

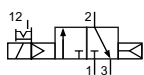
Technical details

Connection	BM-01: G1/8 BM-02: G1/4
Nominal size	BM-01: 5 mm BM-02: 7 mm
Temperature range	-10°C ... +60°C
Medium	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Differing the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
Materials	Body: Al (anodized), plastic, seals: NBR, FKM and PU, inner parts: Al, steel and plastic
Protection	IP 65 according to EN 60529

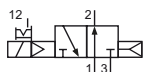


Electrically operated spool valve. The manual override is non-detent (HNT) or detent (HNR) and is operated by bolt or screw driver.

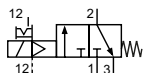
3/2-way valves



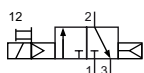
BM-01-310-HNR-xxx
BM-02-310-HNR-xxx
3/2-way, single solenoid, air spring return, NC



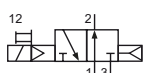
BM-01-312-HNR-xxx
BM-02-312-HNR-xxx
3/2-way, single solenoid, air spring return, NO



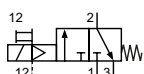
BME-01-311-HNR-xxx
BME-02-311-HNR-xxx
3/2-way, single solenoid, external pilot pressure, mechanical spring return



BM-01-310-HNT-xxx
BM-02-310-HNT-xxx
3/2-way, single solenoid, air spring return, NC



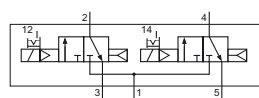
BM-01-312-HNT-xxx
BM-02-312-HNT-xxx
3/2-way, single solenoid, air spring return, NO



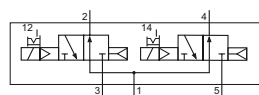
BME-01-311-HNT-xxx
BME-02-311-HNT-xxx
3/2-way, single solenoid, external pilot pressure, mechanical spring return

Please complete: xxx = electrical option

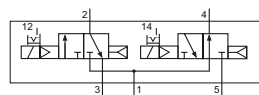
2 x 3/2-way-valves



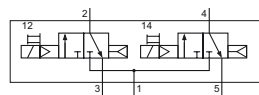
BM-01-310/2-HNR-xxx
BM-02-310/2-HNR-xxx
2 x 3/2-way, single solenoid, air spring return, NC



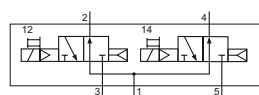
BM-01-312/2-HNR-xxx
BM-02-312/2-HNR-xxx
2 x 3/2-way, single solenoid, air spring return, NO



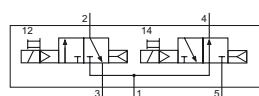
BM-01-314/2-HNR-xxx
BM-02-314/2-HNR-xxx
2 x 3/2-way, single solenoid, air spring return, 1 x NC, 1 x NO



BM-01-310/2-HNT-xxx
BM-02-310/2-HNT-xxx
2 x 3/2-way, single solenoid, air spring return, NC



BM-01-312/2-HNT-xxx
BM-02-312/2-HNT-xxx
2 x 3/2-way, single solenoid, air spring return, NO



BM-01-314/2-HNT-xxx
BM-02-314/2-HNT-xxx
2 x 3/2-way, single solenoid, air spring return, 1 x NC, 1 x NO

Electrical options

Nominal voltage	Power consumption	Specifics	Plug connection*1	-XXX electrical pins on same side of ports	
				2 or 2 and 4	1, 3 or 1, 3 and 5
12 V DC	1 W		Form C	-461	-431
24 V DC	1 W		Form C	-462	-432
24 V DC	1 W		M12	-N62	-
24 V AC	3 VA		Form C	-452	-422
115 V AC	3 VA		Form C	-456	-426
230 V AC	3 VA		Form C	-457	-427

*1 Plug socket not included, suitable plug sockets see page 12.

Series BM-01 and BM-02

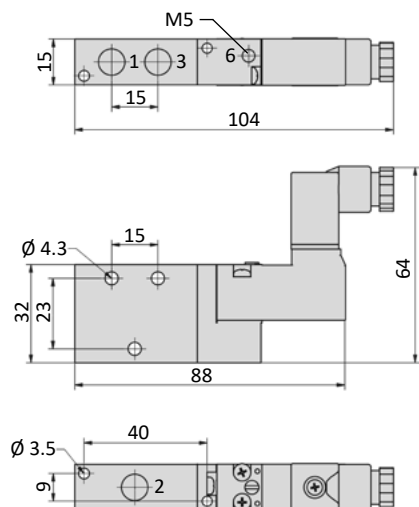
Technical data

Model-no.:	BM-01-310	BM-01-312	BME-01-311	BM-01-310/2	BM-01-312/2	BM-01-314/2
Operating pressure (bar)	2 ... 8	2 ... 8	-0,95 ... 8	2 ... 8	2 ... 8	2 ... 8
Pilot pressure (bar)	2 ... 8	2 ... 8	3 ... 8	2 ... 8	2 ... 8	2 ... 8
Flow rate (NI/min)	660	600	660	650	550	580
Response time (ms) at 6 bar	on: 19 off: 32	on: 16 off: 30	on: 15 off: 35	on: 18 off: 34	on: 18 off: 34	on: 18 off: 34
Weight (kg)	0,108	0,110	0,115	0,154	0,154	0,154

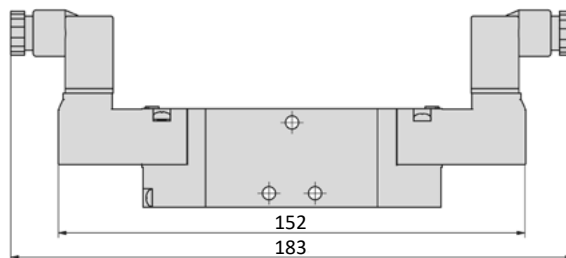
Model-no.:	BM-02-310	BM-02-312	BME-02-311	BM-02-310/2	BM-02-312/2	BM-02-314/2
Operating pressure (bar)	2 ... 8	2 ... 8	-0,95 ... 8	2 ... 8	2 ... 8	2 ... 8
Pilot pressure (bar)	2 ... 8	2 ... 8	3 ... 8	2 ... 8	2 ... 8	2 ... 8
Flow rate (NI/min)	1090	920	1050	1050	1030	NC: 1050, NO: 920
Response time (ms) at 6 bar	on: 19 off: 23	on: 25 off: 27	on: 15 off: 27	on: 22 off: 24	on: 22 off: 24	on: 22 off: 24
Weight (kg)	0,150	0,150	0,150	0,250	0,250	0,250

Dimensions

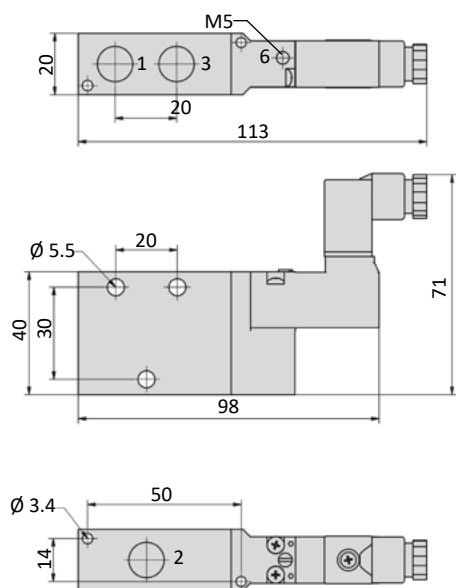
BM-01-31x-HNx



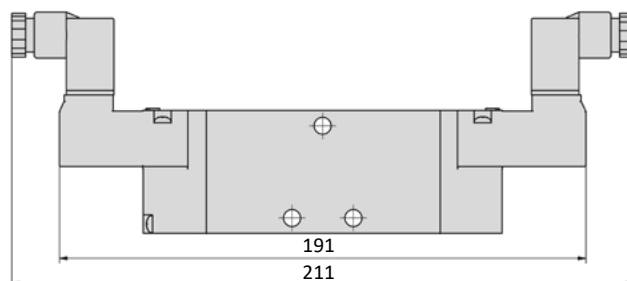
BM-01-31x/2-HNx



BM-02-31x-HNx



BM-02-31x/2-HNx



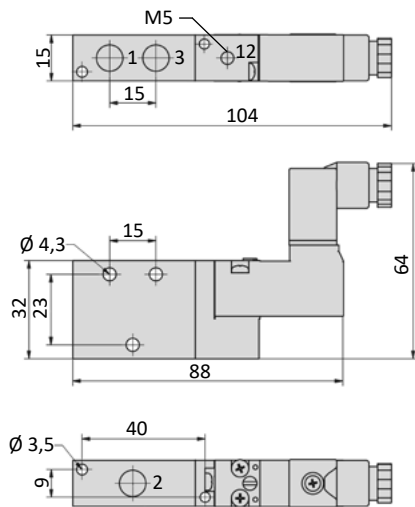
- 1 = pressure inlet
- 2,4 = outlets
- 3,5 = exhausts
- 6 = pilot air exhaust (only at BM-valves)
- 6 = external pilot pressure supply (only at BME-valves)

Plug socket (not included in scope of delivery) can be repositioned by 180°.

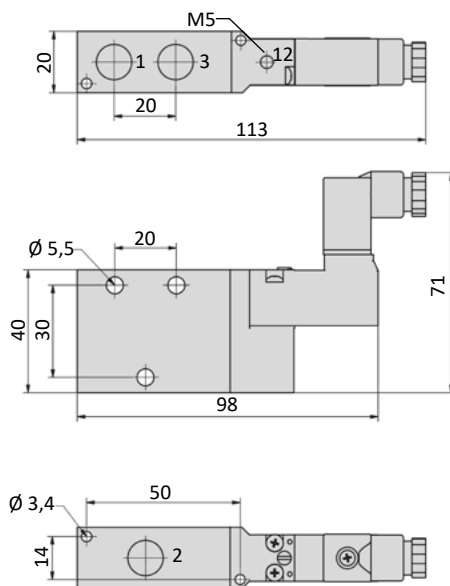
Series BM-01 and BM-02

Dimensions

BME-01-311-HNx



BME-02-311-HNx

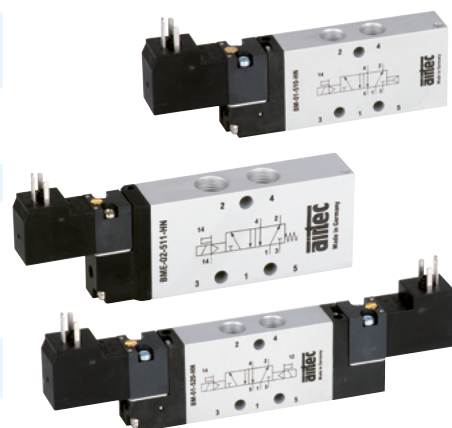


- 1 = pressure inlet
- 2 = outlets
- 3 = exhausts
- 12 = external pilot pressure supply

Plug socket (not included in scope of delivery) can be repositioned by 180°.

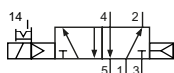
Technical details

Connection	BM-01: G1/8 BM-02: G1/4
Nominal size	BM-01: 5 mm BM-02: 7 mm
Temperature range	-10°C ... +60°C
Medium	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Differing the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
Materials	Body: Al (anodized), plastic, seals: NBR, FKM and PU, inner parts: Al, steel and plastic
Protection	IP 65 according to EN 60529

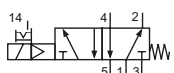


Electrically operated spool valve. The manual override is non-detent or detent and is operated by bolt or screw driver.

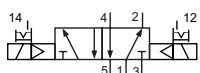
5/2-way-valves



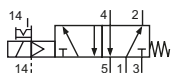
BM-01-510-HNR-xxx
BM-02-510-HNR-xxx
5/2-way, single solenoid, air spring return



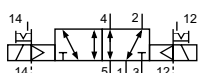
BM-01-511-HNR-xxx
BM-02-511-HNR-xxx
5/2-way, single solenoid, mechanical spring return



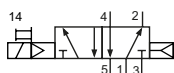
BM-01-520-HNR-xxx
BM-02-520-HNR-xxx
5/2-way, double solenoid



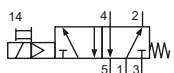
BME-01-511-HNR-xxx
BME-02-511-HNR-xxx
5/2-way, single solenoid, external pilot pressure, mechanical spring return



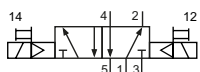
BME-01-520-HNR-xxx
BME-02-520-HNR-xxx
5/2-way, double solenoid, external pilot pressure



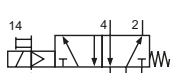
BM-01-510-HNT-xxx
BM-02-510-HNT-xxx
5/2-way, single solenoid, air spring return



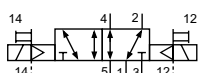
BM-01-511-HNT-xxx
BM-02-511-HNT-xxx
5/2-way, single solenoid, mechanical spring return



BM-01-520-HNT-xxx
BM-02-520-HNT-xxx
5/2-way, double solenoid



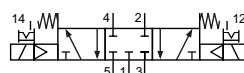
BME-01-511-HNT-xxx
BME-02-511-HNT-xxx
5/2-way, single solenoid, external pilot pressure, mechanical spring return



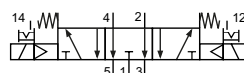
BME-01-520-HNT-xxx
BME-02-520-HNT-xxx
5/2-way, double solenoid, external pilot pressure

Please complete: xxx = electrical option

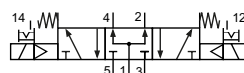
5/3-way-valves



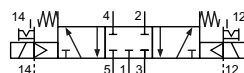
BM-01-530-HNR-xxx
BM-02-530-HNR-xxx
5/3-way, center position closed



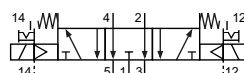
BM-01-533-HNR-xxx
BM-02-533-HNR-xxx
5/3-way, center position exhausted



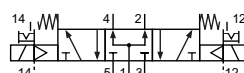
BM-01-534-HNR-xxx
BM-02-534-HNR-xxx
5/3-way, center position pressurized



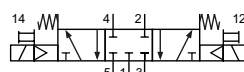
BME-01-530-HNR-xxx
BME-02-530-HNR-xxx
5/3-way, center position closed, external pilot pressure



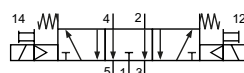
BME-01-533-HNR-xxx
BME-02-533-HNR-xxx
5/3-way, center position exhausted, external pilot pressure



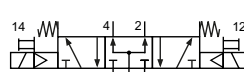
BME-01-534-HNR-xxx
BME-02-534-HNR-xxx
5/3-way, center position pressurized, external pilot pressure



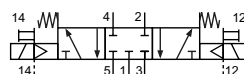
BM-01-530-HNT-xxx
BM-02-530-HNT-xxx
5/3-way, center position closed



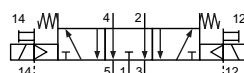
BM-01-533-HNT-xxx
BM-02-533-HNT-xxx
5/3-way, center position exhausted



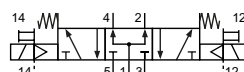
BM-01-534-HNT-xxx
BM-02-534-HNT-xxx
5/3-way, center position pressurized



BME-01-530-HNT-xxx
BME-02-530-HNT-xxx
5/3-way, center position closed, external pilot pressure



BME-01-533-HNT-xxx
BME-02-533-HNT-xxx
5/3-way, center position exhausted, external pilot pressure



BME-01-534-HNT-xxx
BME-02-534-HNT-xxx
5/3-way, center position pressurized, external pilot pressure

Series BM-01 and BM-02

Electrical options

Nominal voltage	Power consumption	Specifics	Plug connection* ¹	-XXX electrical pins on same side of ports	
				2 and 4	1. 3 and 5
12 V DC	1 W		Form C	-461	-431
24 V DC	1 W		Form C	-462	-432
24 V DC	1 W		M12	-N62	-
24 V AC	3 VA		Form C	-452	-422
115 V AC	3 VA		Form C	-456	-426
230 V AC	3 VA		Form C	-457	-427

*¹ Plug socket not included. suitable plug sockets see page 12.

Technical data

Model-no.:	BM-01-510	BM-01-511	BM-01-520	BME-01-511	BME-01-520
Operating pressure (bar)	2 ... 8	3 ... 8	2 ... 8	-0.95 ... 8	-0.95 ... 8
Pilot pressure (bar)	2 ... 8	3 ... 8	2 ... 8	3 ... 8	2 ... 8
Flow rate (NI/min)	780	800	790	800	790
Response time (ms) at 6 bar	on: 17 off: 32	on: 15 off: 35	on: 13 off: 13	on: 15 off: 35	on: 13 off: 13
Weight (kg)	0.118	0.120	0.156	0.126	0.168

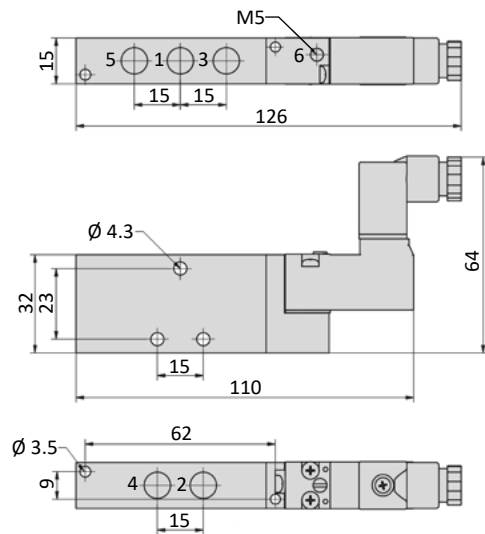
Model-no.:	BM-01-530	BM-01-533	BM-01-534	BME-01-530	BME-01-533	BME-01-534
Operating pressure (bar)	3 ... 8	3 ... 8	3 ... 8	-0.95 ... 8	-0.95 ... 8	-0.95 ... 8
Pilot pressure (bar)	3 ... 8	3 ... 8	3 ... 8	3 ... 8	3 ... 8	3 ... 8
Flow rate (NI/min)	690	670	1030	690	670	1030
Response time (ms) at 6 bar	on: 17 off: 17	on: 16 off: 43	on: 17 off: 49	on: 17 off: 17	on: 16 off: 43	on: 17 off: 49
Weight (kg)	0.154	0.154	0.154	0.166	0.166	0.166

Model-no.:	BM-02-510	BM-02-511	BM-02-520	BME-02-511	BME-02-520
Operating pressure (bar)	2 ... 8	3 ... 8	2 ... 8	-0.95 ... 8	-0.95 ... 8
Pilot pressure (bar)	2 ... 8	3 ... 8	2 ... 8	3 ... 8	2 ... 8
Flow rate (NI/min)	1700	1600	1540	1600	1540
Response time (ms) at 6 bar	on: 23 off: 33	on: 13 off: 35	on: 11 off: 11	on: 13 off: 35	on: 11 off: 11
Weight (kg)	0.220	0.220	0.270	0.220	0.270

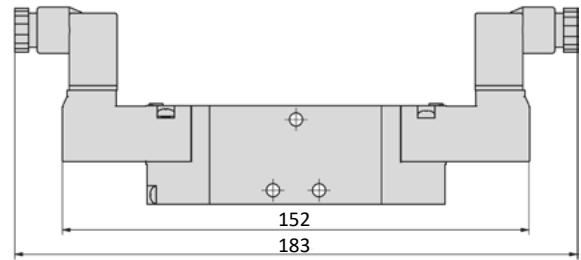
Model-no.:	BM-02-530	BM-02-533	BM-02-534	BME-02-530	BME-02-533	BME-02-534
Operating pressure (bar)	3 ... 8	3 ... 8	3 ... 8	-0.95 ... 8	-0.95 ... 8	-0.95 ... 8
Pilot pressure (bar)	3 ... 8	3 ... 8	3 ... 8	3 ... 8	3 ... 8	3 ... 8
Flow rate (NI/min)	1300	1470	1660	1300	1470	1660
Response time (ms) at 6 bar	on: 20 off: 26	on: 26 off: 28	on: 26 off: 33	on: 20 off: 26	on: 26 off: 28	on: 26 off: 33
Weight (kg)	0.260	0.260	0.260	0.260	0.260	0.260

Dimensions

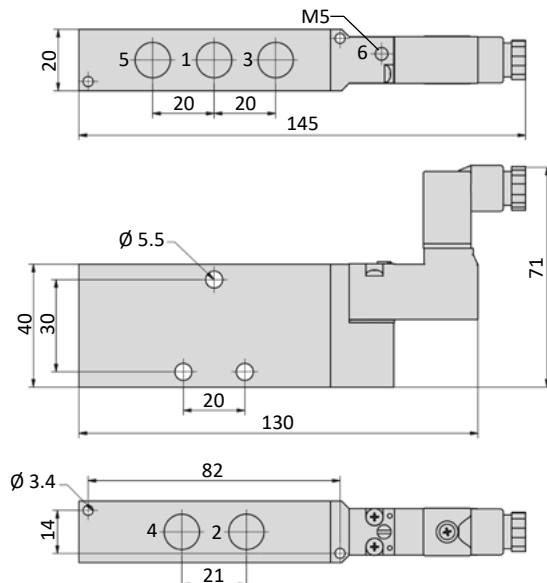
BM-01-51x-HNx, BME-01-51x-HNx



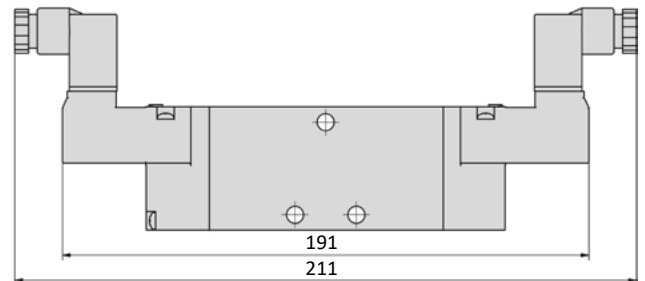
BM-01-520-HNx, BME-01-520-HNx, BM-01-53x-HNx, BME-01-53x-HNx



BM-02-51x-HNx, BME-02-51x-HNx



BM-02-520-HNx, BME-02-520-HNx, BM-02-53x-HNx, BME-02-53x-HNx



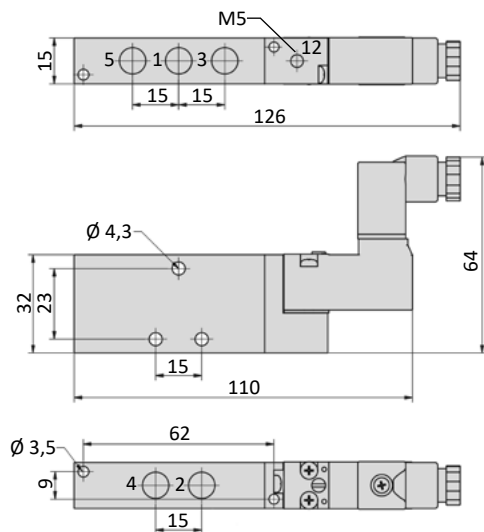
- 1 = pressure inlet
- 2,4 = outlets
- 3,5 = exhausts
- 6 = pilot air exhaust

Plug socket (not included in scope of delivery) can be repositioned by 180°.

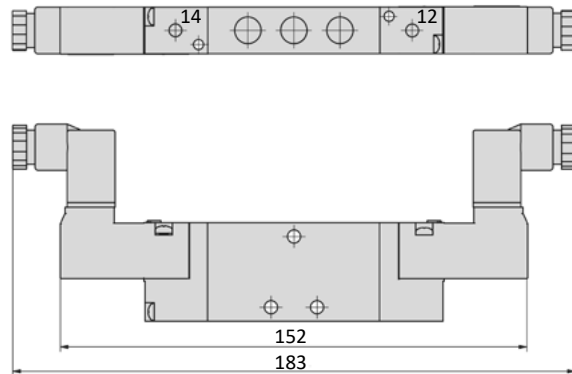
Series BM-01 and BM-02

Dimensions

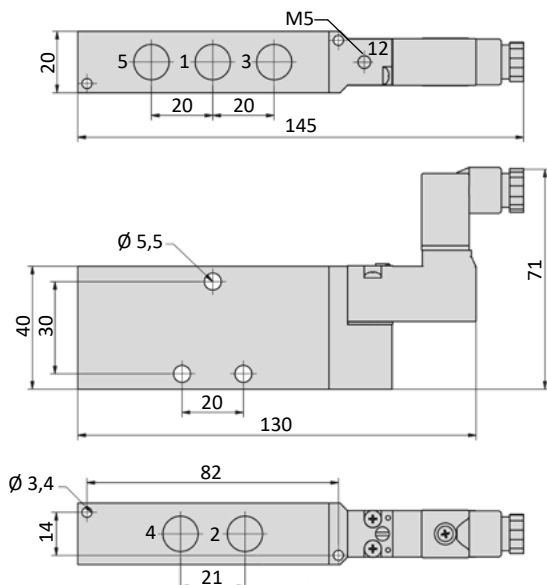
BME-01-51x-HNx



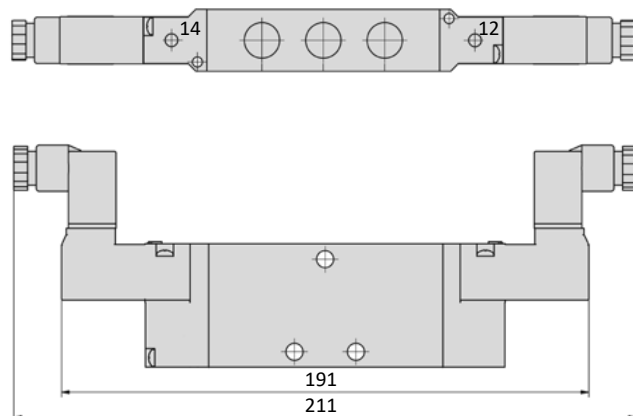
BME-01-520-HNx, BME-01-53x-HNx



BME-02-51x-HNx



BME-02-520-HNx, BME-02-53x-HNx



- 1 = pressure inlet
- 2,4 = outlets
- 3,5 = exhaust
- 12,14 = external pilot pressure supply

Plug socket (not included in scope of delivery) can be repositioned by 180°.

Series BM-01 and BM-02

versions with M8 pilot valve

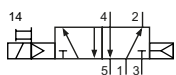
Technische Merkmale der Baureihe

Connection	BM-01: G1/8 BM-02: G1/4
Nominal size	BM-01: 5 mm BM-02: 7 mm
Temperature range	-10°C ... +60°C
Medium	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Differing the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
Materials	Body: Al (anodized), plastic, seals: NBR, FKM and PU, inner parts: Al, steel and plastic
Voltage	24 V DC
Power consumption DC	1 W per pilot valve
Voltage tolerance	± 10 %

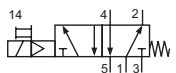


Electrically operated spool valve. The valves are equipped with an M8 solenoid system with a non-detent manual override (HNT). The actuation is carried out by means of a suitable tool.

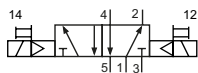
5/2-way-valves



BM-01-510-HNT-xxx
BM-02-510-HNT-xxx
5/2-way, single solenoid, air spring return

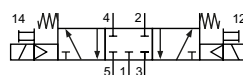


BM-01-511-HNT-xxx
BM-02-511-HNT-xxx
5/2-way, single solenoid, mechanical spring return

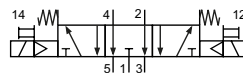


BM-01-520-HNT-xxx
BM-02-520-HNT-xxx
5/2-way, double solenoid

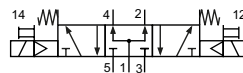
5/3-way-valves



BM-01-530-HNT-xxx
BM-02-530-HNT-xxx
5/3-way, center position closed



BM-01-533-HNT-xxx
BM-02-533-HNT-xxx
5/3-way, center position exhausted



BM-01-534-HNT-xxx
BM-02-534-HNT-xxx
5/3-way, center position pressurized

Model-no.:	BM-01-510	BM-01-511	BM-01-520	BM-01-530	BM-01-533	BM-01-534
Operating pressure (bar)	2 ... 7	3 ... 7	1 ... 7	3 ... 7	3 ... 7	3 ... 7
Pilot pressure (bar)	2 ... 7	3 ... 7	1 ... 7	3 ... 7	3 ... 7	3 ... 7
Flow rate (NI/min)	780	800	790	690	670	1030
Response time (ms) at 6 bar	on: 12 off: 23	on: 12 off: 27	on: 12 off: 12	on: 14 off: 32	on: 14 off: 32	on: 14 off: 32
Weight (kg)	0,098	0,100	0,116	0,114	0,114	0,114

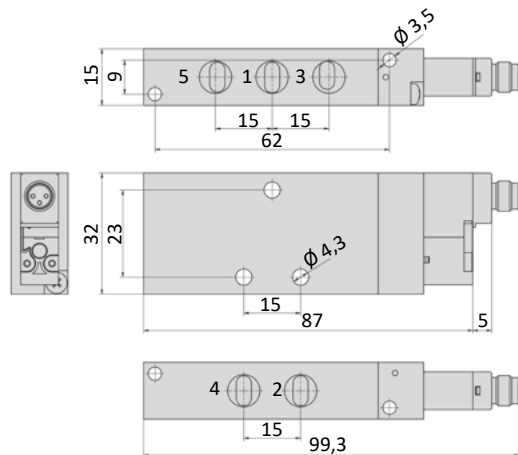
Model-no.:	BM-02-510	BM-02-511	BM-02-520	BM-02-530	BM-02-533	BM-02-534
Operating pressure (bar)	2 ... 7	3 ... 7	2 ... 7	3 ... 7	3 ... 7	3 ... 7
Pilot pressure (bar)	2 ... 7	3 ... 7	2 ... 7	3 ... 7	3 ... 7	3 ... 7
Flow rate (NI/min)	1700	1600	1540	1300	1470	1660
Response time (ms) at 6 bar	on: 12 off: 23	on: 12 off: 27	on: 14 off: 14	on: 16 off: 50	on: 16 off: 50	on: 16 off: 50
Weight (kg)	0,190	0,190	0,210	0,200	0,200	0,200

Series BM-01 and BM-02

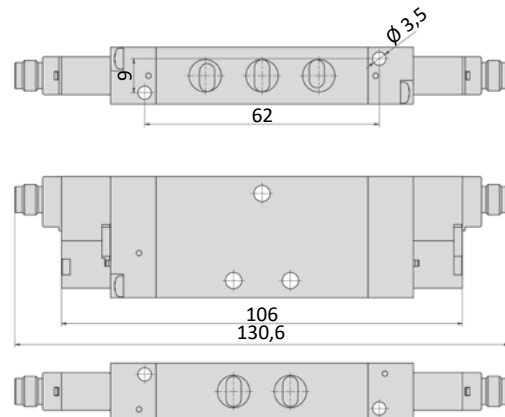
versions with M8 pilot valve

Dimensions

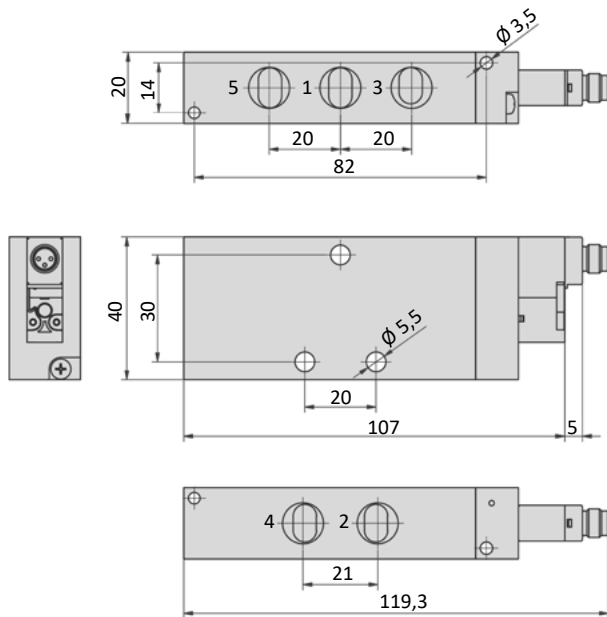
BM-01-51x-HNT-T32



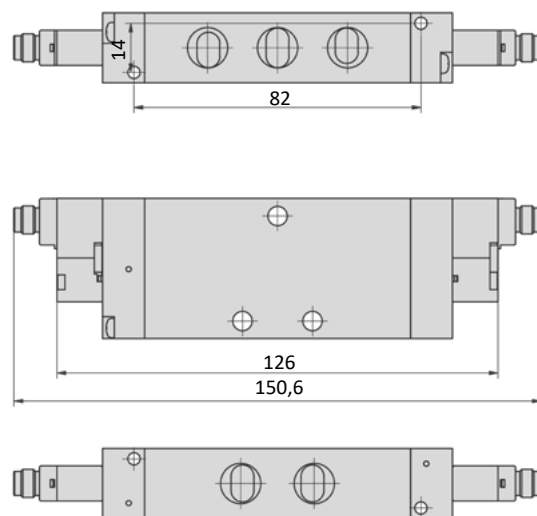
BM-01-520-HNT-T32, BM-01-53x-HNT-T32



BM-02-51x-HNT-T32



BM-02-520-HNT-T32, BM-02-53x-HNT-T32



- 1 = pressure inlet
- 2,4 = outlets
- 3,5 = exhaust

Series BM-01 and BM-02

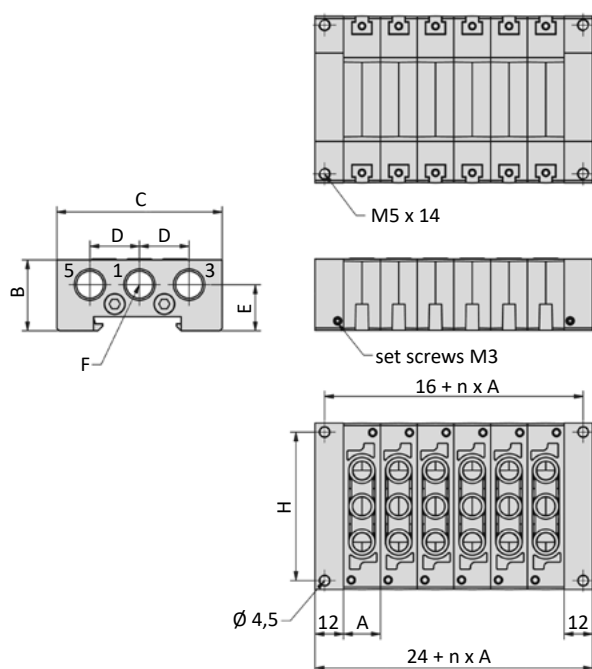
General information

The RF-01-xx/n and RF-02-xx/n manifolds are suitable for the BM-01 and BM-02 valve series. The system is modular and can be extended up to 12 stations. Blanking plates RF-01-V and RF-02-V are available. All mounting screws and gaskets are included.

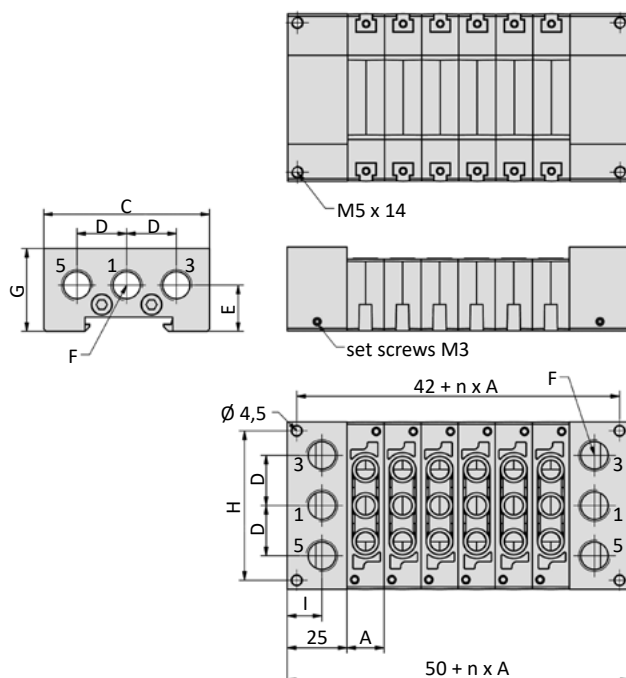


Dimensions

RF-01-AB, RF-02-AB



RF-01-CD, RF-02-CD



n = number of stations
1 = pressure inlet
3,5 = exhausts

Model-no.:	A	B	C	D	E	F	G	H	I
RF-01-xx/n	15.7	30	70	21	19.5	G1/4	35	62.5	14.5
RF-02-xx/n	20.5	32	90	25	20	G3/8	38	82	12.5

Model-no.:	nn	02	03	04	05	06	07	08	09	10	11	12
Weight(kg)	RF-01-AB/nn	0.150	0.190	0.230	0.270	0.310	0.350	0.390	0.430	0.470	0.510	0.550
	RF-02-AB/nn	0.230	0.270	0.310	0.350	0.390	0.430	0.470	0.510	0.550	0.590	0.630

Model-no.:	nn	02	03	04	05	06	07	08	09	10	11	12
Weight(kg)	RF-01-CD/nn	0.300	0.340	0.380	0.420	0.460	0.500	0.540	0.580	0.620	0.660	0.700
	RF-02-CD/nn	0.420	0.460	0.500	0.540	0.580	0.620	0.660	0.700	0.740	0.780	0.820

Plug sockets

Form C according to DIN EN 175301-803

Overall width	15 mm
Contact distance	8 mm
Contacts	2P + E
Protection	IP 65 according to EN 60529 requires a flat gasket
For use with series	BM-01, BM-02



Model-no.:	28-ST-02-1	28-ST-09-1-112	28-ST-09-1-127	28-ST-10-1-112	28-ST-10-1-127	28-ST-10-1-K3-112 *
Voltage (AC/DC)	0 - 250 V	10 - 50 V	70 - 250 V	24 V	230 V	24 V
Status indicator	no	yes	yes	yes	yes	yes
Protective circuit	no	no	no	yes (varistor)	yes (varistor)	yes (varistor)
Connecting cable	without	without	without	without	without	3 m
Wire cross section	max. 0.75 mm ²	max. 0.75 mm ²	max. 0.75 mm ²	max. 0.75 mm ²	max. 0.75 mm ²	3 x 0.5 mm ²
Ø Connecting cable	4 - 6 mm	4 - 6 mm	4 - 6 mm	4 - 6 mm	4 - 6 mm	

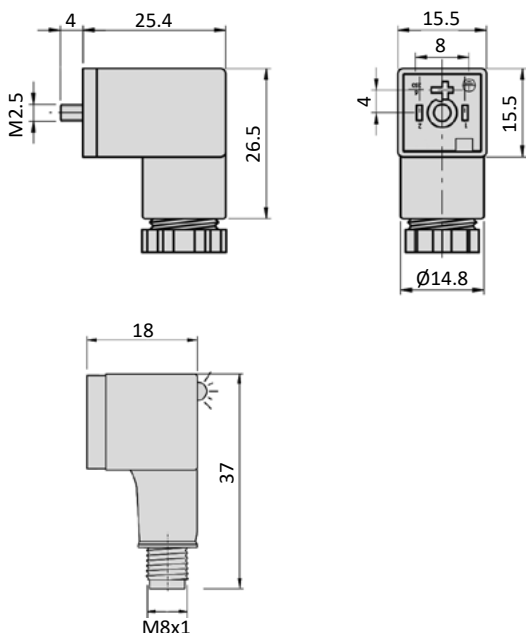
Model-no.:	28-ST-02-1-05
Voltage (AC/DC)	24 V
Status indicator	yes
Protective circuit	yes (varistor)
Connection	M8



* These plug sockets are fitted with integrated flat gaskets.

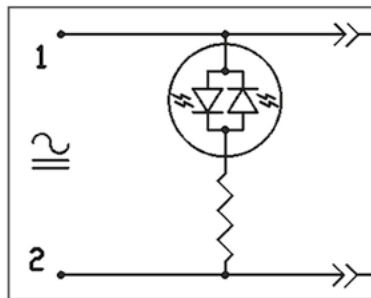
Dimensions

Form C according to DIN EN 175301-803

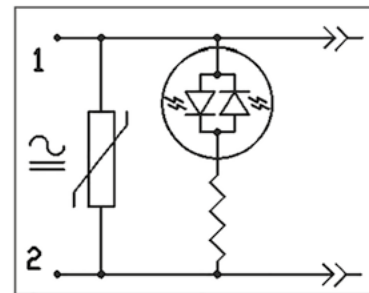


Electrically circuits

Status indicator (LED)



Status indicator (LED) and protective circuit (varistor)

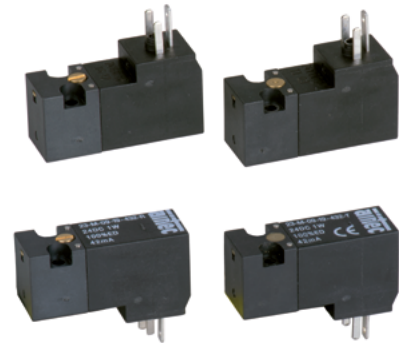


Pilot valves

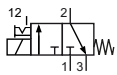
Plug connection shape C according to DIN EN 175301-803

Overall width	15 mm
Contact distance	8 mm
Contacts	2P + E
Protection	IP 65 according to EN 60529 with connected plug socket
Duty cycle	100 %
Temperature range*	-10°C ... +50°C
Voltage tolerance	± 10 %
For use with series	BM-01, BM-02

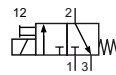
* The max. applicable operating temperature, depends on the temperature specification of the used valve.



3/2-way-valves



23-M-09-19-xxx-R
3/2-way, single solenoid, mechanical spring return, NC, manual override detent



23-M-09-19-xxx-T
3/2-way, single solenoid, mechanical spring return, NC, manual override non-detent

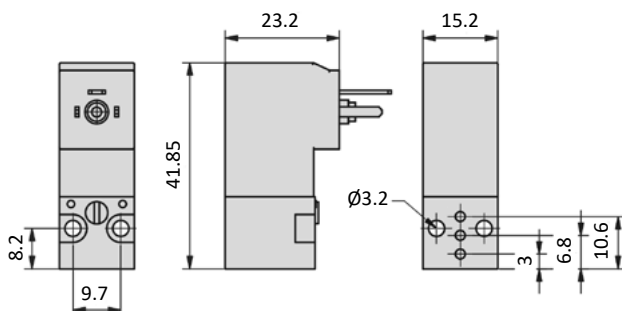
Please complete: xxx = electrical option

Model-no.:	23-M-09-19-461-y	23-M-09-19-462-y	23-M-09-19-452-y	23-M-09-19-456-y	23-M-09-19-457-y
Voltage	12 V DC	24 V DC	24 V AC	115 V AC	230 V AC
Power consumption DC	1 W	1 W	-	-	-
Power consumption AC	-	-	3 VA	3 VA	3 VA
	electric connector on side of manual override				

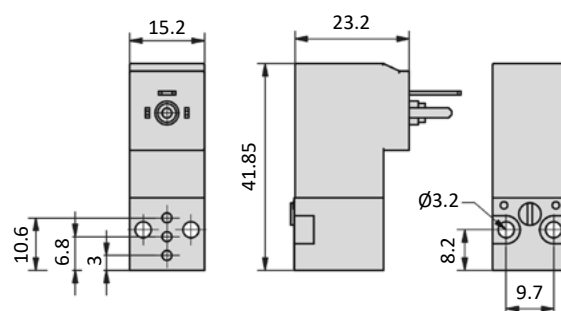
Model-no.:	23-M-09-19-431-y	23-M-09-19-432-y	23-M-09-19-422-y	23-M-09-19-426-y	23-M-09-19-427-y
Voltage	12 V DC	24 V DC	24 V AC	115 V AC	230 V AC
Power consumption DC	1 W	1 W	-	-	-
Power consumption AC	-	-	3 VA	3 VA	3 VA
	electric connector opposite side of manual override y = manual override (R = detent, T = non-detent)				

Dimensions

electric connector on side of manual override



electric connector opposite side of manual override



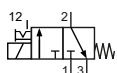
M12 connection

Overall width	15 mm
Contact distance	-
Contacts	M12 plug
Protection	IP 67 according to EN 60529 with connected plug socket
Duty cycle	100 %
Temperature range*	-10°C ... +50°C
Voltage tolerance	± 10 %
For use with series	BM-01, BM-02

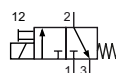


* The max. applicable operating temperature, depends on the temperature specification of the used valve.

3/2-way-valves



23-M-09-19-xxx-R
3/2-way, single solenoid, mechanical spring return, NC, manual override detent



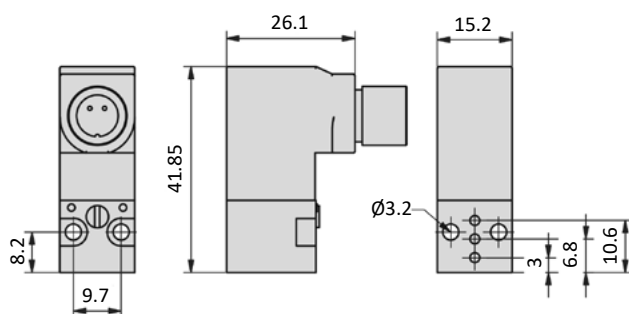
23-M-09-19-xxx-T
3/2-way, single solenoid, mechanical spring return, NC, manual override non-detent

Please complete: xxx = electrical option

Model-no.:	23-M-09-19-N42-T	23-M-09-19-N62-R
Voltage	24 V DC	24 V DC
Power consumption DC	2.5 W	1 W
Power consumption AC	-	-
	electric connector on side of manual override	

Dimensions

electric connector on side of manual override



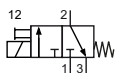
Pilot valves

M8 connection

Overall width	10 mm
Contact distance	-
Contacts	M8 plug
Protection	IP 40 according to EN 60529 with connected plug socket
Duty cycle	100 %
Temperature range	-5°C...+50°C
Voltage tolerance	± 10 %
For use with series	BM-01, BM-02



3/2-Wege-Ventil

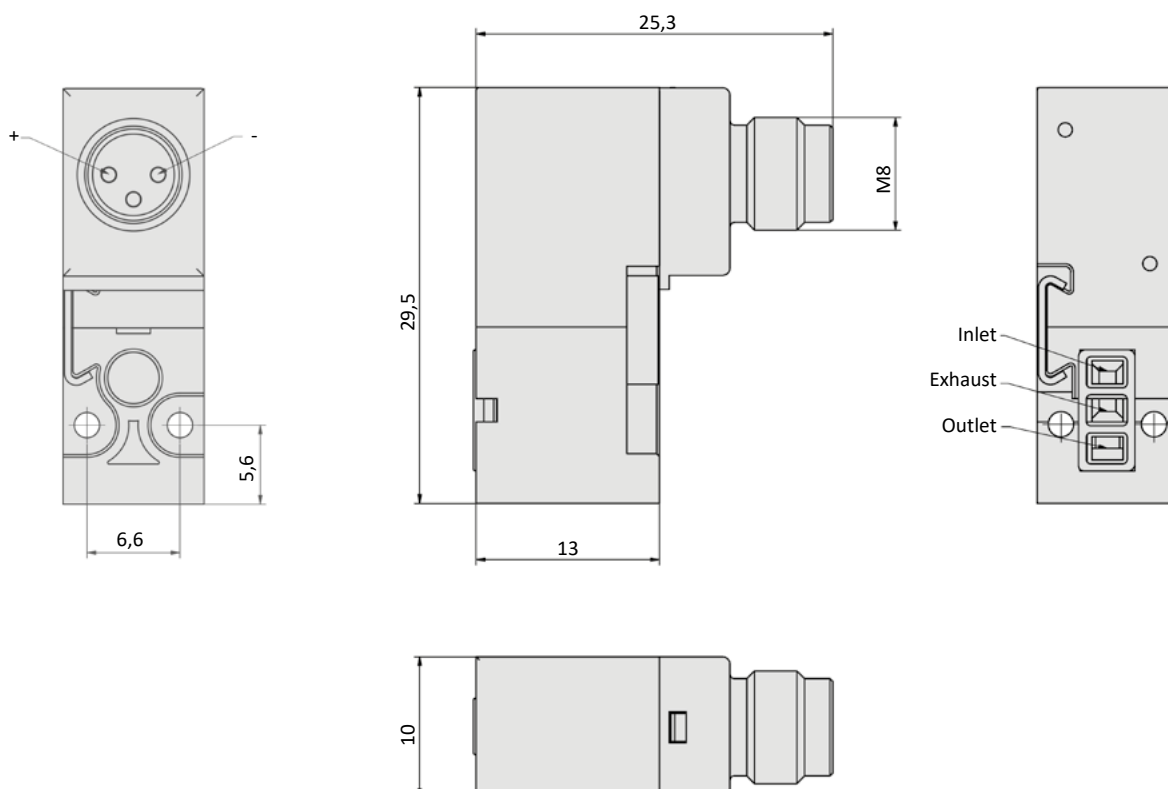


23-M-10-T32-T
3/2-way, single solenoid, mechanical
spring return, NC, manual override
non-detend

Model-no.:	23-M-10-T32-T
Voltage	24 V DC
Power consumption DC	1 W
Nominal size (mm)	0,7
Operating pressure (bar)	1,5...7 bar

Dimensions

electric connector on side of manual override



Voltage code

- HN * - * * *					
Manual override		Coil and plug options		Manual override position on side of	
		Coil type		Voltage	
HN	detent	0	ATEX 2GD, encapsulated with casting compound width 30 mm	0	without indication ports 1/3/(5)
HNR	detent	1	with coil and plug	1	DC ports 1/3/(5)
HNT	non-detent	2		2	AC ports 1/3/(5)
		3	with coil, power consumption different from standard, without plug	3	DC, low power consumption ports 1/3/(5)
		4	with coil, without plug	4	DC ports 2/(4)
		5	without coil	5	AC ports 2/(4)
		6	without pilot valve	6	DC, low power consumption ports 2/(4)
		7	with coil, with enhanced humidity resistance, without plug	7	without indication ports 2/(4)
		8	with coil, with enhanced humidity resistance, with plug		
		9	ATEX 2GD, intrinsically safe, with plug width 30 mm		
		A	ATEX 3GD, without plug, width 30 mm		
		B	ATEX 3GD, with plug, width 30 mm		
		C	ATEX 3GD, without plug, width 22 mm		
		D			
		E			
		F	with coil, with enhanced humidity resistance, without plug, low temperature version		
		G			
		H	with coil shape B according to DIN EN 175301-803, with plug		
		I	with coil shape B according to DIN EN 175301-803, without plug		
		J	with coil shape A according to DIN EN 175301-803, without plug (if not standard)		
		K	with coil shape A according to DIN EN 175301-803, with plug (if not standard)		
		L	with coil, with plug with LED and protective circuit		
		M	with coil, with plug with LED, without protective circuit		
		N	with coil with M12 connection		
		O	with coil with M12 connection with LED and protective circuit		
		P	without connector bridge, without plug		
		Q	with coil with with cable		
		R	with cable up to 1 m length		
		S	with connector bridge, without plug		
		T	with coil with M8 connection		
		U	ATEX 2GD, without coil (for coil 23-SP-036)		
		V	ATEX 2GD, Flame proof enclosures and encapsulated with casting compound		
		W	ATEX 2GD / 3GD, without coil (for coil 23-SP-041 and 23-SP-045)		
		X	ATEX 3GD, without coil (for coil 23-SP-040 in 230V AC and 115V AC)		
		Y	ATEX 2GD, without coil (for coil 23-SP-038)		
		Z	ATEX 2GD / 3GD, without coil (for coil 23-SP-040 in 24V DC and 23-SP-037)		

Not all options are suitable for all valve series