

**Technical data for series**

# MN-06



**Order code** MN-06-310-HN-142

**Series and function**

**Coil options**

<p><b>Standard coil</b><sup>1)</sup>          (with plug socket 28-ST-01)</p> <p><b>141</b> = 12 V DC, 4.2 W  <b>142</b> = 24 V DC, 4.2 W  <b>152</b> = 24 V AC, 7/4 VA  <b>156</b> = 115 V AC, 7/4 VA  <b>157</b> = 230 V AC, 7/4 VA  <b>161</b> = 12 V DC, 2.2 W<sup>2)</sup>  <b>162</b> = 24 V DC, 2.2 W<sup>2)</sup></p> <p><b>Without coil and plug socket</b></p> <p><b>570</b> = Power consumption 4.2 W, 7/4 VA  <b>560</b> = Power consumption 2.2 W<sup>2)</sup></p>	<p><b>Coils with M12 connector and LED</b></p> <p><b>O42</b> = 24 V DC, 4.8 W  <b>O62</b> = 24 V DC, 2.5 W<sup>2)</sup></p> <p><b>Coils with higher humidity resistance</b></p> <p><b>742</b> = 24 V DC, 4.2 W without plug socket  <b>757</b> = 230 V AC, 7/4 VA without plug socket  <b>842</b> = 24 V DC, 4.2 W (with plug socket 28-ST-01)  <b>857</b> = 230 V AC, 7/4 VA (with plug socket 28-ST-01)</p>
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<sup>1)</sup> 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. For optional plug sockets 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.		
<b>Function</b>	3/2-way, normally closed single solenoid, air spring return	3/2-way, normally closed single solenoid, spring return
<b>Connection</b>	G 1/4 at 1 and 3; flange to NAMUR at 2	
<b>Nominal size</b>	6 mm	
<b>Flow rate</b>	750 NI/min (0.762 Cv)	
<b>Pressure range</b>	2 ... 10 bar <sup>2)</sup> (29 ... 145 psi) <sup>2)</sup>	3 ... 10 bar <sup>2)</sup> (43 ... 145 psi) <sup>2)</sup>
<b>Actuating force at 6 bar</b>	on 13 ms off 16 ms	
<b>Temperature range</b>	- 10 °C ... + 70 °C (+ 14 °F ... + 158 °F)	
<b>Materials</b>	Body: Al (anodized), Seals: NBR and POM, Inner parts: Al, stainless steel, brass	
<b>Degree of protection</b>	IP 65 according to EN 60529	
<b>Weight</b>	0.320 kg (0.705 lb.)	

<sup>2)</sup> 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><b>Standard coil</b><sup>1)</sup> (with plug socket 28-ST-01)</p> <p><b>141</b> = 12 V DC, 4.2 W  <b>142</b> = 24 V DC, 4.2 W  <b>152</b> = 24 V AC, 7/4 VA  <b>156</b> = 115 V AC, 7/4 VA  <b>157</b> = 230 V AC, 7/4 VA  <b>161</b> = 12 V DC, 2.2 W<sup>2)</sup>  <b>162</b> = 24 V DC, 2.2 W<sup>2)</sup></p> <p><b>Without coil and plug socket</b></p> <p><b>570</b> = Power consumption 4.2 W, 7/4 VA  <b>560</b> = Power consumption 2.2 W<sup>2)</sup></p>	<p><b>Coils with M12 connector and LED</b></p> <p><b>042</b> = 24 V DC, 4.8 W  <b>062</b> = 24 V DC, 2.5 W<sup>2)</sup></p> <p><b>Coils with higher humidity resistance</b></p> <p><b>742</b> = 24 V DC, 4.2 W without plug socket  <b>757</b> = 230 V AC, 7/4 VA without plug socket  <b>842</b> = 24 V DC, 4.2 W (with plug socket 28-ST-01)  <b>857</b> = 230 V AC, 7/4 VA (with plug socket 28-ST-01)</p>
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<sup>1)</sup> 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. For optional plug sockets 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.

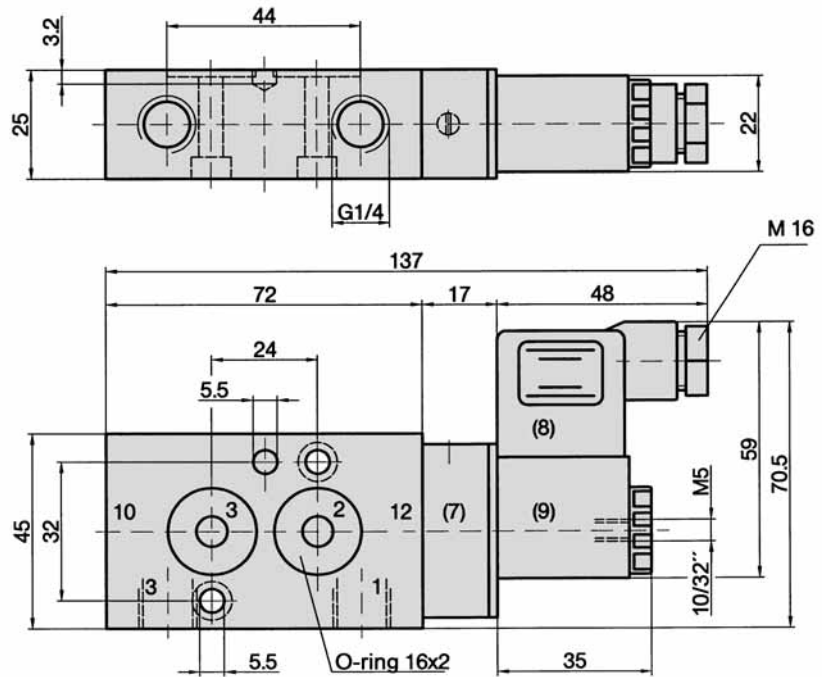
Order number	MN-06-510-HN	MN-06-511-HN	MN-06-520-HN	MN-06-530-HN
Please complete according to order code.				
Function	5/2-way air spring return	5/2-way spring return	5/2-way double solenoid	5/3-way center position closed
Connection	G 1/4 at 1, 3, 5; flange to NAMUR at 2 and 4			
Nominal size	6 mm			
Flow rate	750 NI/min (0.762 Cv)			650 NI/min (0.661 Cv)
Pressure range	2 ... 10 bar <sup>2)</sup> (29 ... 145 psi)	3 ... 10 bar <sup>2)</sup> (43 ... 145 psi)	2 ... 10 bar <sup>2)</sup> (29 ... 145 psi)	3 ... 10 bar <sup>2)</sup> (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.)	

<sup>2)</sup> max. 8 bar (max. 116 psi) at 2.2 W and 2.5 W.

Dimensions for series

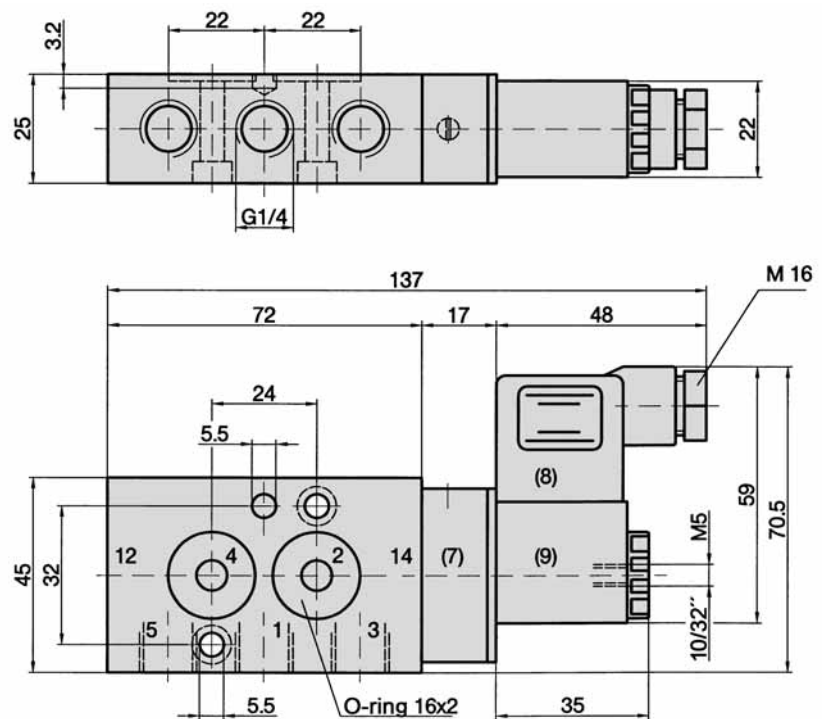
# MN-06

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

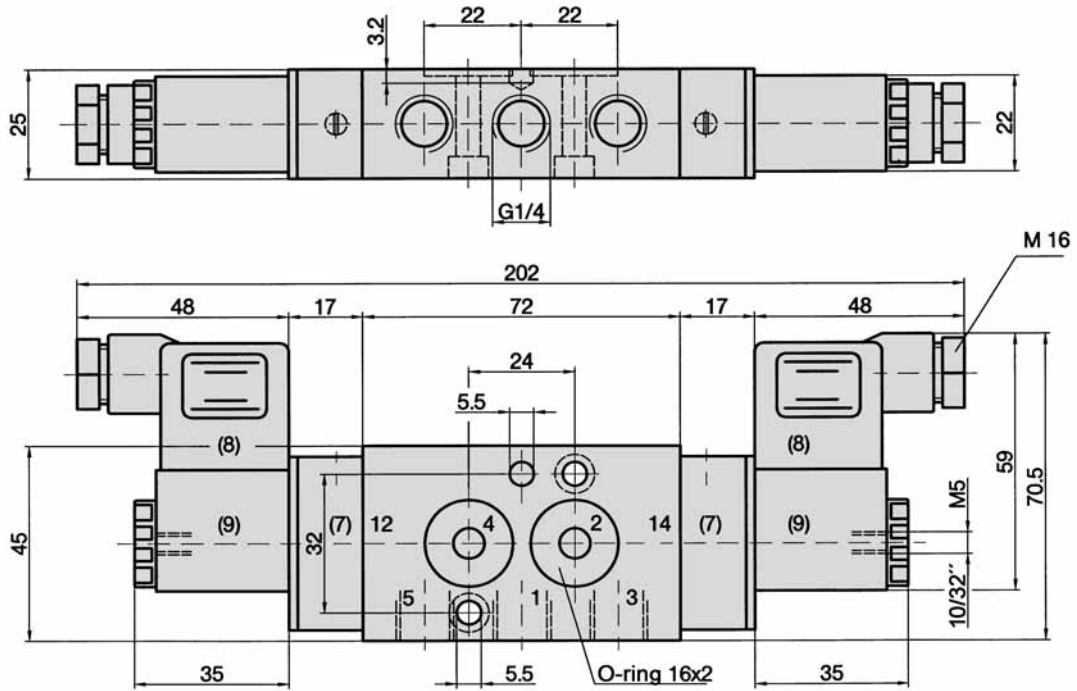


- 1 = pressure inlet
- 2, 4 = outlets
- 3, 5 = exhausts
- (7) = manual override (detent)  
can be repositioned by 180°
- (8) = plug socket can be  
repositioned by 180°
- (9) = solenoid coil can be  
repositioned 4 x 90°

Dimensions for series

# MN-06

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



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

- (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

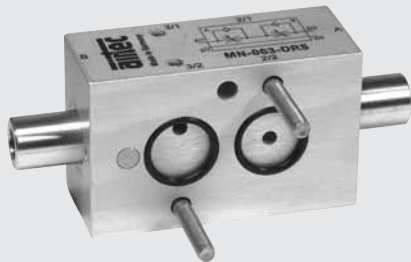
Coils and sockets with contacts according to DIN EN 175301-803 type B (U-form).

Plug sockets with molded cable.

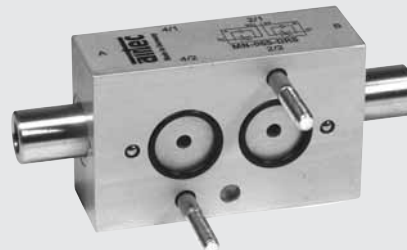
Accessories for series

# MN-06

Speed regulation plates



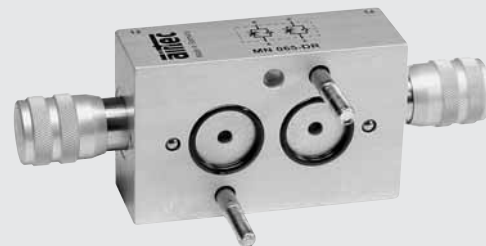
Speed regulator plate for  
single acting actuators  
**MN-063-DRS**  
page 5.026



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



Speed regulator plate for  
single acting actuators  
**MN-063-DR**  
page 5.027



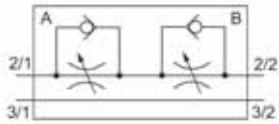
Speed regulator plate for  
double acting actuators  
**MN-065-DR**  
page 5.027

**Other single elements: 20-MN-06-01**

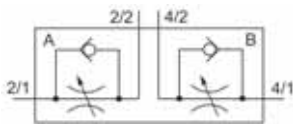
NAMUR seals disc to convert a 5/2-way valve into a 3/2-way function.

Technical data and dimensions for series

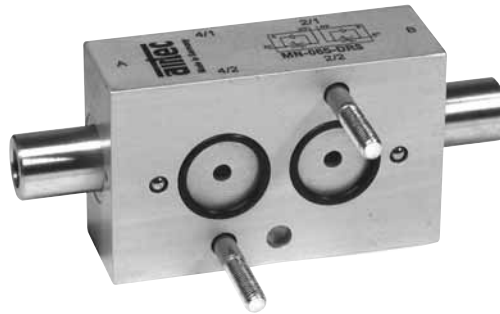
# MN-063-DRS, MN-065-DRS



MN-063-DRS



MN-065-DRS



## Design and function

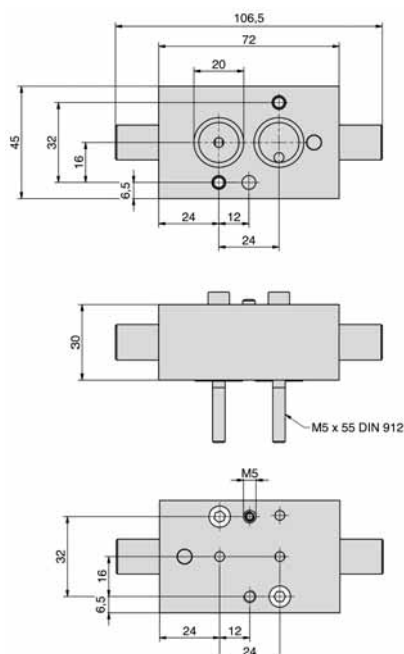
The locating pin, screws and seals are included.

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.

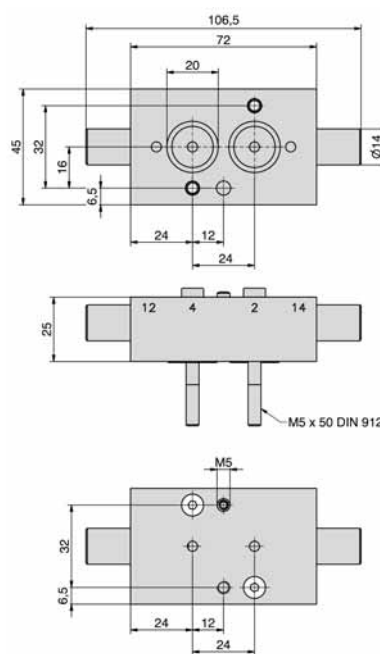
The unit can only be adjusted with a screw driver.

Order number	MN-063-DRS	MN-065-DRS
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)
Temperature range	- 10 °C ... + 70 °C (+ 14 °F ... + 158 °F)	
Materials	Body: Al, Inner parts: brass, Seals: NBR and PU	
Weight	0.330 kg (0.727 lb.)	0.285 kg (0.628 lb.)

### MN-063-DRS

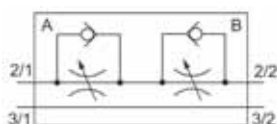


### MN-065-DRS

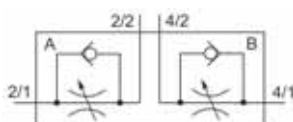


Technical data and dimensions for series

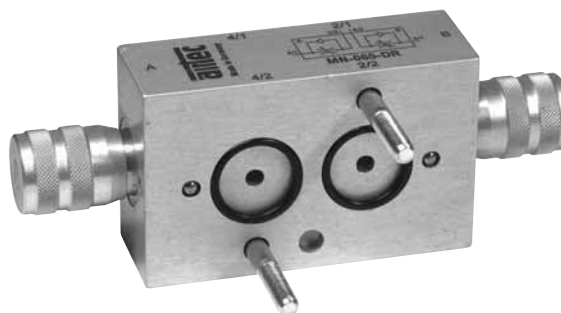
# MN-063-DR, MN-065-DR



MN-063-DR



MN-065-DR



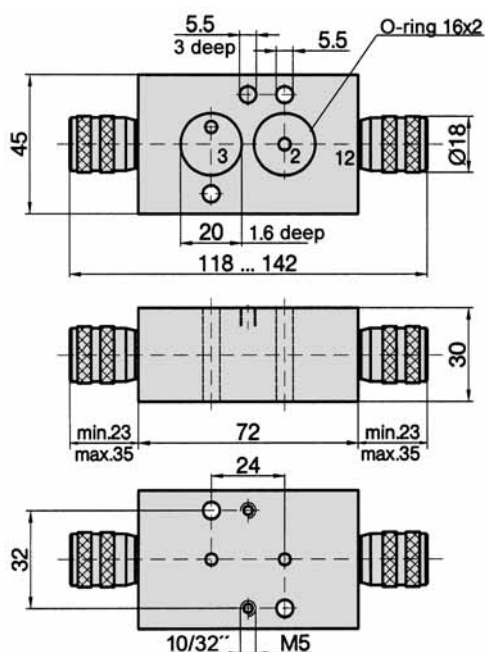
### Design and function

The locating pin, screws and seals are included.

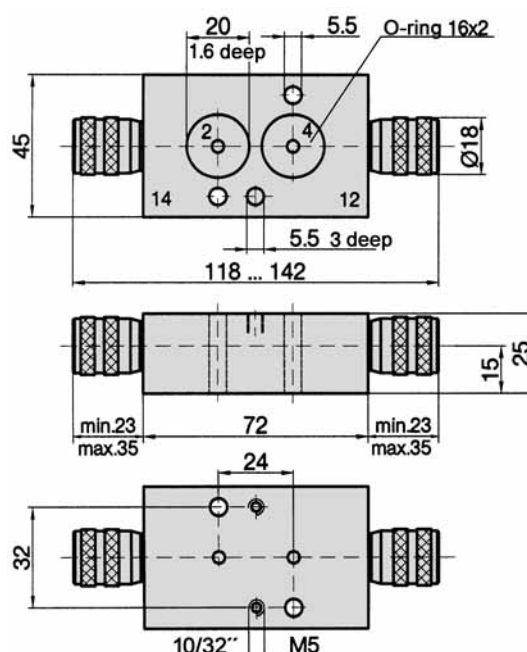
Valves of this series are available in explosion proof design in accordance with 94/9/EG (ATEX). For further details see chapter 12 of this catalogue.

Order number	MN-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)
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.)

### MN-063-DR



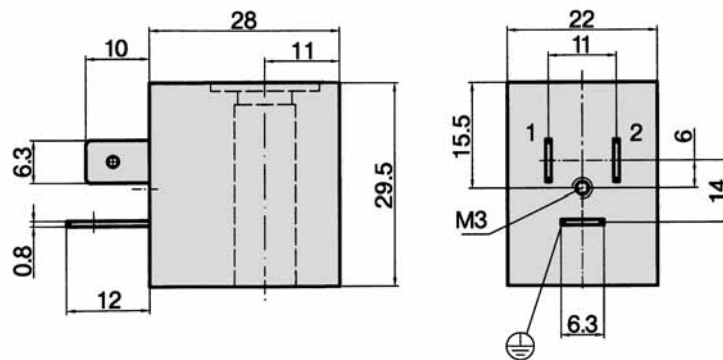
### MN-065-DR





## 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-011-1-711	23-SP-011-1-712	23-SP-011-1-722	23-SP-011-1-726	23-SP-011-1-727	23-SP-012-1-732
Standard voltages	12 V DC	24 V DC	24 V AC	115 V AC	230 V AC	24 V DC
Power consumption	4.6 W	4.8 W	7/4 VA			2.5 W
Degree of protection	IP 65 according to VDE 0470 / EN 60529, with connected plugs and additional O-rings					
Duty cycle	100 % continuous operation					
Material	Duroplast					
Temperature range	- 20 °C ... + 50 °C					
Voltage tolerance	± 10 %					

Other voltages on request.