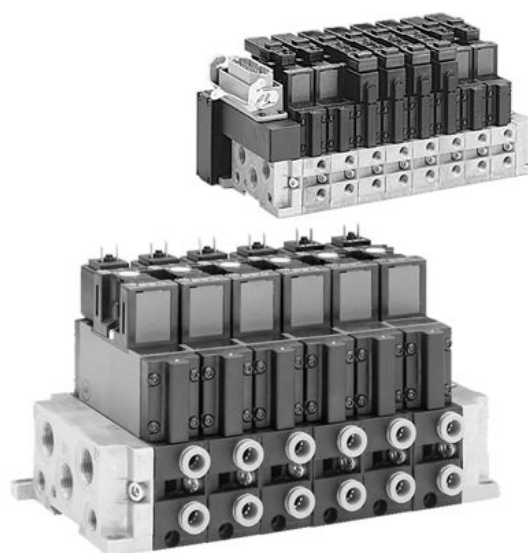


ISO 15407-1, series CD01-PA



AVENTICS™

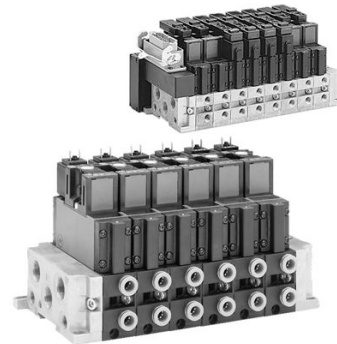
AVENTICS Series CD01-PA
Standardized valve systems
(ISO 15407-1)


EMERSON™

AVENTICS Series CD01-PA Standardized valve systems (ISO 15407-1)

The AVENTICS Series CD01-PA is the flexible valve system according to ISO 15407-1. The Series offers pneumatic or electrical control, vacuum or pressure of up to 16 bar, dual-pressure application, pressure-zones, ATEX certification, and various accessories allow for a wide range of modularity.

- Standardized valve system with size of 26 mm
- High flexibility and functionality
- Easy and flexible custom specific configurations via online configurator
- Pressure range of up to 16 bar
- A combination with Series CD02-AL possible



Product overview

	Page
Electrically operated	
2x3/2-directional valve, Series CD01-PA.....	5
26 mm - Soft seal - Plug	
2x3/2-directional valve, Series CD01-PA, 4-pin.....	8
26 mm - Soft seal - Plug	
5/2-directional valve, Series CD01-PA M12x1.....	10
26 mm - Single Solenoid - Soft seal - Plug	
5/2-directional valve, Series CD01-PA form C.....	12
26 mm - Single Solenoid - Soft seal - Plug	
5/2-directional valve, Series CD01-PA M12x1.....	15
26 mm - Double Solenoid - Soft seal - Plug	
5/2-directional valve, Series CD01-PA form C.....	17
26 mm - Double Solenoid - Soft seal - Plug	
5/2-directional valve, Series CD01-PA.....	19
26 mm - Electrically and Pneumatically Operated - Soft seal	
5/3-directional valve, Series CD01-PA.....	21
26 mm - without detent - Soft seal - Plug	
5/3-directional valve, Series CD01-PA.....	24
26 mm - Soft seal - Plug	
Pneumatically operated	
2x3/2-directional valve, CD01-PA.....	26
Soft seal - Suitable for ATEX	
5/2-directional valve, CD01-PA.....	28
Soft seal - Suitable for ATEX	
5/3-directional valve, CD01-PA.....	30
Double Air Pilot - Soft seal - Suitable for ATEX	
Accessories overview CD01-PA	
Subbase.....	31
End plate left, End plate right.....	32
Base plate.....	33
Mounting kit for DIN rails DIN.....	35
Blanking plate.....	36
Throttle plate.....	37
Pressure regulator for horizontal stacking.....	38
type B	
Pressure regulator for vertical stacking.....	39
Pressure regulator for vertical stacking.....	40
Supply plate.....	41
Supply module.....	43
Supply plate, stacked vertically.....	44
Supply plate, stacked longitudinally.....	45
Single subbase, ports on side.....	46
Single subbase, ports on bottom.....	47
End plate left, End plate right.....	48
Pressure gauge.....	50
Separator for connections 1, 3, 5.....	52
MS01-PA CD01-PA	

Product overview

	Page
Separator.....	53
MS01-AL CD01-PA	
Base plate, ports 2 and 4 on side.....	54
Base plate, ports 2 and 4 on side.....	56
Base plate, Ports 2 and 4, 12 and 14 on side.....	58
Base plate, ports 2 and 4 on bottom.....	60
Contact bridges, series CON-CB.....	61
2x solenoid	
Contact bridges, series CON-CB.....	63
1x solenoid	
Contact bridges, series CON-CB.....	64
2x solenoid	
Contact bridges, series CON-CB.....	65
2x solenoid	
Contact bridges, series CON-CB.....	66
1x solenoid	
Valve plug connector with cable series CON-VP, Form B, 0° female insert.....	67
Valve plug connector with cable series CON-VP,, 180° female insert.....	69
Valve plug connector, series CON-VP, form C, 300 V DC / 250 V AC.....	71

2x3/2-directional valve, Series CD01-PA

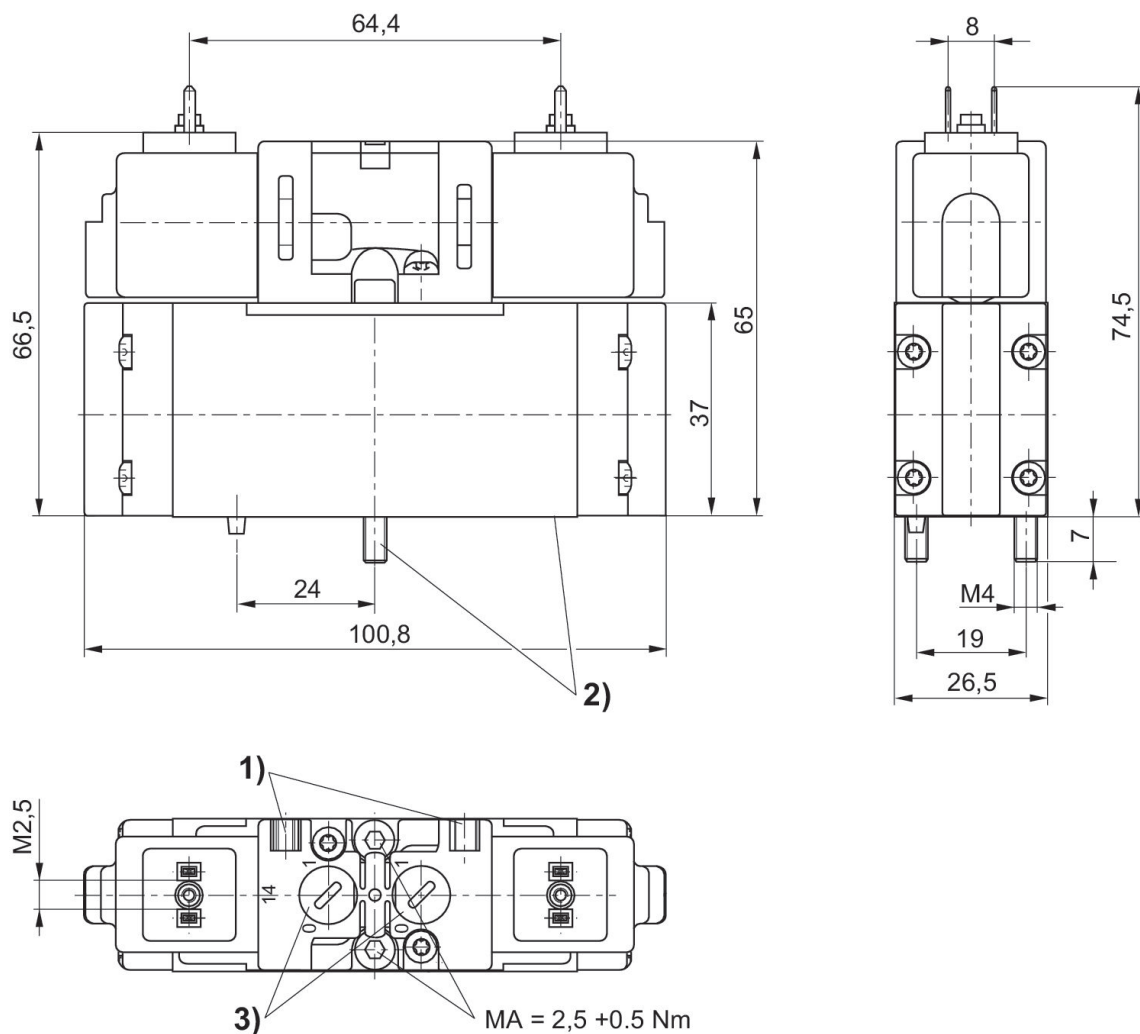
Activation: Electrically
 Standards: ISO 15407-1
 Coil width: 20 mm
 Electrical connection 2, thread size: EN 175301-803, form C
 Compressed air connection type: Base plate connection
 Certificates: Free of substances that impair surface wetting in the coating process
 Compressed air connection input: base plate DIN ISO 15407-1
 Compressed air connection output: base plate DIN ISO 15407-1
 Compressed air connection, exhaust: base plate DIN ISO 15407-1
 Max. control pressure: 10 bar
 Pilot valve width: 26 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 50 °C



Min. working pressure [bar]	Max. working pressure [bar]	Operational voltage	Operational voltage	Operational voltage	Voltage tolerance DC	Power consumption DC [W]	Switch-on time [ms]	Switch-off time [ms]	Pilot	Manual override	Part No.
		24 V			-10 % / +10 %	1.6	27	46	Internal	with detent	5763990220
		24 V			-10 % / +10 %	1.6	27	46	Internal	without detent	5763990620
			24 V	24 V			27	46	Internal	with detent	5763995220
			110 V	110 V			27	46	Internal	with detent	5763995270
			110 V	110 V			27	46	Internal	without detent	5763995670
			230 V	230 V			27	46	Internal	with detent	5763995280
3		24 V			-10 % / +10 %	1.6	26	34	Internal	with detent	5763970220
3		24 V			-10 % / +10 %	1.6	26	34	Internal	without detent	5763970620
3			24 V	24 V			26	34	Internal	with detent	5763975220
3			110 V	110 V			26	34	Internal	with detent	5763975270
3			110 V	110 V			26	34	Internal	without detent	5763975670
0	16	24 V			-10 % / +10 %	1.6	26	34	External	with detent	5763960220
0	16	24 V			-10 % / +10 %	1.6	26	34	External	without detent	5763960620
0	16		110 V	110 V			26	34	External	with detent	5763965270
0	16		110 V	110 V			26	34	External	without detent	5763965670
		24 V			-10 % / +10 %	1.6	27	46	Internal	with detent	5763950220
		24 V			-10 % / +10 %	1.6	27	46	Internal	without detent	5763950620

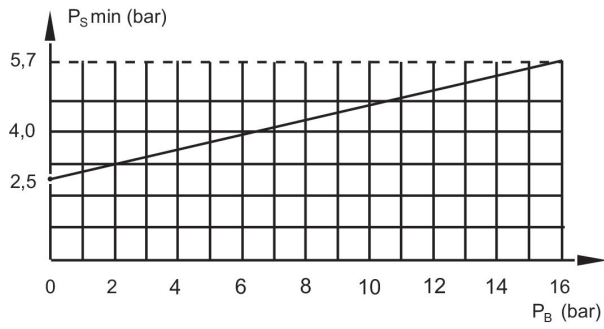
Min. working pressure [bar]	Max. working pressure [bar]	Operational voltage	Operational voltage	Operational voltage	Voltage tolerance DC	Power consumption DC [W]	Switch-on time [ms]	Switch-off time [ms]	Pilot	Manual override	Part No.
			110 V	110 V			27	46	Internal	with detent	5763955270
			110 V	110 V			27	46	Internal	without detent	5763955670

Dimensions



1) mounting space for name plate 2) screws and seals captive 3) manual override

Minimum control pressure for externally piloted valves (depending on the working pressure)



P_B = Working pressure
 P_S = control pressure

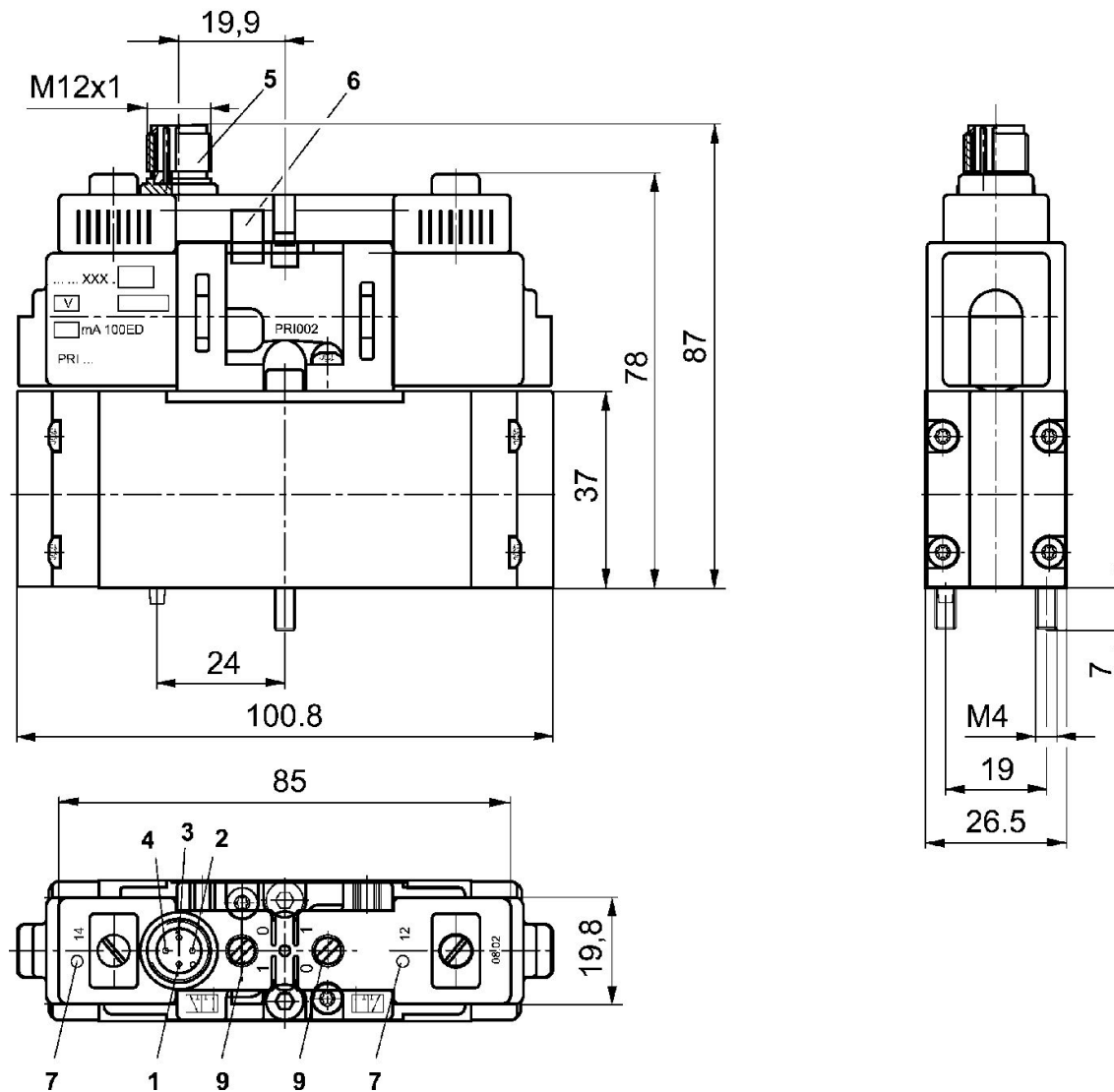
2x3/2-directional valve, Series CD01-PA, 4-pin

Activation: Electrically
 Standards: ISO 15407-1
 Coil width: 20 mm
 Electrical connection 2, thread size: M12x1
 Compressed air connection type: Base plate connection
 Certificates: Free of substances that impair surface wetting in the coating process
 Electrical connection 2, number of poles: 4-pin
 Compressed air connection input: base plate DIN ISO 15407-1
 Compressed air connection output: base plate DIN ISO 15407-1
 Compressed air connection, exhaust: base plate DIN ISO 15407-1
 Max. control pressure: 10 bar
 Pilot valve width: 26 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 50 °C



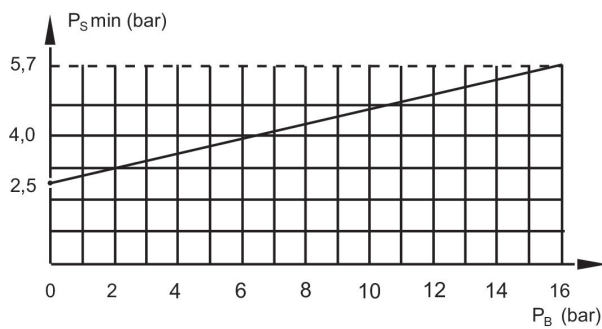
Min. working pressure [bar]	Max. working pressure [bar]	Operational voltage	Voltage tolerance DC	Power consumption DC [W]	Switch-on time [ms]	Switch-off time [ms]	Pilot	Manual override	Part No.
2.5	10	24 V	-10 % / +10 %	1.6	27	46	Internal	without detent	5763990720
2.5	10	24 V	-10 % / +10 %	1.6	27	46	Internal	with detent	5763990520
0	16	24 V	-10 % / +10 %	1.6	26	34	External	without detent	5763960720
0	16	24 V	-10 % / +10 %	1.6	26	34	External	with detent	5763960520
3	10	24 V	-10 % / +10 %	1.6	26	34	Internal	without detent	5763970720
3	10	24 V	-10 % / +10 %	1.6	26	34	Internal	with detent	5763970520
2.5	10	24 V	-10 % / +10 %	1.6	27	46	Internal	without detent	5763950720
2.5	10	24 V	-10 % / +10 %	1.6	27	46	Internal	with detent	5763950520

Dimensions



1) not assigned 2) magnet 12 3) 0 V 4) magnet 14 5) metal round plug M12x1 6) positioning pin 7) yellow valve switching state LED 9) manual override

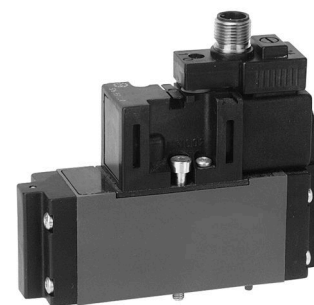
Minimum control pressure for externally piloted valves (depending on the working pressure)



P_B = Working pressure
 P_S = control pressure

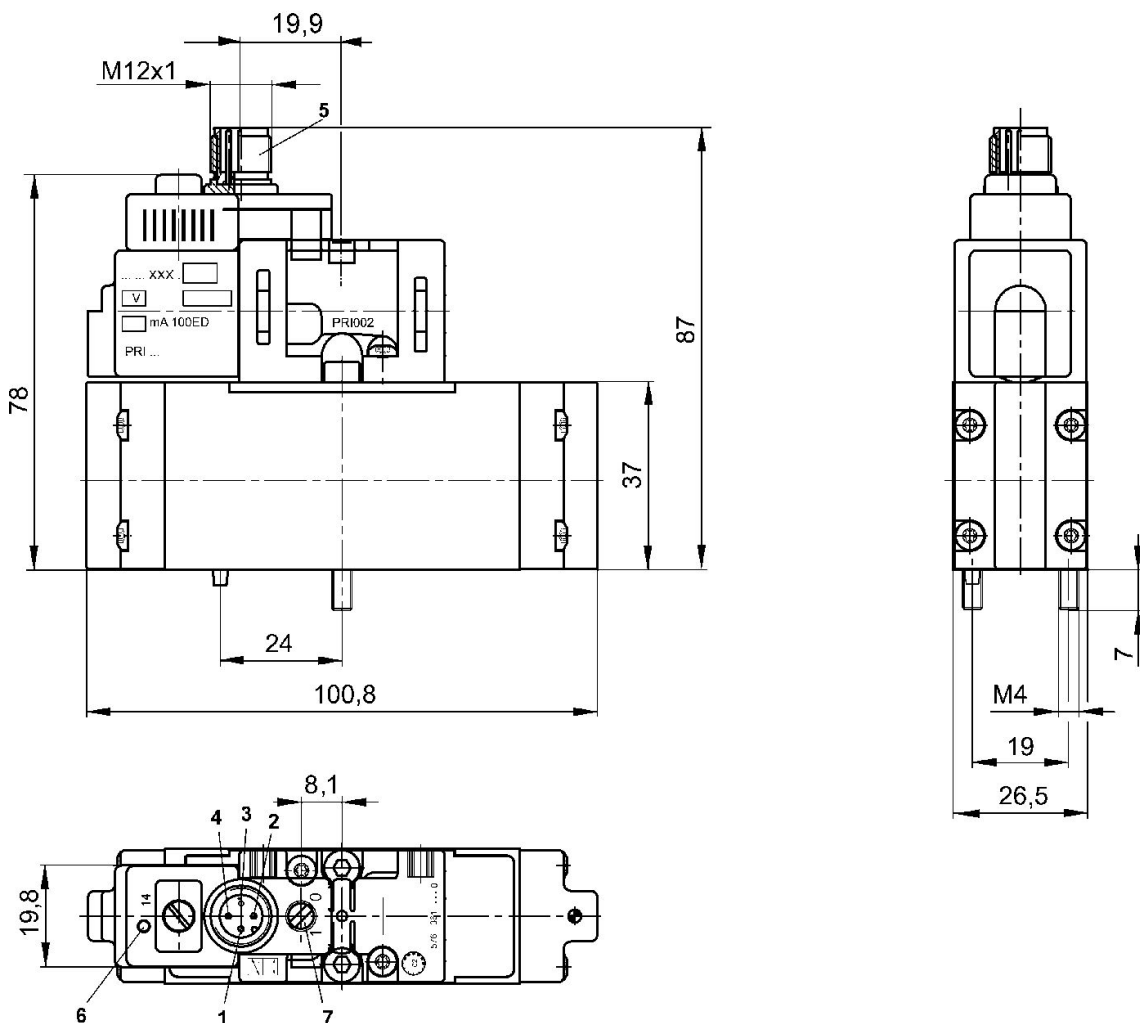
5/2-directional valve, Series CD01-PA M12x1

Flow: 1010 l/min
 Activation: Electrically
 Standards: ISO 15407-1
 Coil width: 20 mm
 Electrical connection 2, thread size: M12x1
 Qn 1 > 2: 1010 l/min
 Compressed air connection type: Base plate connection
 Certificates: Free of substances that impair surface wetting in the coating process
 Electrical connection 2, number of poles: 4-pin
 Compressed air connection input: base plate DIN ISO 15407-1
 Compressed air connection output: base plate DIN ISO 15407-1
 Compressed air connection, exhaust: base plate DIN ISO 15407-1
 Max. control pressure: 10 bar
 Pilot valve width: 26 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 50 °C



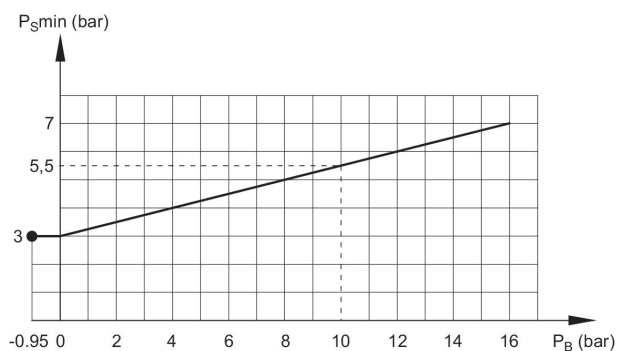
Min. working pressure [bar]	Max. working pressure [bar]	Operational voltage	Voltage tolerance DC	Power consumption DC [W]	Switch-on time [ms]	Switch-off time [ms]	Pilot	Manual override	Return type	Part No.
3	10	24 V	-10 % / +10 %	1.6	29	42	Internal	without detent	with air spring return	5763510720
3	10	24 V	-10 % / +10 %	1.6	29	42	Internal	with detent	with air spring return	5763510520
0	16	24 V	-10 % / +10 %	1.6	34	35	External	without detent	with spring/air spring return	5763600720
0	16	24 V	-10 % / +10 %	1.6	34	35	External	with detent	with spring/air spring return	5763600520

Dimensions



1) not assigned 2) not assigned 12 3) 0 V 4) magnet 14 5) metal round plug M12x1 6) yellow valve switching state LED 7) manual override

Minimum control pressure for externally piloted valves (depending on the working pressure)



P_B = Working pressure
 P_S = control pressure

5/2-directional valve, Series CD01-PA form C

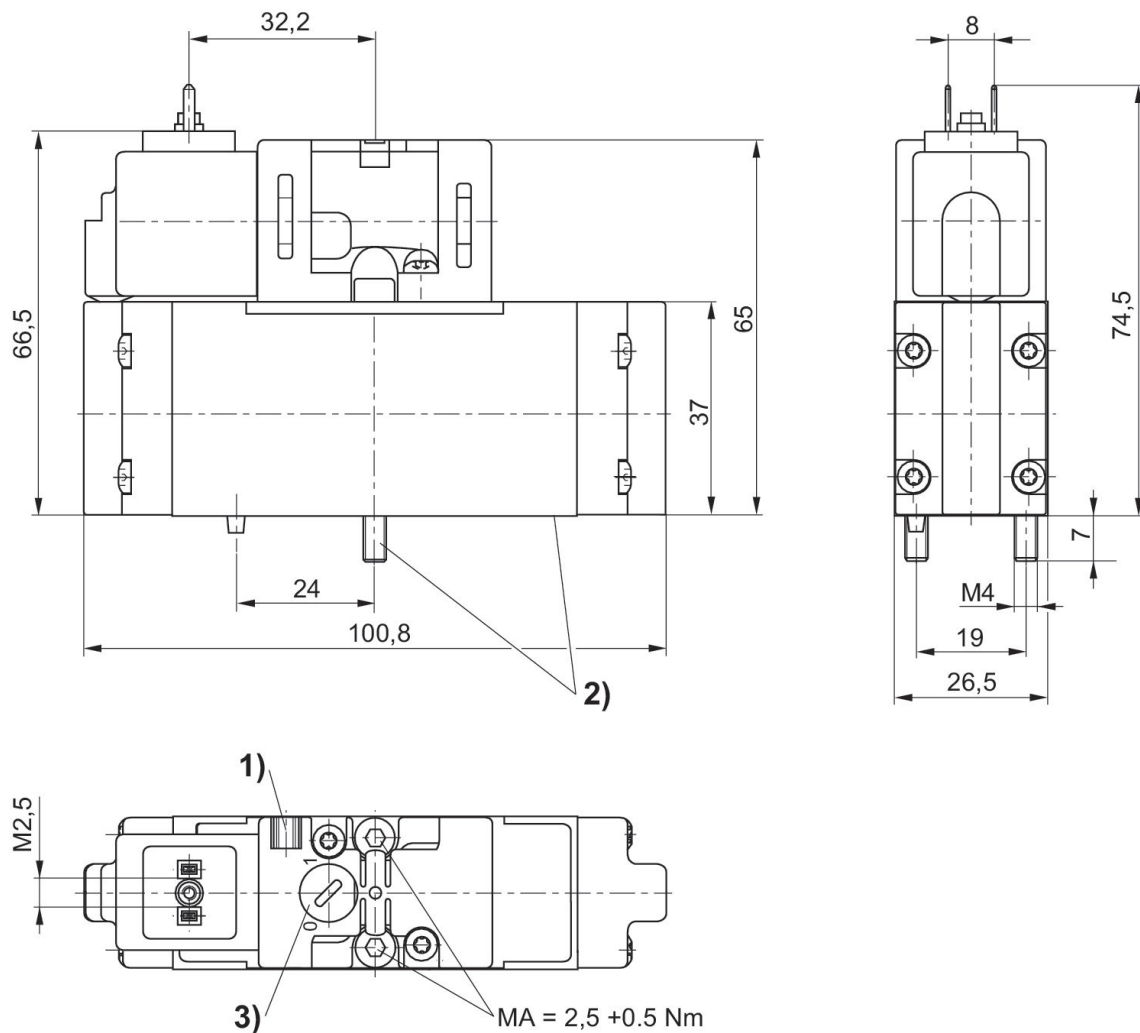
Flow: 1010 l/min
 Activation: Electrically
 Standards: ISO 15407-1
 Coil width: 20 mm
 Electrical connection 2, thread size: EN 175301-803, form C
 Qn 1 > 2: 1010 l/min
 Compressed air connection type: Base plate connection
 Certificates: Free of substances that impair surface wetting in the coating process
 Compressed air connection input: base plate DIN ISO 15407-1
 Compressed air connection output: base plate DIN ISO 15407-1
 Compressed air connection, exhaust: base plate DIN ISO 15407-1
 Pilot valve width: 26 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 50 °C



Min. working pressure [bar]	Max. working pressure [bar]	Operational voltage	Operational voltage	Operational voltage	Voltage tolerance DC	Power consumption DC [W]	Switch-on time [ms]	Switch-off time [ms]	Pilot	Manual override	Return type	Part No.
3	10	12 V			-10 % / +10 %	1.6	29	42	Internal	with detent	with air spring return	5763510210
3	10	24 V			-10 % / +10 %	1.6	29	42	Internal	with detent	with air spring return	5763510220
3	10	24 V			-10 % / +10 %	1.6	29	42	Internal	without detent	with air spring return	5763510620
2	16	24 V			-10 % / +10 %	2.06	29	42	Internal		with air spring return	5763510920
3	10		24 V	24 V			29	42	Internal	with detent	with air spring return	5763515220
3	10		110 V	110 V			29	42	Internal	with detent	with air spring return	5763515270
3	10		110 V	110 V			29	42	Internal	without detent	with air spring return	5763515670
3	10		230 V	230 V			29	42	Internal	with detent	with air spring return	5763515280
0	16	24 V			-10 % / +10 %	1.6	34	35	External	with detent	with spring/air spring return	5763600220
0	16	24 V			-10 % / +10 %	1.6	34	35	External	without detent	with spring/air spring return	5763600620
0	16		24 V	24 V			34	35	External	with detent	with spring/air	5763605220

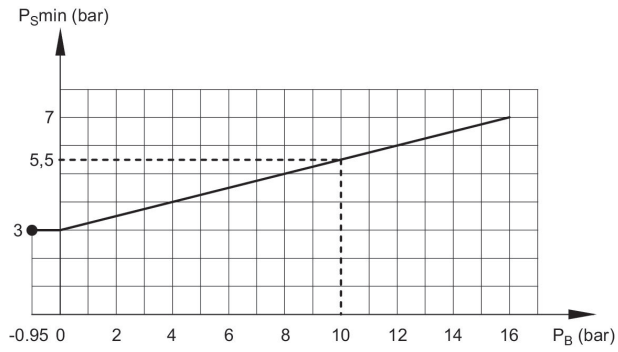
Min. working pressure [bar]	Max. working pressure [bar]	Operational voltage	Operational voltage	Operational voltage	Voltage tolerance DC	Power consumption DC [W]	Switch-on time [ms]	Switch-off time [ms]	Pilot	Manual override	Return type	Part No.
											spring return	
0	16		110 V	110 V			34	35	External	with detent	with spring/air spring return	5763605270
0	16		110 V	110 V			34	35	External	without detent	with spring/air spring return	5763605670
0	16		230 V	230 V			34	35	External	with detent	with spring/air spring return	5763605280

Dimensions



1) mounting space for name plate 2) screws and seals captive 3) manual override

Minimum control pressure for externally piloted valves (depending on the working pressure)



P_B = Working pressure
 P_S = control pressure

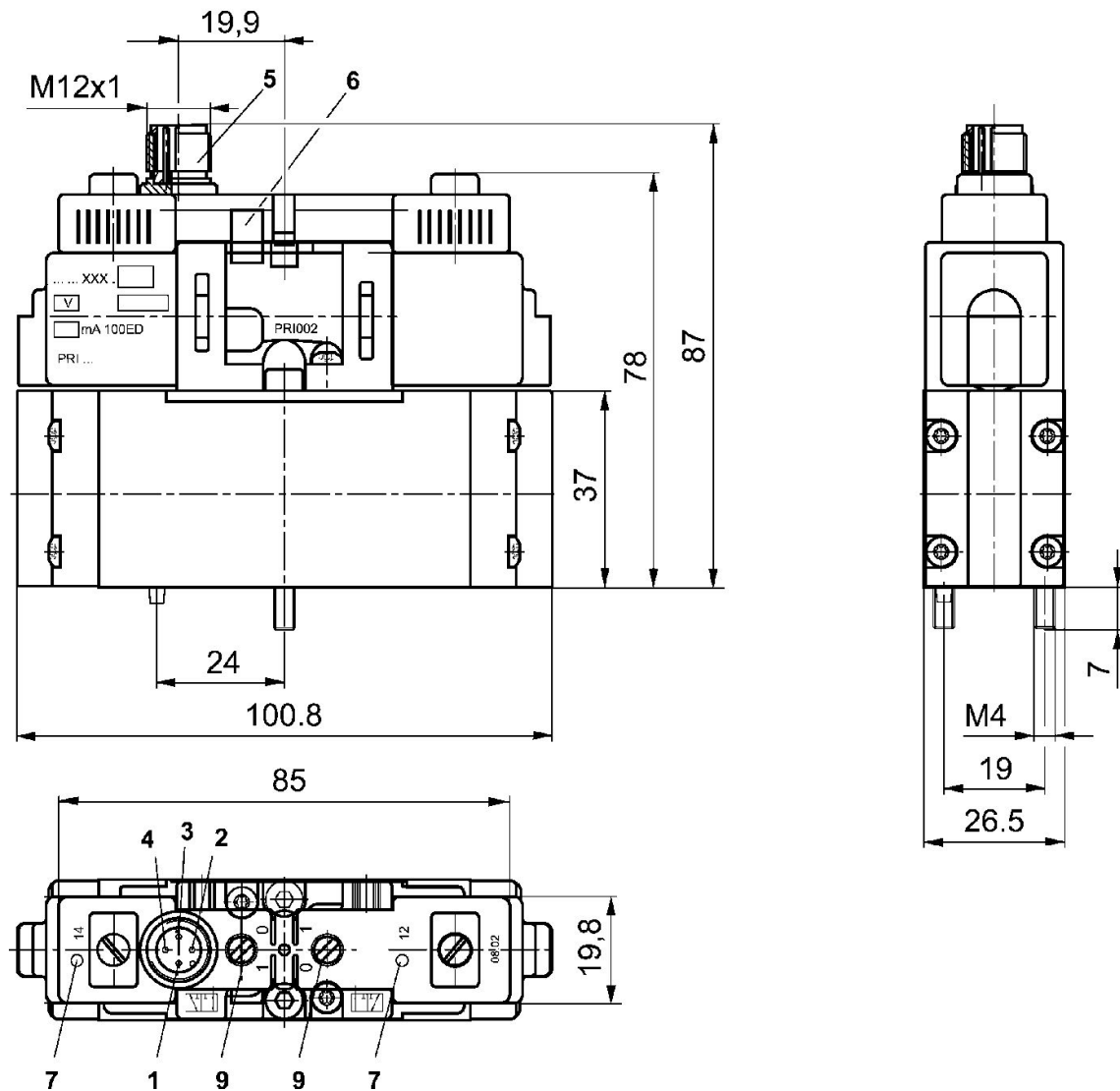
5/2-directional valve, Series CD01-PA M12x1

Flow: 1010 l/min
 Activation: Electrically
 Standards: ISO 15407-1
 Coil width: 20 mm
 Electrical connection 2, thread size: M12x1
 Qn 1 > 2: 1010 l/min
 Compressed air connection type: Base plate connection
 Certificates: Free of substances that impair surface wetting in the coating process
 Electrical connection 2, number of poles: 4-pin
 Compressed air connection input: base plate DIN ISO 15407-1
 Compressed air connection output: base plate DIN ISO 15407-1
 Compressed air connection, exhaust: base plate DIN ISO 15407-1
 Min. control pressure: 2 bar
 Max. control pressure: 10 bar
 Pilot valve width: 26 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 50 °C



Min. working pressure [bar]	Max. working pressure [bar]	Operational voltage	Voltage tolerance DC	Power consumption DC [W]	Switch-on time [ms]	Switch-off time [ms]	Pilot	Manual override	Part No.
2	10	24 V	-10 % / +10 %	1.6	17	17	Internal	without detent	5763520720
2	10	24 V	-10 % / +10 %	1.6	17	17	Internal	with detent	5763520520
-0.95	16	24 V	-10 % / +10 %	1.6	17	17	External	without detent	5763650720
-0.95	16	24 V	-10 % / +10 %	1.6	17	17	External	with detent	5763650520

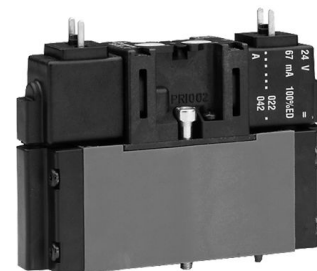
Dimensions



1) not assigned 2) magnet 12 3) 0 V 4) magnet 14 5) metal round plug M12x1 6) positioning pin 7) yellow valve switching state LED 9) manual override

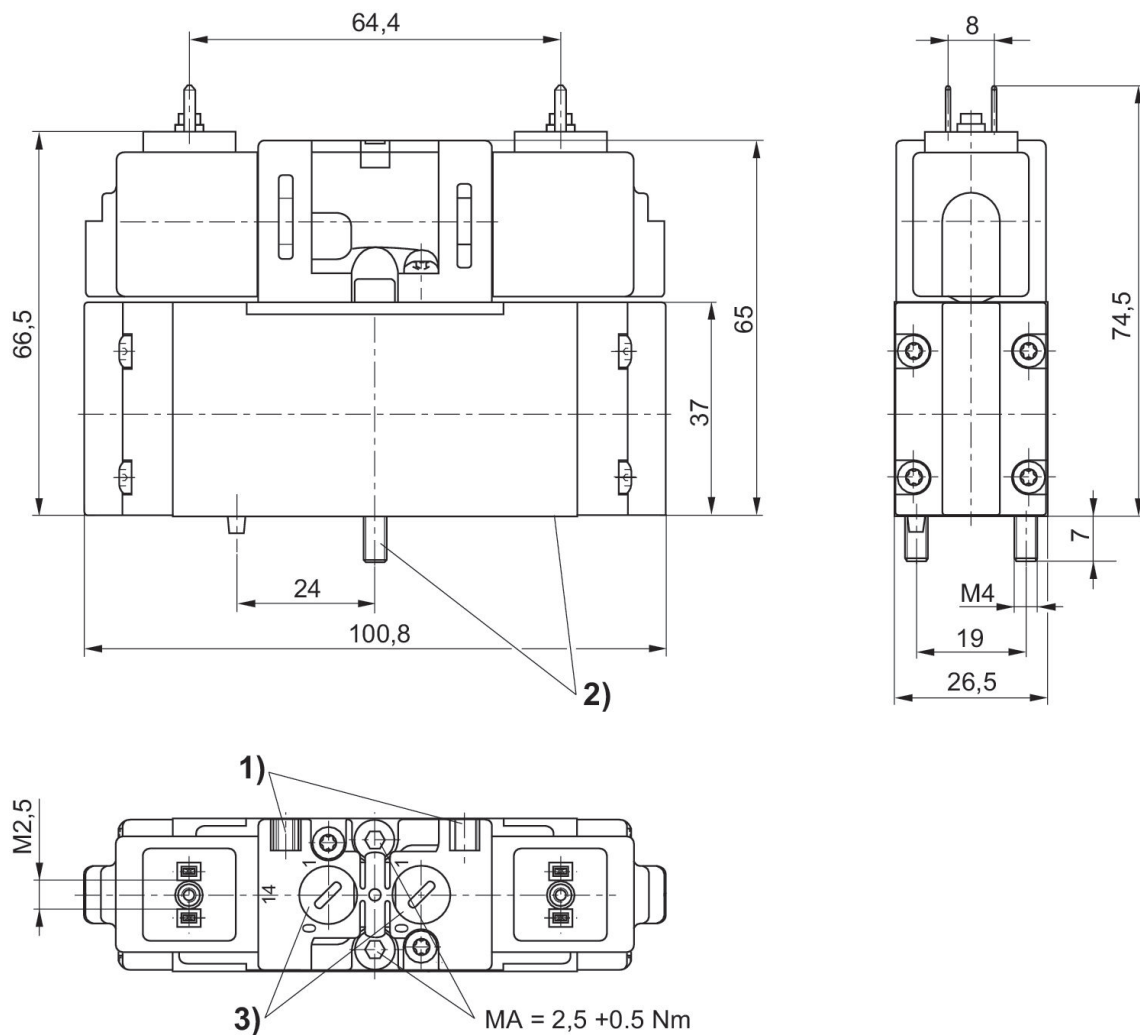
5/2-directional valve, Series CD01-PA form C

Flow: 1010 l/min
 Activation: Electrically
 Standards: ISO 15407-1
 Coil width: 20 mm
 Electrical connection 2, thread size: EN 175301-803, form C
 Qn 1 > 2: 1010 l/min
 Compressed air connection type: Base plate connection
 Certificates: Free of substances that impair surface wetting in the coating process
 Compressed air connection input: base plate DIN ISO 15407-1
 Compressed air connection output: base plate DIN ISO 15407-1
 Compressed air connection, exhaust: base plate DIN ISO 15407-1
 Min. control pressure: 2 bar
 Max. control pressure: 10 bar
 Pilot valve width: 26 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Max. ambient temperature: 50 °C



Min. working pressure [bar]	Max. working pressure [bar]	Operational voltage	Operational voltage	Operational voltage	Voltage tolerance DC	Power consumption DC [W]	Switch-on time [ms]	Switch-off time [ms]	Pilot	Manual override	Part No.
2	10	24 V			-10 % / +10 %	1.6	17	17	Internal	with detent	5763520220
2	10	24 V			-10 % / +10 %	1.6	17	17	Internal	without detent	5763520620
2	10		24 V	24 V			17	17	Internal	with detent	5763525220
2	10		110 V	110 V			17	17	Internal	with detent	5763525270
2	10		110 V	110 V			17	17	Internal	without detent	5763525670
2	10		230 V	230 V			17	17	Internal	with detent	5763525280
-0.95	16	24 V			-10 % / +10 %	1.6	17	17	External	with detent	5763650220
-0.95	16	24 V			-10 % / +10 %	1.6	17	17	External	without detent	5763650620
-0.95	16		110 V	110 V			17	17	External	with detent	5763655270
-0.95	16		110 V	110 V			17	17	External	without detent	5763655670
-0.95	16		230 V	230 V			17	17	External	with detent	5763655280
2	10	24 V			-10 % / +10 %	1.6	17	17	Internal	with detent	5763530220
2	10	24 V			-10 % / +10 %	1.6	17	17	Internal	without detent	5763530620
2	16	24 V			-10 % / +10 %	2.06	17	17	Internal	without	5763530920
2	10		110 V	110 V			17	17	Internal	with detent	5763535270
2	10		110 V	110 V			17	17	Internal	without detent	5763535670

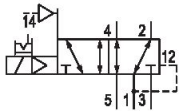
Dimensions



1) mounting space for name plate 2) screws and seals captive 3) manual override

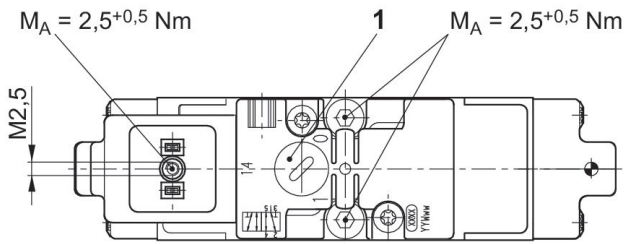
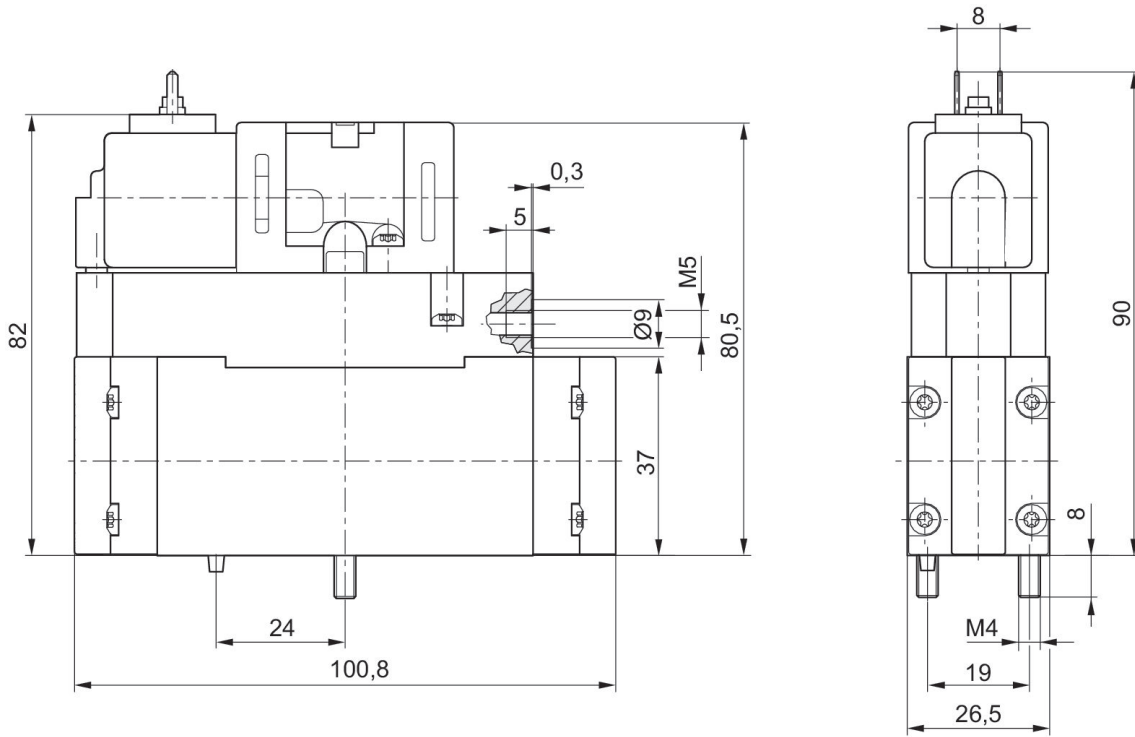
5/2-directional valve, Series CD01-PA

Flow: 1010 l/min
 Activation: Electrically
 Standards: ISO 15407-1
 Coil width: 20 mm
 Qn 1 > 2: 1010 l/min
 Certificates: Free of substances that impair surface wetting in the coating process
 Min. control pressure: 3 bar
 Max. control pressure: 10 bar
 Pilot valve width: 26 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 50 °C
 Min. working pressure: 3 bar
 Max. working pressure: 10 bar



Min. working pressure [bar]	Max. working pressure [bar]	Operational voltage	Voltage tolerance DC	Power consumption DC [W]	Switch-on time [ms]	Switch-off time [ms]	Pilot	Manual override	Part No.
-0.95	16	24 V	-10 % / +10 %	1.6	29	42	External	with detent	R412004730

Dimensions



1) Manual override

5/3-directional valve, Series CD01-PA

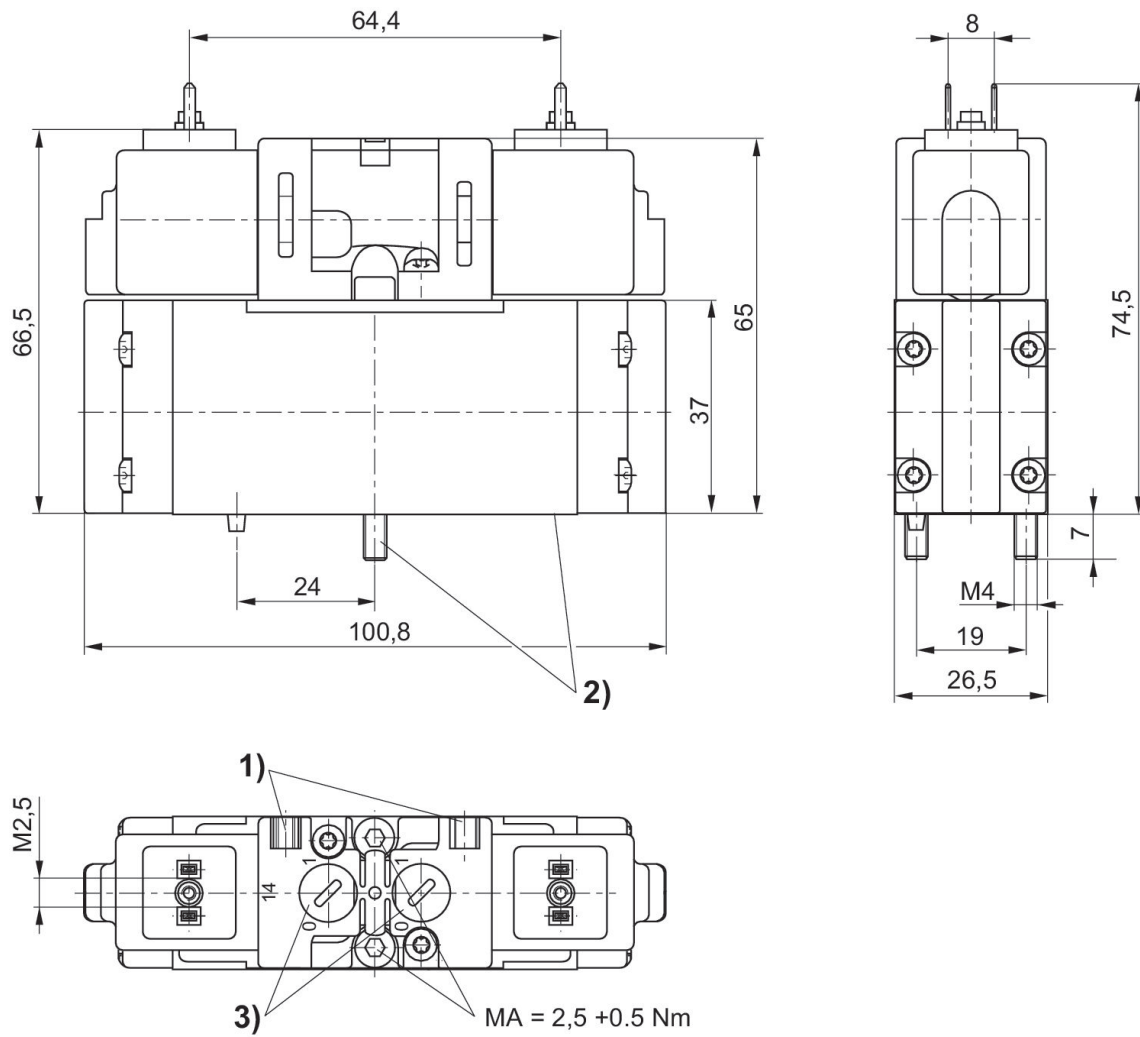
Activation: Electrically
 Standards: ISO 15407-1
 Coil width: 20 mm
 Electrical connection 2, thread size: EN 175301-803, form C
 Compressed air connection type: Base plate connection
 Certificates: Free of substances that impair surface wetting in the coating process
 Compressed air connection input: base plate DIN ISO 15407-1
 Compressed air connection output: base plate DIN ISO 15407-1
 Compressed air connection, exhaust: base plate DIN ISO 15407-1
 Min. control pressure: 3 bar
 Pilot valve width: 26 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 50 °C
 Min. working pressure: -0.95 bar
 Max. working pressure: 16 bar



Min. working pressure [bar]	Max. working pressure [bar]	Operational voltage	Operational voltage	Operational voltage	Voltage tolerance DC	Power consumption DC [W]	Switch-on time [ms]	Switch-off time [ms]	Pilot	Manual override	Part No.
3	10	24 V			-10 % / +10 %	1.6	27	55	Internal	with detent	5763800220
3	10	24 V			-10 % / +10 %	1.6	27	55	Internal	without detent	5763800620
3	16	24 V			-10 % / +10 %	2.06	27	55	Internal	without	5763800920
3	10		110 V	110 V			27	55	Internal	with detent	5763805270
3	10		110 V	110 V			27	55	Internal	without detent	5763805670
-0.95	16	24 V			-10 % / +10 %	1.6	27	55	External	with detent	5763850220
-0.95	16	24 V			-10 % / +10 %	1.6	27	55	External	without detent	5763850620
-0.95	16		110 V	110 V			27	55	External	with detent	5763855270
-0.95	16		110 V	110 V			27	55	External	without detent	5763855670
3	10	24 V			-10 % / +10 %	1.6	24	58	Internal	with detent	5763810220
3	10	24 V			-10 % / +10 %	1.6	24	58	Internal	without detent	5763810620
3	16	24 V			-10 % / +10 %	2.06	24	58	Internal	without	5763810920
3	10		24 V	24 V			24	58	Internal	with detent	5763815220
3	10		110 V	110 V			24	58	Internal	with detent	5763815270
3	10		110 V	110 V			24	58	Internal	without detent	5763815670
3	10		230 V	230 V			24	58	Internal	with detent	5763815280

Min. working pressure [bar]	Max. working pressure [bar]	Operational voltage	Operational voltage	Operational voltage	Voltage tolerance DC	Power consumption DC [W]	Switch-on time [ms]	Switch-off time [ms]	Pilot	Manual override	Part No.
-0.95	16	24 V			-10 % / +10 %	1.6	24	58	External	with detent	5763860220
-0.95	16	24 V			-10 % / +10 %	1.6	24	58	External	without detent	5763860620
-0.95	16		110 V	110 V			24	58	External	with detent	5763865270
-0.95	16		110 V	110 V			24	58	External	without detent	5763865670
3	10	12 V			-10 % / +10 %	1.6	24	49	Internal	with detent	5763820210
3	10	24 V			-10 % / +10 %	1.6	24	49	Internal	with detent	5763820220
3	10	24 V			-10 % / +10 %	1.6	24	49	Internal	without detent	5763820620
3	10		110 V	110 V			24	49	Internal	with detent	5763825270
3	10		110 V	110 V			24	49	Internal	without detent	5763825670
3	10		230 V	230 V			24	49	Internal	with detent	5763825280
-0.95	16	24 V			-10 % / +10 %	1.6	24	49	External	with detent	5763870220
-0.95	16	24 V			-10 % / +10 %	1.6	24	49	External	without detent	5763870620
-0.95	16		110 V	110 V			24	49	External	with detent	5763875270
-0.95	16		110 V	110 V			24	49	External	without detent	5763875670

Dimensions



1) mounting space for name plate 2) screws and seals captive 3) manual override

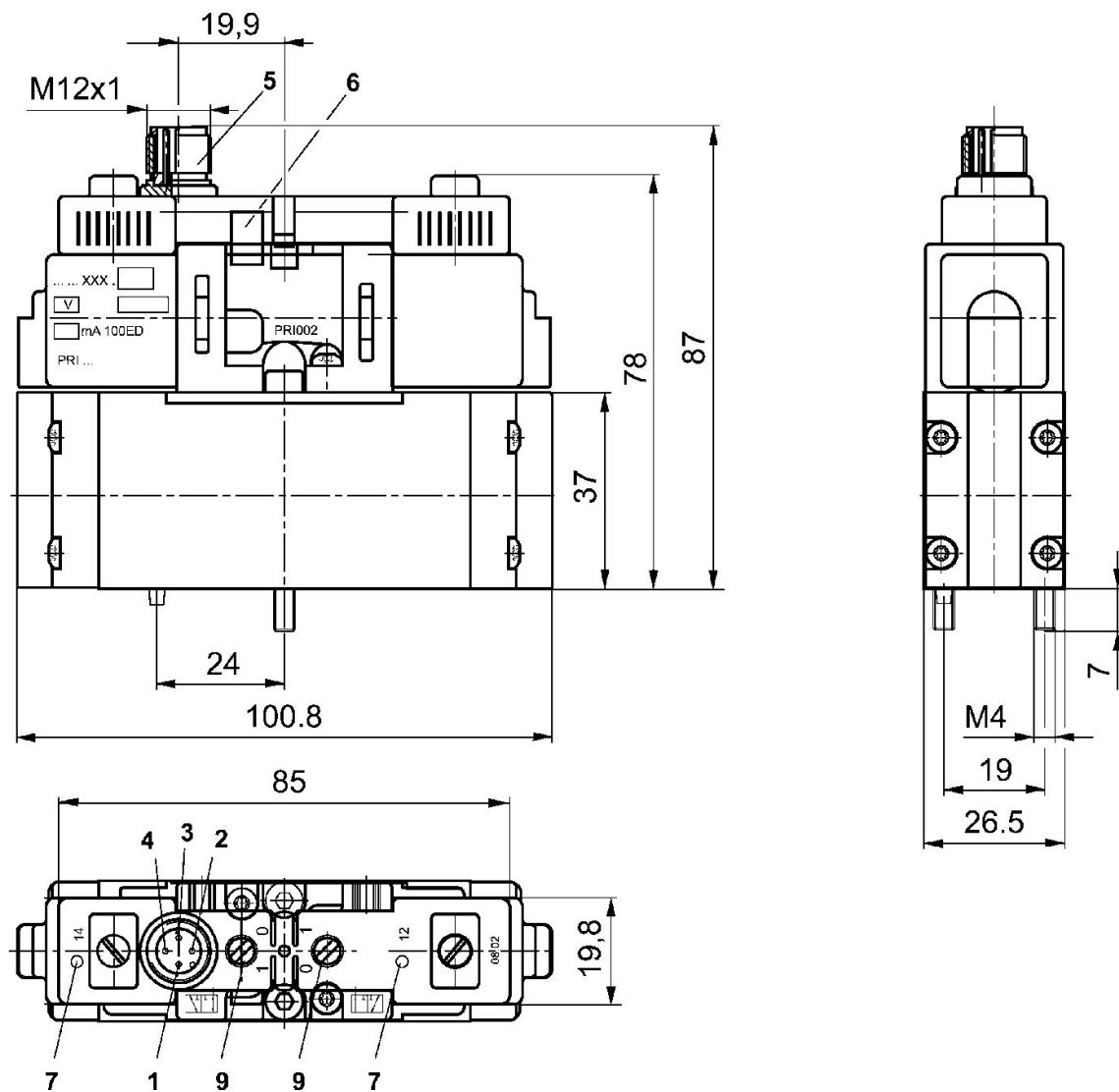
5/3-directional valve, Series CD01-PA

Activation: Electrically
 Standards: ISO 15407-1
 Coil width: 20 mm
 Electrical connection 2, thread size: M12x1
 Compressed air connection type: Base plate connection
 Certificates: Free of substances that impair surface wetting in the coating process
 Electrical connection 2, number of poles: 4-pin
 Compressed air connection input: base plate DIN ISO 15407-1
 Compressed air connection output: base plate DIN ISO 15407-1
 Compressed air connection, exhaust: base plate DIN ISO 15407-1
 Min. control pressure: 3 bar
 Max. control pressure: 10 bar
 Pilot valve width: 26 mm
 Duty cycle: 100 %
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 50 °C



Min. working pressure [bar]	Max. working pressure [bar]	Operational voltage	Voltage tolerance DC	Power consumption DC [W]	Switch-on time [ms]	Switch-off time [ms]	Pilot	Manual override	Part No.
3	10	24 V	-10 % / +10 %	1.6	27	55	Internal	without detent	5763800720
3	10	24 V	-10 % / +10 %	1.6	27	55	Internal	with detent	5763800520
-0.95	16	24 V	-10 % / +10 %	1.6	27	55	External	without detent	5763850720
-0.95	16	24 V	-10 % / +10 %	1.6	27	55	External	with detent	5763850520
3	10	24 V	-10 % / +10 %	1.6	24	58	Internal	without detent	5763810720
3	10	24 V	-10 % / +10 %	1.6	24	58	Internal	with detent	5763810520
-0.95	16	24 V	-10 % / +10 %	1.6	24	58	External	without detent	5763860720
-0.95	16	24 V	-10 % / +10 %	1.6	24	58	External	with detent	5763860520
3	10	24 V	-10 % / +10 %	1.6	24	49	Internal	without detent	5763820720
3	10	24 V	-10 % / +10 %	1.6	24	49	Internal	with detent	5763820520
-0.95	16	24 V	-10 % / +10 %	1.6	24	49	External	without detent	5763870720
-0.95	16	24 V	-10 % / +10 %	1.6	24	49	External	with detent	5763870520

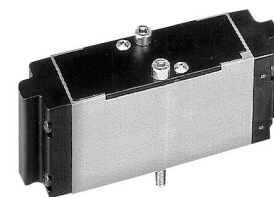
Dimensions



1) not assigned 2) magnet 12 3) 0 V 4) magnet 14 5) metal round plug M12x1 6) positioning pin 7) yellow valve switching state LED 9) manual override

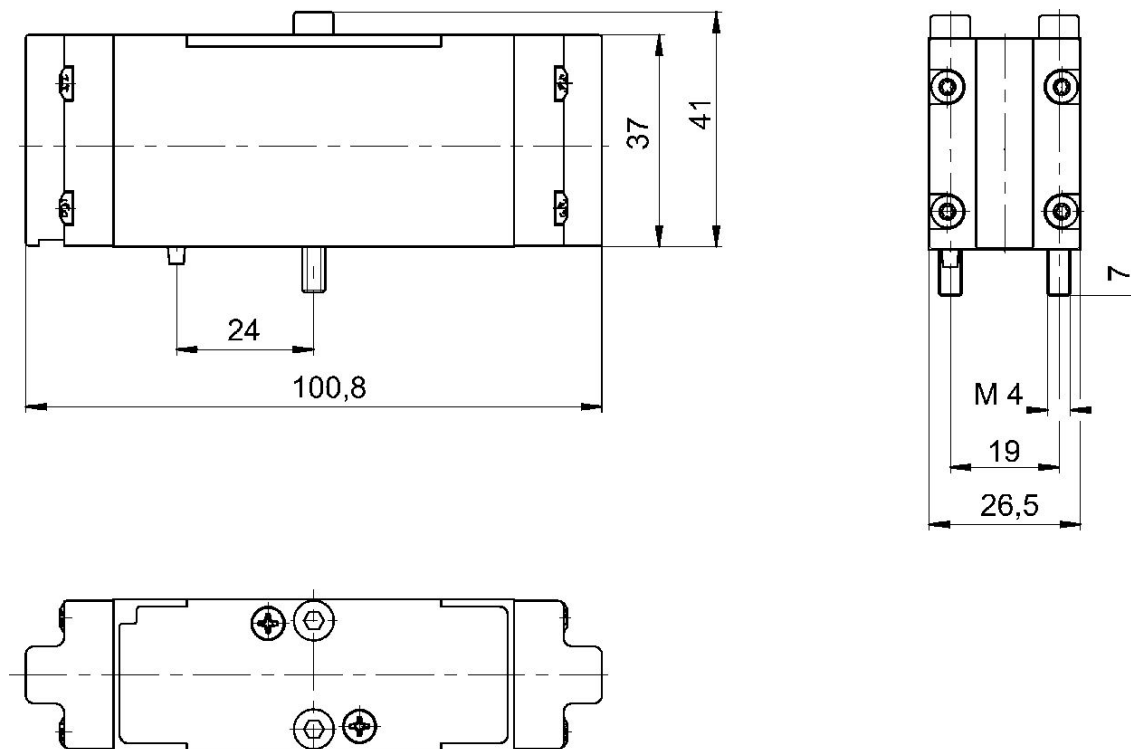
2x3/2-directional valve, CD01-PA

Flow: 1010 l/min
 Activation: Pneumatically
 Standards: ISO 15407-1
 Qn 1 > 2: 1010 l/min
 Compressed air connection type: Base plate connection
 Certificates: Free of substances that impair surface wetting in the coating process
 Compressed air connection input: base plate DIN ISO 15407-1
 Compressed air connection output: base plate DIN ISO 15407-1
 Compressed air connection, exhaust: base plate DIN ISO 15407-1
 Max. control pressure: 16 bar
 Valve function: NC/NC
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 50 °C
 Min. working pressure: 2.5 bar
 Max. working pressure: 16 bar

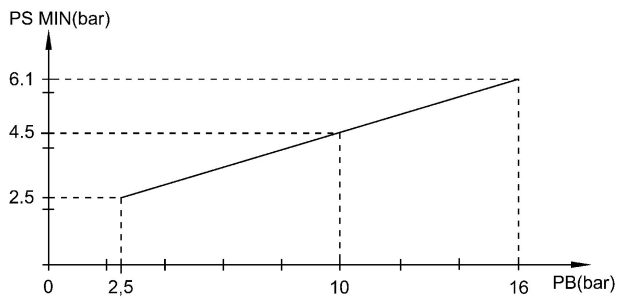


Min. working pressure [bar]	Max. working pressure [bar]	Return type	Part No.
2.5	16	with spring/air spring return	5714003990

Dimensions



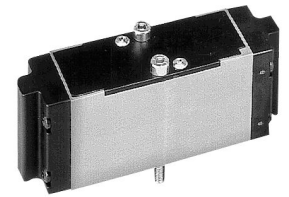
Diagram



P_B = Working pressure
PS = control pressure

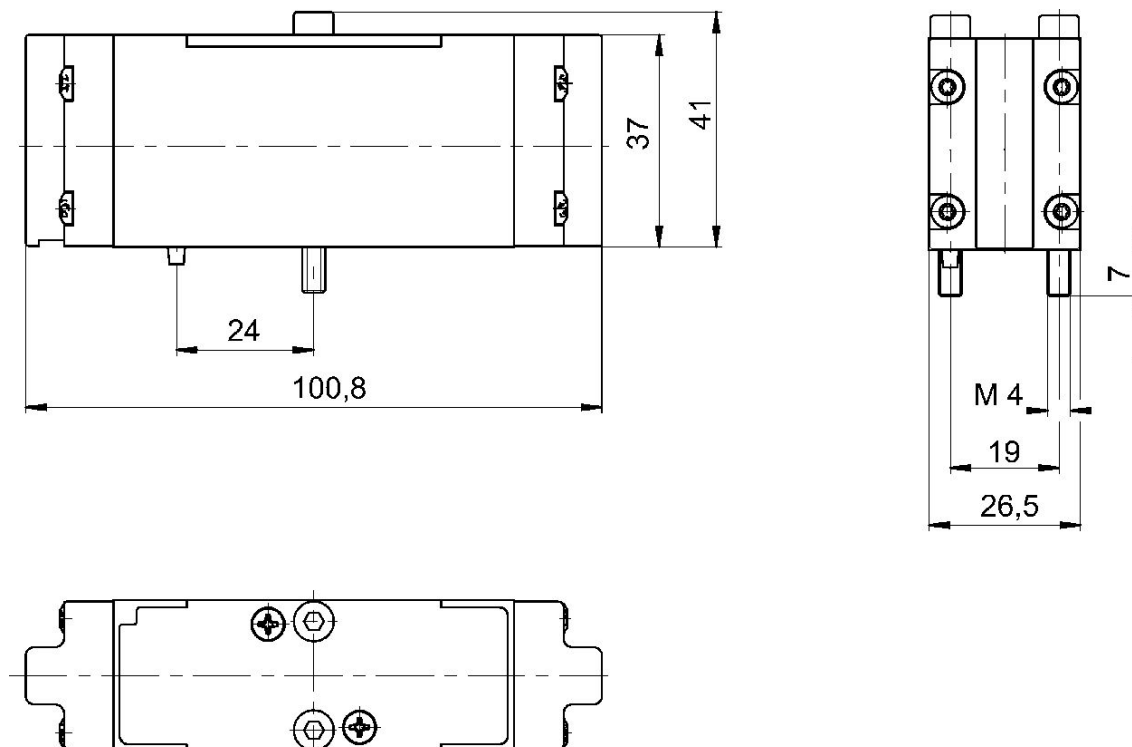
5/2-directional valve, CD01-PA

Flow: 1010 l/min
 Activation: Pneumatically
 Standards: ISO 15407-1
 Qn 1 > 2: 1010 l/min
 Compressed air connection type: Base plate connection
 Certificates: Free of substances that impair surface wetting in the coating process
 Compressed air connection input: base plate DIN ISO 15407-1
 Compressed air connection output: base plate DIN ISO 15407-1
 Compressed air connection, exhaust: base plate DIN ISO 15407-1
 Max. control pressure: 16 bar
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 50 °C
 Min. working pressure: -0.95 bar
 Max. working pressure: 16 bar

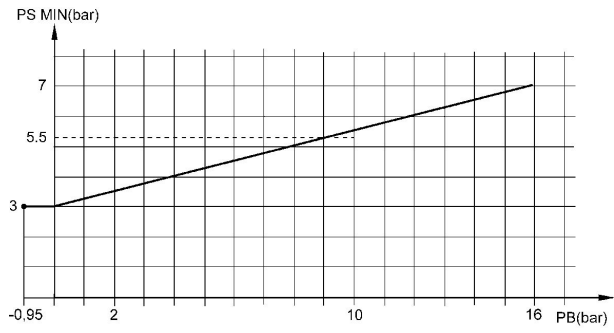


Min. working pressure [bar]	Max. working pressure [bar]	Return type	Part No.
-0.95	16	with spring/air spring return	5714003500
-0.95	16		5714003520
-0.95	16	with differential piston	5714003530

Dimensions



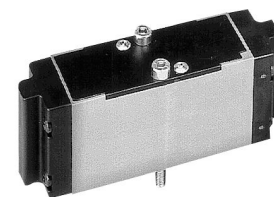
Diagram



P_B = Working pressure
PS = control pressure

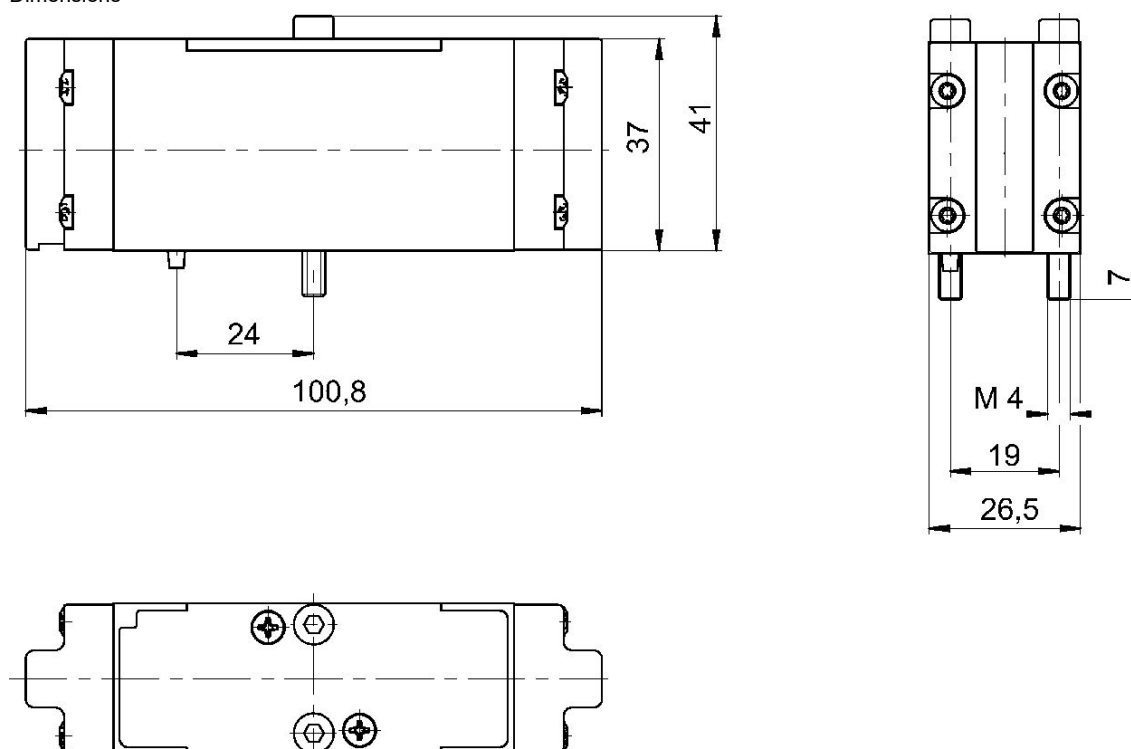
5/3-directional valve, CD01-PA

Activation: Pneumatically
 Standards: ISO 15407-1
 Compressed air connection type: Base plate connection
 Certificates: Free of substances that impair surface wetting in the coating process
 Compressed air connection input: base plate DIN ISO 15407-1
 Compressed air connection output: base plate DIN ISO 15407-1
 Compressed air connection, exhaust: base plate DIN ISO 15407-1
 Min. control pressure: 3 bar
 Max. control pressure: 16 bar
 Type: Spool valve, positive overlapping
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 50 °C
 Min. working pressure: -0.95 bar
 Max. working pressure: 16 bar



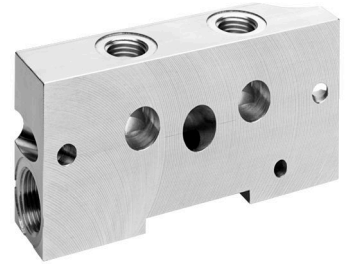
Min. working pressure [bar]	Max. working pressure [bar]	Return type	Part No.
-0.95	16	With spring return	5714003810
-0.95	16	With spring return	5714003800
-0.95	16	With spring return	5714003820

Dimensions



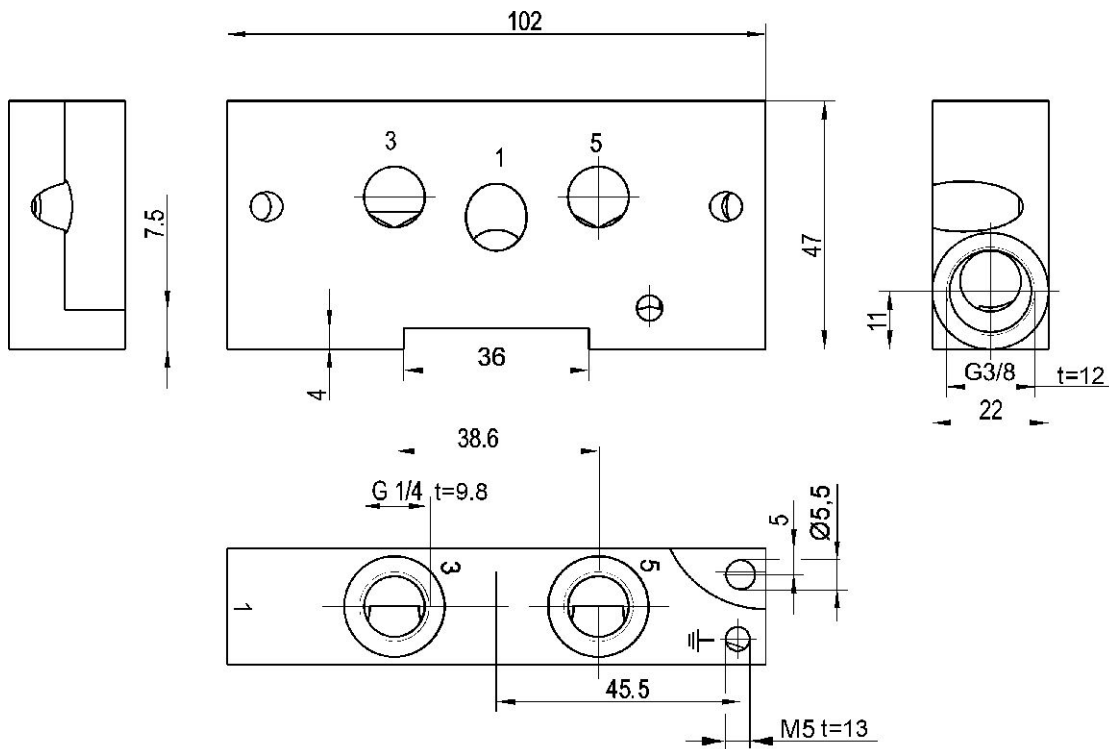
Subbase

Standards: ISO 15407-1
 Compressed air connection type: Internal thread
 Certificates: Free of substances that impair surface wetting in the coating process
 Compressed air connection input: G 3/8
 Compressed air connection, exhaust: G 1/4
 Min. ambient temperature: -25 °C
 Max. ambient temperature: 70 °C
 Min. working pressure: -0.95 bar
 Max. working pressure: 16 bar



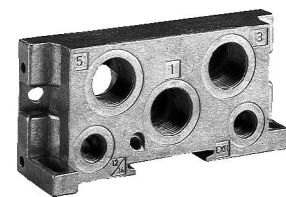
Compressed air connection input	Compressed air connection, exhaust	Pilot	Part No.
G 3/8	G 1/4	Internal	R412000630
G 3/8	G 1/4	External	R412000631

Dimensions



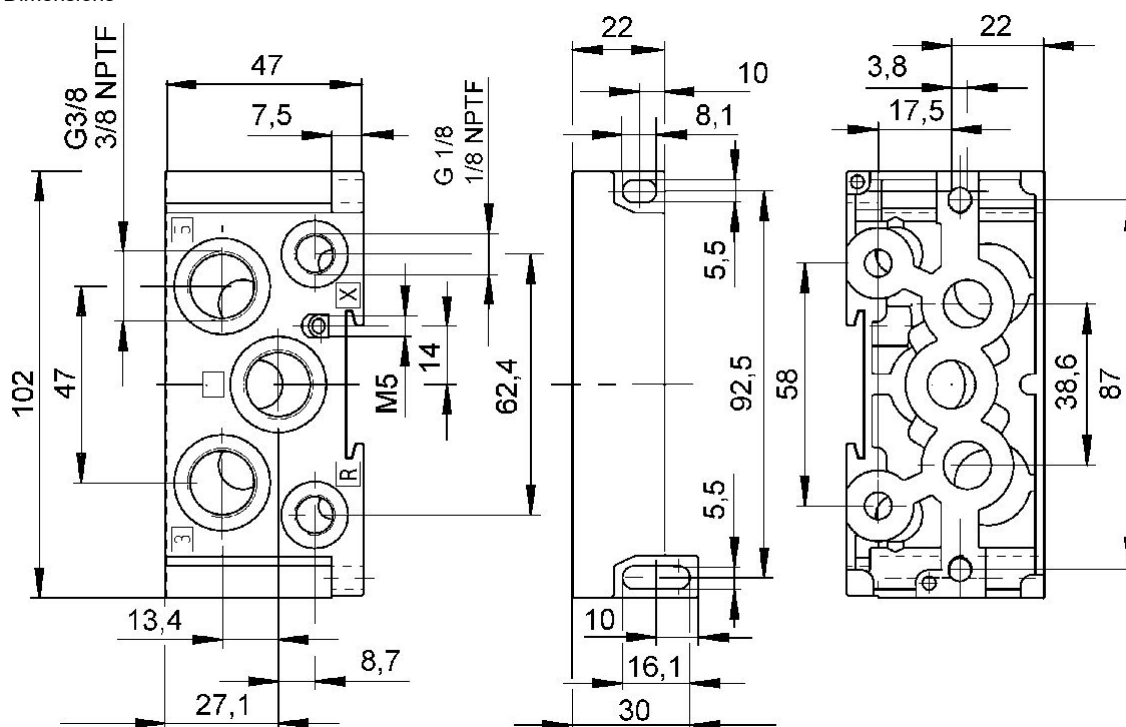
End plate left, End plate right

Standards: ISO 15407-1
 Compressed air connection type: Internal thread
 Certificates: Free of substances that impair surface wetting in the coating process
 Min. ambient temperature: -25 °C
 Max. ambient temperature: 70 °C
 Min. working pressure: -0.95 bar
 Max. working pressure: 16 bar



Type	Compressed air connection input	Compressed air connection, exhaust	Part No.
End plate left	G 3/8	G 3/8	8985121002
End plate right	G 3/8	G 3/8	8985121012

Dimensions



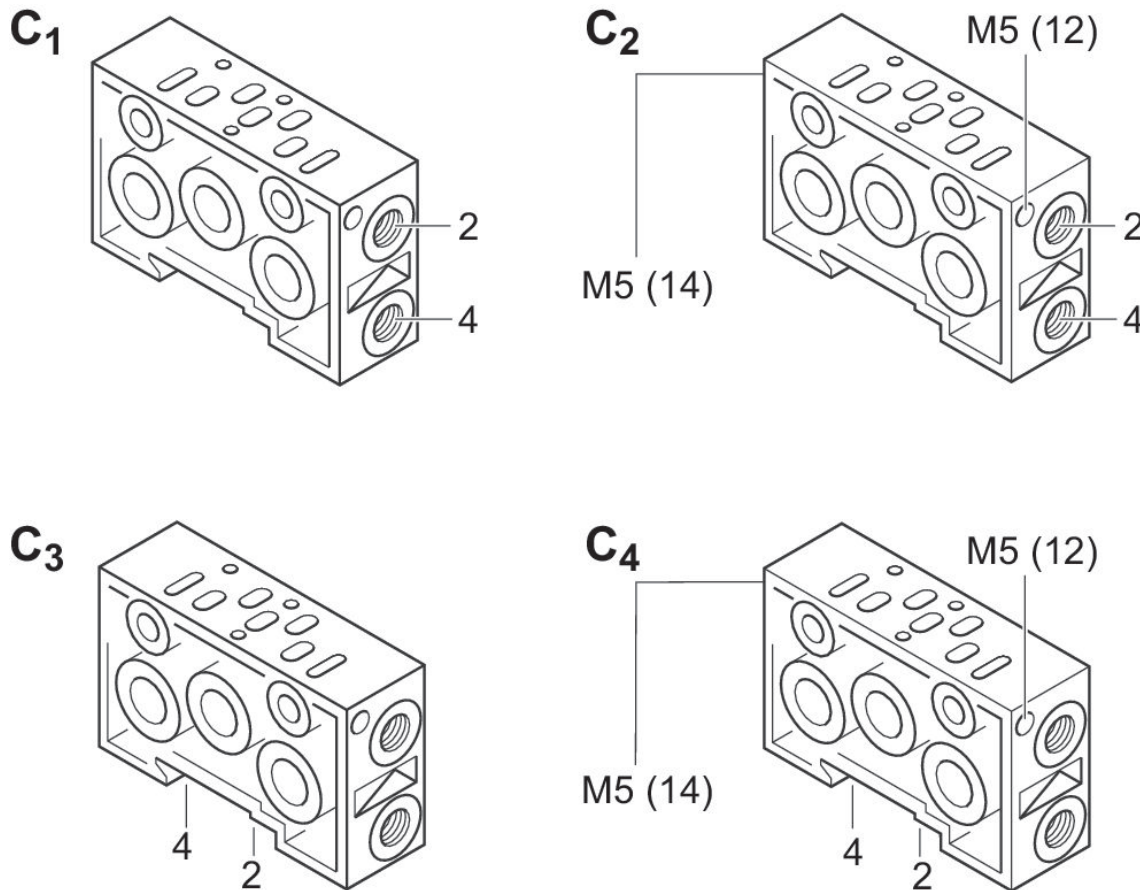
Base plate

Standards: ISO 15407-1
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 70 °C
 Min. working pressure: -0.95 bar
 Max. working pressure: 16 bar



Type	Compressed air connection output	Compressed air connection pilot air	Compressed air connection pilot air exhaust	Connection direction	Max. number of valve positions	Part No.
C1	G 1/4			On the side	1	1825504023
C1	Ø 10x1			On the side	1	1825504025
C2	G 1/4	M5	M5	On the side	1	1825504026
C3	G 1/4			Down	1	1825504029
C4	G 1/4	M5	M5	Down	1	1825504030

Overview drawing



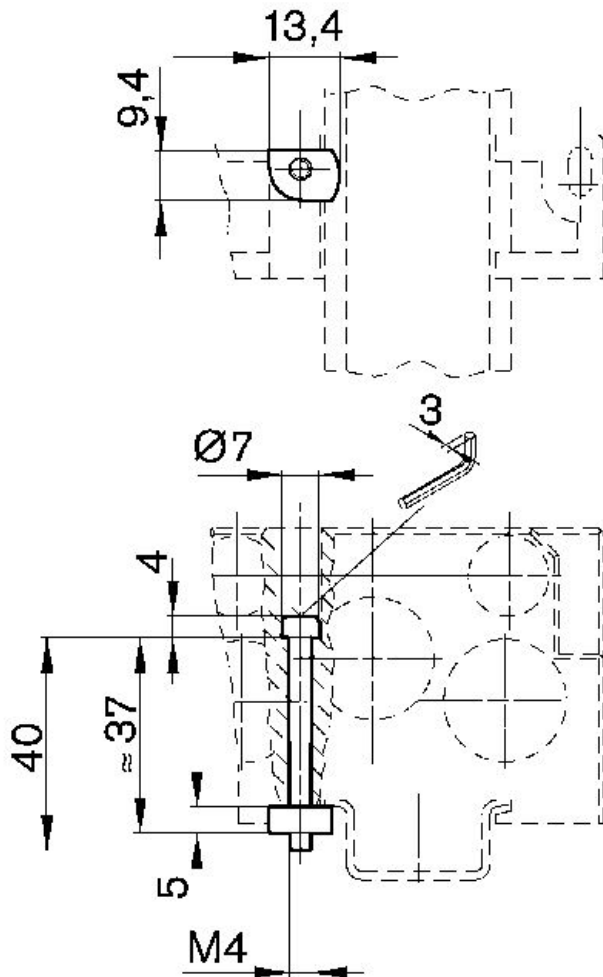
n	a	x ±0,3
2	108	94
3	135	121

n	a	x ±0,3
4	162	148
...
...
n	= 27*(2+n)	= 40+27*n

Mounting kit for DIN rails DIN



Type	Type	Delivery unit [piece]	Weight [kg]	Part No.
Mounting kit for DIN rails EN 60715, 35x15	26 mm	1	0.014	1821398007



Blanking plate

Standards: ISO 15407-1

Certificates: Free of substances that impair surface wetting in the coating process

Min. ambient temperature: -15 °C

Max. ambient temperature: 50 °C

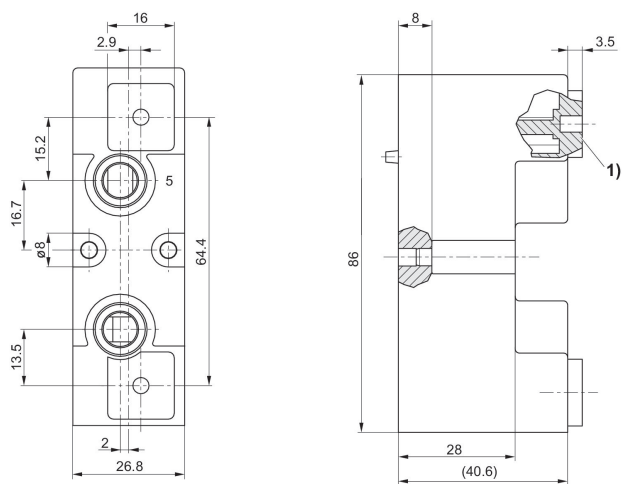
Min. working pressure: -0.95 bar

Max. working pressure: 16 bar



Max. number of valve positions	Part No.
1	8985121492

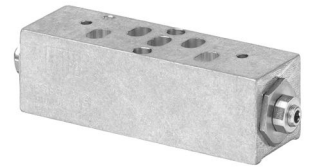
Dimensions



1) Mounting hole for M2.5 thread insert

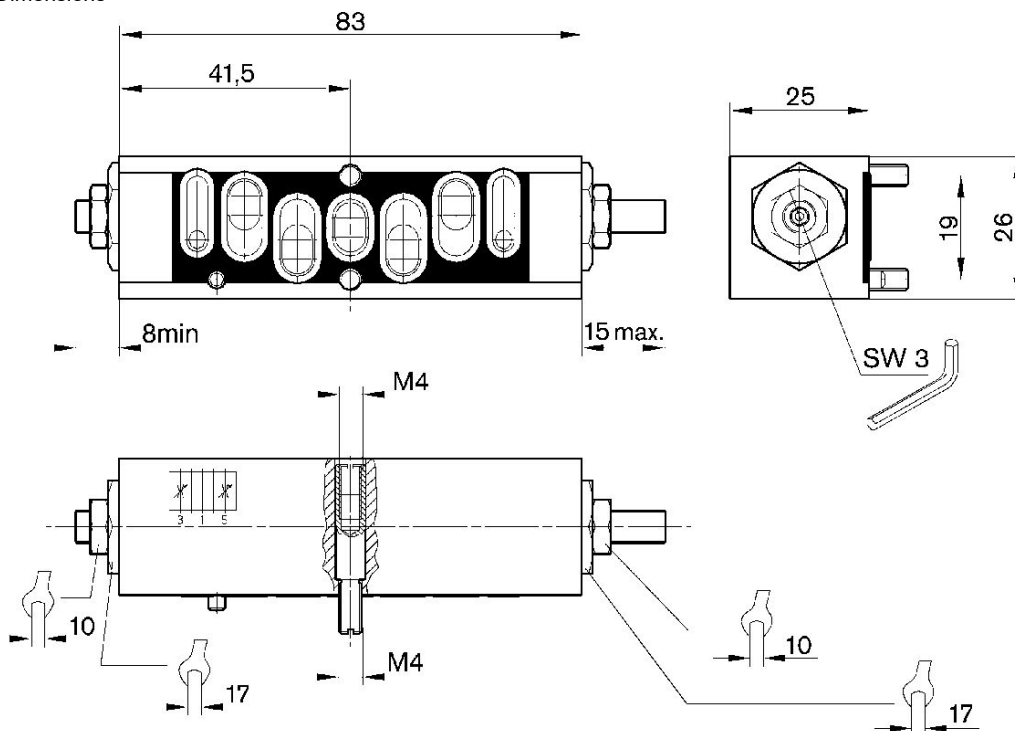
Throttle plate

Standards: ISO 15407-1
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 70 °C
 Min. working pressure: 0 bar
 Max. working pressure: 16 bar



Type	Part No.
Exhaust Air Throttling	0821201022

Dimensions



Pressure regulator for horizontal stacking

Qn 1 > 2: 2100 l/min

Certificates: Free of substances that impair surface wetting in the coating process

Compressed air connection input: Special base plate Ø 12

Min. ambient temperature: -15 °C

Max. ambient temperature: 50 °C

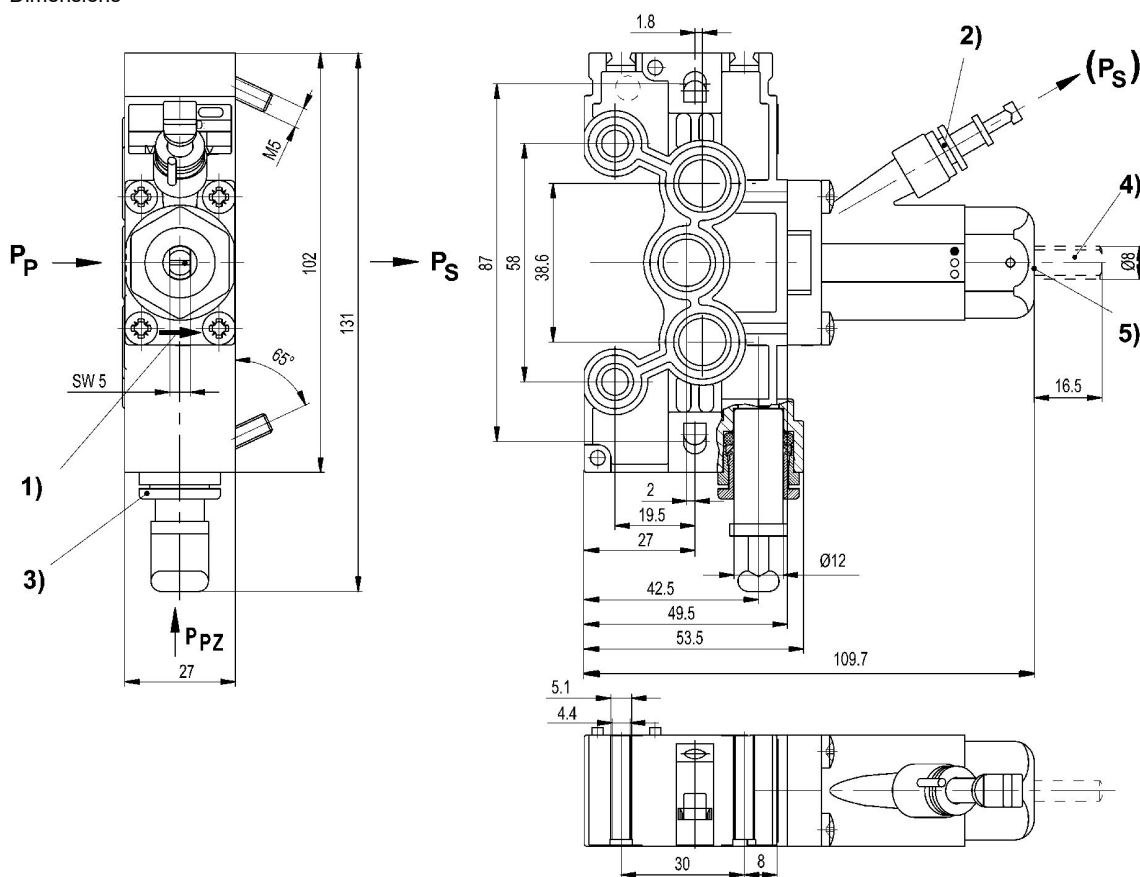
Min. working pressure: 2 bar

Max. working pressure: 10 bar



Min. regulation range [bar]	Max. regulation range [bar]	Actuating element	Part No.
0.8	8	Screw with wrench flats	5750020000
0.8	8	Slotted screw	R412003769

Dimensions



- 1) Flow direction 2) Push-in fitting Ø 6 x 1 (for gauge) 3) Additional pressure feed possible (push-in fitting Ø 12) PP primary pressure PS secondary pressure PPZ additional primary pressure supply
4) activation with key SW 5
5) activation with screwdriver

Pressure regulator for vertical stacking

Qn 1 > 2: 750 l/min

Certificates: Free of substances that impair surface wetting in the coating process

Min. ambient temperature: -15 °C

Max. ambient temperature: 50 °C

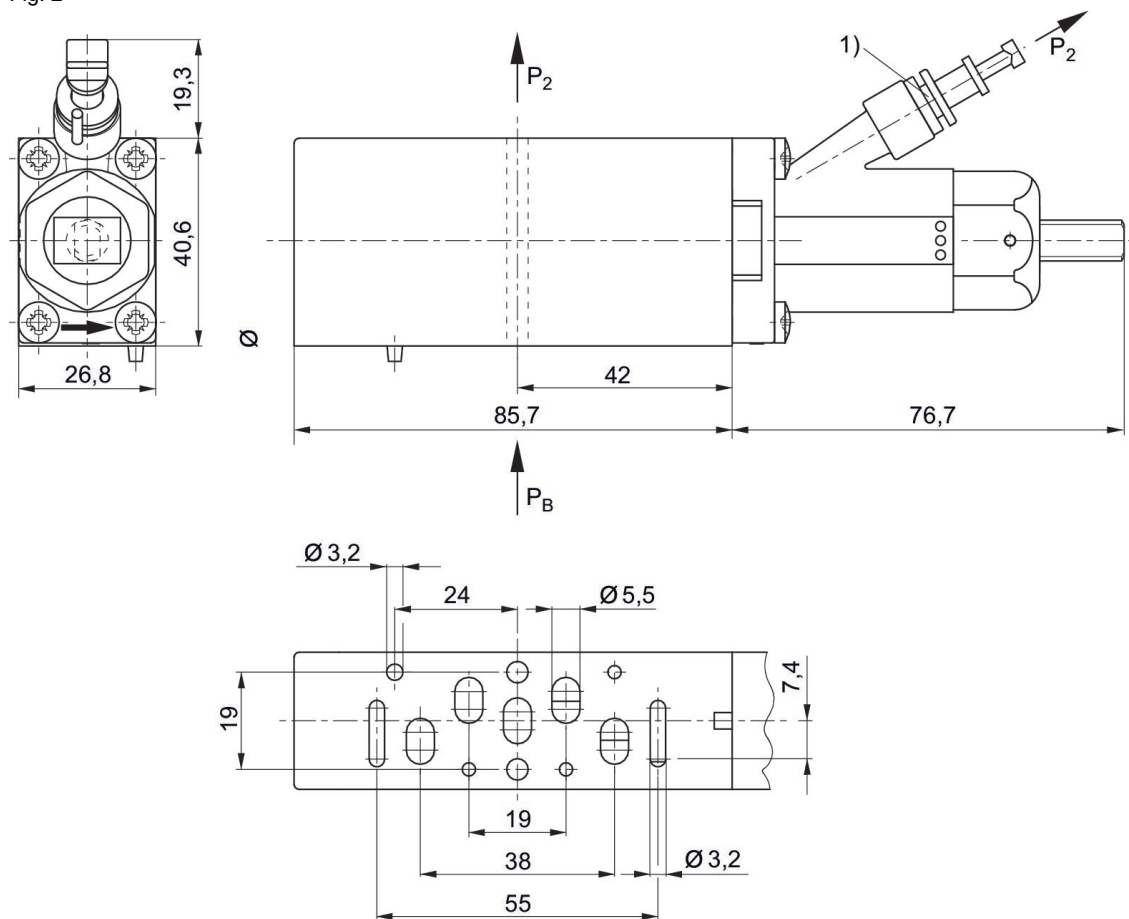
Min. working pressure: 2 bar

Max. working pressure: 10 bar



Controlled port	Min. regulation range [bar]	Max. regulation range [bar]	Actuating element	Part No.
1	0.8	8	Screw with wrench flats	5750020500
1	0.5	4	Screw with wrench flats	R412003719
1	3	3		5750020530

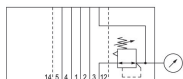
Fig. 2



1) Push-in fitting $\varnothing 6 \times 1$ (for gauge)
 p_2 = Secondary pressure
 P_B = Working pressure

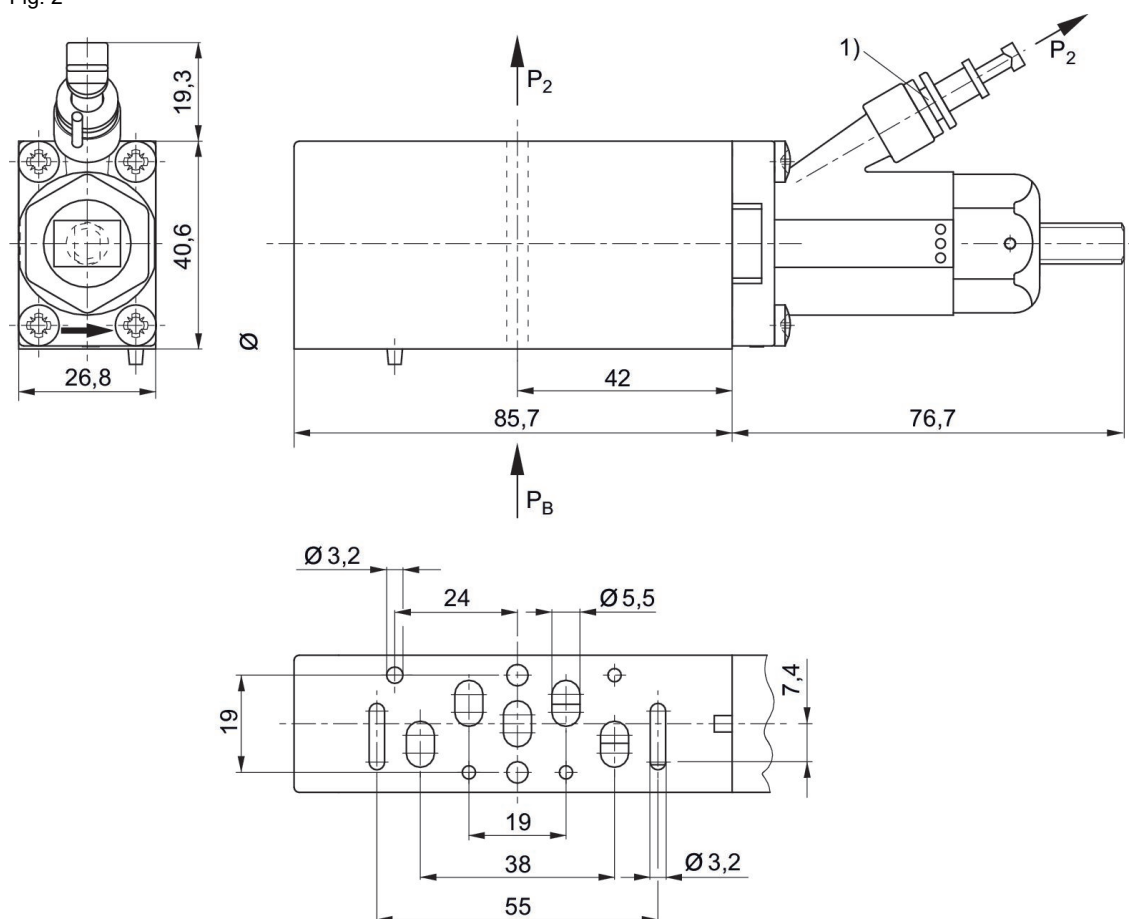
Pressure regulator for vertical stacking

Standards: ISO 15407-1
 Qn 1 > 2: 750 l/min
 Certificates: Free of substances that impair surface wetting in the coating process
 Compressed air connection, exhaust: base plate DIN ISO 15407-1
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 50 °C
 Min. working pressure: 2 bar
 Max. working pressure: 10 bar



Controlled port	Min. regulation range [bar]	Max. regulation range [bar]	Actuating element	Part No.
3	0.8	8	Screw with wrench flats	5750020510
3	3	3		5750020520

Fig. 2



1) Push-in fitting $\varnothing 6 \times 1$ (for gauge)
 p2 = Secondary pressure
 P_B = Working pressure

Supply plate

Standards: ISO 15407-1

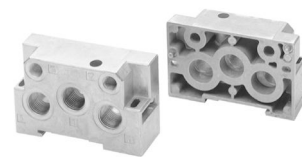
Compressed air connection type: Internal thread

Min. ambient temperature: -15 °C

Max. ambient temperature: 70 °C

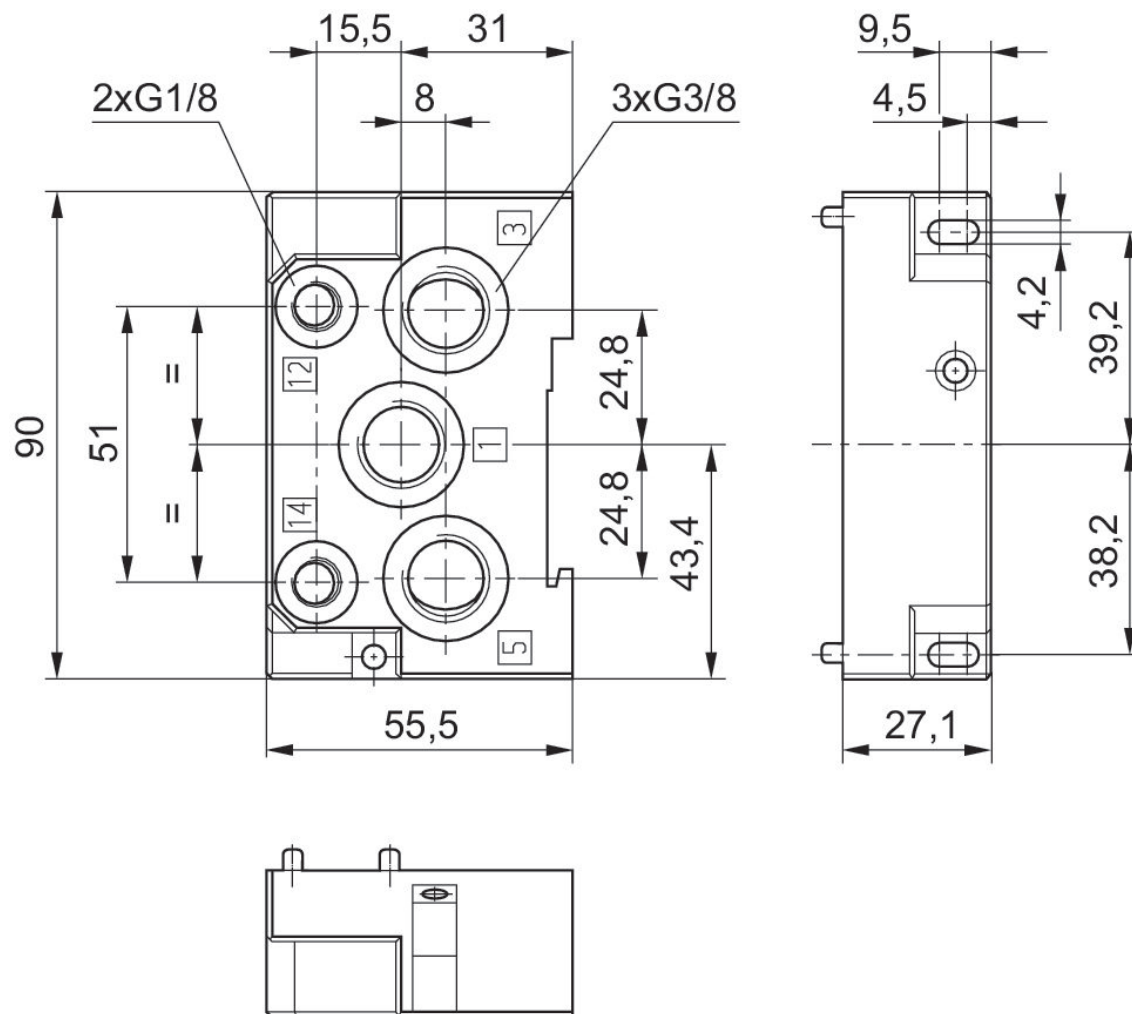
Min. working pressure: -0.95 bar

Max. working pressure: 16 bar



Compressed air connection input	Compressed air connection, exhaust	Compressed air connection pilot air	Compressed air connection pilot air exhaust	Part No.
G 3/8	G 3/8	G 1/8	G 1/8	1825504031

Dimensions



n	a	x ±0,3
2	108	94
3	135	121
4	162	148

n	a	x ±0,3
...
...
n	= 27*(2+n)	= 40+27*n

Supply module

Standards: ISO 15407-1

Compressed air connection type: push-in fitting

Certificates: Free of substances that impair surface wetting in the coating process

Compressed air connection input: \varnothing 8x1

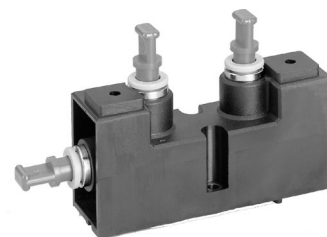
Compressed air connection, exhaust: \varnothing 8x1

Min. ambient temperature: -15 °C

Max. ambient temperature: 50 °C

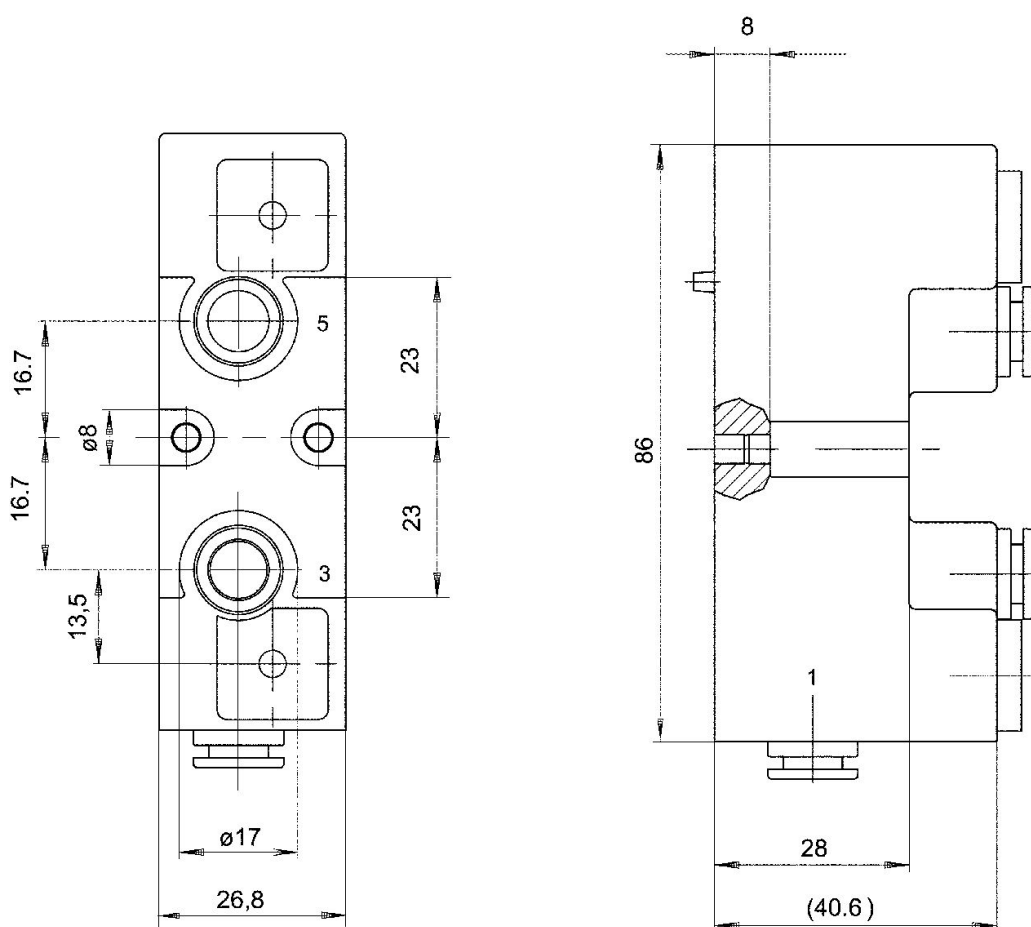
Min. working pressure: -0.95 bar

Max. working pressure: 16 bar



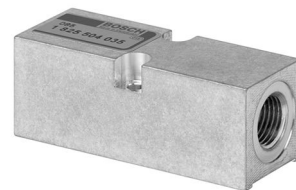
Compressed air connection input	Compressed air connection, exhaust	Max. number of valve positions	Part No.
\varnothing 8x1	\varnothing 8x1	1	8985121472

Dimensions



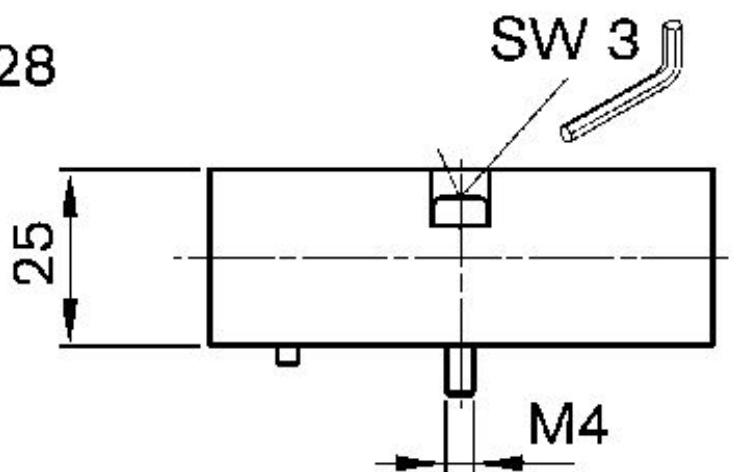
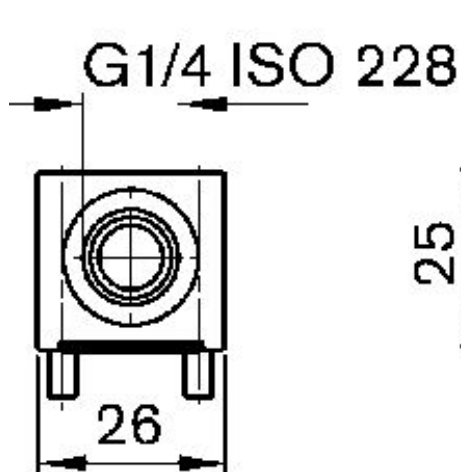
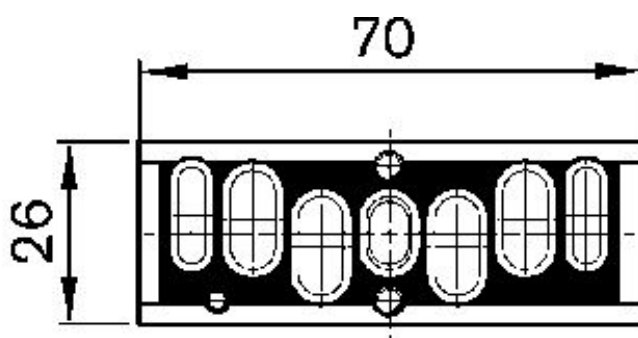
Supply plate, stacked vertically

Standards: ISO 15407-1
 Compressed air connection type: Internal thread
 Compressed air connection input: G 1/4
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 70 °C
 Min. working pressure: -0.95 bar
 Max. working pressure: 16 bar



Compressed air connection input	Max. number of valve positions	Part No.
G 1/4	1	1825504035

Dimensions



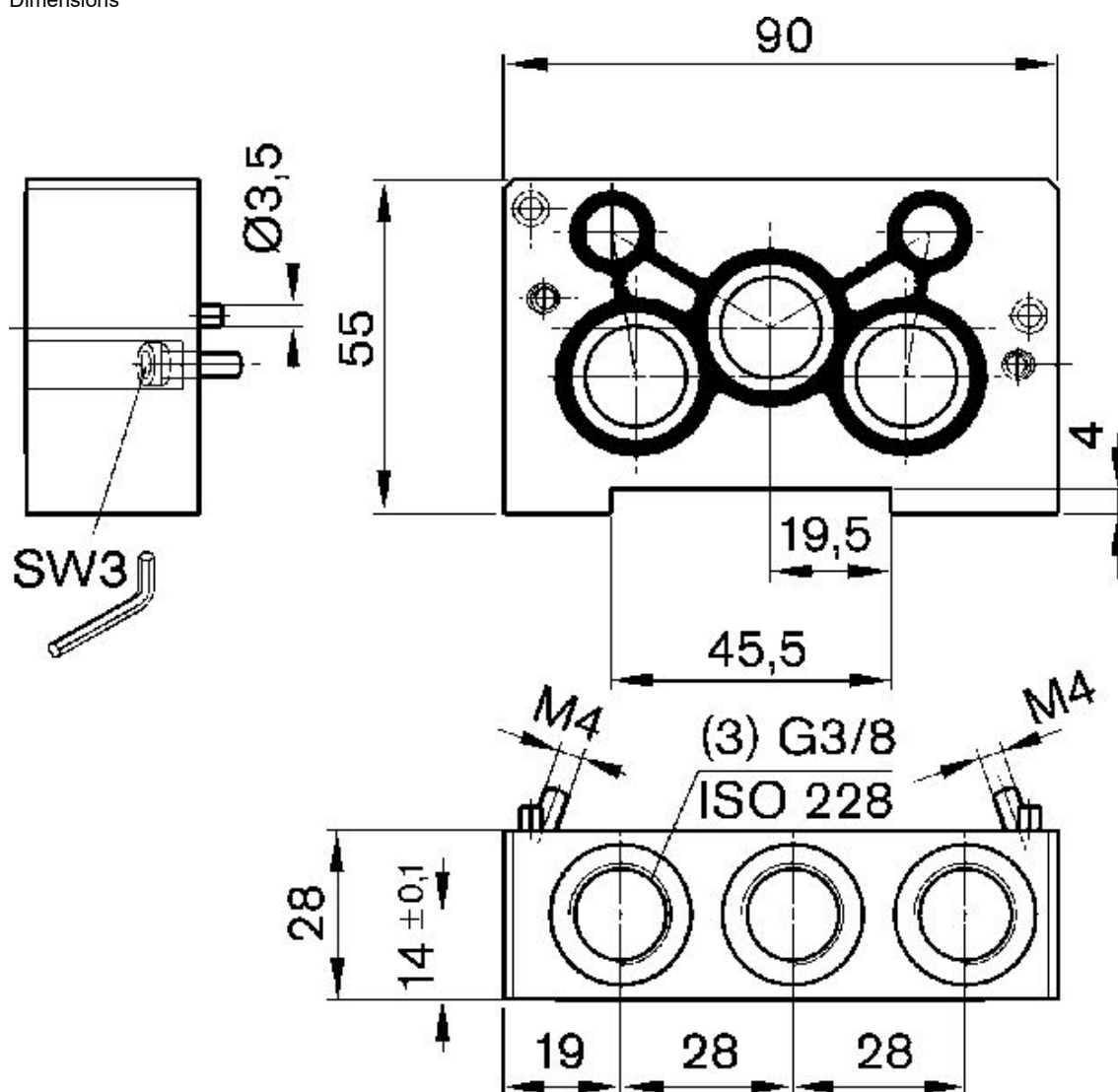
Supply plate, stacked longitudinally

Standards: ISO 15407-1
 Compressed air connection type: Internal thread
 Compressed air connection input: G 3/8
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 70 °C
 Min. working pressure: -0.95 bar
 Max. working pressure: 16 bar



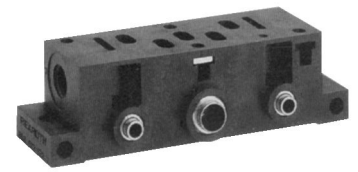
Compressed air connection input	Compressed air connection, exhaust	Part No.
G 3/8	G 3/8	1825504034

Dimensions



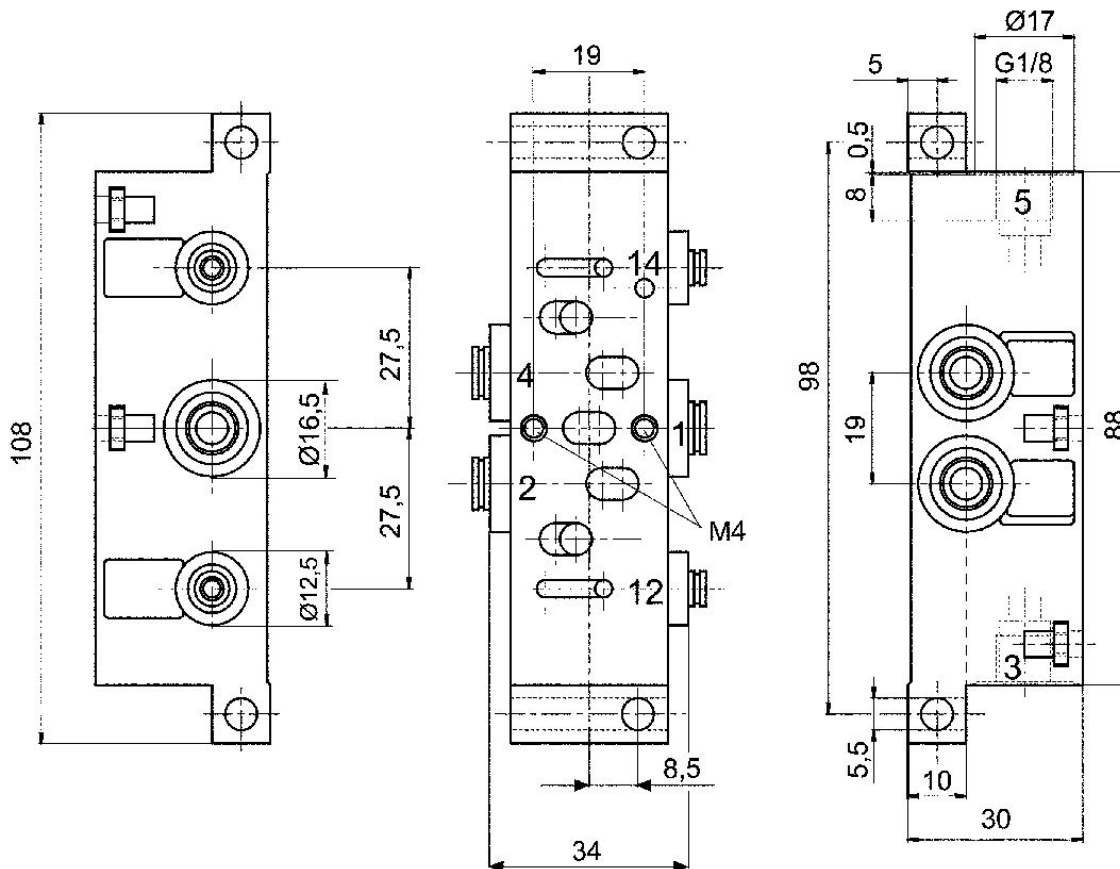
Single subbase, ports on side

Standards: ISO 15407-1
 Compressed air connection type: push-in fitting
 Certificates: Free of substances that impair surface wetting in the coating process
 Compressed air connection, exhaust: G 1/8
 Min. ambient temperature: -25 °C
 Max. ambient temperature: 70 °C
 Min. working pressure: -0.95 bar
 Max. working pressure: 16 bar



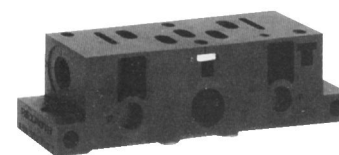
Compressed air connection input	Compressed air connection, exhaust	Compressed air connection output	Compressed air connection pilot air	Compressed air connection pilot air exhaust	Connection direction	Max. number of valve positions	Part No.
Ø 6x1	G 1/8	Ø 6x1	Ø 4	Ø 4	On the side	1	8985121372
Ø 8x1	G 1/8	Ø 8x1	Ø 4	Ø 4	On the side	1	8985121382

Dimensions



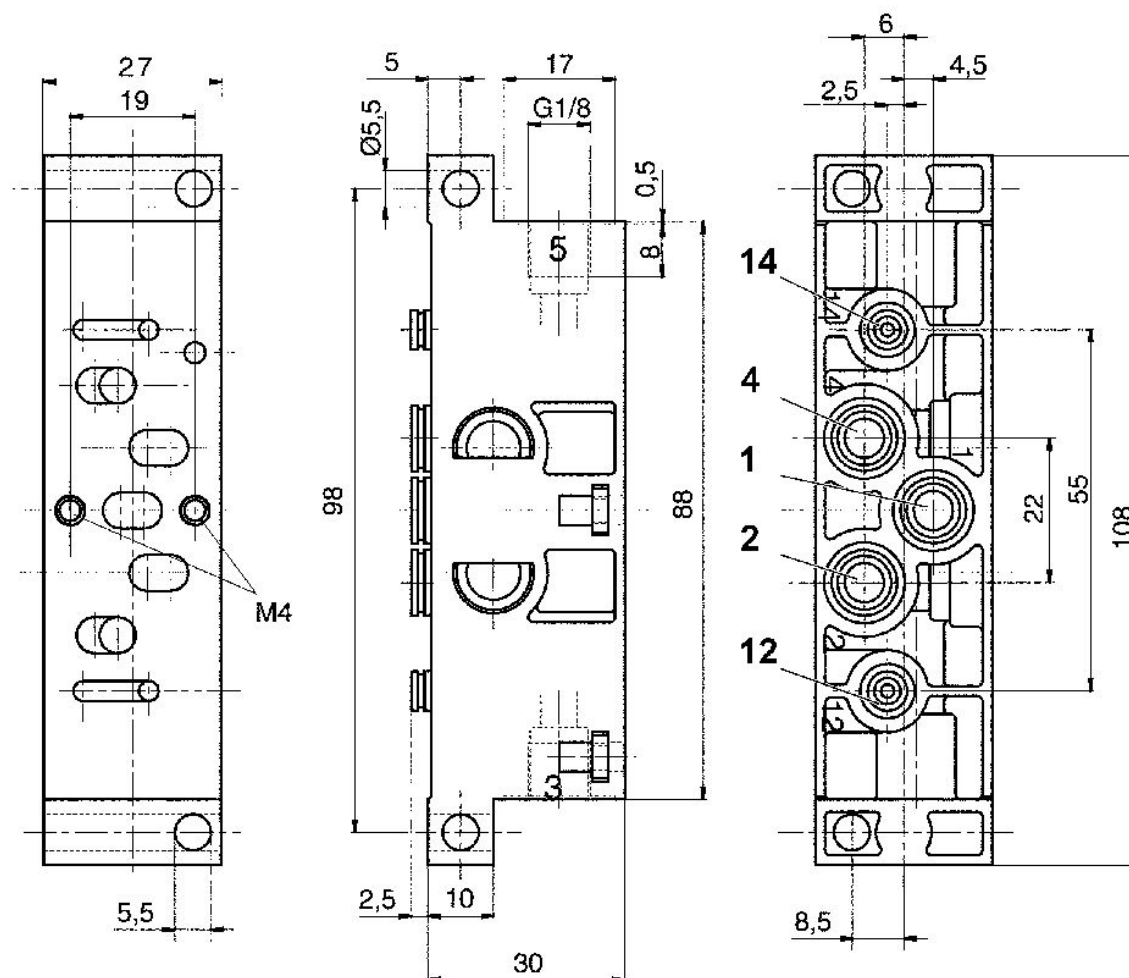
Single subbase, ports on bottom

Standards: ISO 15407-1
 Compressed air connection type: push-in fitting
 Certificates: Free of substances that impair surface wetting in the coating process
 Compressed air connection input: Ø 8x1
 Compressed air connection output: Ø 8x1
 Compressed air connection, exhaust: G 1/8
 Min. ambient temperature: -25 °C
 Max. ambient temperature: 70 °C
 Min. working pressure: -0.95 bar
 Max. working pressure: 16 bar



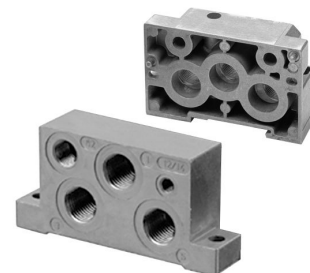
Compressed air connection input	Compressed air connection, exhaust	Compressed air connection output	Compressed air connection pilot air	Compressed air connection pilot air exhaust	Connection direction	Max. number of valve positions	Part No.
Ø 8x1	G 1/8	Ø 8x1	Ø 4	Ø 4	Down	1	8985121392

Dimensions



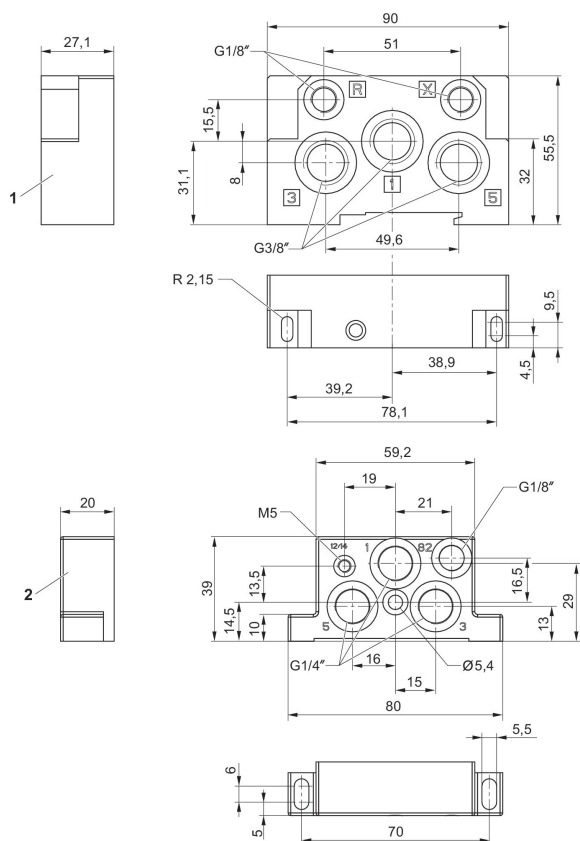
End plate left, End plate right

Standards: ISO 15407-1
 For series: CD01-PA CD02-AL
 Compressed air connection type: Internal thread
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 70 °C
 Min. working pressure: -0.95 bar
 Max. working pressure: 16 bar



Type	Part No.
End plate left, End plate right	R422004065

Dimensions



- 1) Right end plate CD01
- 2) Left end plate CD02

Compressed air connection	Input	Exhaust	Pilot connection	Pilot control exhaust
Port	[1]	[3,5]	[12]	[R]
CD01-PA	G 3/8	G 3/8	G 1/8	G 1/8

Compressed air connection	Input	Exhaust	Pilot connection	Pilot control exhaust
CD02-AL	G 1/8	G 1/8	M5	G 1/8

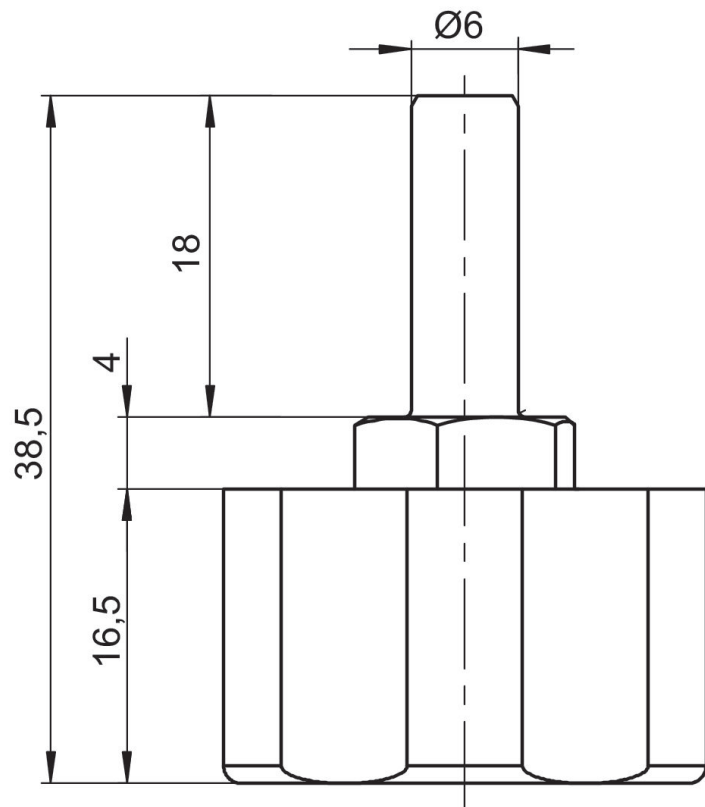
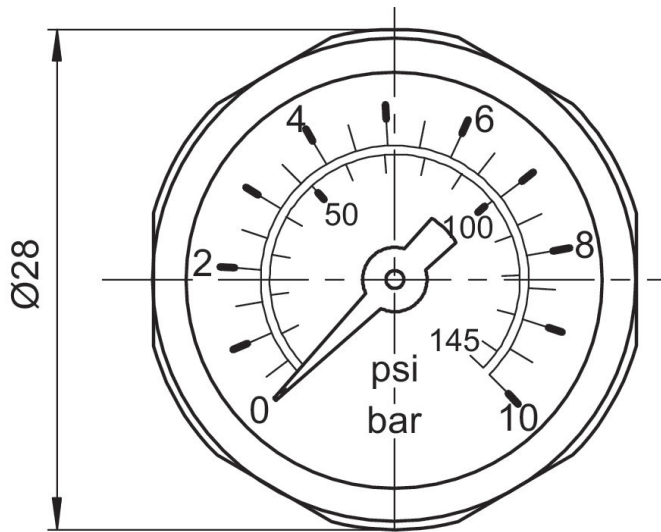
Pressure gauge

Min. ambient temperature: -15 °C
 Max. ambient temperature: 80 °C
 Min. working pressure: 0 bar
 Max. working pressure: 10 bar



Type	Nominal diameter [mm]	Port	Min. main scale display range [bar]	Max. main scale display range [bar]	Min. main scale display range [bar]	Max. main scale display range [bar]	Part No.
Bourdon tube pressure gauge	28	Ø 6	0	4	0	4	R412003960
Bourdon tube pressure gauge	28	Ø 6	0	10	0	10	3530200300
Bourdon tube pressure gauge	28	Ø 6	0	10	0	10	R412004883

Dimensions in mm



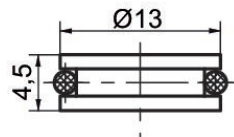
Separator for connections 1, 3, 5

Standards: ISO 15407-1
For series: MS01-PA CD01-PA



Type	Type	Weight [kg]	Material	Part No.
Separator for connections 1, 3, 5	26 mm	0.003	Aluminum	R412015167

Dimensions



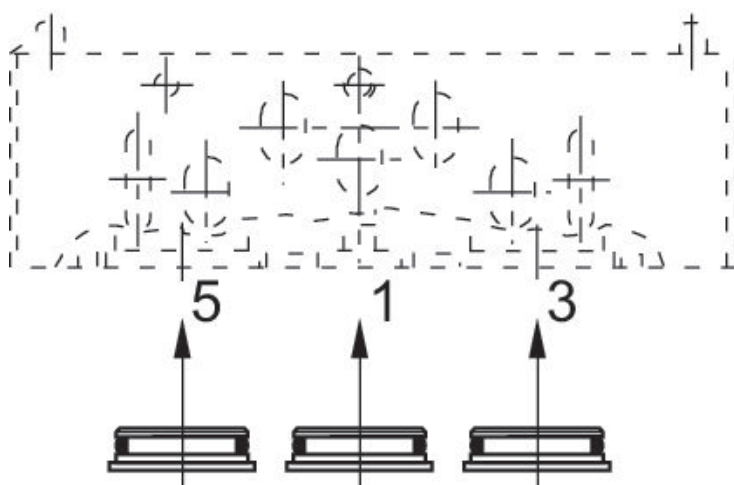
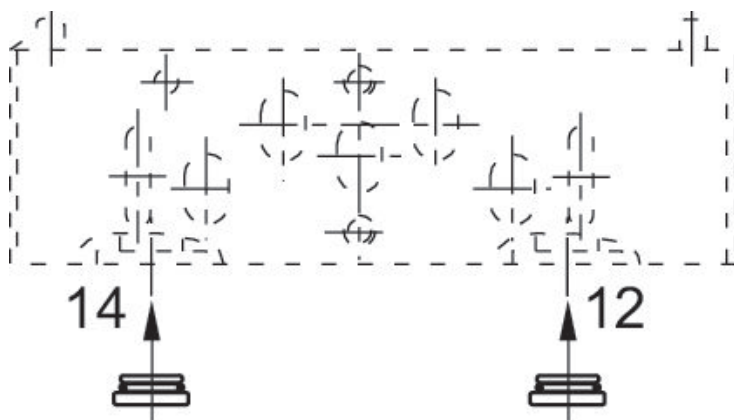
Separator

Standards: ISO 15407-1
 For series: MS01-AL CD01-PA
 Min. ambient temperature: -15 °C
 Max. ambient temperature: 50 °C
 Min. working pressure: -0.95 bar
 Max. working pressure: 16 bar



Type	Type	Weight [kg]	Material	Part No.
Separator for connections 1, 3, 5	26 mm	0.004	Aluminum	1820220039
For connections 12 and 14	26 mm	0.002	Aluminum	1820220040

Dimensions



Base plate, ports 2 and 4 on side

Standards: ISO 15407-1

Compressed air connection type: Internal thread

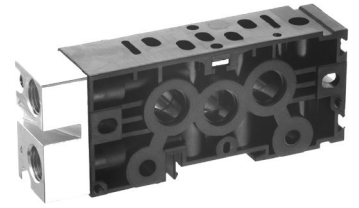
Certificates: Free of substances that impair surface wetting in the coating process

Min. ambient temperature: -25 °C

Max. ambient temperature: 70 °C

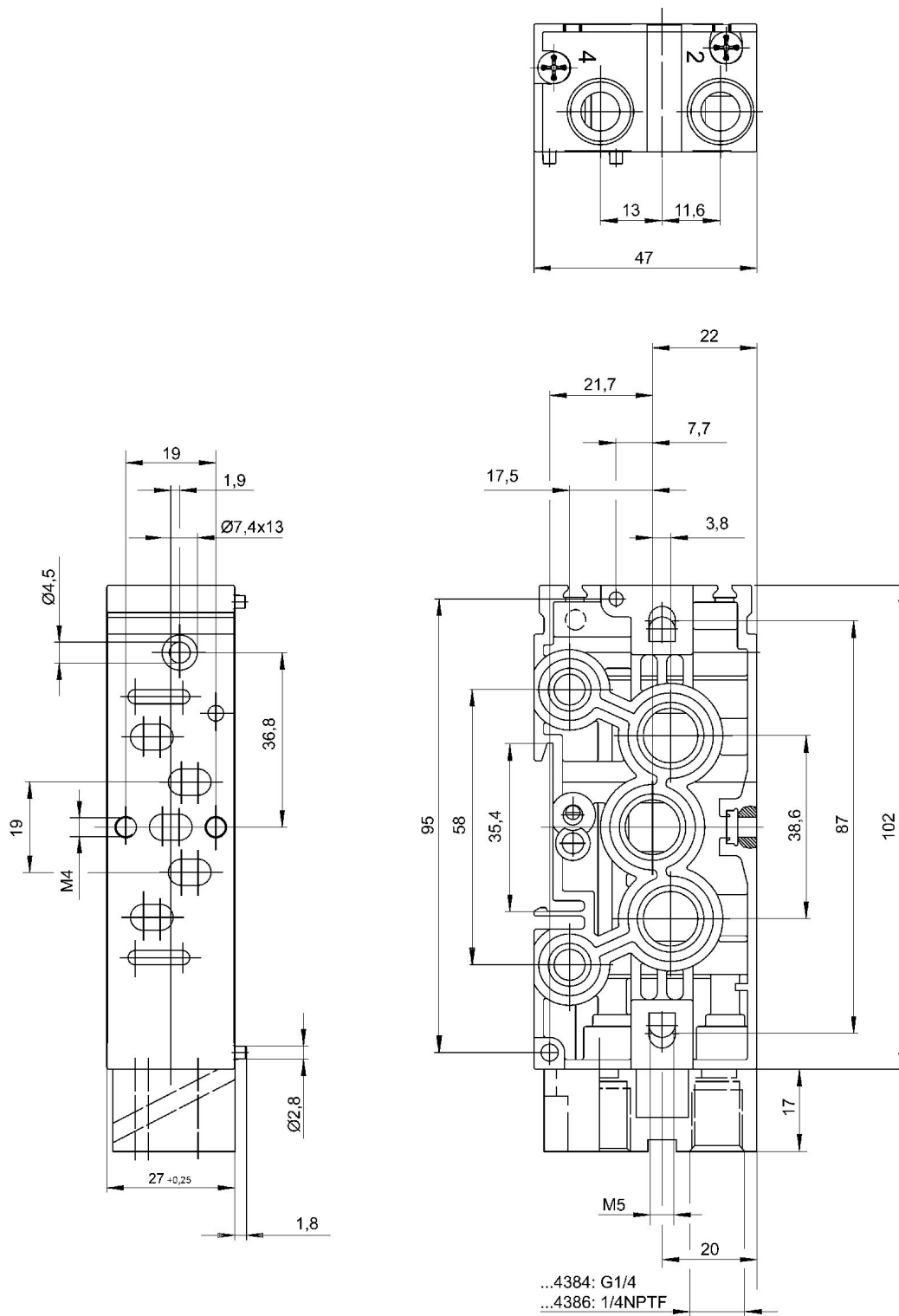
Min. working pressure: -0.95 bar

Max. working pressure: 16 bar



Compressed air connection output	Connection direction	Max. number of valve positions	Part No.
G 1/4	On the side	1	R412004384
1/4 - 18 NPTF	On the side	1	R412004386

Dimensions



Base plate, ports 2 and 4 on side

Standards: ISO 15407-1

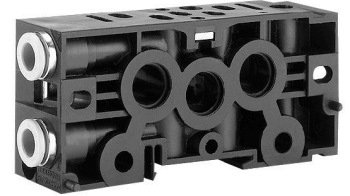
Certificates: Free of substances that impair surface wetting in the coating process

Min. ambient temperature: -25 °C

Max. ambient temperature: 70 °C

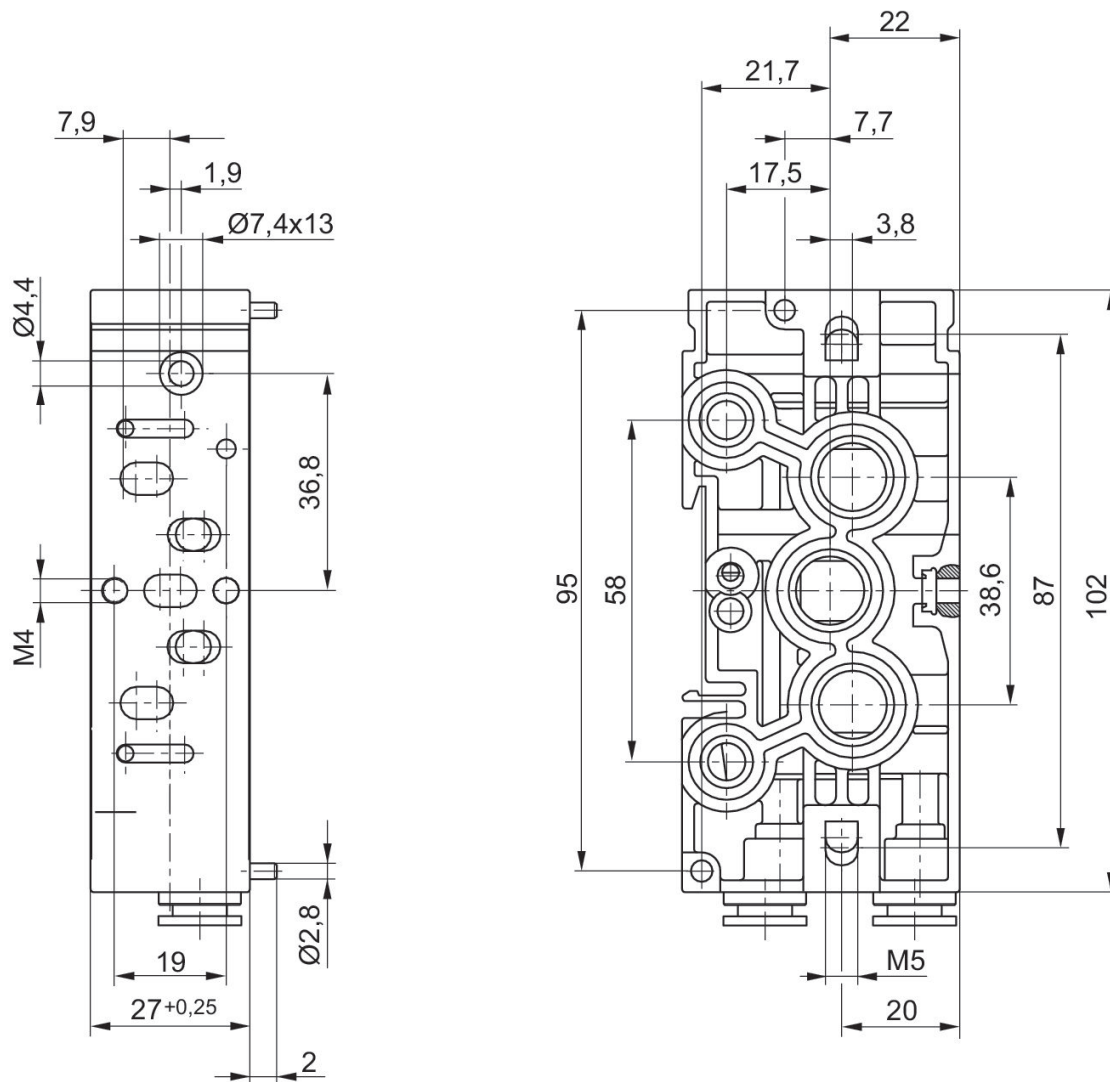
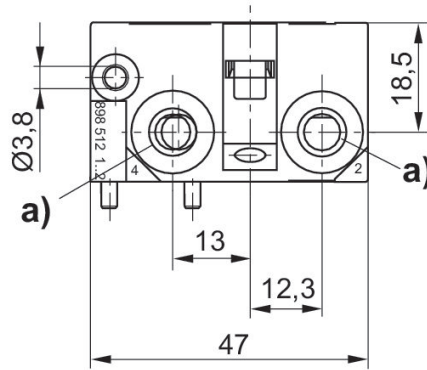
Min. working pressure: -0.95 bar

Max. working pressure: 16 bar



Compressed air connection output	Connection direction	Max. number of valve positions	Part No.
Ø 4	On the side	1	8985121162
Ø 6x1	On the side	1	8985121122
Ø 8x1	On the side	1	8985121052
G 1/8	On the side	1	8985121092

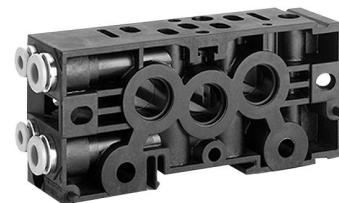
Dimensions



a) push-in fitting or thread connection

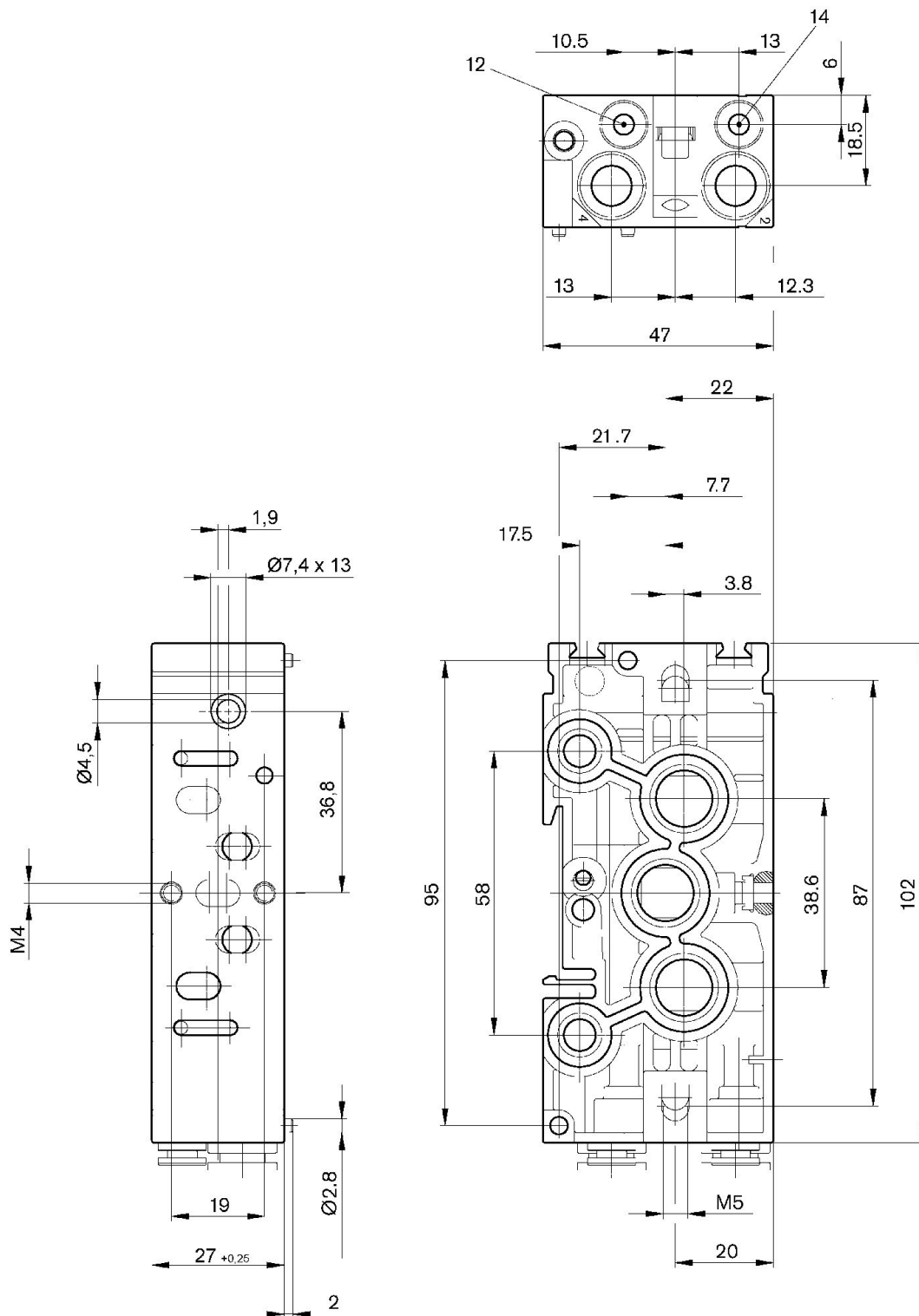
Base plate, Ports 2 and 4, 12 and 14 on side

Standards: ISO 15407-1
Compressed air connection type: Internal thread push-in fitting
Certificates: Free of substances that impair surface wetting in the coating process
Compressed air connection output: Ø 8x1
Min. ambient temperature: -25 °C
Max. ambient temperature: 70 °C
Min. working pressure: -0.95 bar
Max. working pressure: 16 bar



Compressed air connection output	Compressed air connection pilot air	Connection direction	Max. number of valve positions	Part No.
Ø 8x1	Ø 4	On the side	1	8985121022

Dimensions



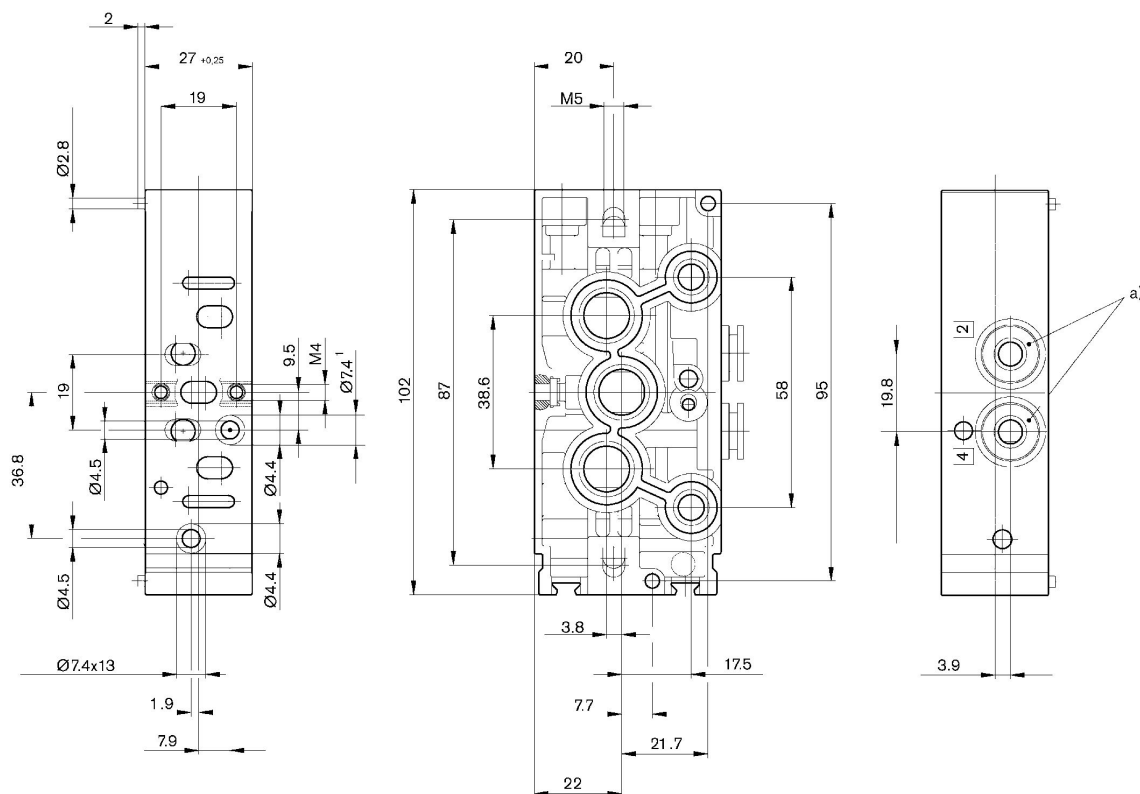
Base plate, ports 2 and 4 on bottom

Standards: ISO 15407-1
 Certificates: Free of substances that impair surface wetting in the coating process
 Min. ambient temperature: -25 °C
 Max. ambient temperature: 70 °C
 Min. working pressure: -0.95 bar
 Max. working pressure: 16 bar



Compressed air connection output	Connection direction	Max. number of valve positions	Part No.
Ø 6x1	Down	1	8985121102
Ø 8x1	Down	1	8985121032
G 1/8	Down	1	8985121072

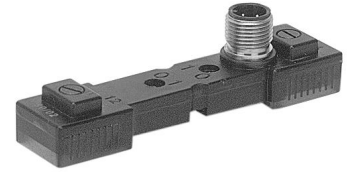
Dimensions



a) push-in fitting or thread connection

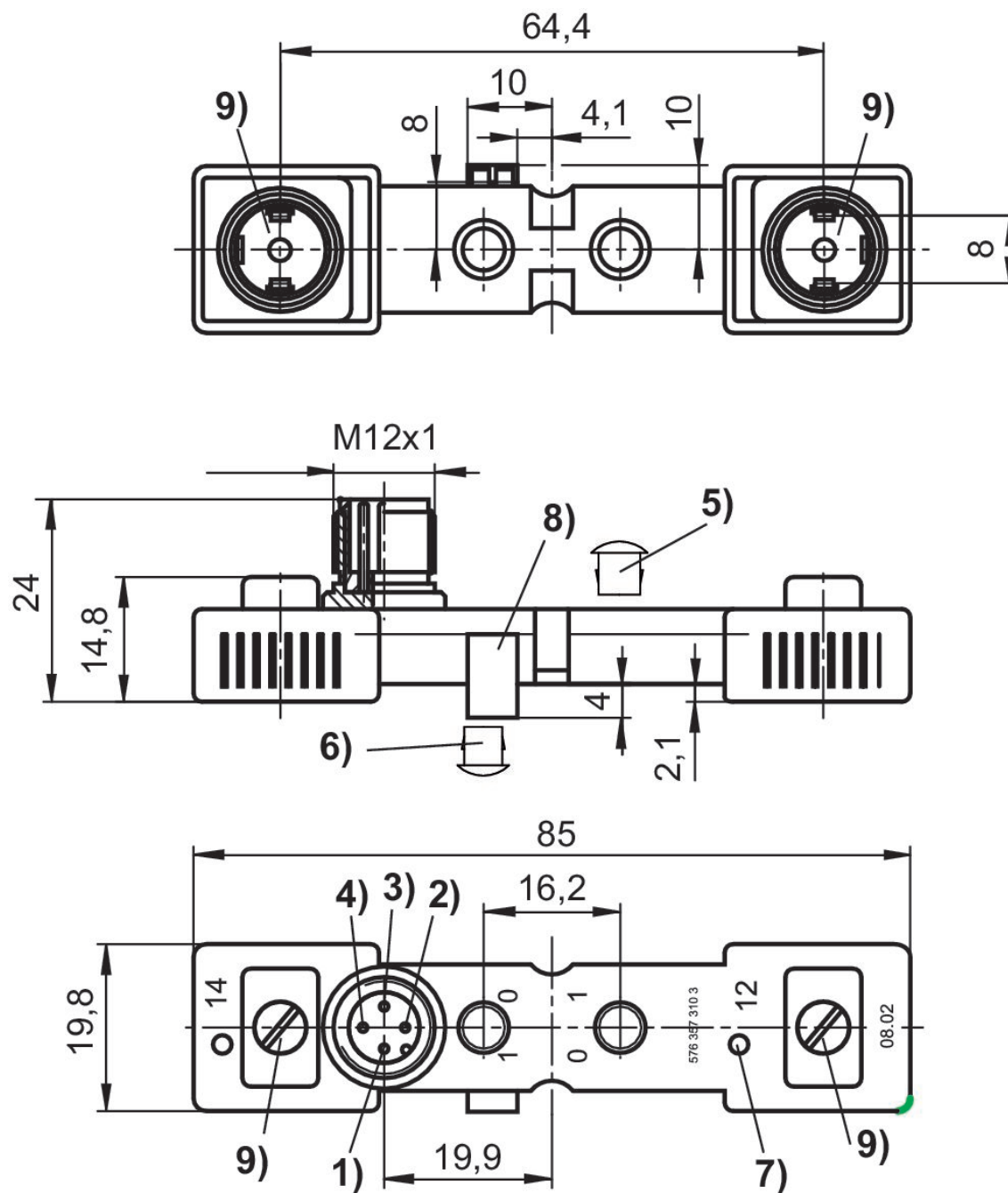
Contact bridges, series CON-CB

Min. ambient temperature: -15 °C
Max. ambient temperature: 50 °C



Max. current [A]	Contact assignment	LED status display	Part No.
4	4-pin	Yellow	5763573103

Dimensions



- 1) not assigned 2) solenoid 12 3) 0 V 4) solenoid 14
- 5) Sealing cap for manual override not removable
- 6) Removable
- 7) LED valve
- 8) positioning pin 9) captive seal and screw

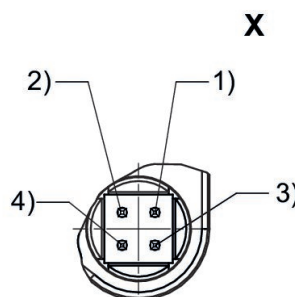
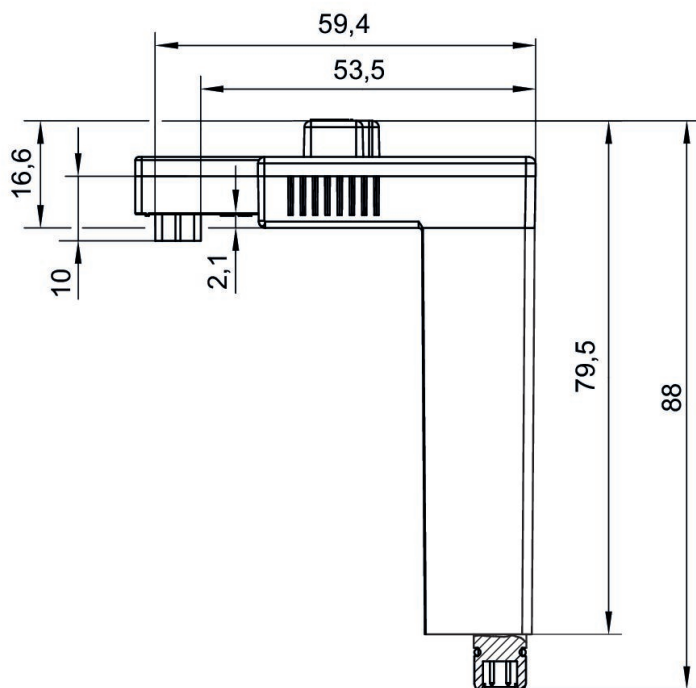
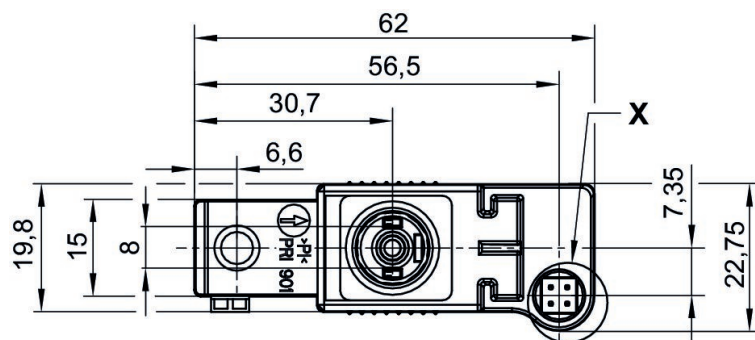
Contact bridges, series CON-CB

Min. ambient temperature: -15 °C
Max. ambient temperature: 50 °C



Protective circuit	Max. current [A]	Contact assignment	LED status display	Part No.
43 V bi-directional	0.5	4-pin	Yellow	R412005847

Dimensions



Pin assignment: Pin 1: solenoid 14 Pin 2: solenoid 12 Pin 3: ground Pin 4: 0 V

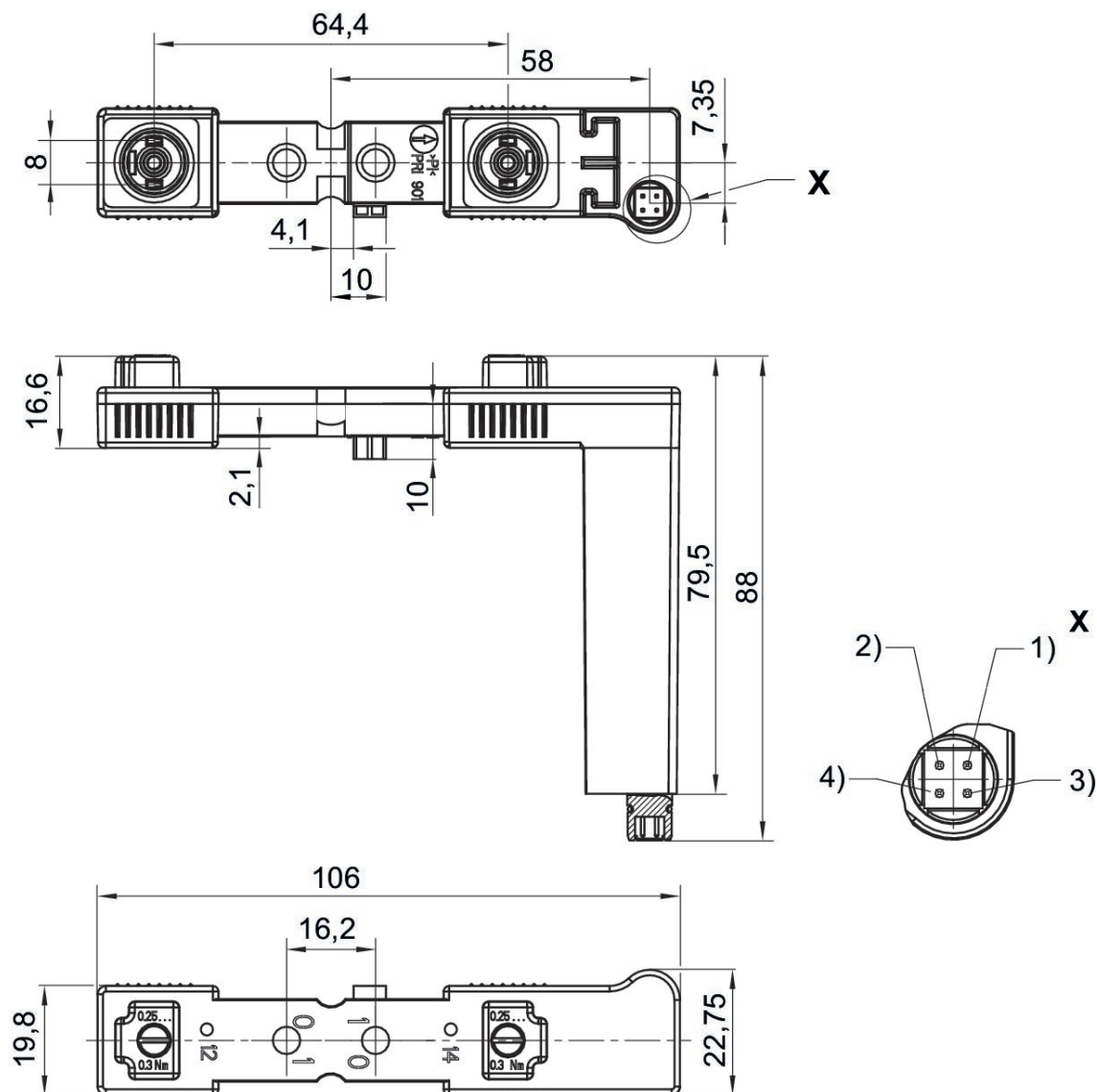
Contact bridges, series CON-CB

Min. ambient temperature: -15 °C
Max. ambient temperature: 50 °C



Max. current [A]	Contact assignment	LED status display	Part No.
0.5	4-pin	Yellow	R412005846

Dimensions



Pin assignment: Pin 1: solenoid 14 Pin 2: solenoid 12 Pin 3: ground Pin 4: 0 V

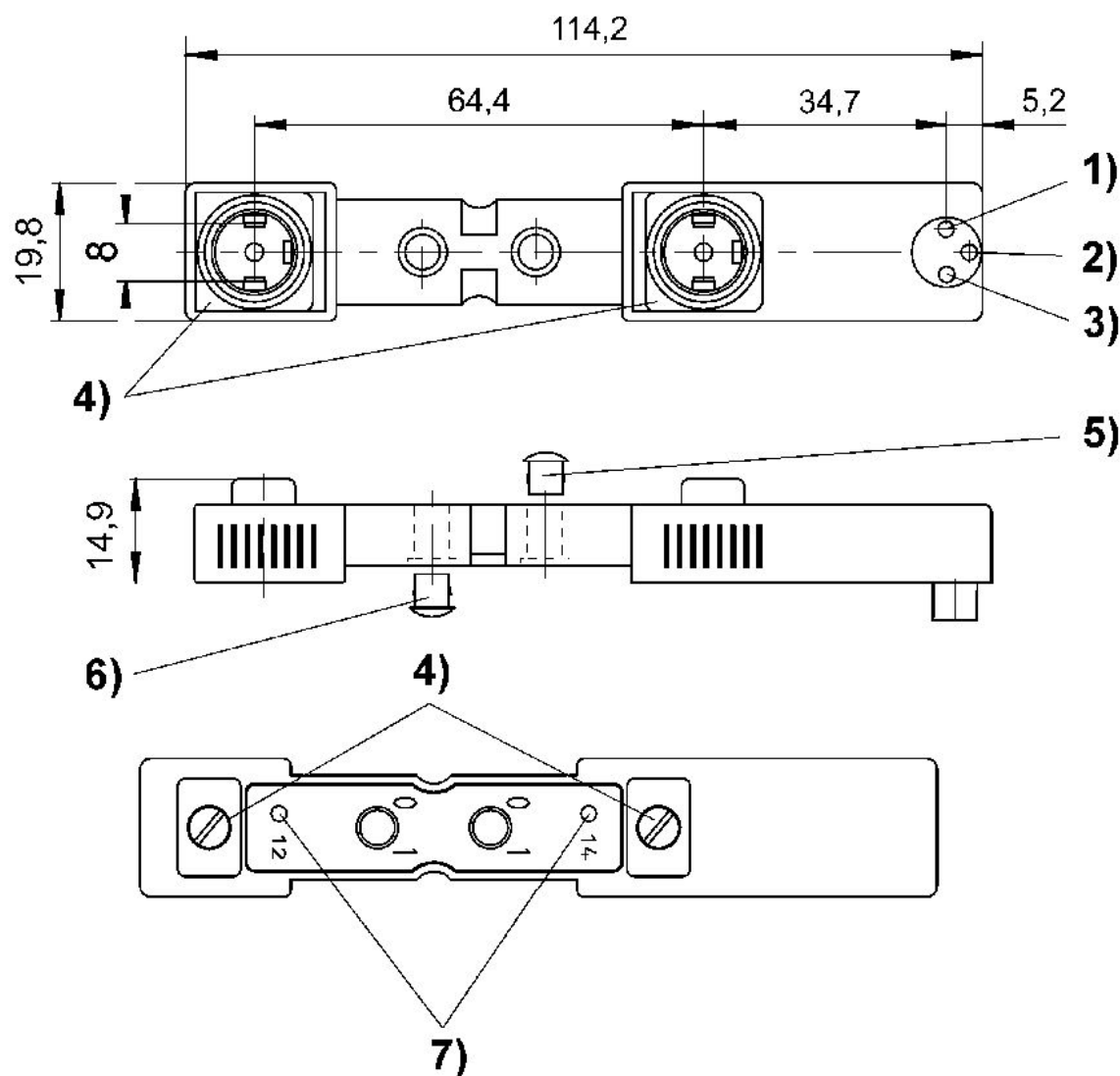
Contact bridges, series CON-CB

Min. ambient temperature: -25 °C
Max. ambient temperature: 75 °C



Max. current [A]	Contact assignment	LED status display	Part No.
0.5	3-pin	Yellow	5763503193

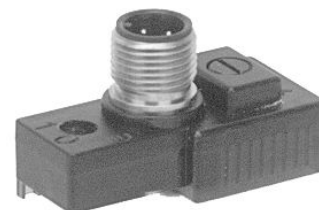
Dimensions



1) solenoid 14##2) solenoid 12##3) 0 V## 4) captive seal and screw##5) sealing cap for manual override not removable##6) removable##7) LED valve

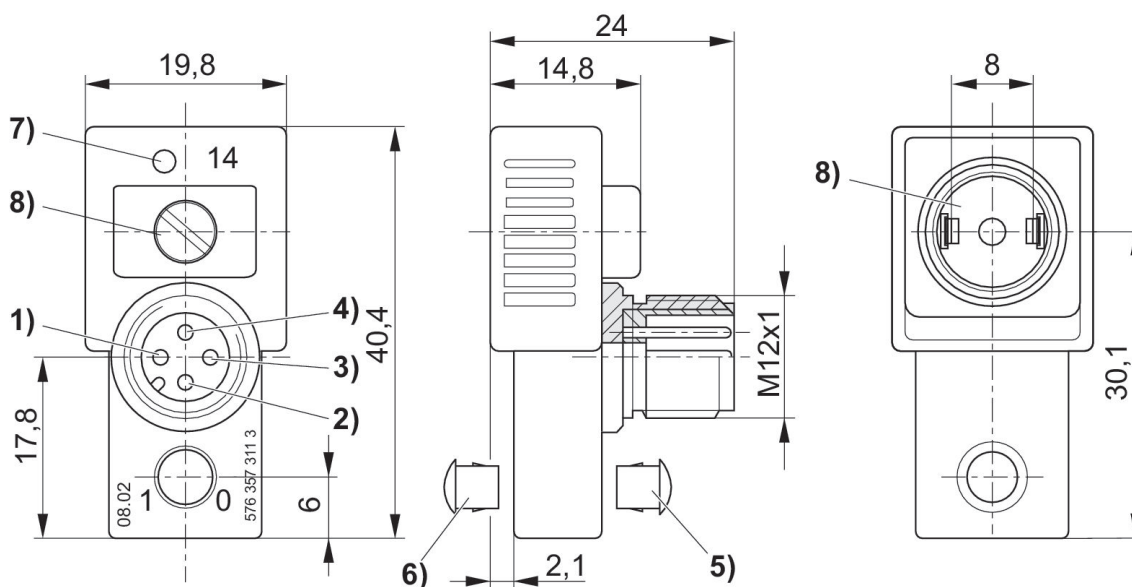
Contact bridges, series CON-CB

Min. ambient temperature: -15 °C
Max. ambient temperature: 50 °C



Max. current [A]	Contact assignment	LED status display	Part No.
4	4-pin	Yellow	5763573113

Dimensions



- 1) not assigned 2) not assigned 3) 0 V 4) magnet 14
- 5) Sealing cap for manual override not removable
- 6) Removable
- 7) LED valve
- 8) captive seal and screw

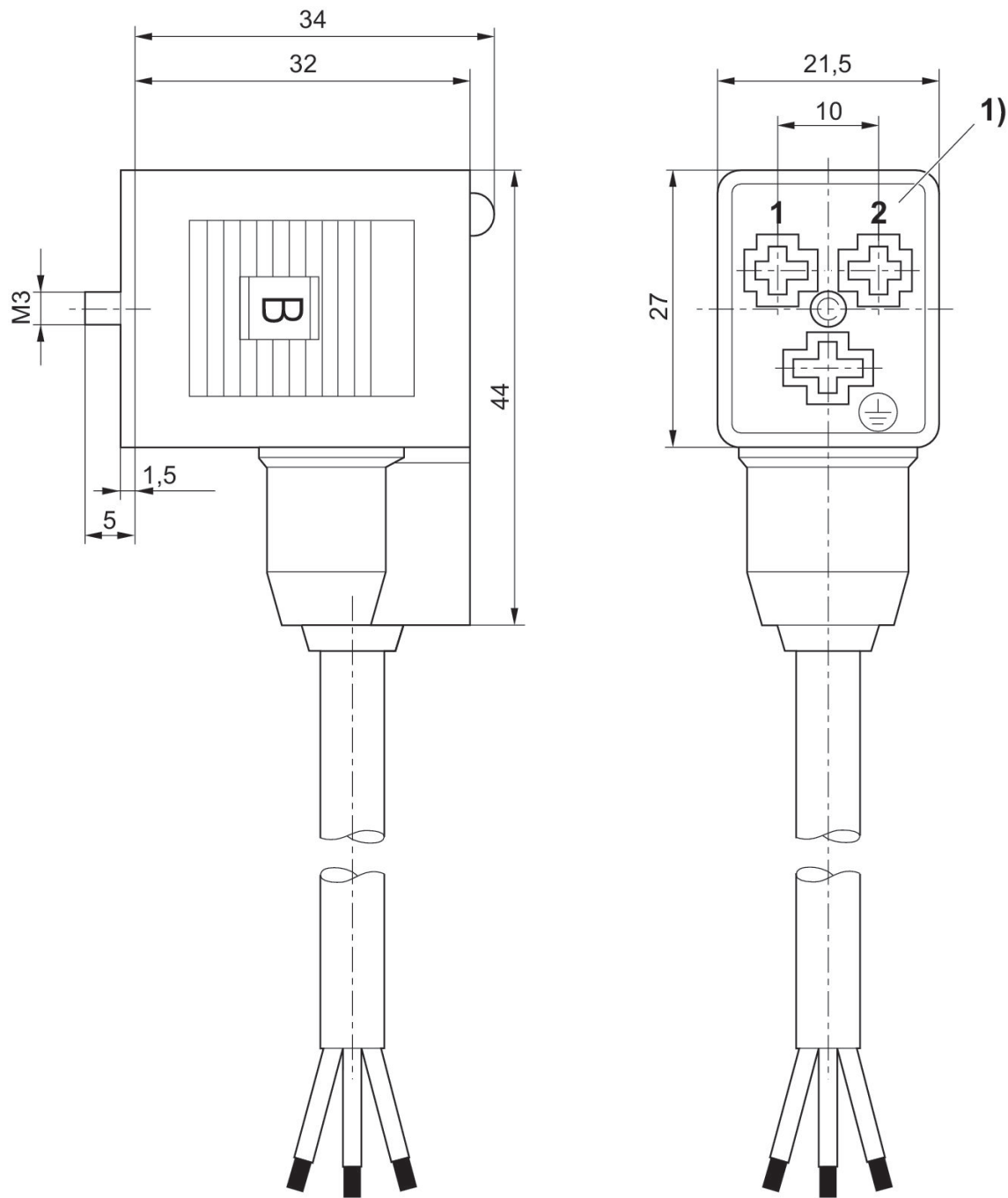
Valve plug connector with cable series CON-VP, Form B, 0° female insert

Electrical connection 1, thread size: Form B
Min. ambient temperature: -20 °C
Max. ambient temperature: 80 °C



Operational voltage	Protective circuit	Max. current [A]	Contact assignment	LED status display	Cable-Ø [mm]	Cable length [m]	Part No.
24 V AC/DC	Z-diode	10	2+E	Yellow	5.9	3	1834484152
24 V AC/DC	Z-diode	10	2+E	Yellow	5.9	5	1834484154

Dimensions



1) 0° female insert

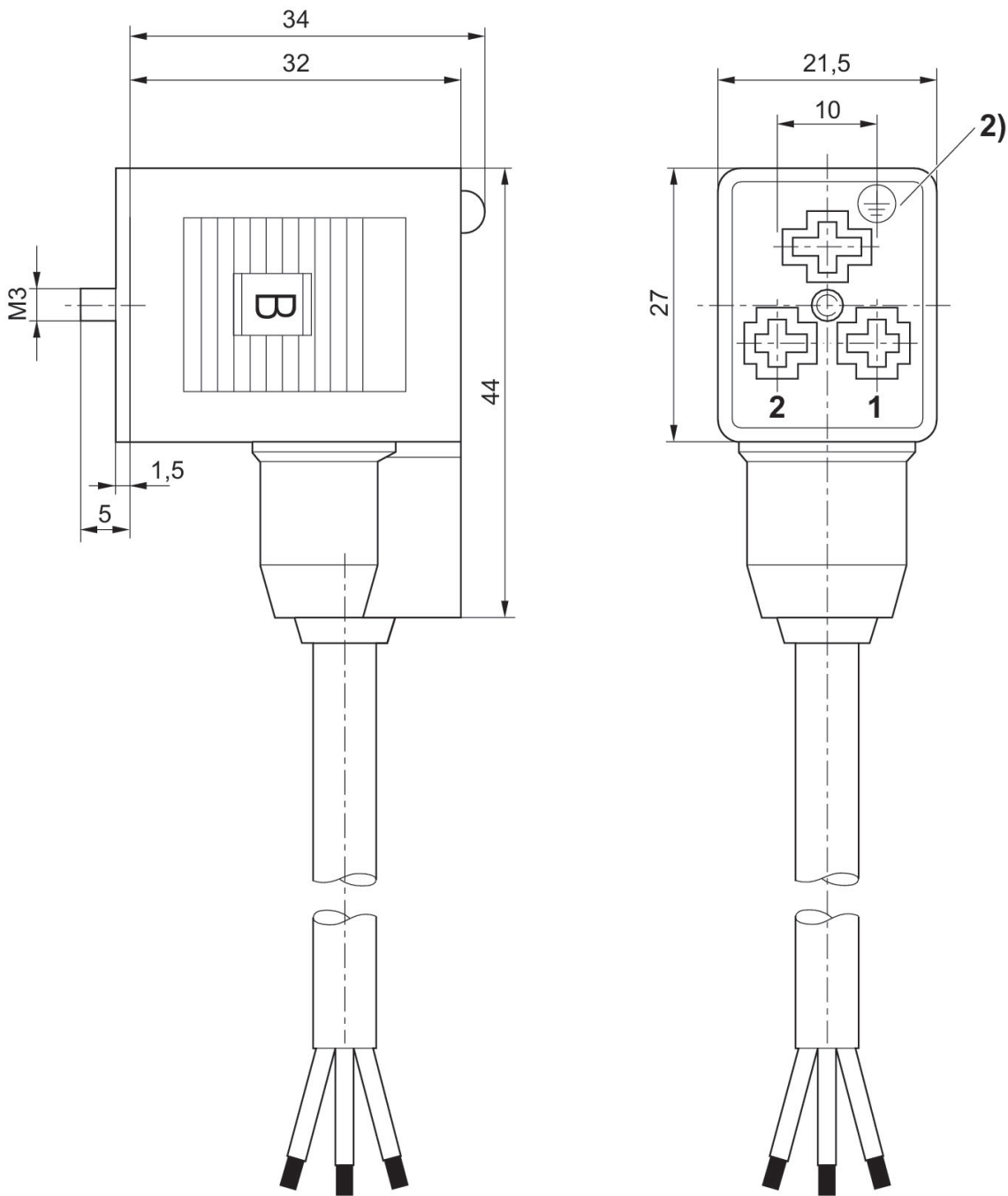
Valve plug connector with cable series CON-VP,, 180° female insert

Electrical connection 1, thread size: Form B
Min. ambient temperature: -20 °C
Max. ambient temperature: 80 °C



Operational voltage	Protective circuit	Max. current [A]	Contact assignment	LED status display	Cable-Ø [mm]	Cable length [m]	Part No.
24 V AC/DC	Z-diode	10	2+E	Yellow	5.9	3	1834484153
24 V AC/DC	Z-diode	10	2+E	Yellow	5.9	5	1834484155

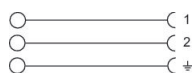
Dimensions



2) 180° female insert

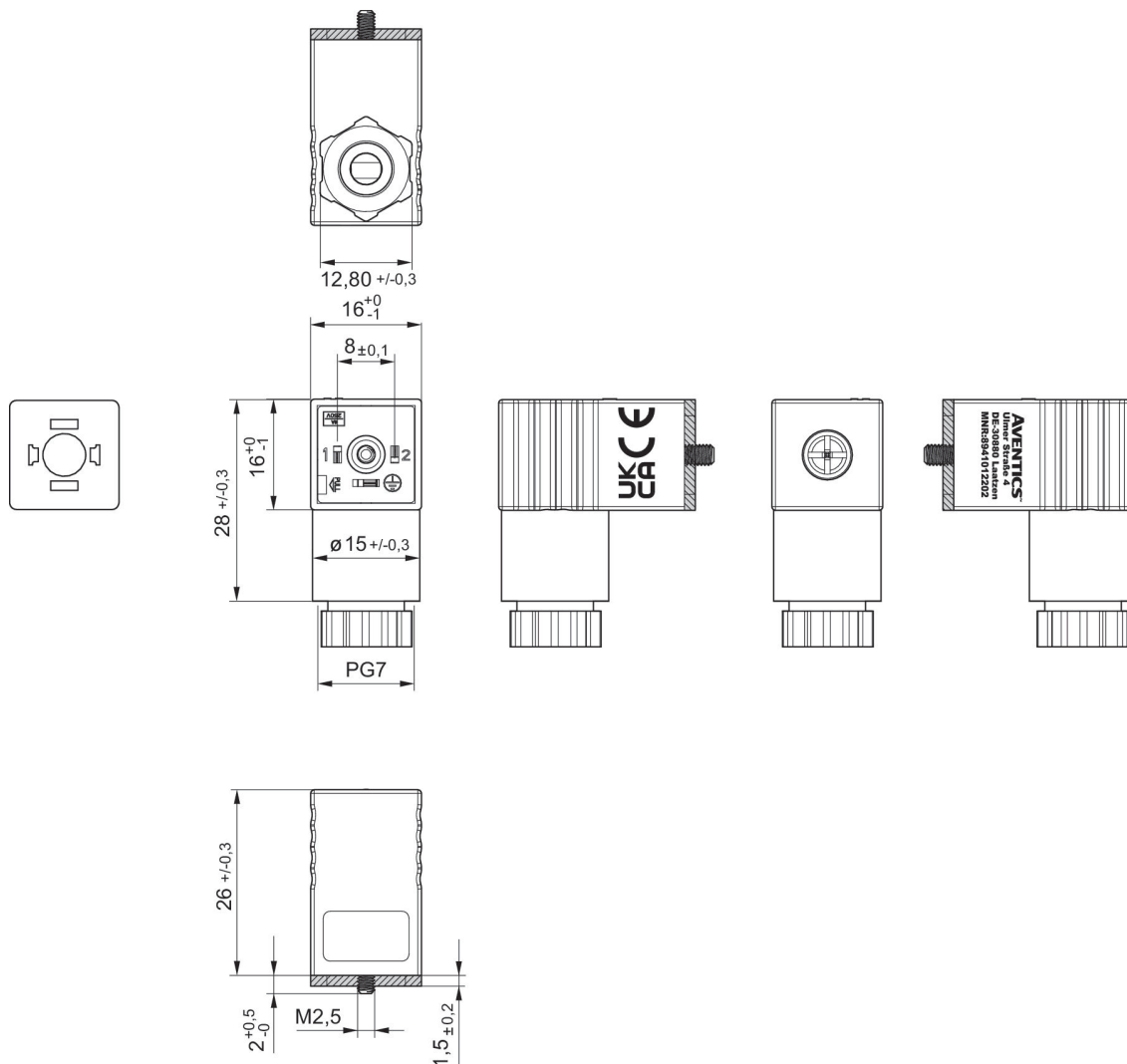
Valve plug connector, series CON-VP, form C, 300 V DC / 250 V AC

Electrical connection 1, thread size: EN 175301-803, form C
 Certificates: CE declaration of conformity UKCA
 Min. ambient temperature: -40 °C
 Max. ambient temperature: 90 °C



Operational voltage	Protective circuit	Max. current [A]	Contact assignment	LED status display	min. suitable cable Ø [mm]	max. suitable cable Ø [mm]	Part No.
300 V DC / 250 V AC		6	2+E		4	6	8941012202
24 V AC/DC	Varistor	1.5	2+E	Green	4	6	4402050330

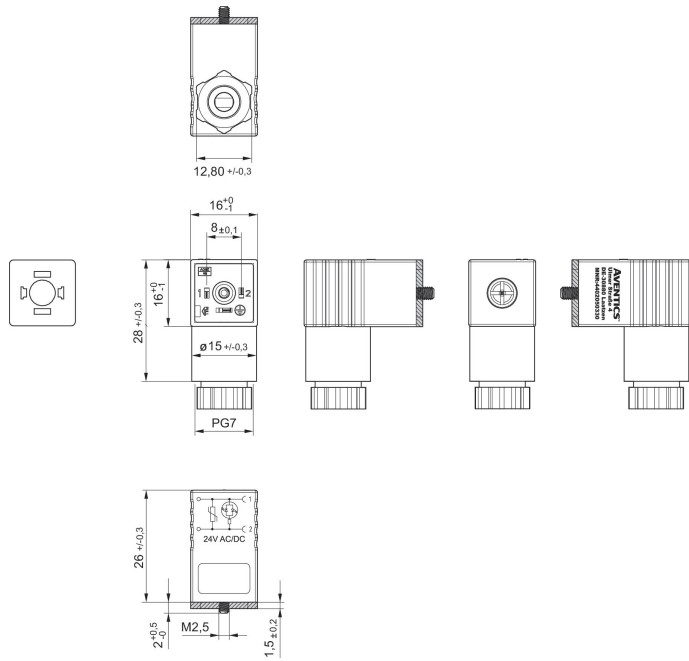
Dimensions



Profile seal

4402050330

Dimensions







Profile seal

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



Visit us: www.Emerson.com/aventics
Your local contact: Emerson.com/contactus

-  Emerson.com
-  Facebook.com/EmersonAutomationSolutions
-  LinkedIn.com/company/Emerson-Automation-Solutions
-  Twitter.com/EMR_Automation



The Emerson logo is a trademark and service mark of Emerson Electric Co. AVENTICS is a registered trademark of one of the Emerson family of companies. All other trademarks are the property of their respective owners. © 2020 Emerson Electric Co. All rights reserved.



CONSIDER IT SOLVED™