Series K8 directly operated solenoid valves

2/2-way - Normally Closed (NC) and Normally Open (NO)
3/2-way - Normally Closed (NC) and Normally Open (NO)

- Compact design
- High performances
- Manifold mounting
- Long life

Thanks to their particular design these valves can be used in applications where very compact solutions are required as well as high performances.
Series K8 is used to control actuators or very small devices and it is suitable for portable equipments thanks to low power consumption, reduced weight and dimensions.

Series K8 directly operated solenoid valves are available as 2/2 or 3/2-way either NC or NO versions.

GENERAL DATA

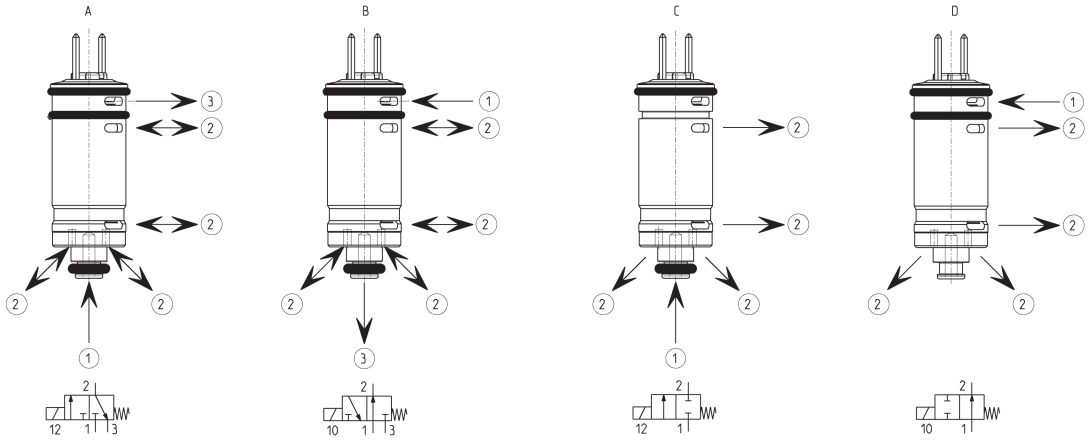
TECHNICAL FEATURES	
Function	2/2 NC - 3/2 NC - 2/2 NO - 3/2 NO
Operation	direct acting poppet type
Pneumatic connections	manifold cartridge
Nominal diameter	0.5 - 0.7 mm
Nominal flow	see kv
Flow efficient kv (l/min)	0.08 - 0.15
Operating pressure	-1 ÷ 3 ... 7 bar
Operating temperature	0°C ÷ 50°C
Media	filtered compressed air, unlubricated, according to ISO 8573-1 class 3.4.3, inert gas
Response time (ISO 12238)	ON <10 msec – OFF <10 msec
Installation	in any position
MATERIALS IN CONTACT WITH THE MEDIUM	
Body	brass - stainless steel - PBT technopolymer
Seals	FKM
Internal parts	stainless steel
ELECTRICAL FEATURES	
Voltage	24 V DC - 12 V DC - 6 V DC - other voltages on demand
Voltage tolerance	±10%
Power consumption	0.6 W
Duty cycle	ED 100%
Electrical connection	2 Pin 0.5 x 0.5 spacing 4 mm
Protection class	IP00
Special versions available on demand	

CODING EXAMPLE

K8	0	00	-	3	0	3	-	K	2	3

K8	SERIES
0	BODY DESIGN: 0 = single valve
00	NUMBER OF POSITIONS: 00 = valve without seat
3	NUMBER OF WAYS - FUNCTIONS: 0 = single base 3 = 3-way NC 4 = 3-way NO 5 = 2-way NC 6 = 2-way NO
0	MATERIALS AND SEALS: 0 = poppet, FKM seals
3	NOMINAL DIAMETER: 3 = Ø 0.5 mm (working pressure 1 ÷ 7 bar) 6 = Ø 0.5 mm (working pressure -1 ÷ 4 bar) 5 = Ø 0.7 mm (working pressure -1 ÷ 3 bar)
K	MATERIALS: K = stainless steel body, brass cage
2	ELECTRICAL CONNECTION: 2 = pin interface size 4 mm
3	VOLTAGE: 1 = 6V DC (0.6 W) 2 = 12V DC (0.6 W) 3 = 24V DC (0.6 W)

AVAILABLE FUNCTIONS

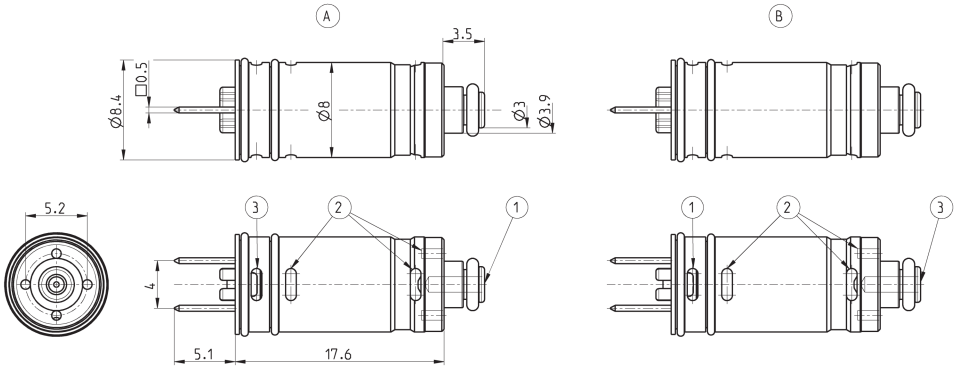


A = 3/2-way valve NC
B = 3/2-way valve NO
C = 2/2-way valve NC
D = 2/2-way valve NO

1 = supply
2 = inlet
3 = exhaust

8 mm solenoid valve, 2/2 and 3/2-way NC (A) and NO (B)

* = put in NUMBER OF WAYS - FUNCTIONS (see CODING EXAMPLE)
** = put in VOLTAGE (see CODING EXAMPLE)

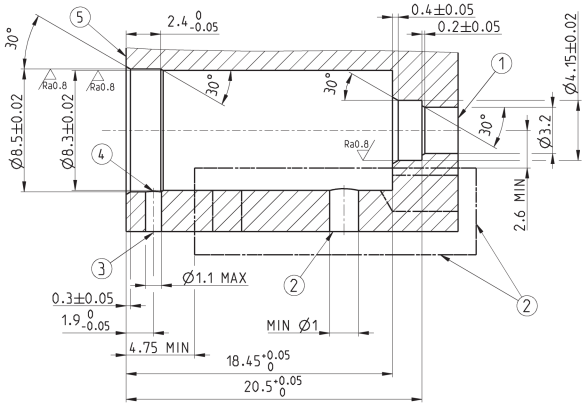


LEGEND:
1 = supply
2 = inlet
3 = exhaust

Mod.	Orifice Ø (mm)	kv (l/min)	Min/max pressure (bar)
K8000-*03-K2**	0.5	0.08	1 ÷ 7
K8000-*06-K2**	0.5	0.08	-1 ÷ 4
K8000-*05-K2**	0.7	0.15	-1 ÷ 3

8 mm solenoid valve seat, 2/2 and 3/2-way NC and NO

Note: better performances can be achieved if the valve seat holes are in line with the respective valve holes.

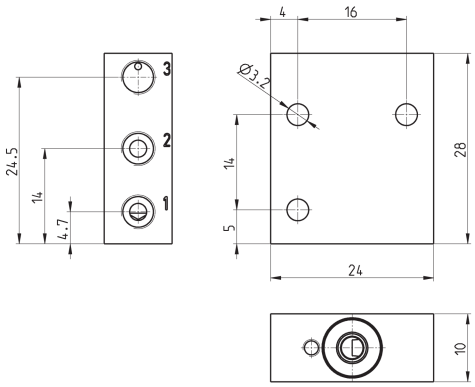


LEGEND:
1 = Port 1
2 = Port 2
3 = Port 3
4 = Free from burrs
5 = Surface to be aligned with the upper surface of the valve reinforcement

FUNCTION	3/2 NC	2/2 NC	3/2 NO	2/2 NO
PORT 1	Supply	Supply	Exhaust	-
PORT 2	Outlet	Outlet	Outlet	Outlet
PORT 3	Exhaust	-	Supply	Supply

Single body for Series K8 solenoid valve

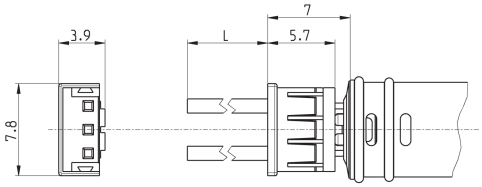
Material: anodized aluminium
Pneumatic connections: M5 threads



Mod.
K8303/14C

Connector Mod. 120-..

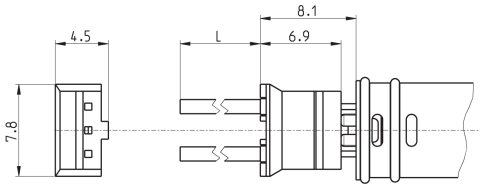
Cable section: 0.25 mm²
Cable external diameter: 1.2 mm
Material for the cable insulation: PVC



Mod.	description	colour	L = cable length (mm)	cable holding
120-803	crimped cable	white	300	crimping
120-806	crimped cable	white	600	crimping

Connector with flying leads Mod. 120-J...

Flying leads section: 0.25 mm²
Flying lead external diameter: 1.2 mm
Material for the flying leads insulation: PVC



Mod.	description	colour	L = cable length (mm)	cable holding
120-J803	crimped cable connector J	white	300	crimping
120-J806	crimped cable connector J	white	600	crimping

Series K8B
pilot operated solenoid valves

2/2-way - Normally Closed (NC) and Normally Open (NO)
3/2-way - Normally Closed (NC) and Normally Open (NO)

- Compact design
- High flow
- Manifold mounting
- Long life

Thanks to their low power consumption and light weight Series K8B solenoid valves are particularly suitable for use with portable equipment too.

Series K8B pilot operated solenoid valves represent the evolution of Series K8 which has been equipped with a flow amplifier. Their particular design makes these valves ideal for use in applications requiring very compact solutions and high flow.

GENERAL DATA

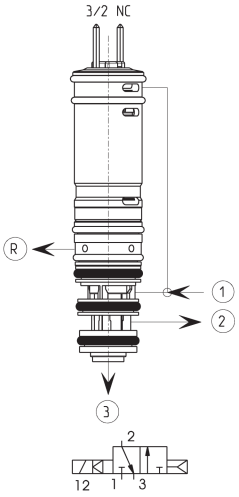
TECHNICAL FEATURES	
Function	2/2 NC - 3/2 NC - 2/2 NO - 3/2 NO
Operation	pilot operated poppet type
Pneumatic connections	manifold cartridge - M7 threads - on subbase with M3 screws
Nominal diameter	3.6 mm
Nominal flow	180 Nl/min (air @ 6 bar ΔP 1 bar)
Flow coefficient kv (l/min)	2.8
Operating pressure	1 ÷ 7 bar
Operating temperature	0°C ÷ 50°C
Media	filtered compressed air, unlubricated, according to ISO 8573-1 class 3.4.3, inert gas
Response time (ISO 12238)	ON <15 msec – OFF <15 msec
Installation	in any position
MATERIALS IN CONTACT WITH THE MEDIUM	
Body	brass - stainless steel - PBT technopolymer - aluminium
Seals	FKM
Internal parts	stainless steel
ELECTRICAL FEATURES	
Voltage	24 V DC - 12 V DC - 6 V DC - other voltages on demand
Voltage tolerance	±10%
Power consumption	0.6 W
Duty cycle	ED 100%
Electrical connection	2 Pin 0.5 x 0.5 pitch 4mm - JST connector with flying leads L = 300mm
Protection class	IP00
Special versions available on demand	

CODING EXAMPLE

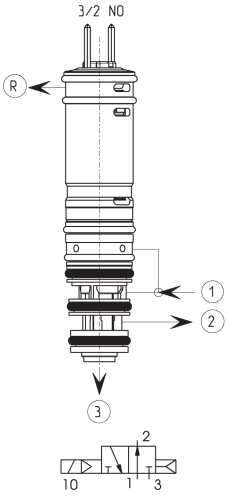
K8B	C5	4	00	-	D4	3	2	N	-	N	00	1A	C003

K8B	SERIES
C5	BODY DESIGN: C0 = body with interface for subbase C3 = threaded body C5 = cartridge
4	NUMBER OF WAYS - FUNCTIONS: 1 = 2/2-way NC 2 = 2/2-way NO 4 = 3/2-way NC 5 = 3/2-way NO
00	PNEUMATIC CONNECTIONS: 00 = cartridge 03 = M7 18 = K8B-type interface, 2-way 19 = K8B-type interface, 3-way
D4	NOMINAL DIAMETER: D4 = Ø 3.6mm
3	SEALS MATERIALS: 3 = FKM
2	BODY MATERIALS: 1 = aluminium 2 = brass
N	MANUAL OVERRIDE: N = not foreseen
N	FIXING ACCESSORIES: N = not foreseen P = screws for plastics M = screws for metal
00	OPTION: 00 = no option
1A	ELECTRICAL CONNECTION: 1A = only pins, pitch 4mm 1B = JST connector, pitch 4mm
C003	VOLTAGE - POWER CONSUMPTION: C001 = 6V DC (0.6 W) C002 = 12V DC (0.6 W) C003 = 24V DC (0.6 W)

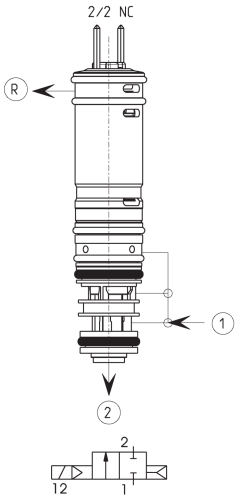
AVAILABLE FUNCTIONS



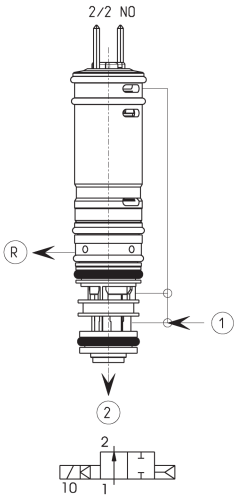
1 = supply
2 = inlet
3 = exhaust
R = K8 exhaust



1 = supply
2 = inlet
3 = exhaust
R = K8 exhaust

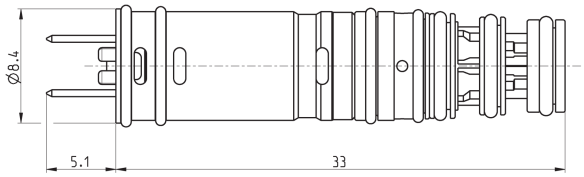


1 = supply
2 = inlet
R = K8 exhaust



1 = supply
2 = inlet
R = K8 exhaust

8 mm solenoid valve, 2/2 and 3/2-way NC and NO

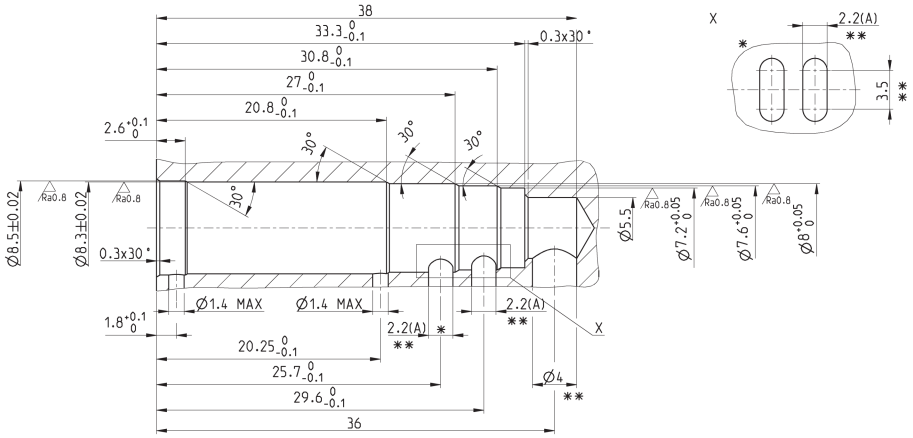


Mod.	Function	NOTE
K8BC5100-D432N-N001A*	2/2 NC	* enter the required voltage (see the coding example)
K8BC5200-D432N-N001A*	2/2 NO	* enter the required voltage (see the coding example)
K8BC5400-D432N-N001A*	3/2 NC	* enter the required voltage (see the coding example)
K8BC5500-D432N-N001A*	3/2 NO	* enter the required voltage (see the coding example)

8 mm solenoid valve seat, 2/2 and 3/2-way NC and NO

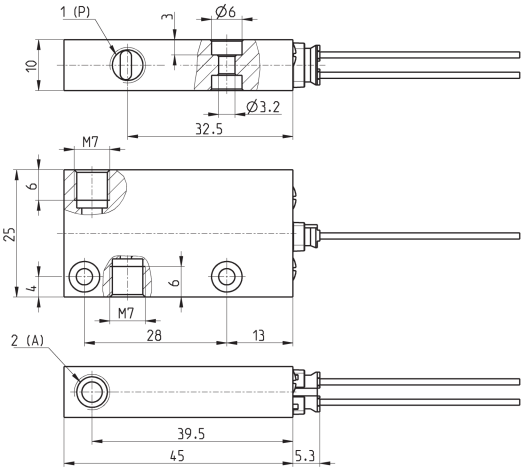
* = FOR THE 2/2 VERSION THIS OPERATION HAS NOT TO BE PERFORMED

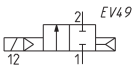
** = TO ACHIEVE DECLARED PERFORMANCE IT IS NECESSARY TO HAVE
A PASSAGE SECTION FOR THE SUPPLY AND EXHAUST PORTS
OF 12.5 mm², WHICH IS EQUAL TO A Ø4 mm

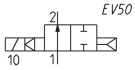


Body with threaded ports, 2/2-way NC and NO

Supplied with:
1x connector with flying leads
Mod. 120-J803 (300mm)



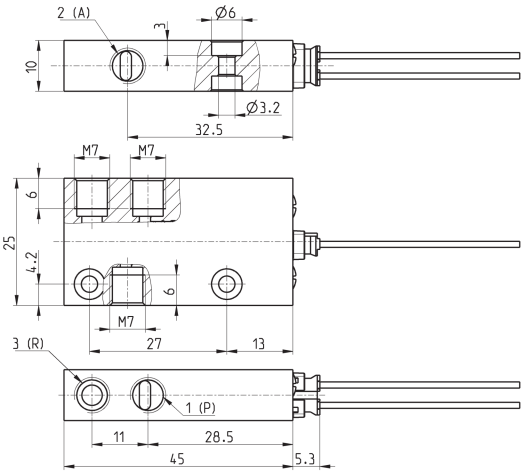


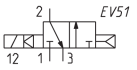


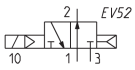
Mod.	Function	Symbol	NOTE
K8BC3103-D431N-N001B*	2/2 NC	EV49	* enter the required voltage (see the coding example)
K8BC3203-D431N-N001B*	2/2 NO	EV50	* enter the required voltage (see the coding example)

Body with threaded ports, 3/2-way NC and NO

Supplied with:
1x connector with flying leads
Mod. 120-J803 (300mm)



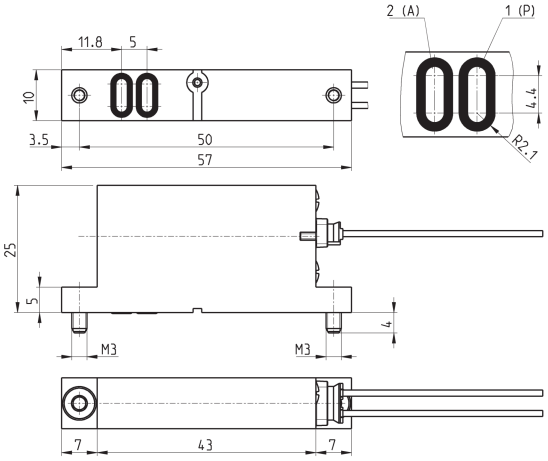


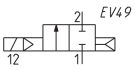


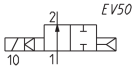
Mod.	Function	Symbol	NOTE
K8BC3403-D431N-N001B*	3/2 NC	EV51	* enter the required voltage (see the coding example)
K8BC3503-D431N-N001B*	3/2 NO	EV52	* enter the required voltage (see the coding example)

Body for subbase, 2/2-way NC and NO

Supplied with:
1x connector with flying leads
Mod. 120-J803 (300mm)
2x interface seals
2x screws M3x6 UNI 5931
(for M version)
or
2x screws M3x6 UNI 10227
(for P version)



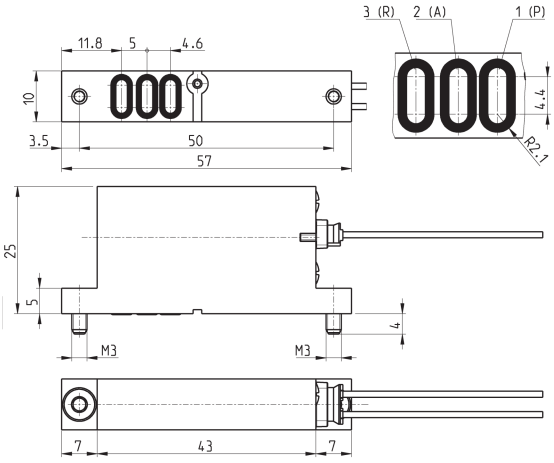


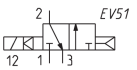


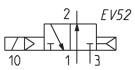
Mod.	Function	Symbol	NOTE
K8BC0118-D431N-*001B**	2/2 NC	EV49	* enter the type of screws - ** enter the required voltage (see the coding example)
K8BC0218-D431N-*001B**	2/2 NO	EV50	* enter the type of screws - ** enter the required voltage (see the coding example)

Body for subbase, 3/2-way NC and NO

Supplied with:
1x connector with flying leads
Mod. 120-J803 (300mm)
3x interface seals
2x screws M3x6 UNI 5931
(for M version)
or
2x screws M3x6 UNI 10227
(for P version)



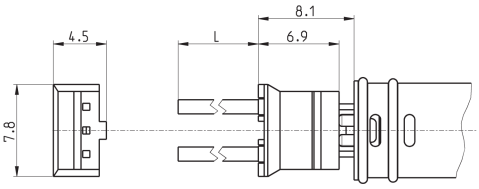




Mod.	Function	Symbol	NOTE
K8BC0419-D431N-*001B**	3/2 NC	EV51	* enter the type of screws - ** enter the required voltage (see the coding example)
K8BC0519-D431N-*001B**	3/2 NO	EV52	* enter the type of screws - ** enter the required voltage (see the coding example)

Connector with flying leads Mod. 120-J...

Flying leads section: 0.25 mm²
Flying lead external diameter: 1.2 mm
Material for the flying leads insulation: PVC



Mod.	description	colour	L = cable length (mm)	cable holding
120-J803	crimped cable connector J	white	300	crimping
120-J806	crimped cable connector J	white	600	crimping