

Standardized valve series
3/2-way
acc. to NAMUR, 900 NI/min (0.915 Cv)



Technical data for series

KN-05



Order code KN-05-310-HN-142

Series and function

Coil options

<p>Standard coil¹⁾ (with plug socket 28-ST-01) 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>Coils with M12 connector and LED O42 = 24 V DC, 4.8 W O62 = 24 V DC, 2.5 W²⁾</p> <p>Coils with higher humidity resistance 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>
<p>Without coil and plug socket 570 = Power consumption 4.2 W, 7/4 VA 560 = Power consumption 2.2 W²⁾</p>	

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. For optional plug sockets see page 5.044.

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 5.044), 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	KN-05-310-HN	KN-05-311-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 and 3	
Nominal size	6 mm	
Flow rate	780 NI/min (0.792 Cv)	
Pressure range	3 ... 10 bar (8 bar at 2.2 W); 43 ... 145 psi (116 psi at 2.2 W)	
Actuating force at 6 bar	on 16 ms off 18 ms	on 13 ms off 16 ms
Temperature range	- 10 °C ... + 70 °C (+ 14 °F ... + 158 °F)	
Materials	Body: Al (anodized), Seals: NBR, 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.

Standardized valve series
5/2- and 5/3-way
acc. to NAMUR, 900 NI/min (0.915 Cv)



Technical data for series

KN-05



Order code KN-05-510-HN-142

Series and function

Coil options

Standard coil¹⁾

(with plug socket 28-ST-01)

- 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⁾

Coils with M12 connector and LED

- O42** = 24 V DC, 4.8 W
- O62** = 24 V DC, 2.5 W²⁾

Coils with higher humidity resistance

- 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)

Without coil and plug socket

- 570** = Power consumption 4.2 W, 7/4 VA
- 560** = Power consumption 2.2 W²⁾

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. For optional plug sockets see page 5.044.

Design and function

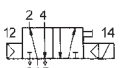
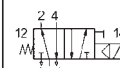
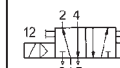
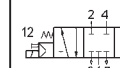
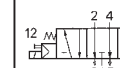
Spool valve for double acting actuators switched by an electrical signal.

The standard coil, plug socket (see page 5.044), 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 Please complete according to order code.	KN-05-510-HN	KN-05-511-HN	KN-05-520-HN	KN-05-530-HN	KN-05-533-HN
Function	 5/2-way single solenoid air spring return	 5/2-way single solenoid spring return	 5/2-way double solenoid	 5/3-way center position closed	 5/3-way center position exhausted
Connection	G 1/4 at 1, 3 and 5; flange to NAMUR at 2 and 4				
Nominal size	6 mm				
Flow rate	900 NI/min (0.915 Cv)	800 NI/min (0.813 Cv)	900 NI/min (0.915 Cv)	680 NI/min (0.691 Cv)	
Pressure range	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 16 ms off 17 ms	on 16 ms off 18 ms	14 ms	on 14 ms off 16 ms	
Temperature range	- 10 °C ... + 70 °C (+ 14 °F ... + 158 °F)				
Materials	Body: Al (anodized), Seals: NBR, Inner parts: Al, stainless steel, brass				
Degree of protection	IP 65 according to EN 60529				
Weight	0.320 kg (0.705 lb.)		0.440 kg (0.970 lb.)		

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

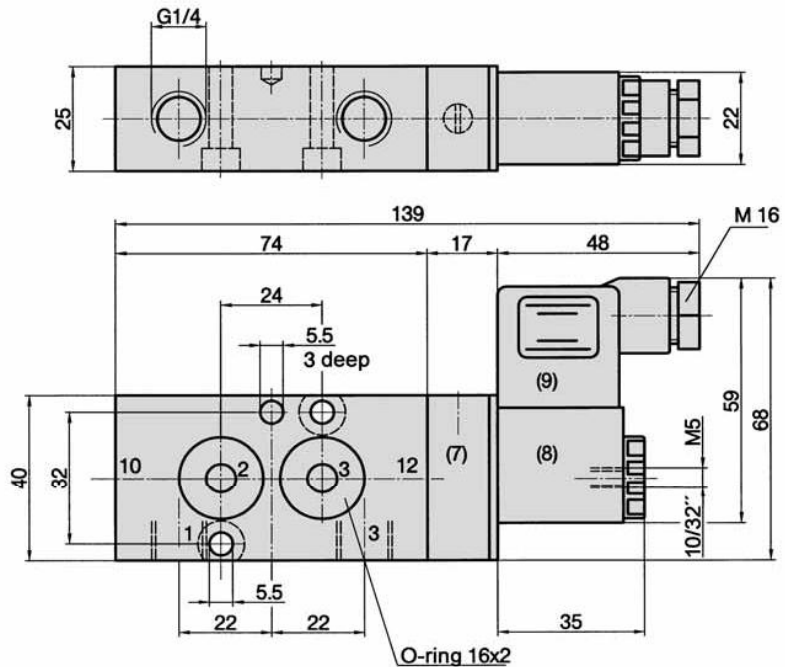
Standardized valve series
3/2- and 5/2-way
acc. to NAMUR, 900 NI/min (0.915 Cv)



Dimensions for series

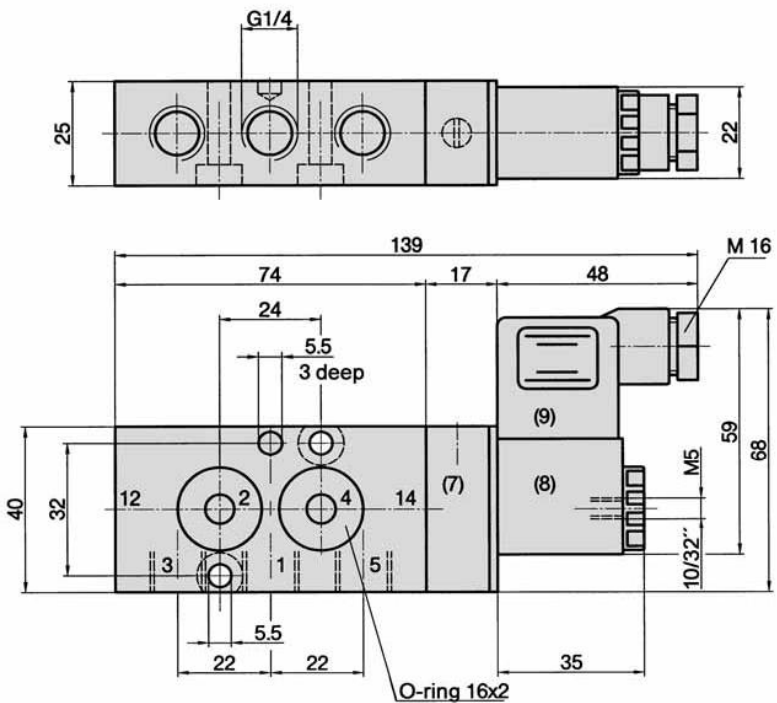
KN-05

KN-05-310-HN, KN-05-311-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°

KN-05-510-HN, KN-05-511-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°

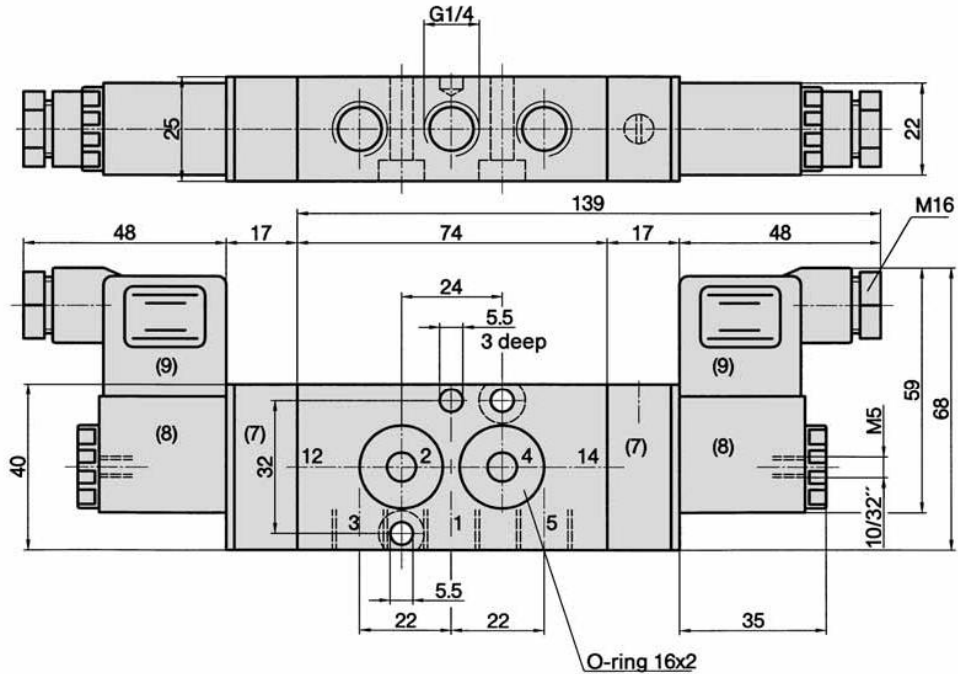
Standardized valve series
 5/2- and 5/3-way
 acc. to NAMUR, 900 NI/min (0.915 Cv)



Dimensions for series

KN-05

KN-05-520-HN, KN-05-530-HN, KN-05-533-HN



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

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

Accessories for series

KN-05

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

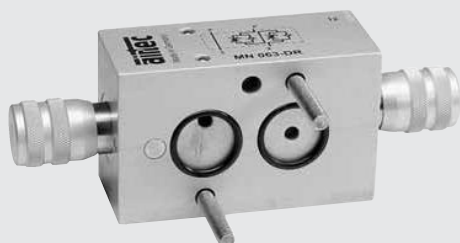
Coils and sockets with contacts according to DIN EN 175301-803 type B (U-form).

Plug sockets with molded cable.

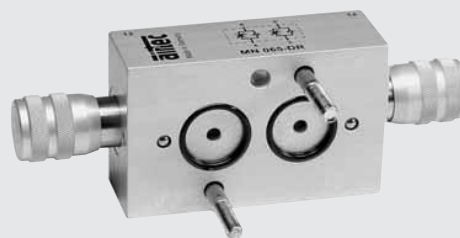
Accessories for series

KN-05

Speed regulation plates



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

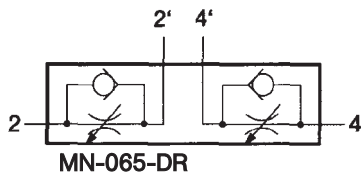
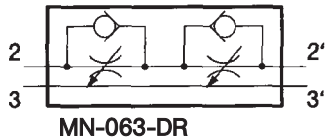


Speed regulator plate for
double acting actuators
MN-065-DR
page 5.026

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.

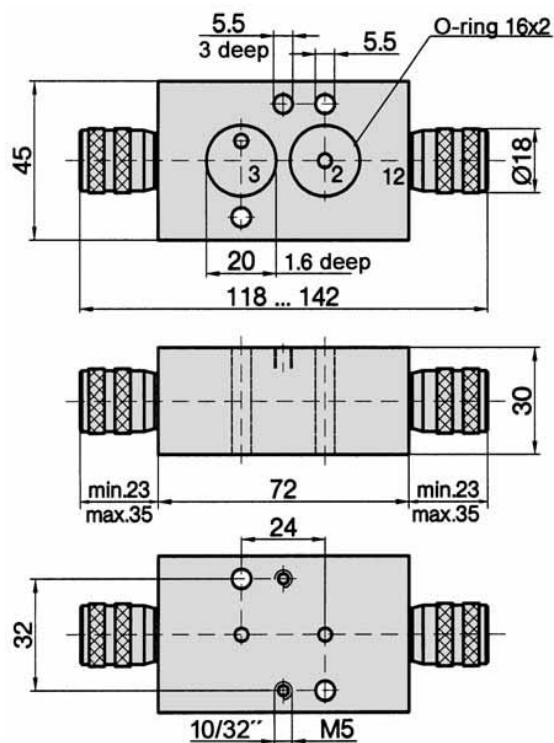
Cylinders of this series are available in explosion proof design in accordance with 94/9/EG (ATEX). For further details see chapter 12 of this catalogue.

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.)

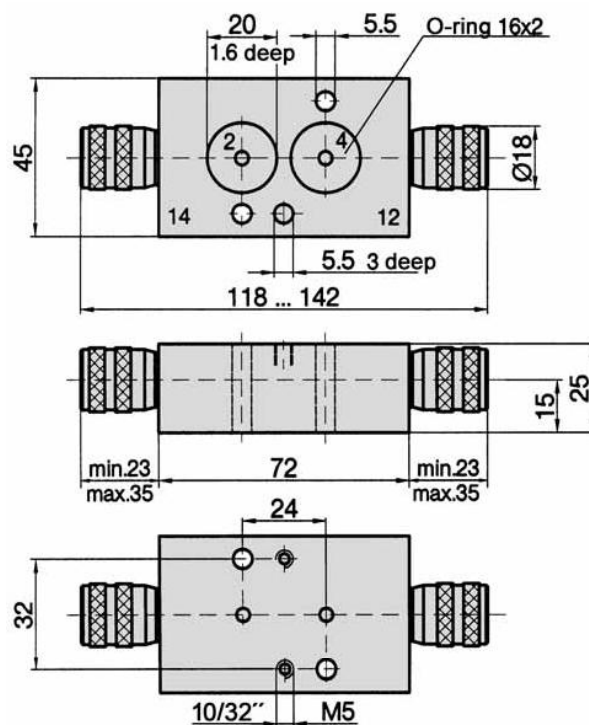
Dimensions for series

MN-063-DR, MN-065-DR

MN-063-DR

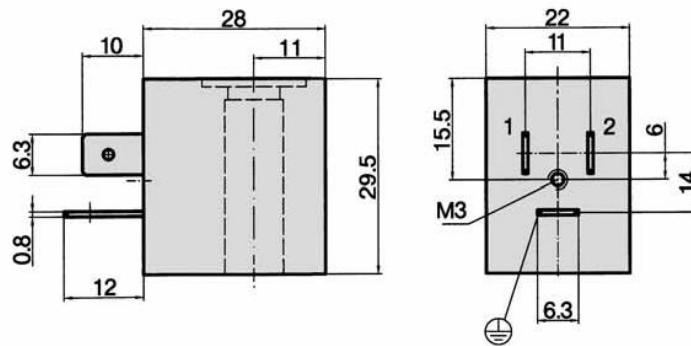


MN-065-DR



Accessories

Solenoid coil with higher humidity resistance



Solenoid coil with contact 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.