8	G 1/8	1 / 8	400	0.08	Fig. 1	0821302078
	G 1/4	G 1/4		600	0.11		0821302080
	G 1/2	G 1/2		750	0.075		0821302082

Nominal flow Qn at 6 bar and Δp = 1 bar

Series CVI
Accessories

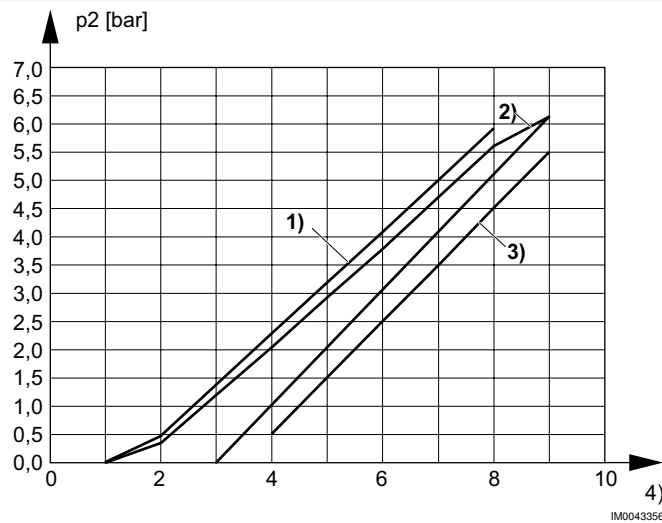
Application example



- 1) e.g. forward stroke with max. pressure
- 2) return stroke with reduced pressure
- 3) installation point on directional control valve

At low tightening torque, the sealing ring enables the banjo union to swivel through 360°. Further tightening locks the banjo union into position. Adjust pressure via adjustment screw with hexagon socket. Lock using counter nuts.

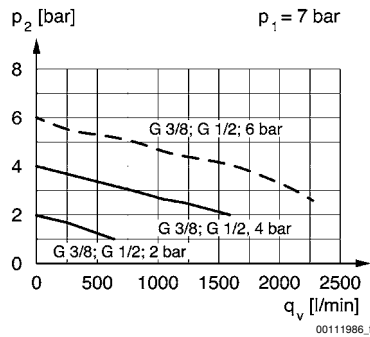
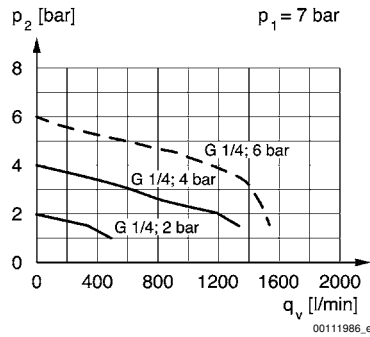
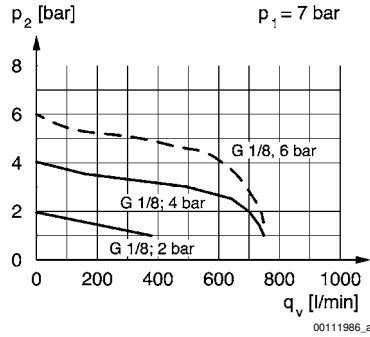
Hysteresis



- 1) Overfill hysteresis
- 2) Control hysteresis
- 3) Refill hysteresis
- 4) Adjustment screw rotations

Series CVI Accessories

Pressure characteristics curve (flow rate from 1 to 2)

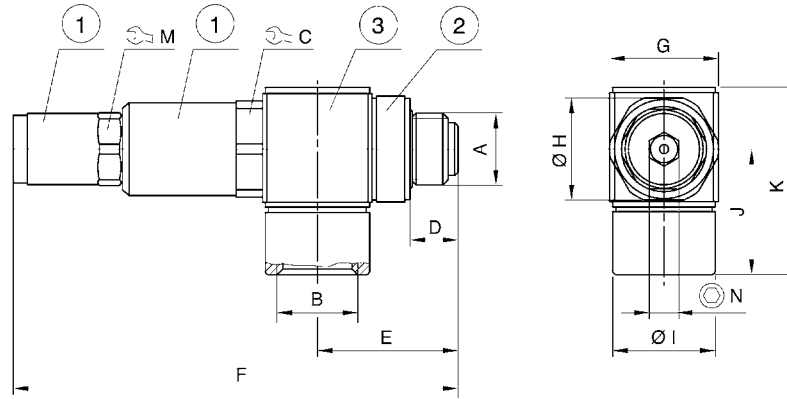


p_1 = working pressure; p_2 = secondary pressure; q_v = nominal flow

Piston rod cylinders ▶ Cylinder valve units

Series CVI
Accessories

Fig. 1



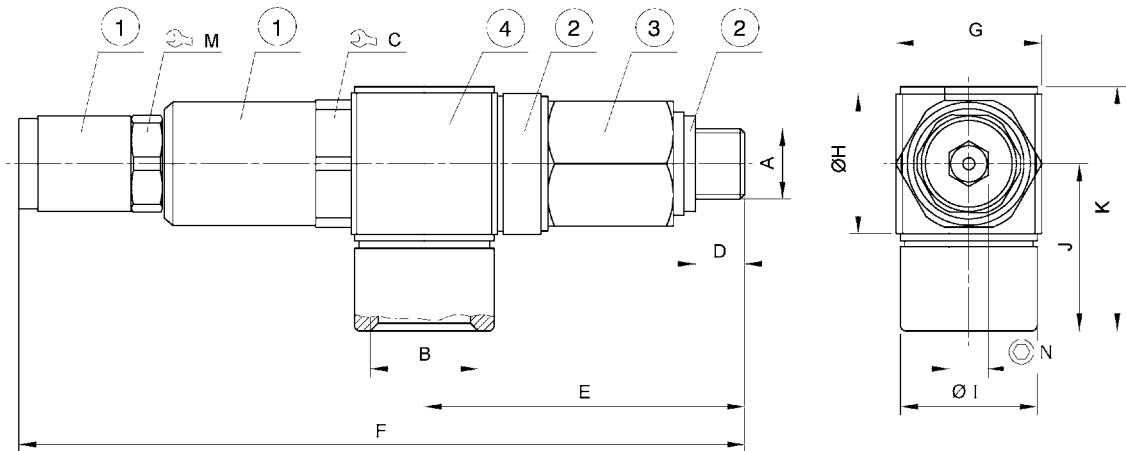
00108127

- 1) galvanized brass
- 2) polyamide
- 3) anodized black aluminum

Part No.	A	B	C	D	E	F	G	H	I	J	K	M
0821302078	G 1/8	G 1/8	17	6.3	19.8	70.8	15	15	13	18.5	26.7	13
0821302080	G 1/4	G 1/4	17	9.5	25.8	78.8	19	19	18	22.5	32.9	13
0821302082	G 1/2	G 1/2	27	11.5	34	86.2	28	28	25	31	46.3	17

Part No.	N											
0821302078	5											
0821302080	5											
0821302082	6											

Fig. 2



00108128

- 1) galvanized brass
- 2) polyamide
- 3) galvanized brass
- 4) anodized black aluminum

Series CVI Accessories

Fittings - Accessories, Series 740



p893_900

Fig. 1

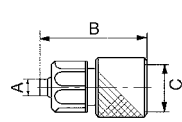


Fig. 2

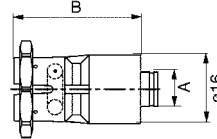


Fig. 3

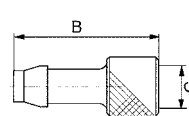


Fig. 4

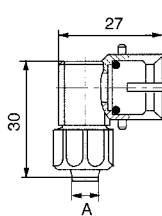


Fig. 5

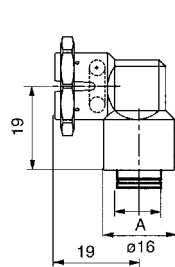


Fig. 6

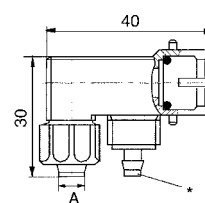


Fig. 7

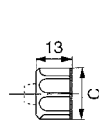


Fig. 8

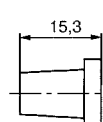


Fig. 9

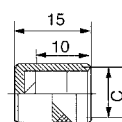
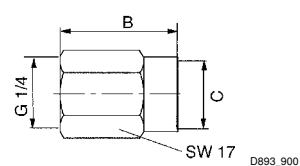


Fig. 10



Part No.	Type	Ø A	B	C	Fig.				
8919905414	tube nut, Ø 10x1	-	-	M14x1	Fig. 7				
8993809904	Silencers	-	-	-	Fig. 8				
8919905404	tube nut, Ø 8x1	-	-	M12x1	Fig. 7				

Exhaust cap, Series SI1



8931-731

Working pressure min./max.
Ambient temperature min./max.
Medium

0 bar / 10 bar
-5 °C / +50 °C
Compressed air

Compressed air connection	Order quantity	Weight	Part No.
	[piece]	[kg]	
R 1/4	10	0.007	8994701900

Series CVI
Accessories

Dimensions

Fig. 1

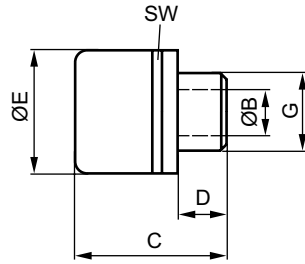
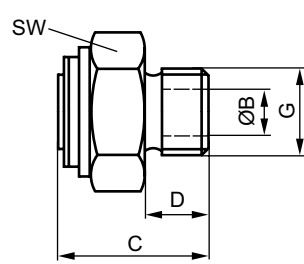


Fig. 2



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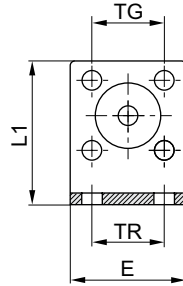
Part No.	Port G	Fig.	B	C	D	E	SW				
8994701900	R 1/4	1	8	20.5	8	20	19				

Series CVI Accessories

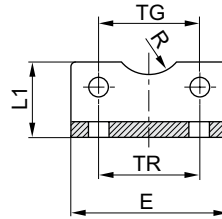
Foot mounting, Series MS1



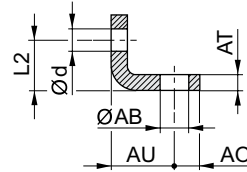
00105808



Ø16



Ø20 - 320



00126387

Scope of delivery: 2 foot mountings incl. mounting screws

Part No.	Piston Ø	For series	ØAB	AO	AT	AU ±0,2	Ød	E	L1	L2
1827001271	32	ICL CCI CCL-IC/-IS PRA/TRB CVI	7	8	4 ±0,3	24	6.6	48	25	15.5
1827001272	40	ICL CCI CCL-IC/-IS PRA/TRB CVI	10	10	4 ±0,3	28	6.6	56	26	17
1827001273	50	ICL CCI CCL-IC/-IS PRA/TRB CVI	10	11	5 ±0,3	32	9	68	32	21.5
1827001498	63	ICL CCI CCL-IC/-IS PRA/TRB CVI	10	13	5 ±0,3	32	9	78	34	21.5
1827001275	80	ICL CCI CCL-IC/-IS PRA/TRB CVI	12	16	6 ±0,5	41	11	98	47	27
1827001276	100	ICL CCI CCL-IC/-IS PRA/TRB CVI	14.5	19	6 ±0,5	41	11	117	52	26.5
1827001310	125	ICL PRA TRB CCL-IS CVI	16.5	20	8 ±1,0	45	13.5	144	69	35
1827001457	160	ITS TRB CVI	18.5	23	10 ±1,0	60	17.5	185	100	45
1827001458	200	ITS TRB CVI	24	26	12 ±1,0	70	17.5	220	120	47.5

Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

Part No.	Piston Ø	R	TG	TR	Standardization					
1827001271	32	15	32,5 ±0,2	32	ISO 15552					
1827001272	40	17.5	38 ±0,2	36	ISO 15552					
1827001273	50	20	46,5 ±0,2	45	ISO 15552					
1827001498	63	22.5	56,5 ±0,2	50	ISO 15552					
1827001275	80	22.5	72 ±0,2	63	ISO 15552					
1827001276	100	27.5	89 ±0,2	75	ISO 15552					
1827001310	125	30	110 ±0,3	90	ISO 15552					
1827001457	160	32.5	140 ±0,3	115	ISO 15552					
1827001458	200	37.5	175 ±0,3	135	ISO 15552					

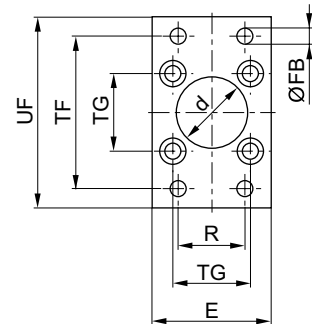
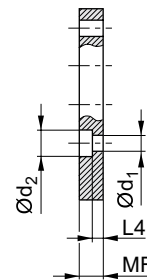
Material: Steel
Surface: galvanized

Flange mounting, Series MF1, MF2

▶ Cylinder mounting in accordance with ISO 15552



00105812



00126399

Scope of delivery: flange mounting incl. mounting screws

Part No.	Piston Ø	Ød H11	Ød1	Ød2	E 1)	ØFB	L4	MF	R	TF	TG
1827001277	32	30	6.6	11	50	7	4.5	10	32	64	32,5 ±0,2
1827001278	40	35	6.6	11	55	9	4.5	10	36	72	38 ±0,2
1827001279	50	40	9	15	65	9	6	12	45	90	46,5 ±0,2
1827001499	63	45	9	15	75	9	6	12	50	100	56,5 ±0,2
1827001281	80	45	11	18	100	12	9	16	63	126	72 ±0,2
1827001282	100	55	11	18	120	14	9	16	75	150	89 ±0,2
1827004861	125	60	14	20	140	16	10.5	20	90	180	110 ±0,3
1827001460	160	65	18	26	180	18	9.5	20	115	230	140 ±0,3
1827001461	200	75	18	26	220	22	12.5	25	135	270	175 ±0,3

Part No.	UF										
1827001277	80										
1827001278	90										
1827001279	110										
1827001499	125										
1827001281	154										
1827001282	186										

1) Max.
Material: Steel
Surface: galvanized

Series CVI Accessories

Part No.	UF										
1827004861	220										
1827001460	275										
1827001461	312										

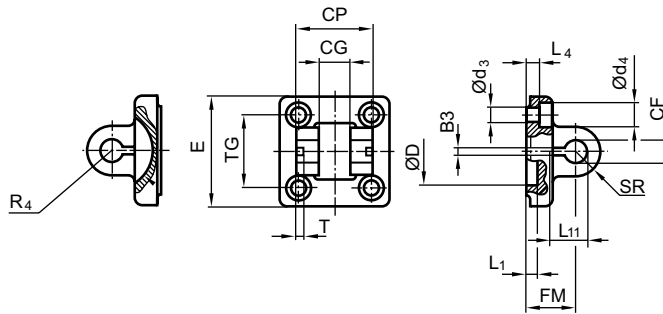
1) Max.
Material: Steel
Surface: galvanized

Clevis mounting, Series AB6

▶ Cylinder mounting in accordance with ISO 15552



24547



Scope of delivery: clevis mounting incl. pivot pins and mounting screws

00105819

Part No.	Piston Ø	B3 ±0,2	Ø CF F7	CG D10	CP d12	Ø d3	Ø d4	Ø D	E	FM ±0,2	L1 1)	L4 ±0,5
1827001593	32	3.3	10	14	34	6.6	11	30	49	22	4.5	5.5
1827001594	40	4.3	12	16	40	6.6	11	35	55	25	4.5	5.5
1827001595	50	4.3	16	21	45	9	15	40	67	27	4.5	6.5
1827002024	63	4.3	16	21	51	9	15	45	77	32	4.5	6.5
1827001597	80	4.3	20	25	65	11	18	45	97	36	4.5	10
1827001598	100	4.3	20	25	75	11	18	55	117	41	4.5	10
1827001599	125	6.3	30	37	97	14	20	60	140	50	7	10
1827001600	160	6.3	35	43	122	18	26	65	180	55	10	10
1827001601	200	6.3	35	43	122	18	26	75	220	60	10	11

Part No.	L11 -0,5	R4	SR	T ±0,2	TG	Note						
1827001593	16.5	17	11	3	32,5 ±0,2	2)						
1827001594	18	20	12	4	38 ±0,2	2)						
1827001595	23	22	15	4	46,5 ±0,2	2)						
1827002024	23	25	15	4	56,5 ±0,2	2)						
1827001597	27	30	20	4	72 ±0,2	2)						
1827001598	27	32	20	4	89 ±0,2	2)						
1827001599	40	42	26	6	110 ±0,3	2)						
1827001600	45	46	32.5	6	140 ±0,3	3) 4)						
1827001601	45	49	32.5	6	175 ±0,3	3) 4)						

- 1) Min.
2) Material: Aluminum (forged)
3) Material: Nodular graphite iron
4) Surface: galvanized

Piston rod cylinders ▶ Cylinder valve units

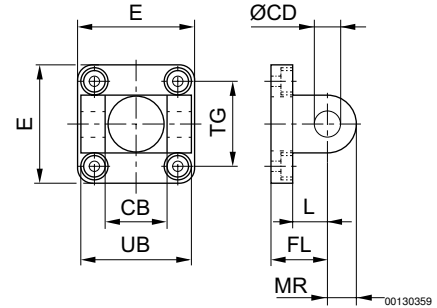
Series CVI
Accessories

Clevis mounting, Series MP2

▶ Cylinder mounting in accordance with ISO 15552



P523_025



Scope of delivery: clevis mounting incl. mounting screws

Part No.	Piston Ø	CB H14	Ø CD H9	E	FL ±0,2	L 1)	MR 2)	UB h13	TG	Note
1827001289	32	26	10	49 ±1	22	12	10	45	32,5 ±0,2	3)
1827001290	40	28	12	53 ±1	25	15	13	52	38 ±0,2	3)
1827001291	50	32	12	63 ±1	27	15	13	60	46,5 ±0,2	3)
1827001500	63	40	16	73 ±1	32	18	17	70	56,5 ±0,2	3)
1827001293	80	50	16	98 ±1	36	20	17	90	72,0 ±0,2	3)
1827001294	100	60	20	115 ±1	41	25	18	110	89,0 ±0,2	3)
1827004862	125	70	25	140	50	30	26	130	110 ±0,3	3)
1827004863	160	90	30	177	55	35	31	170	140 ±0,3	4) 5)
1827004864	200	90	30	216	60	35	31	170	175 ±0,3	4) 5)

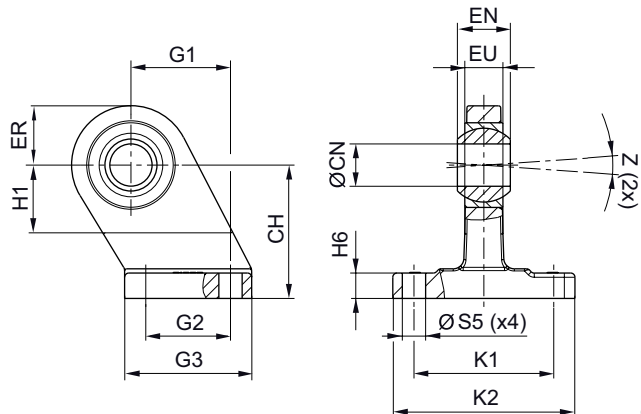
- 1) Min.
- 2) Max.
- 3) Material: Aluminum (forged)
- 4) Material: Nodular graphite iron
- 5) Surface: galvanized

Bearing block, Series CS7

▶ Cylinder mounting in accordance with VDMA 24562 part 2



00105817



00105820

Series CVI Accessories

Part No.	Piston Ø	CH JS15	ØCN H7	EU 1)	EN -1,0	ER 1)	G1 JS14	G2 JS14	G3 1)	H1 2)	H6	K1 JS14
1827001784	32	32	10	10.5	14	16	21	18	31	16	9 ±1	38
1827001785	40	36	12	12	16	18	24	22	35	20	9 ±1	41
1827001786	50	45	16	15	21	21	33	30	45	22	11 ±1	50
1827001787	63	50	16	15	21	23	37	35	50	27	11 ±1	52
1827001788	80	63	20	18	25	28	47	40	60	31	12 ±1,5	66
1827001789	100	71	20	18	25	30	55	50	70	38	13 ±1,5	76
1827001790	125	90	30	25	37	40	70	60	90	40	17 ±1,5	94
1827001791	160	115	35	28	43	44	97	88	126	45	22 ±1,5	118
1827001792	200	135	35	28	43	47	105	90	130	45	27 ±2	122

Part No.	K2 1)	ØS5 H13	Z 2)									
1827001784	51	6.6	4°									
1827001785	54	6.6	4°									
1827001786	65	9	4°									
1827001787	67	9	4°									
1827001788	86	11	4°									
1827001789	96	11	4°									
1827001790	124	14	4°									
1827001791	1556	14	4°									
1827001792	162	18	4°									

1) Max.

2) Min.

Material: Nodular graphite iron

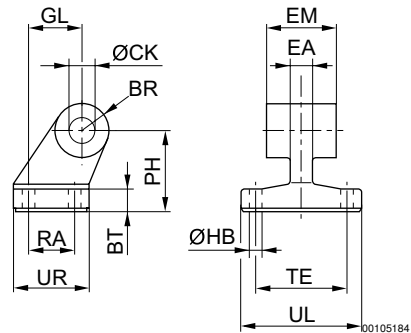
Surface: galvanized

Bearing block, Series AB7

▶ Cylinder mounting in accordance with ISO 15552



00105160



00105184

Part No.	Piston Ø	BR	BT	Ø CK H9	Ø HB H13	EM	GL JS14	EA 1)	PH JS15	RA JS14	TE JS14
1825805275	32	10	8	10	6.6	26 -0,2/-0,6	21	10	32	18	38
1825805276	40	11	10	12	6.6	28 -0,2/-0,6	24	12	36	22	41
1825805277	50	13	12	12	9	32 -0,2/-0,6	33	16	45	30	50
1825805278	63	15	12	16	9	40 -0,2/-0,6	37	16	50	35	52
1825805279	80	15	14	16	11	50 -0,2/-0,6	47	20	63	40	66
1825805280	100	19	15	20	11	60 -0,2/-0,6	55	20	71	50	76
1825805281	125	22,5	20	25	14	70 -0,5/-1,5	70	30	90	60	94

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

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Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

Part No.	Piston Ø	BR	BT	Ø CK H9	Ø HB H13	EM	GL JS14	EA 1)	PH JS15	RA JS14	TE JS14
1825805282	160	31.5	25	30	14	90 -0,5/-1,5	97	36	115	88	118
1825805283	200	31.5	30	30	18	90 -0,5/-1,5	105	40	135	90	122

Part No.	UL 1)	UR 1)									
1825805275	51	31									
1825805276	54	35									
1825805277	65	45									
1825805278	67	50									
1825805279	86	60									
1825805280	96	70									
1825805281	124	90									
1825805282	156	126									
1825805283	162	130									

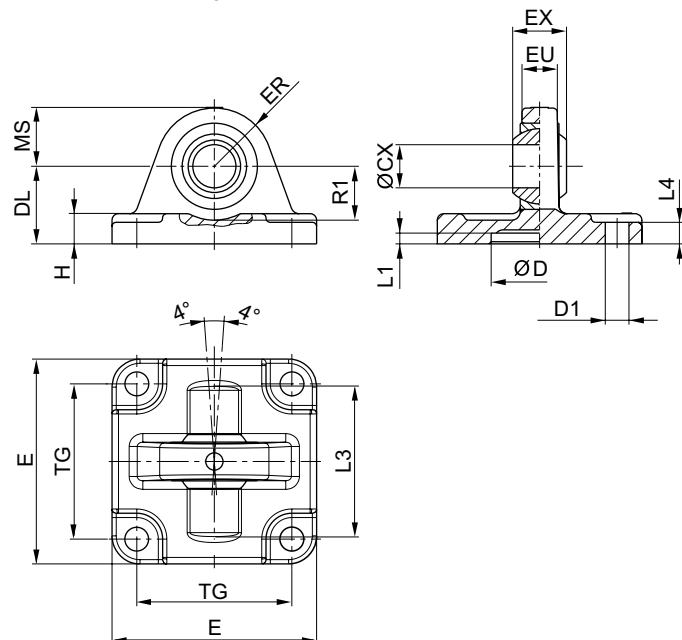
1) Max.
Material: Nodular graphite iron
Surface: galvanized

Rear eye, Series MP6

▶ Cylinder mounting in accordance with ISO 1552 ▶ With ball joint and foot



24548



00126391

Scope of delivery: clevis incl. mounting screws

Part No.	Piston Ø	ØCX H7	ØD H11	ØD1 H13	DL ±0,2	E	EX -0,1	ER	EU	H	L1 1)	L3
1827001621	50	16	40	9	27	65	21	20	15	10.5	4.5	48
1827020087	63	16	45	9	32	75	21	23	15	10.5	4.5	55
1827001623	80	20	45	11	36	95	25	27	18	14	4.5	70
1827001624	100	20	55	11	41	115	25	30	18	15	4.5	80
1827001625	125	30	60	14	50	140	37	40	25	16	7	100

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Series CVI Accessories

Part No.	Piston Ø	ØCX H7	ØD H11	ØD1 H13	DL ±0,2	E	EX -0,1	ER	EU	H	L1 1)	L3
1827001626	160	35	65	18	55	176	43	44	30	17	7	130
1827001627	200	35	75	18	60	216	43	47	30	19.5	7	130

Part No.	L4	MS -0,5	R1 1)	TG	Weight [kg]	Note						
1827001621	6.5	21	19	46,5 ±0,2	0.2	2)						
1827020087	6.5	23	21	56,5 ±0,2	0.3	2)						
1827001623	10	27	24	72 ±0,2	0.6	2)						
1827001624	10	30	25	89 ±0,2	0.8	2)						
1827001625	10	40	33	110 ±0,3	1.4	2)						
1827001626	10	44	39	140 ±0,3	5.6	3) 4)						
1827001627	11	47	41	175 ±0,3	8.5	3) 4)						

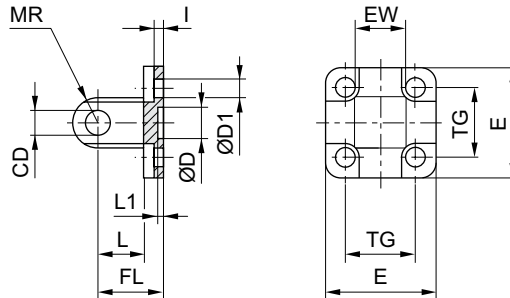
- 1) Min.
 2) Material: Aluminum (forged)
 3) Material: Nodular graphite iron
 4) Surface: galvanized

Rear eye, Series MP4

▶ Cylinder mounting in accordance with ISO 15552 ▶ for clevis mounting MP2 and AB3



P529_024



00126403_a

Scope of delivery: clevis incl. mounting screws

Part No.	Piston Ø	CD H9	Ø D	Ø D1	E	EW	FL ±0,2	I ±0,5	L 1)	L1 1)	MR 2)
1827001283	32	10	30 H11	6.6	48	26 -0,2/-0,6	22	5.5	12	4.5	10
1827001284	40	12	35 H11	6.6	53	28 -0,2/-0,6	25	5.5	15	4.5	12
1827001285	50	12	40 H11	9	63	32 -0,2/-0,6	27	6.5	15	4.5	12
1827020086	63	16	45 H11	9	73	40 -0,2/-0,6	32	6.5	20	4.5	16
1827001287	80	16	45 H11	11	98	50 -0,2/-0,6	36	10	20	4.5	16
1827001288	100	20	55 H11	11	115	60 -0,2/-0,6	41	10	25	4.5	20
1827004866	125	25	60 H11	14	140	70 -0,5/-1,2	50	10	30	7	26
1827004867	160	30	65 H11	18	180	90 -0,5/-1,2	55	10	35	7	31
1827004868	200	30	75 H11	18	220	90 -0,5/-1,2	60	11	35	7	31

Part No.	TG	Note									
1827001283	32,5 ±0,2	3)									
1827001284	38 ±0,2	3)									

- 1) Min.
 2) Max.
 3) Material: Aluminum (forged)
 4) Material: Nodular graphite iron
 5) Surface: galvanized

Piston rod cylinders ▶ Cylinder valve units

Series CVI
Accessories

Part No.	TG	Note										
1827001285	46,5 ±0,2	3)										
1827020086	56,5 ±0,2	3)										
1827001287	72 ±0,2	3)										
1827001288	89 ±0,2	3)										
1827004866	110 ±0,3	3)										
1827004867	140 ±0,3	4) 5)										
1827004868	175 ±0,3	4) 5)										

- 1) Min.
- 2) Max.
- 3) Material: Aluminum (forged)
- 4) Material: Nodular graphite iron
- 5) Surface: galvanized

Series CVI Accessories

Rear eye, Series MP9 ▶ With rubber bushing



IM0043848

Fig. 1

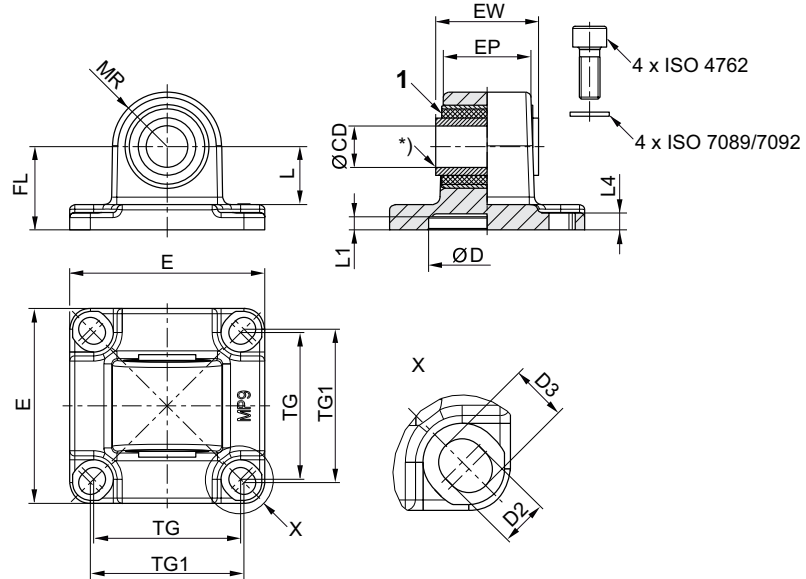
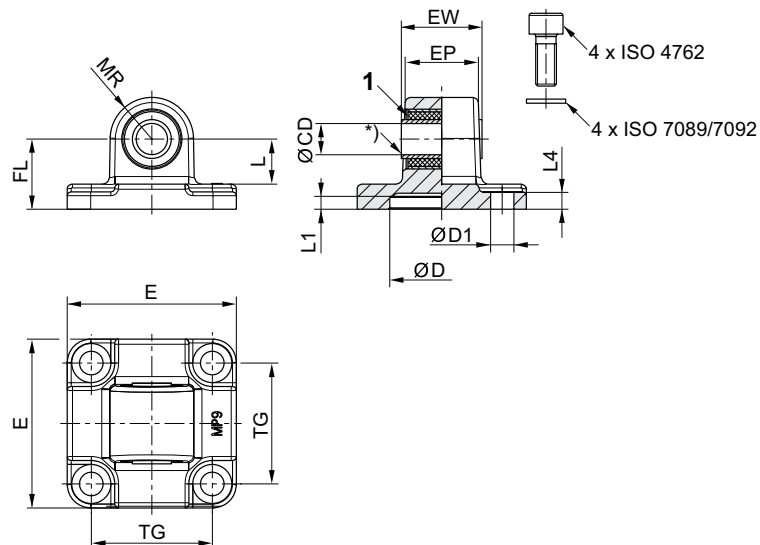


Fig. 2



IM0043825

1) Rubber bushing

* Plain bearing material: bronze (Ø125: steel, galvanized)

Scope of delivery: clevis incl. mounting screws

Part No.	Piston Ø	CD H11	CD H9	E	EW	EP	TG	TG1 ±0,2	FL ±0,2	MR	L 1)	L1
3683202000	25	10	–	40	17.5	14.5	26	27	20	12.5	14.8	3
3683203000	32	10	–	46	25.5	18.9	32.5	–	22	12.5	13.8	5
3683204000	40	–	12	53	27	23.5	38	40	25	15	16.3	5
3683205000	50	–	12	65	31	28	46.5	–	27	16	17.3	5
3683206000	63	–	16	75	39.5	33.5	56.5	59	32	21	22.3	5
3683208000	80	–	16	94.5	49.5	43	72	–	36	22	21.8	5

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Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

Part No.	Piston Ø	CD H11	CD H9	E	EW	EP	TG	TG1 ±0,2	FL ±0,2	MR	L 1)	L1
3683210000	100	–	20	114	59.5	54	89	90	41	25	25.8	5
R412015973	125	–	25	138	69.5	60	110	–	50	34	33.8	7.5

Part No.	L4	D H11	D1 H13	D2 -0,2	D3 -0,2	Standardization	Weight [kg]	Fig.	Note			
3683202000	3	18	–	5.5	6.2	ISO 21287	0.063	Fig. 1	2) 4)			
3683203000	5.5	30	6.6	–	–	ISO 15552	0.092	Fig. 2	3) 5)			
3683204000	5.5	35	–	6.6	8	ISO 15552	0.143	Fig. 1	3) 5)			
3683205000	6.5	40	9	–	–	ISO 15552	0.217	Fig. 2	5)			
3683206000	6.5	45	–	9	10.8	ISO 15552	0.411	Fig. 1	3) 5)			
3683208000	10	45	11	–	–	ISO 15552	0.64	Fig. 2	5)			
3683210000	10	55	–	11	11.7	ISO 15552	0.956	Fig. 1	3) 5)			
R412015973	10	60	13.5	–	–	ISO 15552	1.37	Fig. 2	5)			

1) Min.

2) CAD files *_iso.* (suitable for cylinders according to ISO 21287) and *_167.* (suitable for 167 series cylinders)

3) suitable for 167 series cylinders

4) Material: Die-cast aluminum

5) Material: Aluminum (forged)

Bolts, AA4

Fig. 1

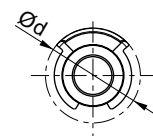
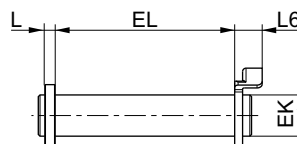
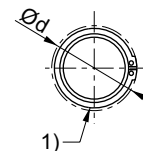


Fig. 2

00105158



21294

Scope of delivery: pivot pins incl. circlips

1) circlip DIN 471

Part No.	Piston Ø	Ø d 2)	EK e8	EL	L 2)	L6 2)	Standardization	Weight [kg]	Fig.
1823120020	32	20	10	45,2 +0,3	3.5	9	–	0.03	Fig. 1
1823120021	40	22	12	52,2 +0,3	4	9	–	0.05	Fig. 1
1823120022	50	22	12	60,2 +0,3	4	9	–	0.06	Fig. 1

2) Max.

Material: Steel

Surface: galvanized

Series CVI
Accessories

Part No.	Piston Ø	Ø d 2)	EK e8	EL	L 2)	L6 2)	Standardization	Weight [kg]	Fig.
1823120023	63	28	16	70,2 +0,3	4.5	11	-	0.12	Fig. 1
1823120024	80	28	16	90,2 +0,3	4.5	11	-	0.15	Fig. 1
1823120025	100	38	20	110,2 +0,3	5	11	-	0.29	Fig. 1
5236000092	125	34.2	25	132 +0,5	-	3,75	ISO 15552	0.53	Fig. 2
5237000092	160, 200	40.5	30	172 +0,5	-	4,25	ISO 15552	0.99	Fig. 2

2) Max.
 Material: Steel
 Surface: galvanized

Non-rotating axle for clevis mountings AB6, AA6


00112286

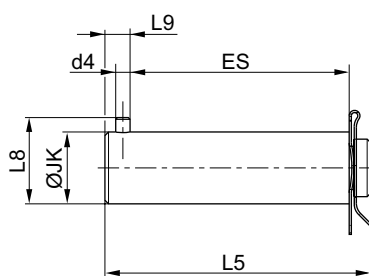


Fig. 1

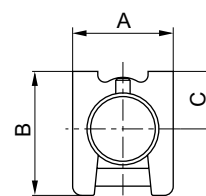
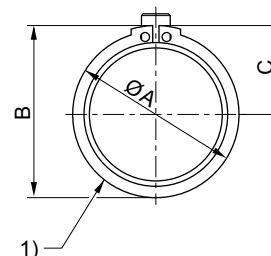


Fig. 2



21295

Scope of delivery: bolt incl. locking ring or locking washer
 1) circlip DIN 471

Part No.	Piston Ø	A	B	C	Ø d4 H12	JK h9	ES	L5	L8	L9
5230000082	32	18	22	10	3	10	31	41	14	5.5
5231000082	40	22	26	12	4	12	36	48	16	7
5232000082	50	28	34.5	16	4	16	41	54	20	7
5233000082	63	28	34.5	16	4	16	47	60	20	7
5234000082	80	28	34.5	16	4	20	63	74	24	5
5235000082	100	28	34.5	16	4	20	71	84	24	7
5236000082	125	36	37.5	19.5	6	30	88	106	36	13

Part No.	Standardization	Fig.								
5230000082	ISO 15552	Fig. 1								

Material: Stainless steel

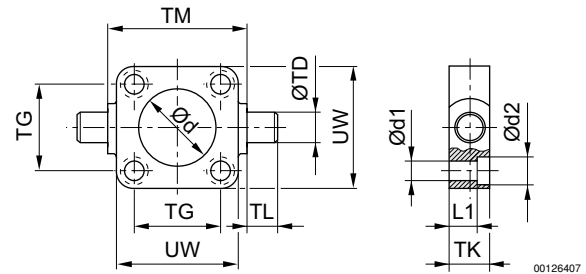
Piston rod cylinders ▶ Cylinder valve units

Series CVI
Accessories

Part No.	Standardization	Fig.										
5231000082	-	Fig. 1										
5232000082	-	Fig. 1										
5233000082	-	Fig. 1										
5234000082	-	Fig. 1										
5235000082	ISO 15552	Fig. 1										
5236000082	ISO 15552	Fig. 2										

Material: Stainless steel

Trunnion mounting, front or rear, Series MT5, MT6



The delivered product may vary from that in the illustration.
Scope of delivery: trunnion mounting incl. mounting screws

00128925

00126407

Part No.	Piston Ø	For series	Ø d H11	Ø d1	Ø d2	L1	TD e9	TG ±0,2	TK	TL h14	TM h14
1827001609	32	CCI CVI CCL-IC/-IS ICL PRA/TRB	30	6.6	11	7.5	12	32.5	16	12	50
1827001610	40	CCI CVI CCL-IC/-IS ICL PRA/TRB	35	6.6	11	7.5	16	38	20	16	63
1827001611	50	CCI CVI CCL-IC/-IS ICL PRA/TRB	40	9	15	10	16	46.5	24	16	75
1827002046	63	CCI CVI CCL-IC/-IS ICL PRA/TRB	45	9	15	10	20	56.5	24	20	90
1827001613	80	CCI CVI CCL-IC/-IS ICL PRA/TRB	45	11	18	16	20	72	28	20	110
1827001614	100	CCI CVI CCL-IC/-IS ICL PRA/TRB	55	11	18	25.5	25	89	38	25	132

Series CVI Accessories

Part No.	Piston Ø	For series	Ø d H11	Ø d1	Ø d2	L1	TD e9	TG ±0,2	TK	TL h14	TM h14
1827001615	125	CVI ICL CCL-IS PRA TRB	60	14	20	34	25	110	46	25	160

Part No.	Piston Ø	UW									
1827001609	32	48									
1827001610	40	56									
1827001611	50	65									
1827002046	63	75									
1827001613	80	100									
1827001614	100	120									
1827001615	125	145									

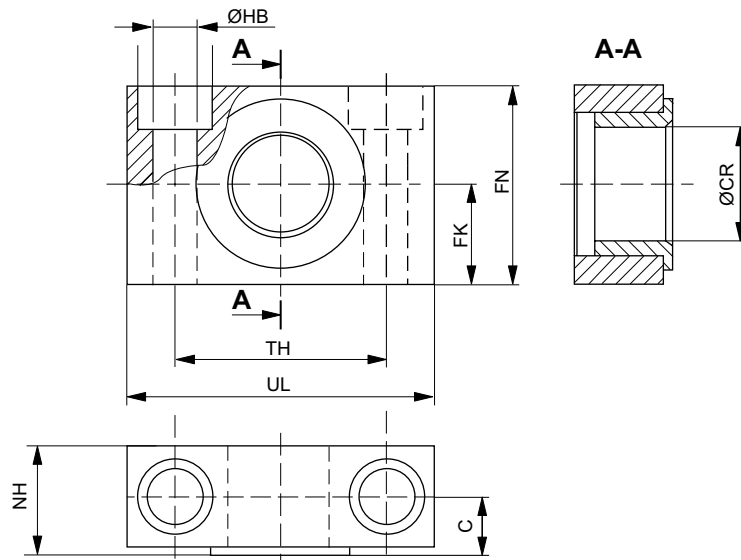
Material: Nodular graphite iron
Surface: galvanized

Bearing brackets MT4, MT5, MT6, Series AT4

▶ Cylinder mounting in accordance with ISO 15552 ▶ for Series CCI, CCL-IC, ICL, KPZ, PRA/TRB, ITS



00105163



00105221

Part No.	Piston Ø	For series	UL	NH	TH	C	CR H9	HB H13	FN	FK
1827001603	20, 25, 32	CCI CCL-IC ICL KPZ PRA/TRB	46	18	32 ±0,2	10.5	12	6.6	30	15 ±0,1
1827001604	40, 50	CCI CCL-IC ICL KPZ PRA/TRB	55	21	36 ±0,2	12	16	9	36	18 ±0,1

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Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

Part No.	Piston Ø	For series	UL	NH	TH	C	CR H9	HB H13	FN	FK
1827001605	63, 80	CCI CCL-IC ICL KPZ PRA/TRB	65	23	42 ±0,2	13	20	11	40	20 ±0,1
1827001606	100, 125	CCI CCL-IC ICL KPZ PRA/TRB	75	28.5	50 ±0,2	16	25	14	50	25 ±0,1
1827001607	160, 200	ITS	92	40	60 ±0,3	22.5	32	18	60	30 ±0,2

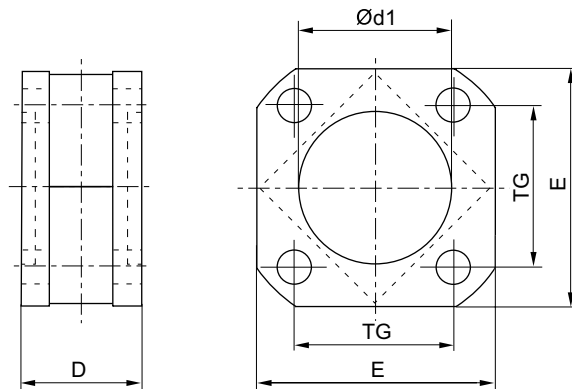
Part No.	Piston Ø	Plain bearing	Delivery quantity [Piece]							
1827001603	20, 25, 32	Sintered bronze	2							
1827001604	40, 50	Sintered bronze	2							
1827001605	63, 80	Sintered bronze	2							
1827001606	100, 125	Sintered bronze	2							
1827001607	160, 200	Sintered bronze	2							

Material: Steel
Surface: galvanized

Intermediate flange, Series JP1 ▶ for multi-position cylinders



00135554



00135553

Part No.	Piston Ø	D	Ø d1 N7	E	TG						
1827020247	32	27	30	47	32.5						
1827020248	40	27	35	53	38						
1827020249	50	32	40	65	46.5						
1827020250	63	28	45	75	56.5						
1827020251	80	38	45	95	72						
1827020252	100	38	55	115	89						
1827020253	125	44	60	140	110						

Material: Aluminum

Series CVI Accessories

Rod clevis, Series AP2 ▶ galvanized steel



00105171

Fig. 1

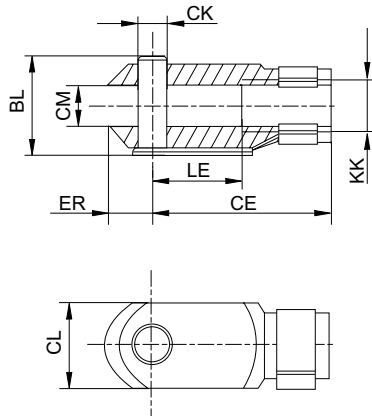
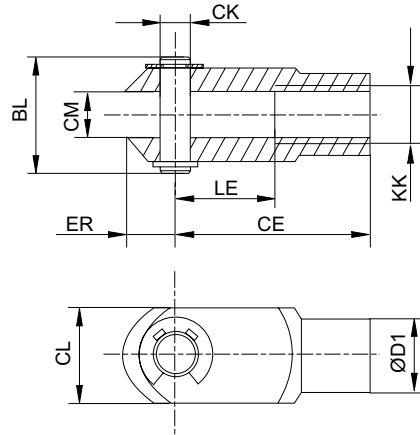


Fig. 2



00126410

Part No.	KK	BL	CE	ØCK e11	CL	CM	ØD1	ER	LE	Material
1822122024	M10x1,25	26	40	10	20	10	18	12	20	Steel
1822122025	M12x1,25	31	48	12	24	12	20	14	24	Steel
1822122005	M16x1,5	39	64	16	32	16	26	19	32	Steel
1822122004	M20x1,5	50	80	20	40	20	34	20	40	Steel
1827001493	M27x2	68	110	30	55	30	48	38	54	Steel
1827001471	M36x2	80	144	35	70	35	60	57	72	Steel

Part No.	Surface	Weight [kg]	Fig.							
1822122024	galvanized	0.1	Fig. 1							
1822122025	galvanized	0.16	Fig. 1							
1822122005	galvanized	0.4	Fig. 1							
1822122004	galvanized	0.7	Fig. 1							
1827001493	galvanized	2	Fig. 2							
1827001471	galvanized	3.5	Fig. 2							

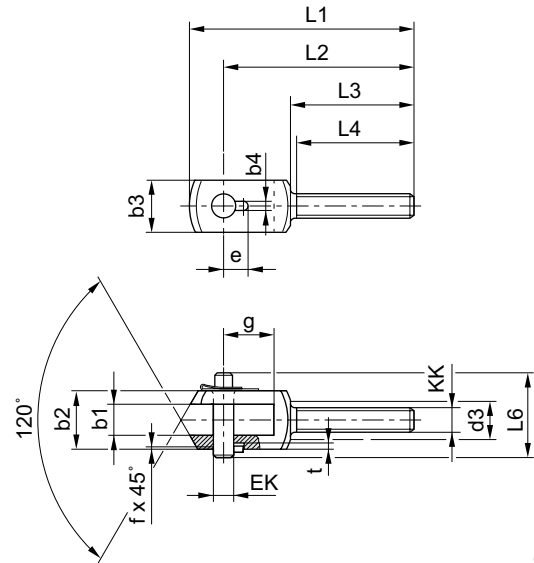
Piston rod cylinders ▶ Cylinder valve units

Series CVI
Accessories

Rod clevis, Series PM6
▶ galvanized steel



00105173



00105197

Scope of delivery incl. bolt

Part No.	KK	b1 B12	b2 d12	b3	b4 +0,2	d3	e +0,3	EK	f	g	L1	L2
1822122032	M10x1,25	14	28	20	3.3	17	11.5	10	0.7	20	90	78
1822122033	M12x1,25	16	30	25	4.3	19	12	12	1	26	108	92
1822122034	M16x1,5	21	40	35	4.3	24	14	16	1	31	129	108
1822122035	M20x1,5	25	50	40	4.3	30	16	20	1	43	156	131
1822122036	M27x2	37	67	60	6.3	38	24	30	1.5	54	200	168

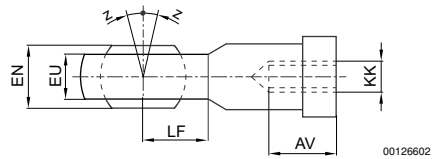
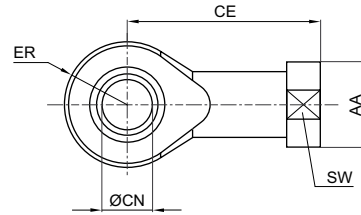
Part No.	L3	L4 +1	L6	t +0,2	Material	Surface					
1822122032	53	50	35	3	Steel	galvanized					
1822122033	58	55	39	3	Steel	galvanized					
1822122034	65	62	50	3	Steel	galvanized					
1822122035	73	69	60	3	Steel	galvanized					
1822122036	98	92	77	5	Steel	galvanized					

Series CVI Accessories

Ball eye rod end with flange, Series AP6 ▶ galvanized steel



00105172



00126602

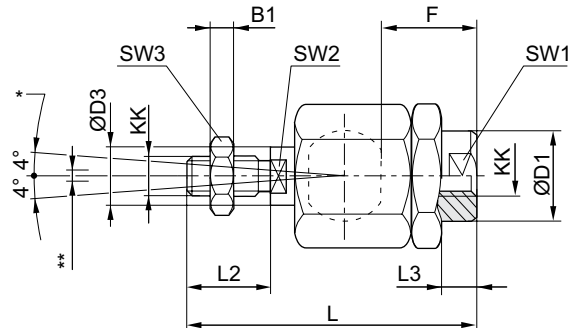
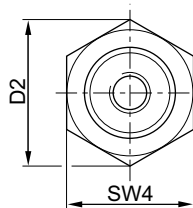
Part No.	KK	AA	AV min.	CE	Ø CN H7	EN -0,1	ER	EU max.	LF	SW	Z [°] max.
1822124003	M10x1,25	19	15	43	10	14	14	11.5	14	17	4
1822124004	M12x1,25	22	18	50	12	16	16	12.5	16	19	4
1822124005	M16x1,5	27	24	64	16	21	21	15.5	21	22	4
1822124006	M20x1,5	34	30	77	20	25	25	18.5	25	30	4
1822124013	M27x2	50	45	110	30	37	35	27	35	41	4
1822124008	M36x2	60	56	125	35	43	40	32	40	50	4

Part No.	Material	Surface	Weight [kg]
1822124003	Steel	galvanized	0.07
1822124004	Steel	galvanized	0.12
1822124005	Steel	galvanized	0.21
1822124006	Steel	galvanized	0.38
1822124013	Steel	galvanized	1.17
1822124008	Steel	galvanized	2

Flexible spherical coupling, Series PM5



00105169



D300_029

* Angle joint
 ** Radial joint from 0,5 - 2 mm
 Axial play set to 0.05 to 0.2 mm

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Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

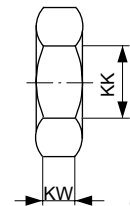
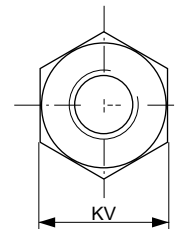
Part No.	KK	B1	Ø D1	D2	Ø D3	F	L ±2	L2	L3 ±1	SW1	SW2	SW3
1826409002	M10x1,25	6	21.5	34	14	23	73	20	7.5	19	12	17
1826409003	M12x1,25	7	21.5	34	14	28	77	24	13	19	12	19
1826409004	M16x1,5	8	33.5	47	22	32	108	32	9	30	19	24
1826409005	M20x1,5	10	33.5	47	22	42	122	40	19	30	19	30
1826409006	M27x2	13.5	62	62	28	48	147	54	14	32	24	41
1826409007	M36x2	18	80	80	38	86	241	72	18.2	50	36	55

Part No.	SW4	Material	Surface	Weight [kg]
1826409002	30	Steel	galvanized	0.21
1826409003	30	Steel	galvanized	0.21
1826409004	41	Steel	galvanized	0.65
1826409005	41	Steel	galvanized	0.68
1826409006	55	Steel	galvanized	1.7
1826409007	75	Steel	galvanized	5.4

Nut for piston rod, Series MR9



00105168



00105192

Part No.	KK	KV	KW	Material	Surface	Weight [kg]
1823300020	M10x1,25	17	6	Steel	galvanized	0.01
8103190344	M12x1,25	19	6	Steel	galvanized	0.012
1823300030	M16x1,5	24	8	Steel	galvanized	0.017
1823300031	M20x1,5	30	10	Steel	galvanized	0.03
1823A00029	M27x2	41	13.5	Steel	galvanized	0.108
8103190414	M36x2	55	18	Steel	galvanized	0.175
8103190424	M42x2	65	21	Steel	galvanized	0.37

Series CVI Accessories

Sensor, Series ST6

▶ 6 mm T-slot ▶ with cable ▶ open cable ends, 2-pin, open cable ends, 3-pin



24712

Certificates	CE declaration of conformity cULus RoHS
Ambient temperature min./max.	-30 °C / +80 °C
Protection class	IP65, IP67, IP69K
Switching point precision [mm]	±0,1
Switching logic	NO (make contact)
Switching capacity	Reed, 2-pin: max. 10 W Reed, 3-pin: max. 6 W
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
Materials:	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

Technical Remarks

- No cULus certification for 230 V variant.

	Type of contact	Cable length	DC operating voltage min./max.	Operational voltage AC min./max.	Voltage drop U at I _{max}	DC switching current, max.	AC switching current, max.	Part No.
		[m]	[V DC]	[V AC]		[A]	[A]	
	Reed	3	10 / 230	10 / 230	I*Rs	0.13	0.13	R412022866
	Reed	3 5 10	10 / 30	10 / 30	I*Rs	0.3	0.5	R412022869 R412022870 R412022871
	electronic PNP	3 5 10	10 / 30	-	≤ 2,5 V	0.13	-	R412022853 R412022855 R412022857
	electronic NPN	3 5	10 / 30	-	≤ 2,5 V	0.13	-	R412022849 R412022850

Part No.	Max. switching frequency kHz	Operating current, not switched	Operating current, switched	Fig.	Note
R412022866	< 0,4	-	-	Fig. 1	1); 3)
R412022869 R412022870 R412022871	< 0,4	-	-	Fig. 2	2); 3)
R412022853 R412022855 R412022857	< 1,0	< 8 mA	< 30 mA	Fig. 2	2); 4)
R412022849 R412022850	< 1,0	< 8 mA	< 30 mA	Fig. 2	2); 4)

1) interfaces: open cable ends; 2-pin

2) interfaces: open cable ends; 3-pin

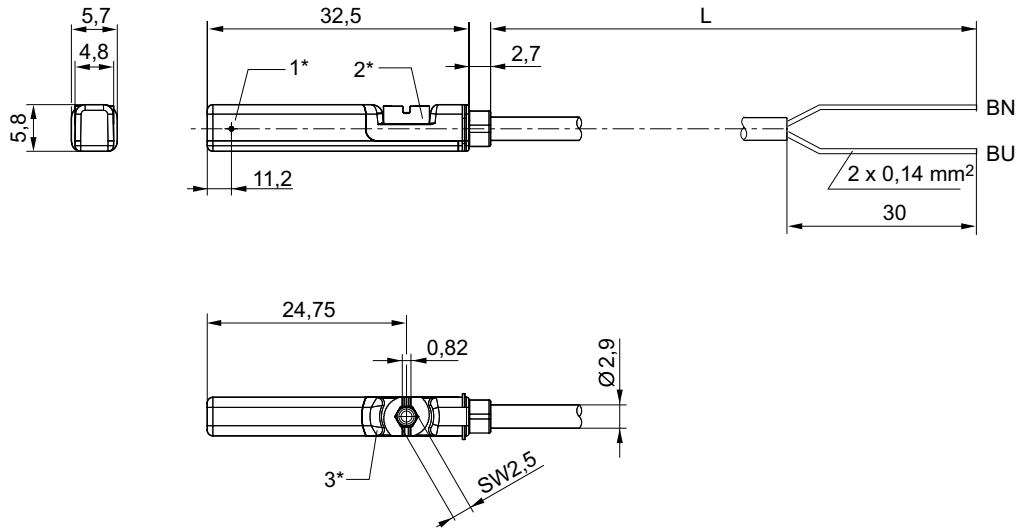
3) Protected against polarity reversal

4) short circuit resistant / Protected against polarity reversal

Piston rod cylinders ▶ Cylinder valve units

Series CVI
Accessories

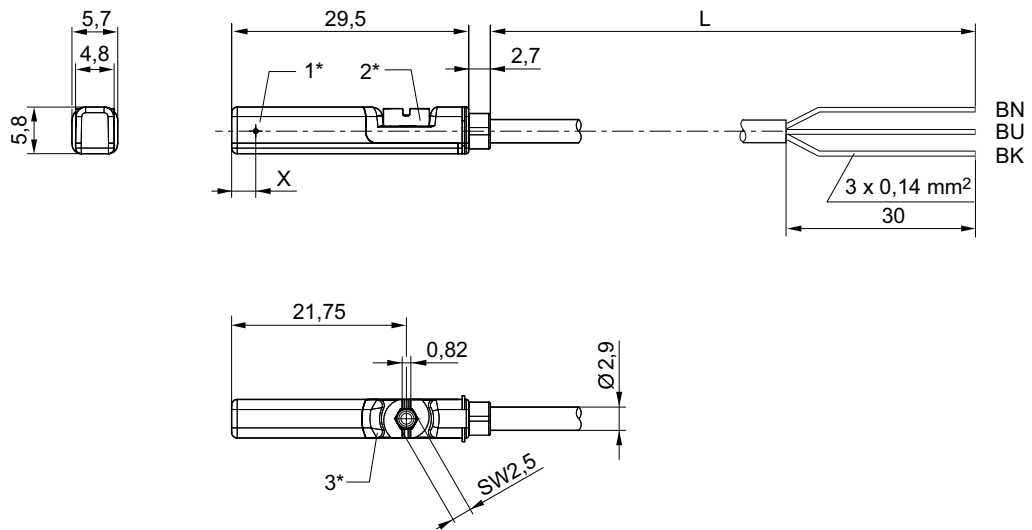
Fig. 1



24619

1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
BN=brown, BU=blue

Fig. 2



24620

1* = switching point 2* = locking screw 3* = LED window, transparent
L = cable length
BN = brown, BK = black, BU = blue
X = electronic: 11,6 mm, Reed: 8,3 mm

Series CVI Accessories

Sensor, Series ST6

▶ 6 mm T-slot ▶ with cable ▶ open cable ends, 3-pin ▶ ATEX certified



24712

Certificates	CE declaration of conformity cULus RoHS II 3G Ex nA op is IIC T4 Gc X II 3D Ex tc IIIC T135°C Dc X
ATEX	-20°C / +50°C
Ambient temperature min./max.	IP67
Protection class	±0,1
Switching point precision [mm]	< 10 mA
Quiescent current (without load)	10 V DC - 30 V DC
DC operating voltage min./max.	NO (make contact)
Switching logic	Yellow
LED status display	10 - 55 Hz, 1 mm
Vibration resistance	30 g / 11 ms
Shock resistance	
Materials:	
Housing	Polyamide
Cable sheath	Polyurethane
Locking screw	Stainless steel

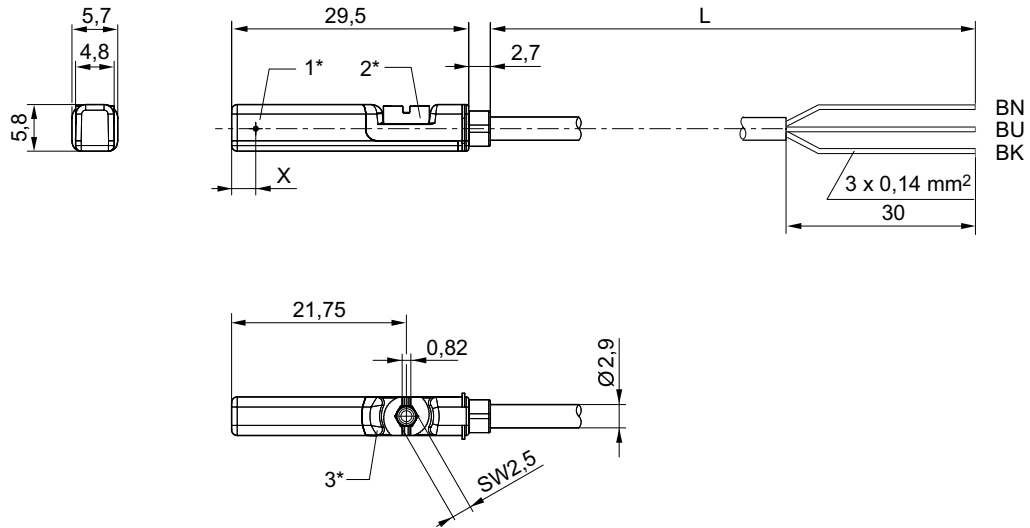
	Type of contact	Cable length	Voltage drop U at I _{max}	DC switching current, max.	Max. switching frequency kHz	Part No.
		[m]		[A]		
	electronic PNP	3	≤ 2,5 V	0.1	< 1,0	R412022854
		5				R412022856

interfaces: open cable ends; 3-pin
short circuit resistant / Protected against polarity reversal

Piston rod cylinders ▶ Cylinder valve units

**Series CVI
Accessories**

Dimensions



24620

1* = switching point 2* = locking screw 3* = LED window, transparent
 L = cable length
 BN = brown, BK = black, BU = blue
 X = electronic: 11.6 mm

Sensor, Series ST6

▶ 6 mm T-slot ▶ with cable ▶ Plug, M8, 3-pin, with knurled screw ▶ ATEX certified



24713

Certificates

ATEX

Ambient temperature min./max.
 Protection class
 Switching point precision [mm]
 Quiescent current (without load)
 DC operating voltage min./max.
 Switching logic
 LED status display
 Vibration resistance
 Shock resistance

Materials:

Housing
 Cable sheath
 Locking screw

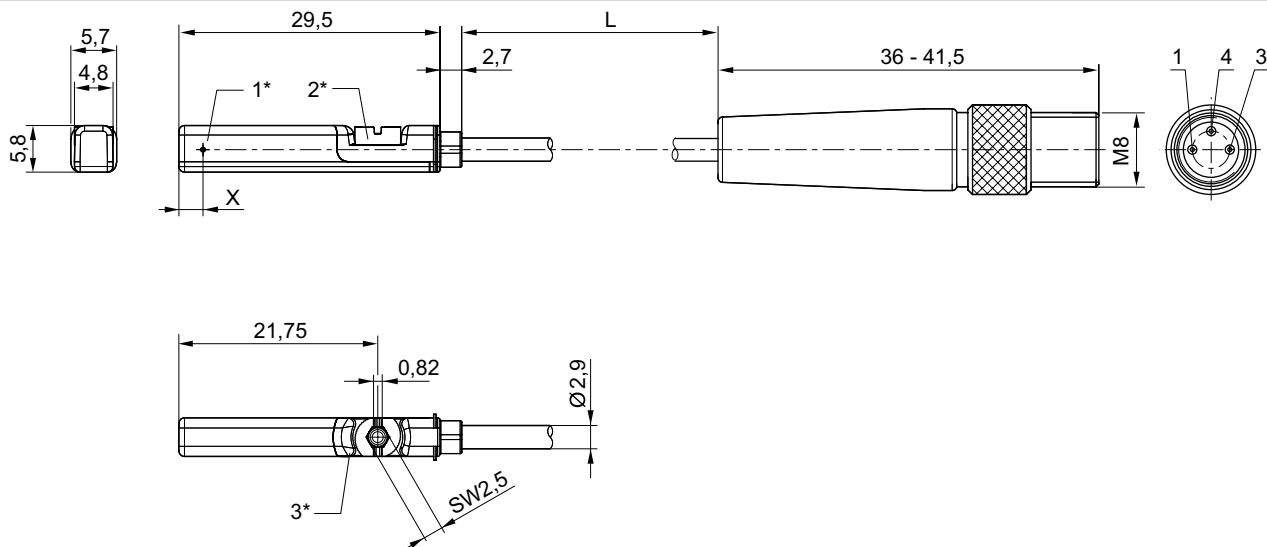
CE declaration of conformity

cULus
 RoHS
 II 3G Ex nA op is IIC T4 Gc X
 II 3D Ex tc IIIC T135°C Dc X
 -20°C / +50°C
 IP67
 ±0,1
 < 10 mA
 10 V DC - 30 V DC
 NO (make contact)
 Yellow
 10 - 55 Hz, 1 mm
 30 g / 11 ms

Polyamide
 Polyurethane
 Stainless steel

Series CVI
Accessories

	Type of contact	Cable length	Voltage drop U at I _{max}	DC switching current, max.	Max. switching frequency kHz	Part No.
		[m]		[A]		
	electronic PNP	0.3	≤ 2,5 V	0.1	< 1,0	R412022860
interfaces: Plug; M8; 3-pin; with knurled screw short circuit resistant / Protected against polarity reversal						

Dimensions


1* = switching point 2* = locking screw 3* = LED window, transparent
 L = cable length
 X = PNP: 11,6 mm
 Pin assignment: 1 = (+), 3 = (-), 4 = (OUT)

24622

Piston rod cylinders ▶ Cylinder valve units

Series CVI
Accessories

Sensor, Series ST6

▶ 6 mm T-slot ▶ with cable ▶ Plug, M12, 3-pin, with knurled screw ▶ ATEX certified



24714

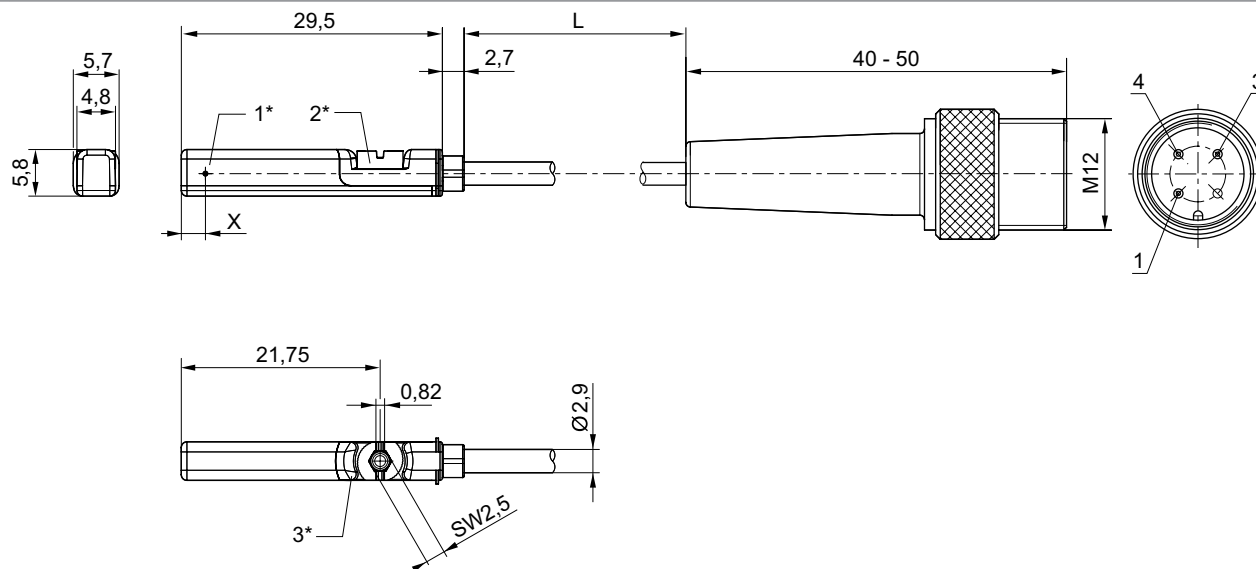
<p>Certificates</p> <p>ATEX</p> <p>Ambient temperature min./max.</p> <p>Protection class</p> <p>Switching point precision [mm]</p> <p>Quiescent current (without load)</p> <p>DC operating voltage min./max.</p> <p>Switching logic</p> <p>LED status display</p> <p>Vibration resistance</p> <p>Shock resistance</p> <p>Materials:</p> <p>Housing</p> <p>Cable sheath</p> <p>Locking screw</p>	<p>CE declaration of conformity</p> <p>cULus</p> <p>RoHS</p> <p>II 3G Ex nA op is IIC T4 Gc X</p> <p>II 3D Ex tc IIIC T135°C Dc X</p> <p>-20°C / +50°C</p> <p>IP67</p> <p>±0,1</p> <p>< 10 mA</p> <p>10 V DC - 30 V DC</p> <p>NO (make contact)</p> <p>Yellow</p> <p>10 - 55 Hz, 1 mm</p> <p>30 g / 11 ms</p> <p>Polyamide</p> <p>Polyurethane</p> <p>Stainless steel</p>
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	Type of contact	Cable length	Voltage drop U at I _{max}	DC switching current, max.	Max. switching frequency kHz	Part No.
		[m]		[A]		
	electronic PNP	0.3	≤ 2,5 V	0.1	< 1,0	R412022864

interfaces: Plug; M12; 3-pin; with knurled screw
short circuit resistant / Protected against polarity reversal

Series CVI Accessories

Dimensions

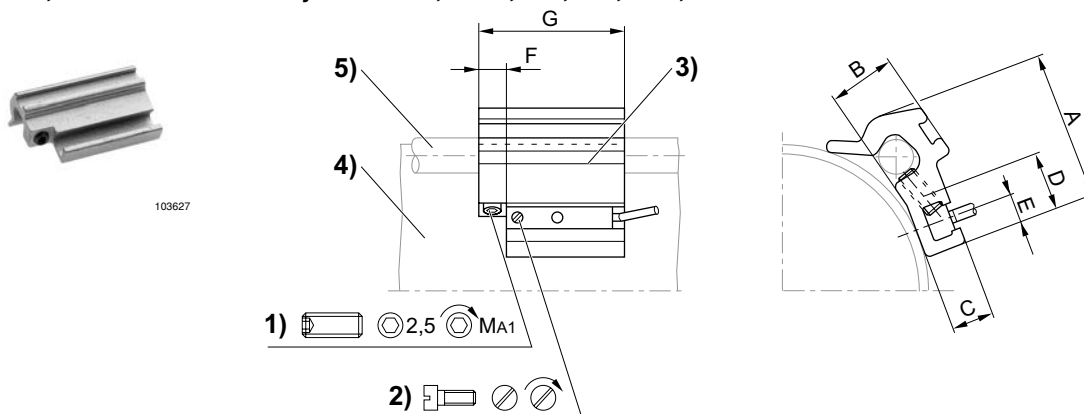


1* = switching point 2* = locking screw 3* = LED window, transparent
 L = cable length
 X = PNP: 11,6 mm
 Pin assignment: 1 = (+), 3 = (-), 4 = (OUT)

24623

Sensor mounting, Series CB1

▶ for Series ST6, SM6 ▶ to mount on cylinder TRB, C12P, 167, CVI, TRR, 523



00105013

1) Clamping threaded pin 2) Mounting screw for sensor 3) Sensor 4) Cylinder profile 5) Tie rod

Part No.	Cylinders Ø [mm]	For series	A	B	C	D	E	F	G	1)	MA1 [Nm]
1827020282	32 - 40	ST6, SM6	26	10	7	14	5	8	40	M5x8	2 ±0,2
1827020283	50 - 63	ST6, SM6	32,5	15,5	7	14	5	8	40	M5x10	2 ±0,2
1827020284	80 - 100	ST6, SM6	43	17	6,9	14	5	8	40	M5x16	2 ±0,2

Part No.	Material	Weight [kg]									
1827020282	Aluminum	0.016									

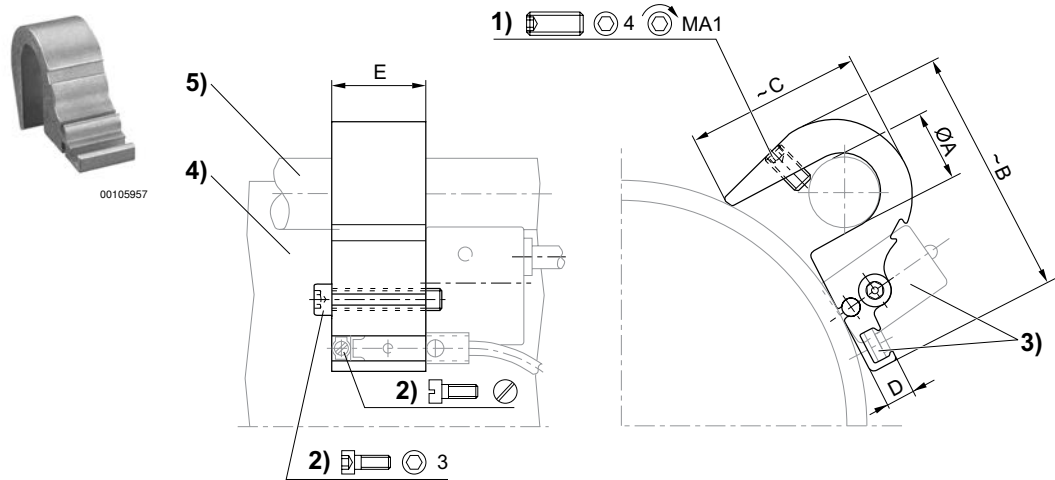
Piston rod cylinders ▶ Cylinder valve units

Series CVI
Accessories

Part No.	Material	Weight [kg]								
1827020283	Aluminum	0.029								
1827020284	Aluminum	0.042								

Sensor mounting, Series CB1

▶ for Series ST6, SM6, SN1, SN2 ▶ to mount on cylinder TRB, C12P, CVI, 523



1) Clamping threaded pin 2) Mounting screw for sensor 3) Sensor 4) Cylinder profile 5) Tie rod

Part No.	Cylinders Ø [mm]	For series	Ø A	B	C	D	E	1)	MA1 [Nm]
1827020292	125 - 125	ST6, SM6, SN1, SN2	12	45	29	6.5	21	M5x10	2

Part No.	Material	Weight [kg]								
1827020292	Aluminum	0.031								

Sensor, Series SN6

▶ with cable ▶ without wire end ferrule, tin-plated, 2-pin ▶ heat resistant up to 120 °C





Ambient temperature min./max.
Protection class
Switching point precision [mm]
LED status display
Vibration resistance
Shock resistance

See table below
IP67, IP65
±0,1
Yellow
35 g (50 - 2000 Hz)
50 g / 11 ms

Materials:
Housing
Cable sheath

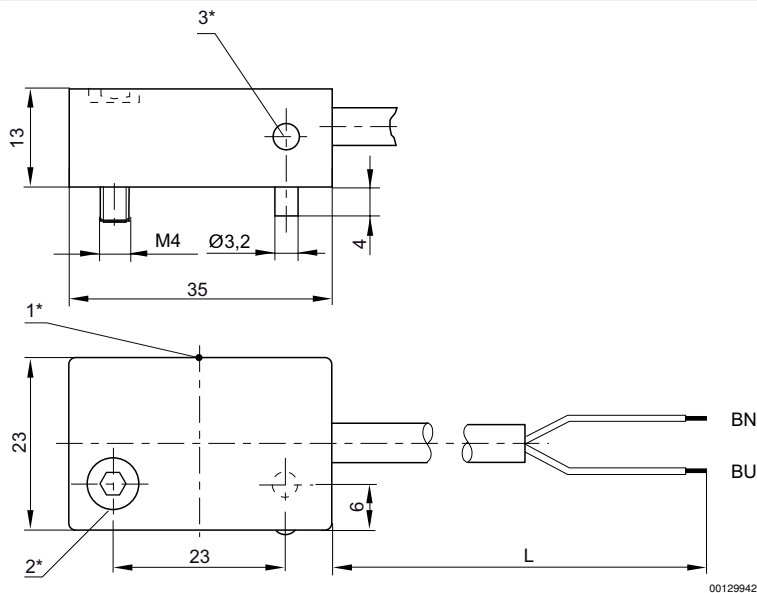
Polyester amide
Polyvinyl chloride

Series CVI Accessories

	Type of contact	Cable length	Operational voltage AC min./max.	DC switching current, max.	AC switching current, max.	Ambient temperature min./max.	Switching capacity	Part No.
		[m]	[V AC]	[A]	[A]	[°C]		
	Reed	2.5 6	10 / 250	0.5	0.5	-25°C / +75°C	50 W / 50 VA	8940412022 8940412032
	Reed	2.5	10 / 250	3	3	-20°C / +120°C	60 W / 60 VA	8940411902

interfaces: without wire end ferrule, tin-plated; 2-pin
Protected against polarity reversal

Dimensions



1* = switching point 2* = clamping screw 3* = LED
L = cable length
BN=brown, BU=blue

Sensor, Series SN6 ▶ Plug, Form B, industry, 2-pin





Protection class	IP65
Switching point precision [mm]	±0,1
Vibration resistance	35 g (50 - 2000 Hz)
Shock resistance	50 g / 11 ms
Materials:	
Housing	Polyester amide

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

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Piston rod cylinders ▶ Cylinder valve units

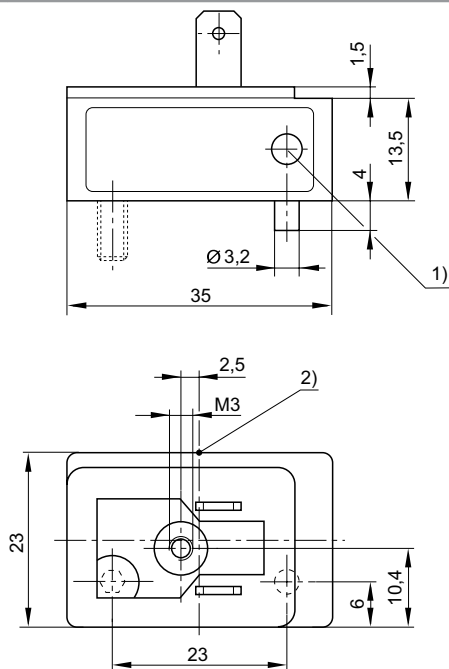
Series CVI Accessories

	Type of contact	Operational voltage AC min./max.	DC switching current, max.	AC switching current, max.	Ambient temperature min./max.	Switching capacity	LED	Part No.
		[V AC]	[A]	[A]	[°C]			
	Reed	10 / 250	3	3	-25°C / +75°C	60 W / 60 VA	-	8940410602
	Reed	10 / 250	0.5	0.5	-25°C / +75°C	50 W / 50 VA	Yellow	8940410612

Part No.	Note
8940410602	-
8940410612	1)

1) Protected against polarity reversal interfaces: Plug; Form B, industry; 2-pin

Dimensions



D894_060_c

- 1) LED
- 2) Switching point

Series CVI Accessories

Sensor, Series SN6

▶ Plug, Form B, industry, 2-pin ▶ ATEX certified



00129777

ATEX

Ambient temperature min./max.

Protection class

Switching point precision [mm]

LED status display

Materials:

Housing

II 3G Ex nC nA IIC T4 Gc

II 3D Ex tc IIIB/IIIC T125°C Dc -10°C ≤ Ta ≤ 50°C


-10°C / +50°C

IP65

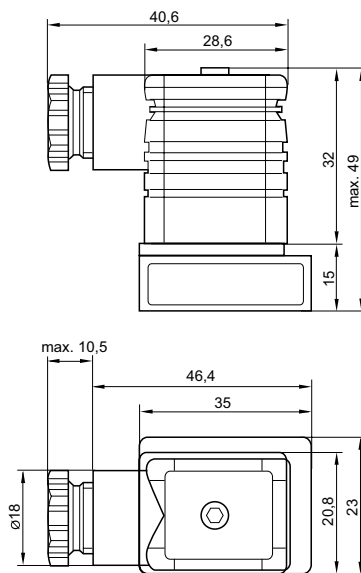
±0,1

Yellow

Polyester amide

	Type of contact	DC operating voltage min./max.	Operational voltage AC min./max.	DC switching current, max.	AC switching current, max.	Part No.
		[V DC]	[V AC]	[A]	[A]	
	Reed	21.6 / 26.4	210 / 240	0.1	0.1	R412000823
interfaces: Plug; Form B, industry; 2-pin Protected against polarity reversal						

Dimensions



00129659

Piston rod cylinders ▶ Cylinder valve units

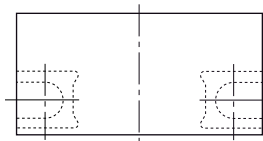
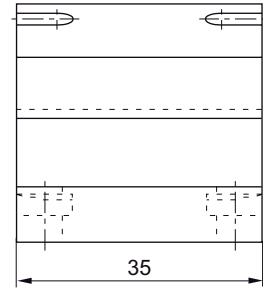
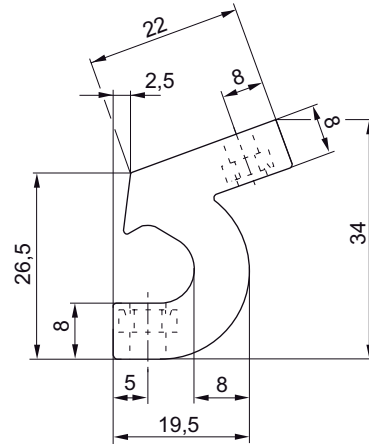
Series CVI
Accessories

Sensor mounting, Series CB1

▶ for Series SN6 ▶ to mount on cylinder TRB, CVI, 523



00137192



00137191

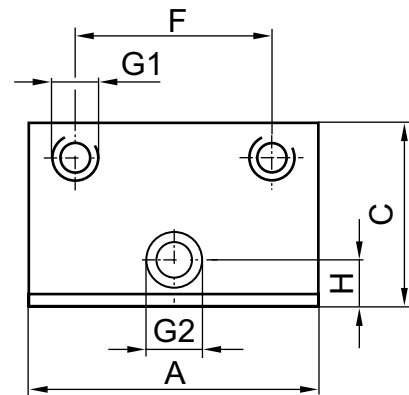
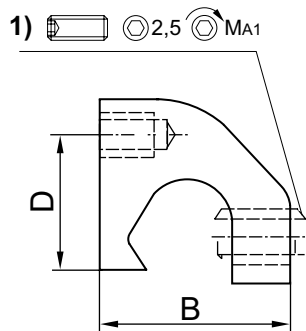
Part No.	Cylinders Ø [mm]	For series	Material	Weight [kg]					
5230033502	32 - 63	SN6	Polyamide	0.028					

Sensor mounting, Series CB1

▶ for Series SN6 ▶ to mount on cylinder TRB, C12P, CVI, 523



24503



00130352

1) Clamping threaded pin

Part No.	Cylinders Ø [mm]	For series	A	B	C	D	F	G1	G2	H	MA1 [Nm]
3220643562	80 - 125	SN6	35	22	21	12	23	M4	M5	5	1,8 +0,4

Series CVI

Accessories

Part No.	Material	Weight [kg]								
3220643562	Aluminum	0.034								

Sensors, Series SM6

▶ 6 mm groove ▶ with cable ▶ without wire end ferrule, tin-plated, 4-pin ▶ with distance measuring sensor, measurement range 32 - 256 mm

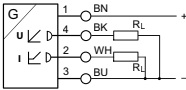


00133722

Certificates	cULus
Ambient temperature min./max.	-20°C / +70°C
Protection class	IP67
Output signal	0 - 10 V DC, 4 - 20 mA
Quiescent current (without load)	< 25 mA
Current signal	4 - 20 mA
Maximum load (analog current output)	500 Ω
DC operating voltage min./max.	15 V DC - 30 V DC
Residual ripple	≤ 10 %
sampling interval	1 ms
Resolution max. measuring range	0,05 mm
Repetitive precision max. measuring range	0.1 mm
Linearity deviation	0,3 mm
Sampling speed	3 m/s
Display	LED
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms

Materials:

Housing	Polyamide, fiber-glass reinforced
Cable sheath	Polyurethane

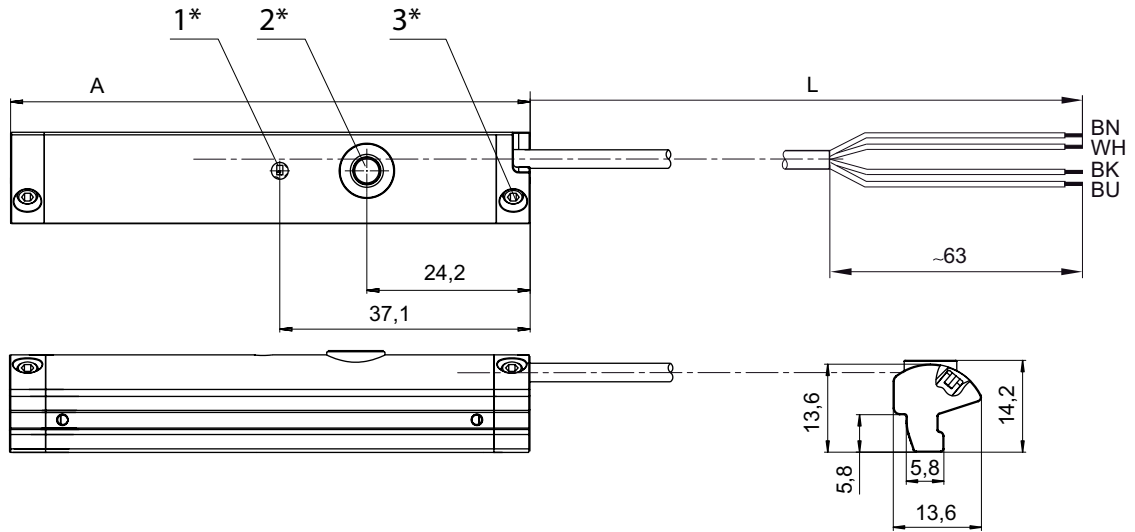
	Type of contact	Cable length	Measurement range	Overall length	Part No.
			Max.	Sensor A	
		[m]	[mm]	[mm]	
	Analog	2	32	45	R412010141
			64	77	R412010143
			96	109	R412010262
			128	141	R412010264
			160	173	R412010411
			192	205	R412010413
			224	237	R412010415
			256	269	R412010417

interfaces: without wire end ferrule, tin-plated; 4-pin
short circuit resistant / Protected against polarity reversal / Overload protection

Piston rod cylinders ▶ Cylinder valve units

**Series CVI
Accessories**

Dimensions



00133787

- 1* = LED 2* = teach button 3* = threaded pin M3x11
- L = cable length
- (1) BN=brown
- (2) WH=white
- (3) BU=blue
- (4) BK=black
- A = sensor length

Sensors, Series SM6

▶ 6 mm groove ▶ with cable ▶ Plug, M8x1, 4-pin, with knurled screw ▶ with distance measuring sensor, measurement range 32 - 256 mm



00134312

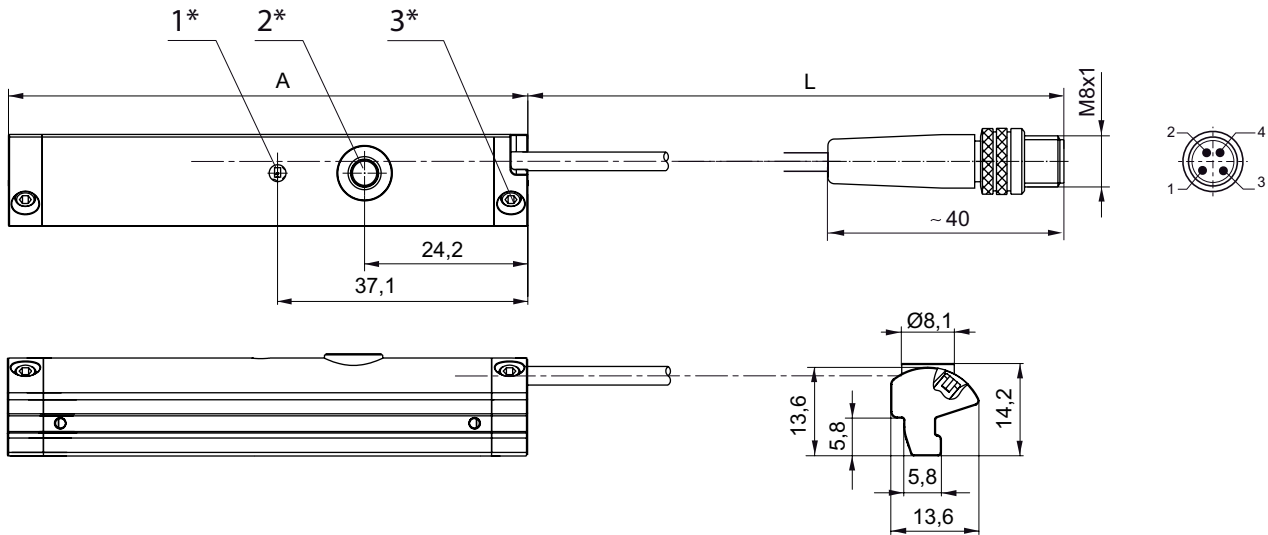
Certificates	cULus
Ambient temperature min./max.	-20 °C / +70 °C
Protection class	IP67
Output signal	0 - 10 V DC, 4 - 20 mA
Quiescent current (without load)	< 25 mA
Current signal	4 - 20 mA
DC operating voltage min./max.	15 V DC - 30 V DC
sampling interval	1 ms
Resolution max. measuring range	0,05 mm
Repetitive precision max. measuring range	0.1 mm
Linearity deviation	0,3 mm
Sampling speed	3 m/s
Display	LED
LED status display	Yellow
Vibration resistance	10 - 55 Hz, 1 mm
Shock resistance	30 g / 11 ms
 Materials:	
Housing	Polyamide, fiber-glass reinforced
Cable sheath	Polyurethane

Series CVI Accessories

	Type of contact	Cable length	Measurement range	Overall length	Part No.
			Max.	Sensor A	
		[m]	[mm]	[mm]	
	Analog	0.3	32	45	R412010142
			64	77	R412010144
			96	109	R412010263
			128	141	R412010265
			160	173	R412010410
			192	205	R412010412
			224	237	R412010414
			256	269	R412010416

interfaces: Plug; M8x1; 4-pin; with knurled screw
short circuit resistant / Protected against polarity reversal / Overload protection

Dimensions



1* = LED 2* = teach button 3* = threaded pin M3x11

L = cable length

Pin assignment: 1 = (+), 2 = (OUT 1) 3 = (GND), 4 = (OUT 2), EN 60947-5-7

A = sensor length

00133788

Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

Connecting cable, Series CN2

▶ open cable ends, 3-pin



00107009_b

Ambient temperature min./max.

-40°C / +85°C

Protection class

IP65

Materials:

Cable sheath

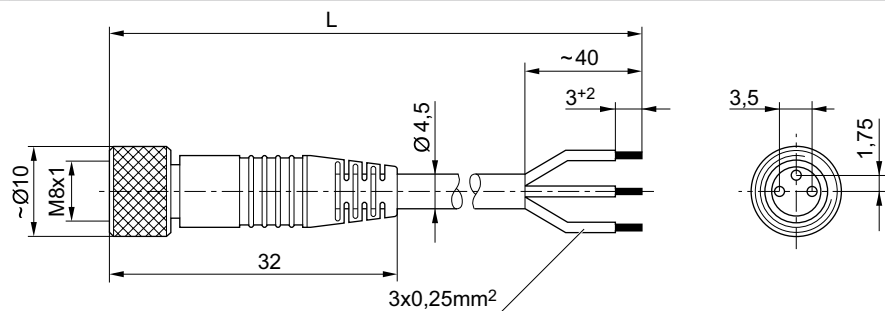
Polyurethane

Technical Remarks

- The specified protection class is only valid in assembled and tested state.

	Electrical interface	Max. current	Number of wires	Wire cross-section	Cable-Ø	Cable length L	Weight	Part No.
	[Port 1]	[A]		[mm ²]	[mm]	[m]	[kg]	
-	Socket, M8, 3-pin, straight	4	3	0.24	4.5	3	0.091	1834484166
-						5	0.145	1834484168
	Socket, M8x1, 3-pin, angled	4	3	0.24	4.5	3	0.092	1834484167
						5	0.141	1834484169
						10	0.276	1834484248

Dimensions

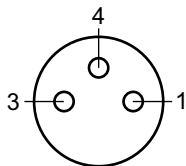


00105612_a

L = length

Series CVI Accessories

Pin assignment



Buchse_3-polig

- (1) BN=brown
- (3) BU=blue
- (4) BK=black

Socket, M8x1, Series CN2



16406

Ambient temperature min./max.

-25 °C / +85 °C

Protection class

IP65

Materials:

Housing

Polyamide

Technical Remarks

- The specified protection class is only valid in assembled and tested state.

	Electrical interface	Operational voltage	Max. current	Contact assignment	Cable exit	suitable cable-Ø min./max	Part No.
		AC					
		[V]	[A]			[mm]	
	Socket, M8x1, 3-pin	48	4	-	straight	3.5 / 5	1834484173
	Socket, M8x1, 3-pin, angled			3	angled 90°		1834484174

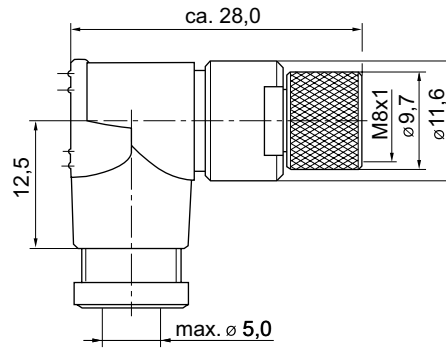
Part No.	number of plug options 1	Housing color	Weight
			[kg]
1834484173 1834484174	1 position	Black	0.008

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

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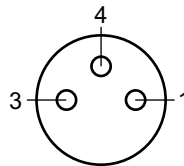
Series CVI
Accessories

Dimensions



15832

Pin assignment



Buchse_3-polig

Series CVI

Accessories

Holding unit, Series HU1

▶ Ø32 - 100 mm ▶ hold: spring force, release: compressed air

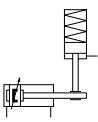


00104762

Function	Hold with clamping jaws
Release pressure	4 bar / 8 bar
Ambient temperature min./max.	-10 °C / +60 °C
Medium temperature min./max.	-10 °C / +60 °C
Max. particle size	5 µm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³
Static holding force	See table below
Materials:	
Housing	Aluminum, black anodized

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.
- Warning: The holding unit may not be used for the following applications:- for dynamic holding- in or as safety equipment
- Holding unit may only be unlocked when turned off.
- Make sure that the load direction does not change during a holding interval. A change in the direction of force, as well as external forces such as impacts, strong vibrations, or torsional forces, will briefly release the piston rod and may destroy the HU1 holding unit.
- When clamped, there must be no residual pressure on the holding unit (0 bar).
- Note: The minimum control pressure is \geq the working pressure of the cylinder!

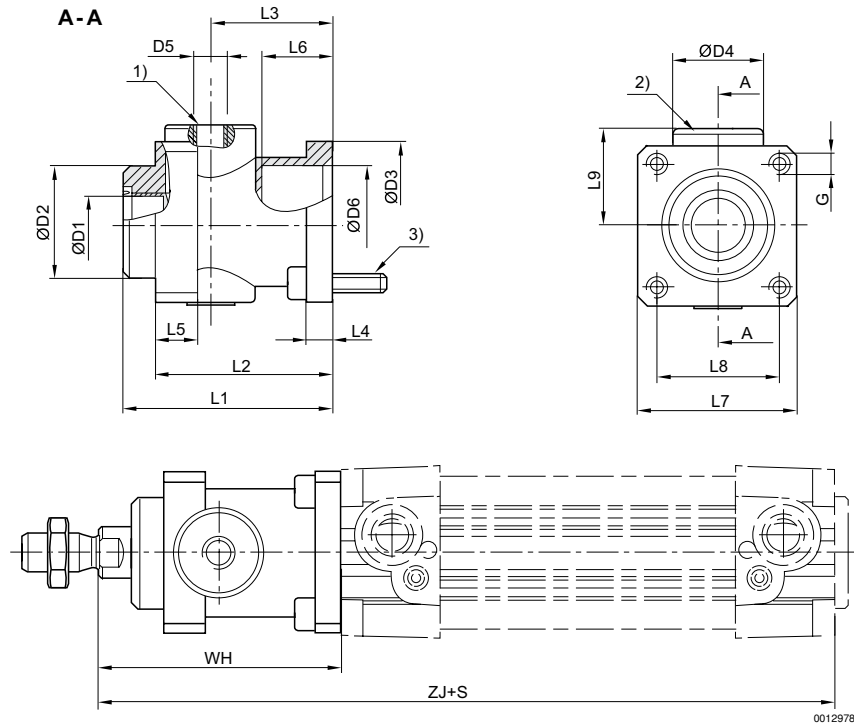
	Piston Ø	suitable piston rod Ø	Piston rod extension	Compressed air connection	Static holding force	Weight	Part No.
	[mm]	[mm]	[mm]		[N]	[kg]	
	32	12	42	M5	650	0.2	0821401165
	40	16	45	G 1/8	1100	0.27	0821401166
	50	20	57	G 1/8	1600	0.57	0821401167
	63	20	57	G 1/8	2500	0.8	0821401168
	80	25	77	G 1/8	4000	1.85	0821401169
	100	25	77	G 1/8	6300	2.9	0821401170

Holding force at 0 bar

Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

Dimensions



- 1) air connection
 - 2) Holding cartridge
 - 3) mounting screws 4x
- S = stroke

Piston Ø	Ø D1	Ø D2	Ø D3	Ø D4	D5	L1	L2	L3	L4	L5	L6	L7	L8
32	12	30	35	25	M5	58	48	34	8	13	20.5	45	32.5
40	16	35	40	28	G 1/8	65	55	38	8	13	22.5	50	38
50	20	40	50	35	G 1/8	82	70	48	15	16	29.5	60	46.5
63	20	45	60	38	G 1/8	82	70	49.5	15	16	29.5	70	56.5
80	25	45	80	48	G 1/8	110	90	61	18	20	35	90	72
100	25	55	100	58	G 1/8	115	100	69	18	20	-	105	89

Piston Ø	L9	G	WH	ZJ									
32	25.5	M6	68	162									
40	30	M6	75	180									
50	36	M8	94	200									
63	40	M8	94	215									
80	50	M10	123	251									
100	58	M10	128	266									

Series CVI

Accessories

Locking unit, Series LU6

▶ Ø32 - 125 mm ▶ Holding and braking: non-adjustable spring, Release: compressed air



00134922

Version	Clamping jaw lock
Function	Static holding Dynamic braking
Release pressure	4 bar / 10 bar
Ambient temperature min./max.	-25 °C / +80 °C
Medium temperature min./max.	-25 °C / +80 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 mg/m ³
Materials:	
Housing	Aluminum, anodized
Seal	Nitrile butadiene rubber
Scraper	Nitrile butadiene rubber


Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The maximum ambient and medium temperature is +70 °C for the dynamic braking function.
- Note: Before pressurizing the locking unit, make sure that there is a balance of forces at the piston on the drive cylinder. Please see the operating instructions for further safety-relevant information. The locking unit can be used in controls with a max. performance level e in accordance with DIN EN ISO 13849-1 ("basic and well-tried safety principles"). For applications in category 2 to 4 controls, additional control measures according to DIN EN ISO 13849-1 are required.
- The locking unit can be used as an individual component or pre-mounted on a cylinder..
- Scope of delivery: LU6, each with 4 flange nuts, washers, and tie rods

Piston rod cylinders ▶ Cylinder valve units
**Series CVI
Accessories**

Piston Ø		[mm]	32	40	50	63	80
Max. holding/ braking force	F_{LU6}	[N]	760	1200	1900	3000	5000
Max. moving mass, external	m_{max}	[kg]	77	122	194	306	510
Max. piston speed	v_{max}	[m/s]	1	1	1	1	1
Max. total braking energy	E_{total}	[10 ⁶ J]	3.2	6	10	18	36
Max. braking energy per hour	P_{LU6}	[J/h]	720	1350	2250	4050	8100
Max. braking en- ergy per braking cycle	E_{LU6}	[J]	4.8	9	15	27	54
Braking energy per braking cycle related to B10d	E_{B10d}	[J]	1.6	3	5	9	18
Brake response time (4 bar)	t_{brake}	[s]	0.08	0.08	0.08	0.08	0.08
Brake response time (6.3 bar)	t_{brake}	[s]	0.1	0.1	0.1	0.1	0.1
Brake response time (10 bar)	t_{brake}	[s]	0.12	0.12	0.12	0.12	0.12

Piston Ø		[mm]	100	125			
Max. holding/ braking force	F_{LU6}	[N]	8000	12000			
Max. moving mass, external	m_{max}	[kg]	815	1223			
Max. piston speed	v_{max}	[m/s]	1	1			
Max. total braking energy	E_{total}	[10 ⁶ J]	58	93			
Max. braking energy per hour	P_{LU6}	[J/h]	13200	21000			
Max. braking en- ergy per braking cycle	E_{LU6}	[J]	88	140			
Braking energy per braking cycle related to B10d	E_{B10d}	[J]	29	47			
Brake response time (4 bar)	t_{brake}	[s]	0.09	0.09			
Brake response time (6.3 bar)	t_{brake}	[s]	0.11	0.11			
Brake response time (10 bar)	t_{brake}	[s]	0.13	0.13			

	Piston Ø	suitable pis- ton rod Ø	Piston rod extension	Compressed air connec- tion	Required flow rate	Weight	Max. torsional moment of piston rod	Part No.
	[mm]	[mm]	[mm]		Qn	[kg]	[Nm]	
					[l/min]			
	32	12	125	G 1/8	50	0.8	0.5	5230996402
	40	16	125	G 1/8	70	1	1	5231996402
	50	20	145	G 1/8	140	1.8	2	5232996402
	63	20	165	G 1/8	240	2.8	2.5	5233996402
	80	25	185	G 1/8	450	5.5	5	5234996402
	100	25	220	G 1/8	700	9.5	9	5235996402
	125	32	220	G 1/4	1200	13.8	15	5236996402

Part numbers marked in bold are available from the central warehouse in Germany, see the shopping basket for more detailed information

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Series CVI
Accessories

Part No.	B10d value static	B10d value dynamic	Buckling protection of the piston rod 1)	
			Max. cylinder stroke for Euler case 1	Max. cylinder stroke for Euler case 2
			[mm]	[mm]
5230996402	5.000.000	2.000.000	750	400
5231996402			1100	550
5232996402			1350	700
5233996402			950	500
5234996402			1350	700
5235996402			950	500
5236996402			1500	800

1) Only applies in dynamic cases, and only retracting

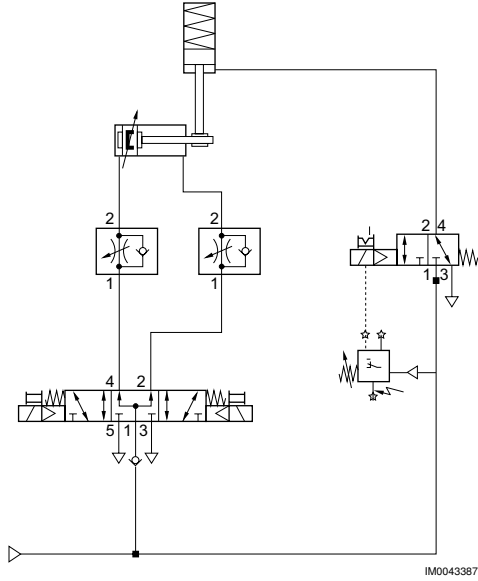
Formulas and sample calculations

Brake force pre-selection, locking unit LU6	Example: 30 kg load (brakes)
$F_{load} = m * g * 2$ (safety factor) $F_{LU6} \geq F_{load}$	$588,6 \text{ N} = F_{load}$ $760 \text{ N for } \varnothing 32 = F_{LU6}$
Pre-selection, PRA /TRB cylinder diameter	Example: 30 kg load, 500 mm stroke, 6 bar, vertical movement, cycle time 0.65 s
a) Cylinder diameter test	→ Calculation Tool: Test both movement directions $\varnothing 32$: Too much energy $\varnothing 40$: correct energy
b) Piston speed test	→ Calculation Tool
$v_{load} \leq v_{max}$	$0,77 \text{ m/s} = v_{load}$ $1,00 \text{ m/s} = v_{max}$
c) Brake energy test	
$E_{load} = 1/2 * m * v^2$ $E_{LU6} \geq E_{load}$	$8,9 \text{ J} = E_{load}$ $9,0 \text{ J} = E_{LU6}$
Test: LU6 performance	Example: 30 kg load, 120 brakes per hour
$P_{load} = E_{load} * n_{brake}$ $P_{LU6} \geq P_{load}$	$1067,2 \text{ J/h} = P_{load}$ $1350 \text{ J/h} = P_{LU6}$
Calculation of the expected service life	Example: 30 kg load, LU6 $\varnothing 40$
$E_{total} / E_{load} = B10d$ $B10d \leq 2 * 10^6$	$674.650 = B10d$
Calculation of the braking distance	
$S_{brake} = S_{dead\ time} + S_{LU6}$ $S_{dead\ time} = (t_{brake} + t_{valve}) * v_{load}$ $S_{LU6} = E_{load} / F_{LU6}$	t_{valve} = depending on the valve used

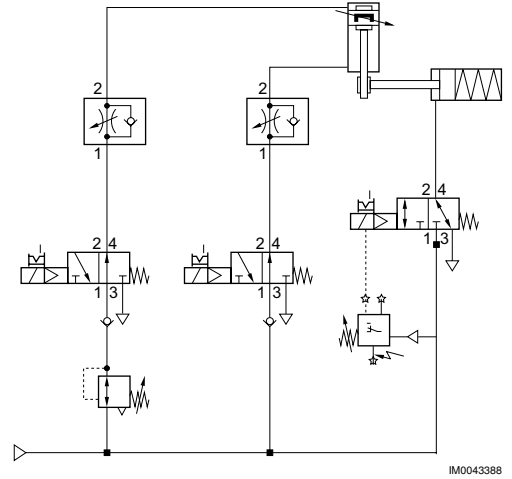
Piston rod cylinders ▶ Cylinder valve units

**Series CVI
Accessories**

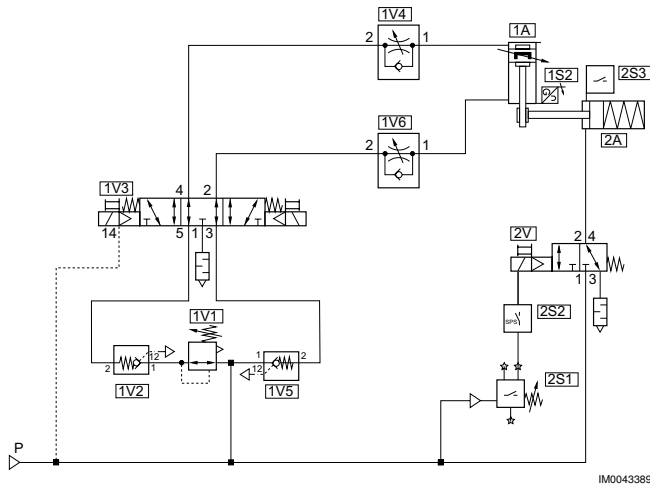
**Circuit example for non-safety relevant functions:
mounting orientation horizontal**



Vertical mounting orientation

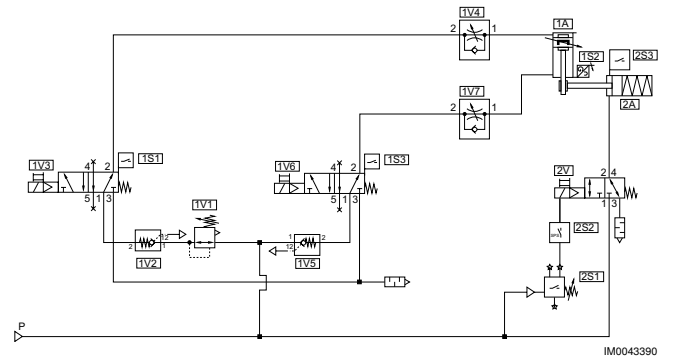


**Circuit example for safety-related stop functions:
mounting orientation horizontal**

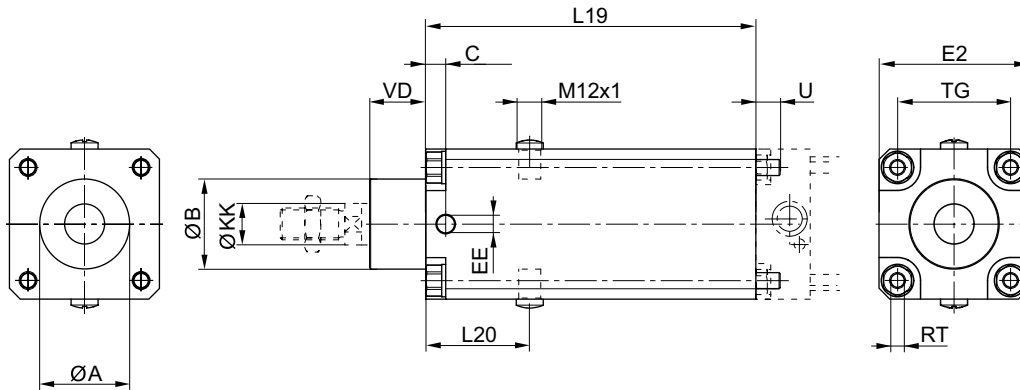


Channel 1: Safe stopping and closing
Channel 2: Safe brake control

Vertical mounting orientation



Channel 1: Safe stopping and closing
Channel 2: Safe brake control

Series CVI
Accessories
Dimensions


00134223

Piston \varnothing	$\varnothing A$	$\varnothing B$ d11	C	EE	E2	L19	L20	$\varnothing KK$ e8-h9	TG	RT	U	VD
32	30,5	30	9	G1/8	48	125	44	12	32,5	M6	10	19
40	35,5	35	9	G1/8	53	125	44	16	38	M6	10	21
50	40,5	40	9	G1/8	63	145	49	20	46,5	M8	11	28
63	45,5	45	10	G1/8	75	165	52	20	56,5	M8	11	28
80	45,5	45	11	G1/8	98	185	61,5	25	72	M10	16	34
100	55,5	55	13	G1/8	118	220	68	25	89	M10	16	37
125	60,5	60	13	G1/4	142	220	75	32	110	M12	16	45

Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

Coil, Series CO1

▶ form A ▶ Coil width 30 mm



00135727


Connector standard electrical connections
 Ambient temperature min./max.
 Protection class with electrical connector/plug
 Duty cycle ED

EN 175301-803, form A
 Plug
 -- / +50 °C
 IP65
 100 %

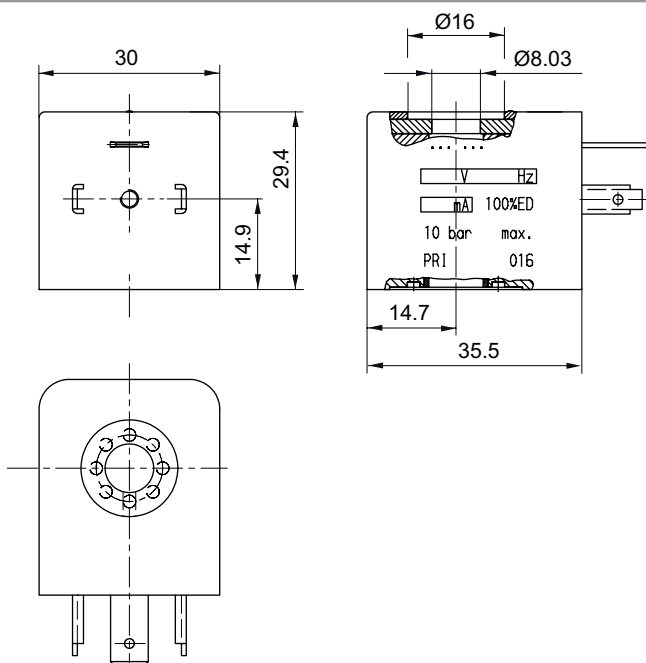
Materials:
 Housing

Thermoplastic elastomer

Operational voltage	Voltage tolerance	Power consumption
DC	DC	DC
		W
24 V	-10% / +10%	2.1

	Operational voltage	Compatibility index	Weight	Part No.
	DC		[kg]	
	24 V	13	0.096	5420507022

Dimensions



00135722

Series CVI
 Accessories

Coil, Series CO1

▶ with electrical connector ▶ Coil width 30 mm ▶ ATEX certified



ATEX

Ambient temperature min./max.

Protection class

Duty cycle ED

Compatibility index CI

II 3G Ex nAc IIB T4

II 3D Ex tc IIIB T125°C IP65X

-10°C / +50°C


IP65

100 %

13

00138109

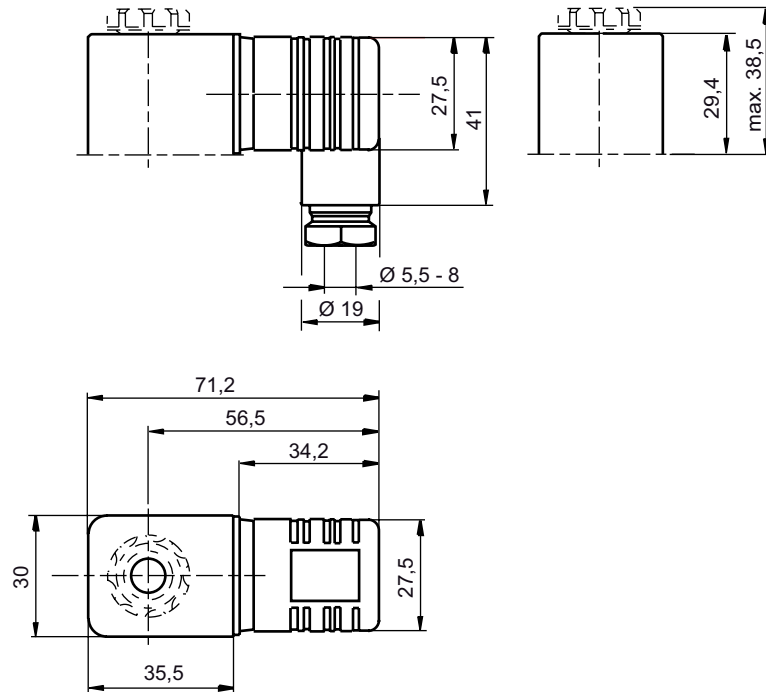
Operational voltage			Voltage tolerance			Power consumption	Switch-on power	Holding power
DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 50 Hz
						W	VA	VA
24 V	-	-	-10% / +10%	-	-	2.1	-	-
-	230 V	230 V	-	-20% / +10%	-10% / +20%	-	4.1	4.1

	Operational voltage			Weight	Part No.
	AC 50 Hz	DC	AC 60 Hz	[kg]	
	-	24 V	-	0.14	R412000144
	230 V	-	230 V	0.137	R412000147

Piston rod cylinders ▶ Cylinder valve units

Series CVI
Accessories

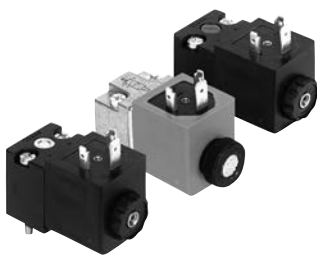
Dimensions



00129941

Pilot valve

▶ 581, Modular system ▶ Pilot valve width: 30 mm



P581_160

Standards

Ambient temperature min./max.
Medium

Protection class with connection
Duty cycle

CNOMO / NFE 49-003-1

-10 °C / +50 °C
Compressed air

IP65
100 %

Technical Remarks

- The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!
- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of compressed air must remain constant during the life cycle.
- Use only the approved oils from AVENTICS, see chapter „Technical information“.

Series CVI
Accessories

Operational voltage		Voltage tolerance		Power consumption	Switch-on power	Holding power
DC	AC 50 Hz	DC	AC 50 Hz	DC	AC 50 Hz	AC 50 Hz
				W	VA	VA
24 V	-	-10% / +10%	-	2	-	-
-	230 V	-	-20% / +10%	-	10	8

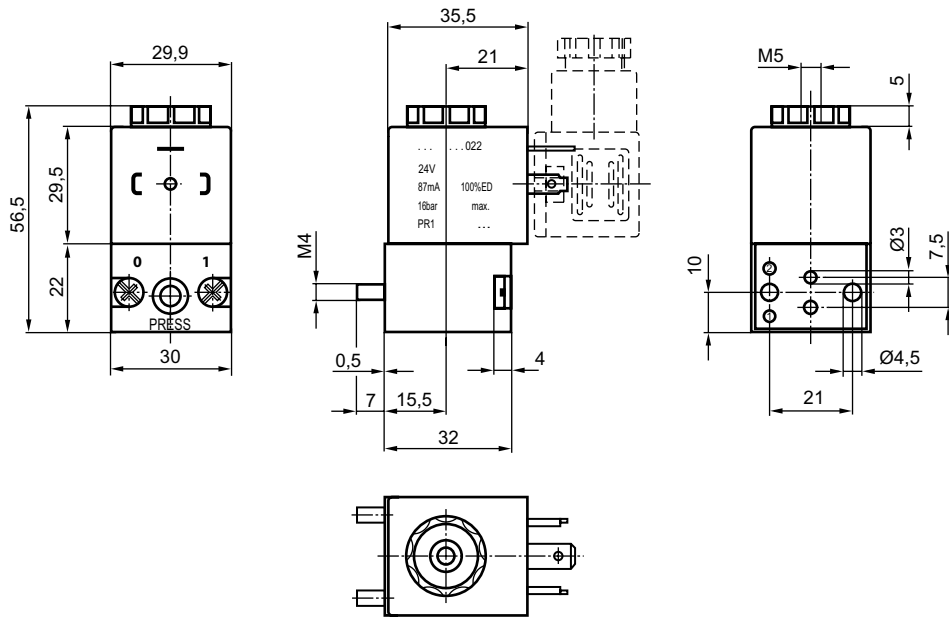
	MO	Operating voltage		Power consumption		Holding power		Switch-on power	Working pressure min./max.	Note	Part No.
		DC	AC 50 Hz	DC	AC 50 Hz	AC 50 Hz	[VA]				
				[W]	[VA]	[VA]	[bar]	[kg]			
		24 V	-	2	-	-	0 / 10	0.17	1); 2)		5420890020
		-	230 V	-	8	10					

MO = Manual override

1) pilot valve 30x22 mm with CNOMO porting configuration

2) Low power consumption

Dimensions



00132665

Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

Silencers, Series SI1 ▶ Sintered bronze



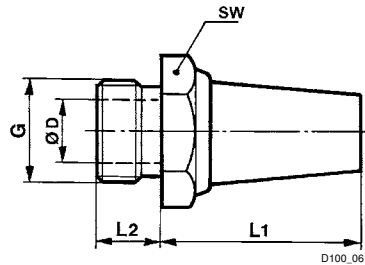
P100_060

Working pressure min./max. 0 bar / 10 bar
 Ambient temperature min./max. -25°C / +80°C
 Medium Compressed air

Materials: Sintered bronze
 Silencers
 Thread Brass

Compressed air connection	Sound pressure level	Qn	Order quantity	Weight	Part No.
	[dB]	[l/min]	[piece]	[kg]	
G 1/8	75	1500	10	0.01	1827000000
G 1/4	79	2900	10	0.02	1827000001
G 3/8	84	5900	5	0.05	1827000002
G 1/2	90	7100	2	0.08	1827000003

Dimensions



Part No.	Port G	SW	Ø D	L1	L2							
1827000000	G 1/8	13	6	18	6							
1827000001	G 1/4	17	8.5	25	8							
1827000002	G 3/8	22	12	34	10							
1827000003	G 1/2	27	14.5	44	12							

Sound pressure level measured at 6 bar at 1 m distance

Series CVI
 Accessories

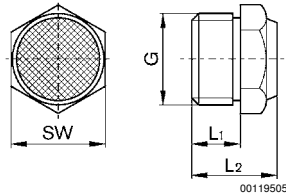
Silencers, Series SI1
 > Sintered bronze


P100_037

Working pressure min./max. 0 bar / 10 bar
 Ambient temperature min./max. -25°C / +80°C
 Medium Compressed air

Materials:
 Silencers Sintered bronze
 Thread Brass

Compressed air connection	Sound pressure level	Qn	Order quantity	Weight	Part No.
	[dB]	[l/min]	[piece]	[kg]	
G 1/8	85	640	10	0.001	1827000031
G 1/4	88	900	10	0.01	1827000033
G 3/8	90	1750	5	0.016	1827000034
G 1/2	85	2000	2	0.035	1827000035

Dimensions


Part No.	Port G	L1	L2	SW								
1827000031	G 1/8	6	11.5	13								
1827000033	G 1/4	8	13.5	17								
1827000034	G 3/8	10	17.5	22								
1827000035	G 1/2	12	19.5	27								

Sound pressure level measured at 6 bar at 1 m distance

Piston rod cylinders ▶ Cylinder valve units

Series CVI Accessories

Electrical connector, Series CN1 ▶ 18 mm ▶ ISO 4400 ▶ form A



00110264_a

Ambient temperature min./max.	-40°C / +90°C
Protection class	IP65
Mounting screw tightening torque	0.4 Nm

Technical Remarks

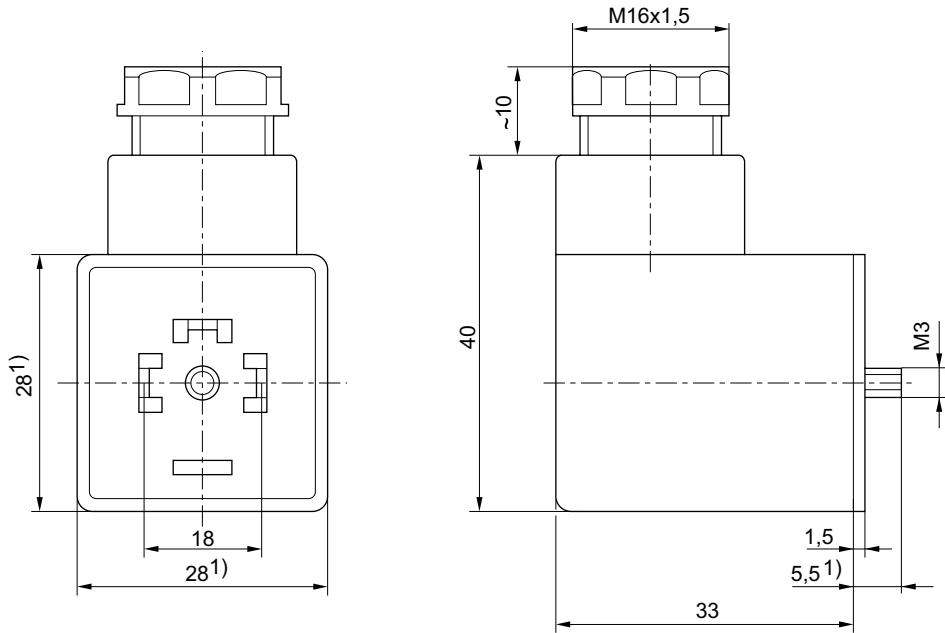
- The specified protection class is only valid in assembled and tested state.

	Cable fitting	Operational voltage	Contact assignment	Cable exit	Protective circuit	suitable cable-Ø min./max	Part No.
		AC					
		[V]				[mm]	
	M16x1,5	24	2+E	angled 90°	Z-diode	6 / 8	1834484101
	M16x1,5	110 230	2+E	angled 90°	Varistor	6 / 8	1834484102 1834484103

Part No.	number of plug options 1	Status display	LED status display	Housing color	Weight	Note
					[kg]	
1834484101	4 positions each 90°	1 LED	Yellow	Transparent	0.03	3); 4)
1834484102 1834484103	4 positions each 90°	2 LED	Red	Transparent	0.03	2); 5); 5) 2); 4)

- 1) electrical connector with status display (2 LED) for pressure sensor
- 2) Profile seal
- 3) Flat gasket
- 4) Seal: Silicone caoutchouc
- 5) Seal: caoutchouc/butadiene caoutchouc

Series CVI
 Accessories

Dimensions


00110274

1) Max.

Electrical connector, Series CN1

▶ 8 mm ▶ ISO 15217 ▶ form C



P894_220

 Ambient temperature min./max.
 Protection class
 Mounting screw tightening torque

 -40°C / +90°C
 IP65
 0.4 Nm

 Materials:
 Housing

Polyamide

Technical Remarks

- The specified protection class is only valid in assembled and tested state.

Piston rod cylinders ▶ Cylinder valve units

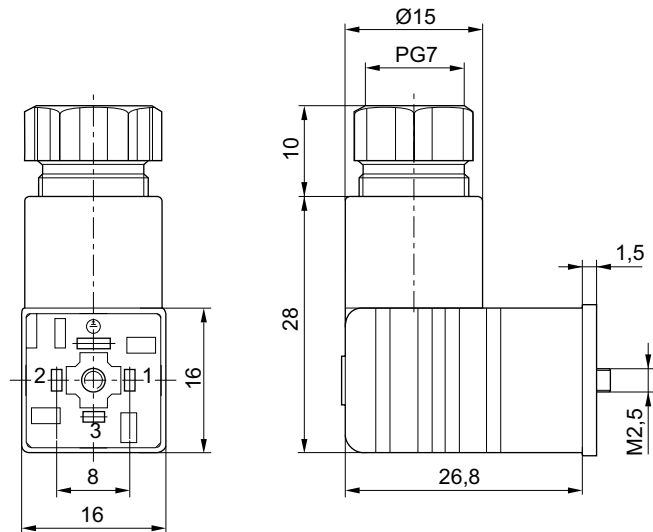
Series CVI Accessories

	Cable fitting	Operational voltage	Max. current	Contact assignment	Cable exit	Protective circuit	suitable cable-Ø min./max	Part No.
		AC						
		[V]	[A]				[mm]	
	M12x1,5 PG 7	250	6	2+E	angled 90°	-	4 / 6	1834484187 8941012202
	M12x1,5	24	-	2+E	angled 90°	Z-diode	-	4402050330

Part No.	number of plug options 1	Status display	LED status display	Housing color	Weight	Fig.	Note
					[kg]		
1834484187 8941012202	4 positions each 90°	-	-	Black	0.012	Fig. 1 Fig. 2	1); 2) 1)
4402050330	4 positions each 90°	1 LED	Green	Transparent	0.014	Fig. 3	-

- 1) Profile seal
2) Seal: caoutchouc/butadiene caoutchouc

Fig. 1



00110255

Series CVI
 Accessories

Fig. 2

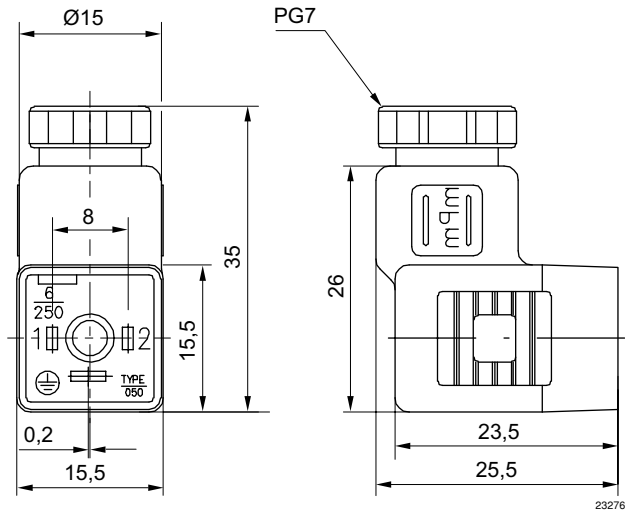
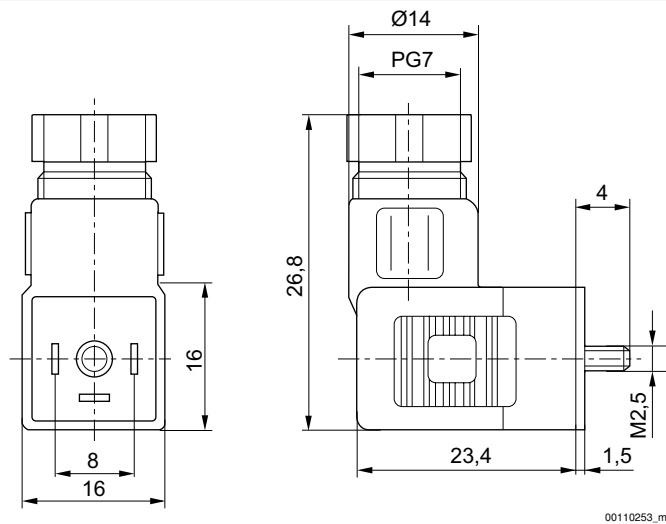


Fig. 3



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27-04-2017

An example configuration is depicted on the title page. The delivered product may thus vary from that in the illustration. Subject to change. © AVENTICS S.à r.l.
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