

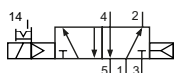
Technical details

Connection	Sub-base mounting
Nominal Size	3 mm
Temperature range	-10°C ... +70°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), seals: NBR and POM, inner parts: Al, brass, stainless steel
Protection	IP 65 according to EN 60529

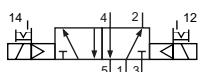


Electrically operated spool valve. The manual override is detent and is operated by screwdriver. Gaskets and screws are part of delivery.

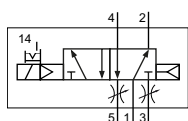
5/2-way valves



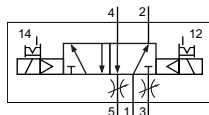
MC-20-510-HN-xxx
5/2-way, single solenoid, air spring return



MC-20-520-HN-xxx
5/2-way, double solenoid



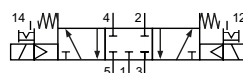
MD-20-510-HN-xxx
5/2-way, single solenoid, air spring return, with exhaust throttles



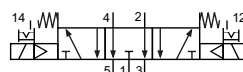
MD-20-520-HN-xxx
5/2-way, double solenoid, with exhaust throttles

Please complete: xxx = electrical option

5/3-way valves



MC-20-530-HN-xxx
5/3-way, center position closed



MC-20-533-HN-xxx
5/3-way, center position exhausted

Electrical options

Nominal voltage	Power consumption	Specifics	Plug connection*1	-xxx Plug connections	
				opposite 1,2,3,4,5	at 1,2,3,4,5
12 V DC	1 W		Form C industrial norm	-411	-441
24 V DC	1 W		Form C industrial norm	-412	-442

*1 Plug socket not included, suitable plug sockets see page 04.

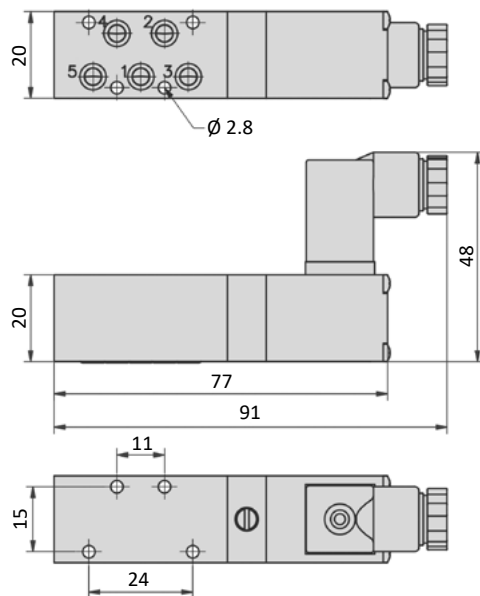
Series MC-20 and MD-20

Technical data

Model-no.:	MC-20-510 MD-20-510	MC-20-520 MD-20-520	MC-20-530	MC-20-533
Operating pressure (bar)	2.5 ... 8	2.5 ... 8	3 ... 8	3 ... 8
Pilot pressure (bar)	2.5 ... 8	2.5 ... 8	3 ... 8	3 ... 8
Flow rate (Nl/min)	220	220	220	220
Response time (ms) at 6 bar	on: 12 off: 12	on: 11 off: 11	on: 15 off: 22	on: 15 off: 22
Weight (kg)	0.100	0.156	0.162	0.162

Dimensions

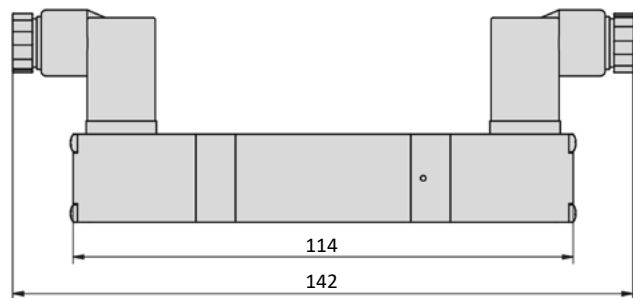
MC-20-510-HN, MD-20-510-HN



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

Plug socket (not included in scope of delivery) can be repositioned by 180°.
Solenoid coil and manual override can be repositioned by 4 x 90°.

MC-20-520-HN, MD-20-520-HN, MC-20-53x-HN



Accessories



Plug sockets: see page 04

Voltage code

Series MC-20 and MD-20

- HN * - * * *				
Manual override	Coil and plug options		Coil type	Voltage type Position of the manual override Position of the connector lugs
- without	1	with coil and plug	23-M-20	DC Manual override at 1, 2, 3, 4, 5 Connector lugs at 1, 2, 3, 4, 5
HN detend	4	with coil, without plug	23-M-20	DC Manual override opposite to 1, 2, 3, 4, 5 Connector lugs opposite to 1, 2, 3, 4, 5
				1 12 V 2 24 V

Plug sockets

Form C industrial norm

Overall width	15 mm
Contact distance	9.4 mm
Contacts	2P + E
Protection	IP 65 according to EN 60529 requires a flat gasket
For use with series	M-20, MC-20, MD-20, MS-20



Model-no.:	28-ST-02-01	28-ST-09-112	28-ST-09-127	28-ST-10-112	28-ST-10-127	28-ST-10-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	

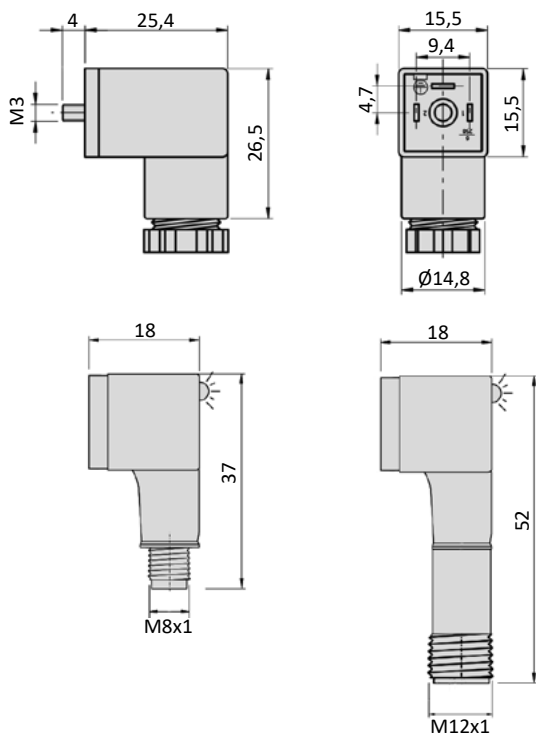
Model-no.:	28-ST-02-2-05	28-ST-02-2-07
Voltage (AC/DC)	24 V	24 V
Status indicator	yes	yes
Protective circuit	yes (varistor)	yes (varistor)
Connection	M8	M12



* These plug sockets are fitted with integrated flat gaskets.

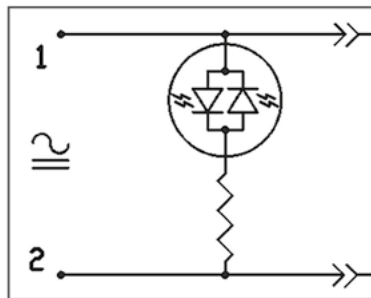
Dimensions

Form C industrial norm

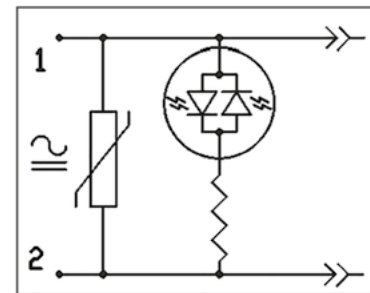


Electrically circuits

Status indicator (LED)



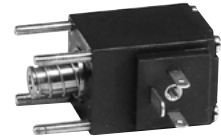
Status indicator (LED) and protective circuit (varistor)



Solenoid coils

Form C industrial norm

Overall width	20 mm
Contact distance	9,4 mm
Contacts	2P + E
Protection	IP 65 according to EN 60529 with connected plug socket
Duty cycle	100 %
Temperature range*	-20°C...+50°C
Voltage tolerance	± 10 %
For use with series	M-20, MS-20, MC-20, MD-20



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

Model-no.:	23-M-20-411	23-M-20-412
Voltage	12 V DC	24 V DC
Power consumption DC	2 W	2 W
Power consumption AC	-	-

Dimensions

Form C industrial norm

