

Standardized valve series
3/2-way
acc. to NAMUR, 750 NI/min (0.762 Cv)



Technical data for series

MN-06



Order code

MN-06-310-HN-142

Series and function

Coil options

<p>Standard coil¹⁾ (with plug socket 28-ST-01)</p> <p>141 = 12 V DC, 4.2 W 142 = 24 V DC, 4.2 W 152 = 24 V AC, 7/4 VA 156 = 115 V AC, 7/4 VA 157 = 230 V AC, 7/4 VA 161 = 12 V DC, 2.2 W²⁾ 162 = 24 V DC, 2.2 W²⁾</p> <p>Without coil and plug socket</p> <p>570 = Power consumption 4.2 W, 7/4 VA 560 = Power consumption 2.2 W²⁾</p>	<p>Coils with M12 connector and LED</p> <p>O42 = 24 V DC, 4.8 W O62 = 24 V DC, 2.5 W²⁾</p> <p>Coils with higher humidity resistance</p> <p>742 = 24 V DC, 4.2 W without plug socket 757 = 230 V AC, 7/4 VA without plug socket 842 = 24 V DC, 4.2 W (with plug socket 28-ST-01) 857 = 230 V AC, 7/4 VA (with plug socket 28-ST-01)</p>
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¹⁾ When the valve is requested without the plug socket, the first digit of the order code for standard coils must be changed from 1 to 4. If optional plug sockets are required they may be ordered separately. Further details see page 5.024.

Design and function

Spool valve for single acting actuators switched by an electrical signal.

The exhaust air is guided into the spring chamber of the actuator. The standard coil, plug socket (see page 5.024), locating pin, screws and seals are included.

For outdoor applications or in areas with high humidity use coil 23-SP-011-1 or 23-SP-012-1 (see page 5.120).

Please specify required control voltage when ordering.

Valves of this series are available in explosion proof design in accordance with 94/9/EG (ATEX). For further details see chapter 12 of this catalogue.

Order number	MN-06-310-HN	MN-06-311-HN
Please complete according to order code.		
Function	3/2-way, normally closed single solenoid, air spring return	3/2-way, normally closed single solenoid, spring return
Connection	G 1/4 at 1 and 3; flange to NAMUR at 2	
Nominal size	6 mm	
Flow rate	750 NI/min (0.762 Cv)	
Pressure range	2 ... 10 bar ²⁾ (29 ... 145 psi) ²⁾	3 ... 10 bar ²⁾ (43 ... 145 psi) ²⁾
Actuating force at 6 bar	on 13 ms off 16 ms	
Temperature range	- 10 °C ... + 70 °C (+ 14 °F ... + 158 °F)	
Materials	Body: Al (anodized), Seals: NBR and POM, Inner parts: Al, stainless steel, brass	
Degree of protection	IP 65 according to EN 60529	
Weight	0.320 kg (0.705 lb.)	

²⁾ max. 8 bar (max. 116 psi) at 2.2 W and 2.5 W.

Technical data for series

MN-06



Order code

MN-06-510-HN-142

Series and function

Coil options

<p>Standard coil¹⁾ (with plug socket 28-ST-01)</p> <p>141 = 12 V DC, 4.2 W 142 = 24 V DC, 4.2 W 152 = 24 V AC, 7/4 VA 156 = 115 V AC, 7/4 VA 157 = 230 V AC, 7/4 VA 161 = 12 V DC, 2.2 W²⁾ 162 = 24 V DC, 2.2 W²⁾</p> <p>Without coil and plug socket</p> <p>570 = Power consumption 4.2 W, 7/4 VA 560 = Power consumption 2.2 W²⁾</p>	<p>Coils with M12 connector and LED</p> <p>042 = 24 V DC, 4.8 W 062 = 24 V DC, 2.5 W²⁾</p> <p>Coils with higher humidity resistance</p> <p>742 = 24 V DC, 4.2 W without plug socket 757 = 230 V AC, 7/4 VA without plug socket 842 = 24 V DC, 4.2 W (with plug socket 28-ST-01) 857 = 230 V AC, 7/4 VA (with plug socket 28-ST-01)</p>
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¹⁾ When the valve is requested without the plug socket, the first digit of the order code for standard coils must be changed from 1 to 4. If optional plug sockets are required they may be ordered separately. Further details see page 5.024.

Design and function

Spool valve for double acting actuators switched by an electrical signal.

The standard coil, plug socket (see page 5.024), locating pin, screws and seals are included.

For outdoor applications or in areas with high humidity use coil 23-SP-011-1 or 23-SP-012-1 (see page 5.120).

Please specify required control voltage when ordering.

Valves of this series are available in explosion proof design in accordance with 94/9/EG (ATEX). For further details see chapter 12 of this catalogue.

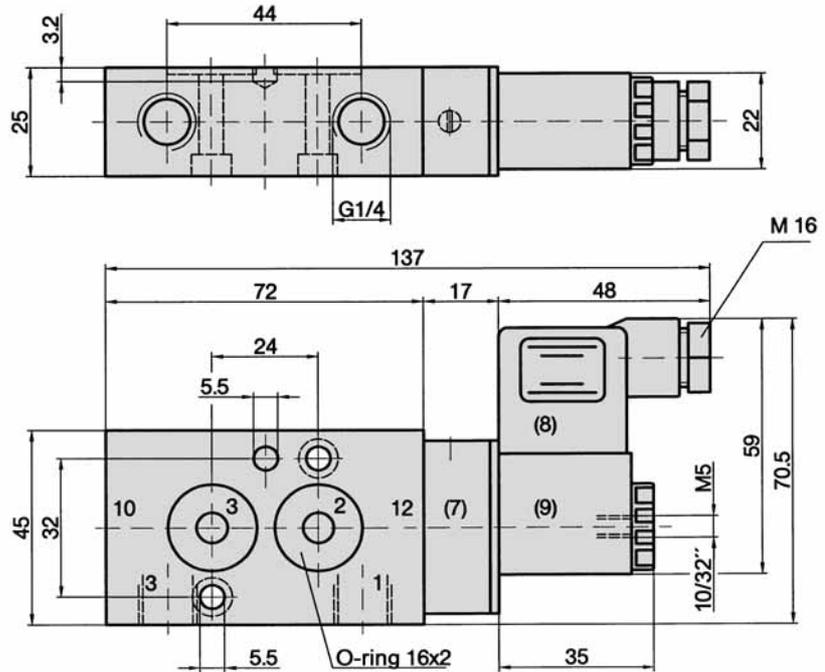
Order number	MN-06-510-HN	MN-06-511-HN	MN-06-520-HN	MN-06-530-HN
Please complete according to order code.				
Function	5/2-way air spring return	5/2-way spring return	5/2-way double solenoid	5/3-way center position closed
Connection	G 1/4 at 1, 3, 5; flange to NAMUR at 2 and 4			
Nominal size	6 mm			
Flow rate	750 NI/min (0.762 Cv)			650 NI/min (0.661 Cv)
Pressure range	2 ... 10 bar ²⁾ (29 ... 145 psi)	3 ... 10 bar ²⁾ (43 ... 145 psi)	2 ... 10 bar ²⁾ (29 ... 145 psi)	3 ... 10 bar ²⁾ (43 ... 145 psi)
Actuating force at 6 bar	on 13 ms off 16 ms		12 ms	on 13 ms off 15 ms
Temperature range	- 10 °C ... + 70 °C (+ 14 °F ... + 158 °F)			
Materials	Body: Al (anodized), Seals: NBR and POM, Inner parts: Al, stainless steel, brass			
Degree of protection	IP 65 according to EN 60529			
Weight	0.320 kg (0.705 lb.)		0.460 kg (1.014 lbs.)	

²⁾ max. 8 bar (max. 116 psi) at 2.2 W and 2.5 W.

Dimensions for series

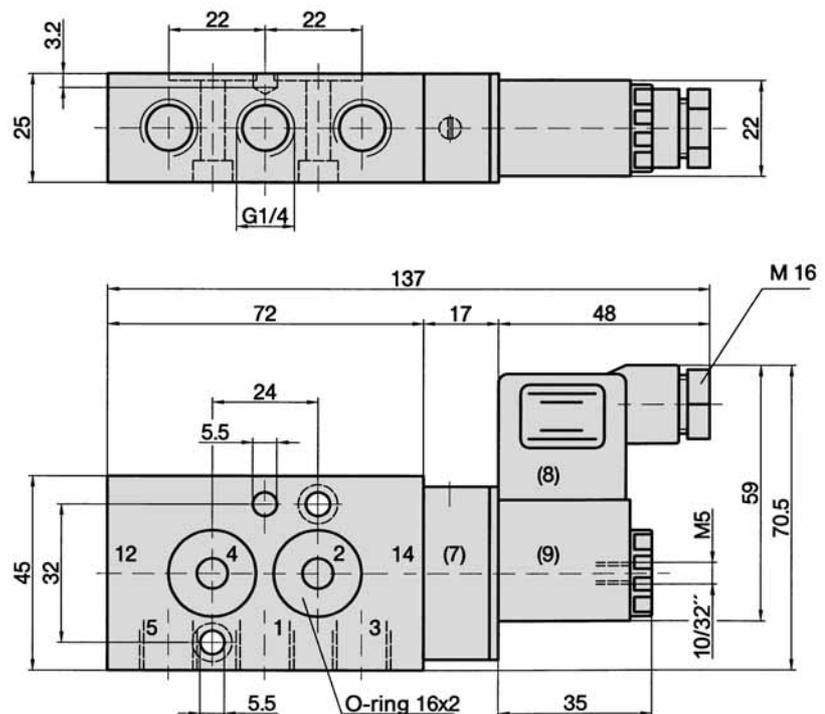
MN-06

MN-06-310-HN, MN-06-311-HN



- 1 = pressure inlet
- 2 = outlet
- 3 = exhaust
- (7) = manual override (detent)
can be repositioned by 180°
- (8) = plug socket can be
repositioned by 180°
- (9) = solenoid coil can be
repositioned 4 x 90°

MN-06-510-HN, MN-06-511-HN

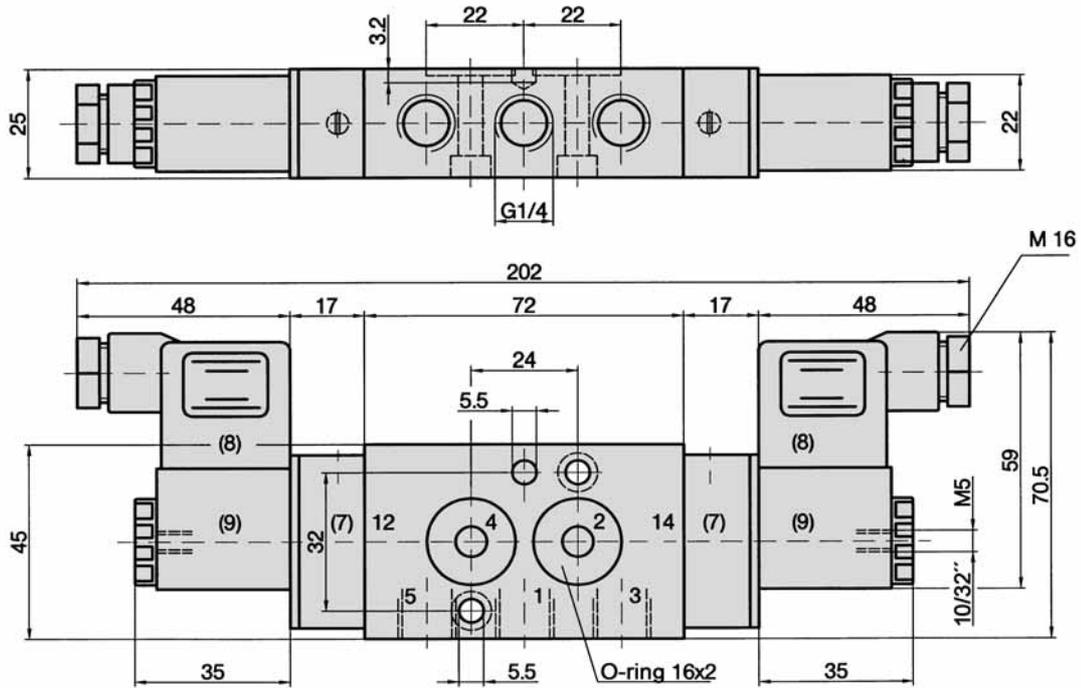


- 1 = pressure inlet
- 2, 4 = outlet
- 3, 5 = exhaust
- (7) = manual override (detent)
can be repositioned by 180°
- (8) = plug socket can be
repositioned by 180°
- (9) = solenoid coil can be
repositioned 4 x 90°

Dimensions for series

MN-06

MN-06-520-HN, MN-06-530-HN



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

- (7) = manual override (detent) can be repositioned by 180°
- (8) = plug socket can be repositioned by 180°
- (9) = solenoid coil can be repositioned 4 x 90°

Accessories for series

MN-06

Solenoid coils, actuators



Standard coil
23-SP-011-...
 page 4.280



Coil with 2.2 W
 power consumption
23-SP-012-...
 page 4.280



Coil with M-12 plug
 connection, 4.8 W, LED
 and circuit protection
23-SP-011-5-O12
 page 4.280



Coil with M-12 plug
 connection, 2.5 W, LED
 and circuit protection
23-SP-012-5-O32
 page 4.280



Valves with explosion
 proof actuator see
 chapter 12.



Standard
 actuator
23-R-011



Low power
 actuator
23-R-012

Plug sockets



Standard plug socket
28-ST-01
 page 4.281



Plug socket with LED
28-ST-04-...
 page 4.281



Plug socket with LED
 and circuit protection
28-ST-06-...
 page 4.281



Plug socket with LED,
 circuit protection and cable
28-ST-06-K3-...
 page 4.281

User information

Low power consumption coils (2.2 W or 2.5 W) are for pressures up to 8 bar (116 psi) only. Valve actuator 23-R-012 is required. The actuator 23-R-012 is nickel plated. Make sure that the coils with the right power consumption are used.

When using explosion proof coils the dimensions of the corresponding valve change.

For outdoor applications or in areas with high humidity use coil 23-SP-011-1-... or 23-SP-012-1-... (see page 5.120).

The following types are available on request

Coils and sockets with contacts according to DIN EN 175301-803 type B (U-form).

Plug sockets with molded cable.

Accessories for series

MN-06

Speed regulation plates



Speed regulator plate for
single acting actuators
MN-063-DR
page 5.026

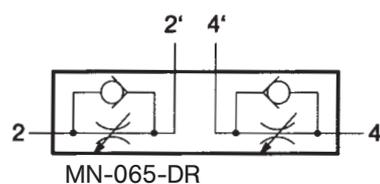
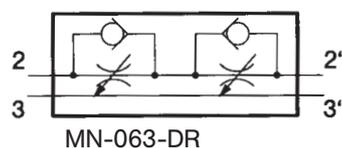


Speed regulator plate for
double acting actuators
MN-065-DR
page 5.026

Other single elements: **20-MN-06-01**
NAMUR seals disc to convert a 5/2-way valve into a 3/2-way function.

Technical data for series

MN-063-DR, MN-065-DR



Design and function

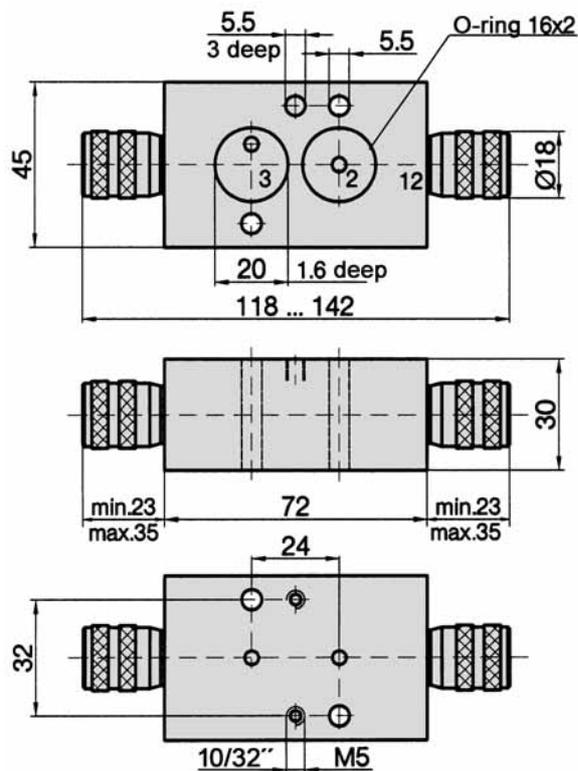
The locating pin, screws and seals are included.

Order number	MN-063-DR	MN-065-DR
Function	Speed regulation plate for single acting actuators	Speed regulation plate for double acting actuators
Nominal size	4 mm	
Nominal flow	controlled flow direction	0 ... 180 NI/min (0 ... 0.183 Cv)
	free flow direction	235 NI/min (0.239 Cv)
		0 ... 240 NI/min (0 ... 0.244 Cv)
		250 NI/min (0.254 Cv)
Temperature range	- 10 °C ... + 70 °C (+ 14 °F ... + 158 °F)	
Materials	Body: Al, Inner parts: brass, Seals: NBR and PU	
Weight	0.350 kg (0.772 lb.)	0.305 kg (0.672 lb.)

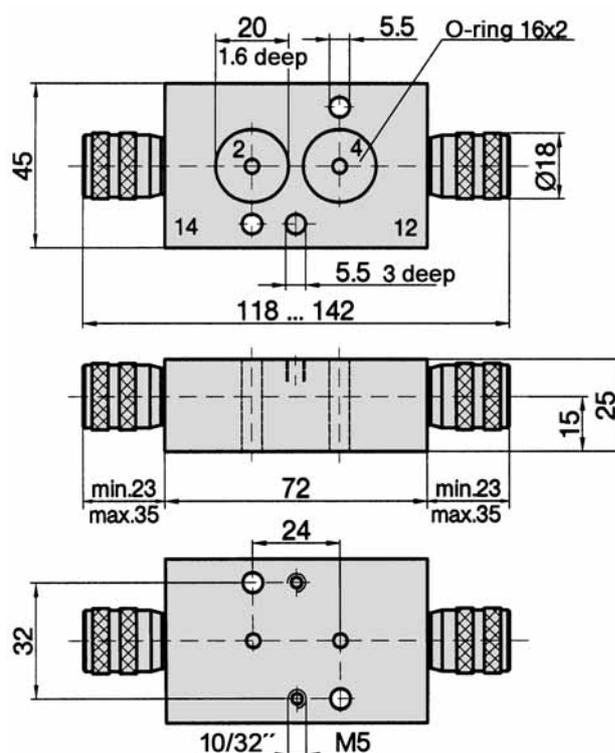
Dimensions for series

MN-063-DR, MN-065-DR

MN-063-DR

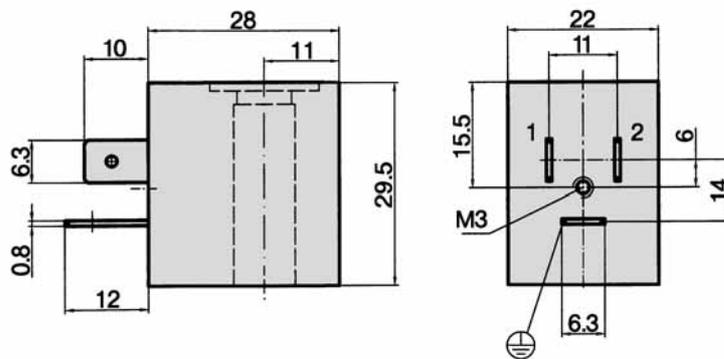


MN-065-DR



Accessories

Solenoid coil with higher humidity resistance



Solenoid coil with pin distance of 11 mm.

This coil is designed for outdoor applications in high humidity environments.

Order number	23-SP-011-1-712	23-SP-011-1-722	23-SP-011-1-726	23-SP-011-1-727	23-SP-012-1-712
Standard voltages	24 V DC	24 V AC	115 V AC	230 V AC	24 V DC
Power consumption	4.2 W	7/4 VA			2.5 W
Degree of protection	IP 65 according to VDE 0470 / EN 60529, with connected plugs.				
Duty cycle	100 % continuous operation				

Other voltages on request.