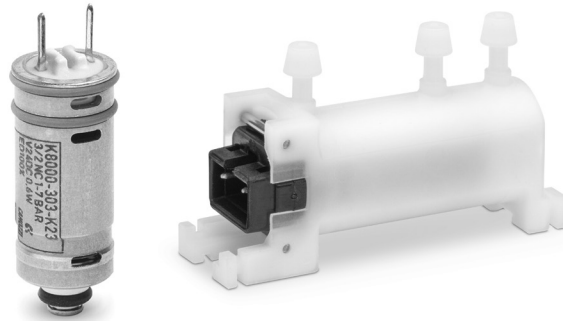


Direct acting solenoid valves

Series K8 - K8X

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

SERIES - K8-K8X SOLENOID VALVES



- » Compact design
- » High performances
- » Manifold mounting
- » Long life
- » Version for use with oxygen available

The universal (UNI) version enables to mix two different gaseous fluids or to select the path of the gaseous fluid in the pneumatic circuit.

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.

GENERAL DATA

TECHNICAL FEATURES

Function	2/2 NC - 3/2 NC - 2/2 NO - 3/2 NO - 3/2 UNI
Operation	direct acting poppet type
Pneumatic connections	cartridge seat in manifold / barb fittings for tube 4/2 - 4/2,5 - 5/3 mm
Orifice diameter	0,5 ... 0,7 mm
Flow efficient kv (l/min)	0.08 ... 0,15
Operating pressure	-1 ÷ 3 ... 7 bar
Operating temperature	0 ÷ 50 °C
Media	filtered compressed air, unlubricated, according to ISO 8573-1:2010 class [3:4:3], inert gas
Response time (ISO 12238)	ON <10 ms - OFF <10 ms
Installation	in any position

MATERIALS IN CONTACT WITH THE MEDIUM

Body	brass - stainless steel - PBT
Seals	FKM
Internal parts	stainless steel - enamelled copper

ELECTRICAL FEATURES

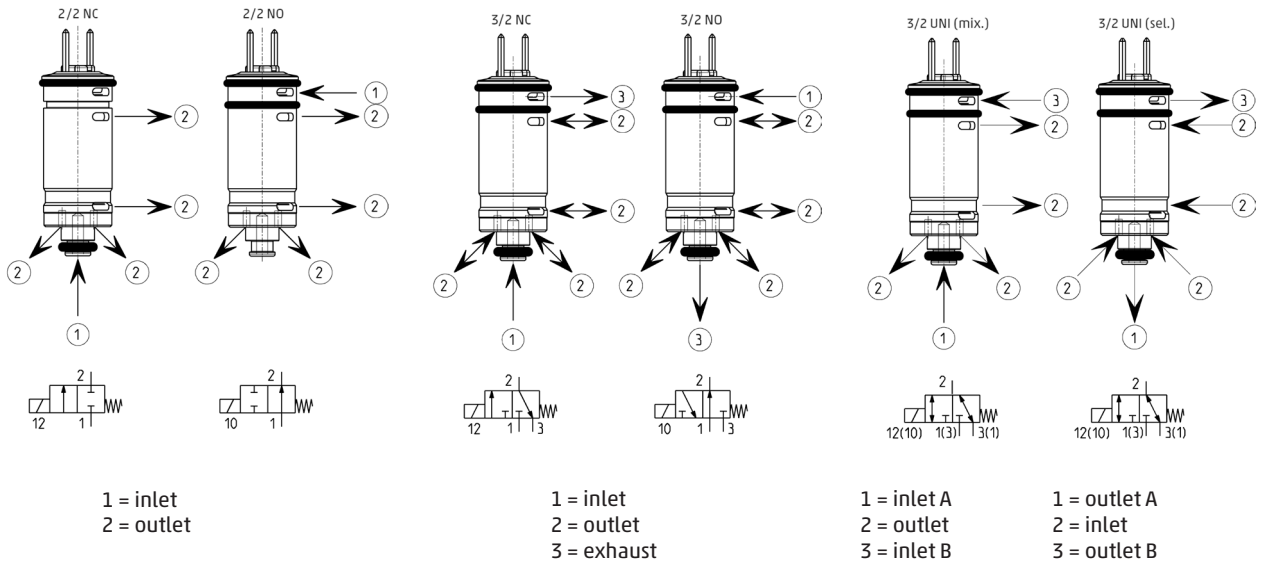
Voltage	3 ... 24 V DC - other voltages on demand
Voltage tolerance	±10%
Power consumption	0,6 W
Duty cycle	ED 100%
Electrical connection	2 pins 0,5 x 0,5 pitch 4 mm - JST connector with 300 mm flying leads
Protection class	IP00

Special versions available on demand

CODING EXAMPLE

K8	0	00	-	3	0	3	-	K	2	3
K8	SERIES									
0	VALVE VERSION 0 = cartridge valve X = cartridge valve with PBT body									
00	BODY DESIGN 00 = cartridge valve without body 1A = valve with PBT body and barb fittings for tube Ø 4/2 mm 1B = valve with PBT body and barb fittings for tube Ø 4/2.5 mm 1C = valve with PBT body and barb fittings for tube Ø 5/3 mm									
3	NUMBER OF WAYS - FUNCTIONS 3 = 3/2-way - NC 4 = 3/2-way - NO 5 = 2/2-way - NC 6 = 2/2-way - NO 7 = 3/2-way - UNI									
0	SEALS MATERIAL 0 = FKM									
3	ORIFICE DIAMETER 3 = Ø 0,5 mm (max pressure 7 bar) 5 = Ø 0,7 mm 6 = Ø 0,5 mm (max pressure 4 bar)									
K	MATERIALS K = brass orifice									
2	ELECTRICAL CONNECTION 2 = pins - pitch 4 mm 3 = JST connector with 300 mm flying leads									
3	VOLTAGE - POWER CONSUMPTION: 1 = 6 V DC - 0,6 W 2 = 12 V DC - 0,6 W 3 = 24 V DC - 0,6 W 5 = 5 V DC - 0,6 W 6 = 3 V DC - 0,6 W									
OPTIONS = standard OX1 = for use with oxygen (non volatile residual less than 550 mg/m ²)										

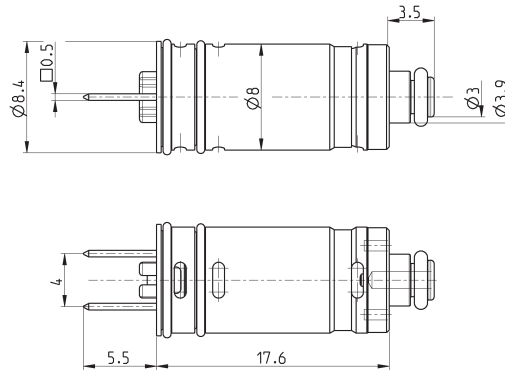
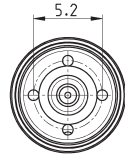
AVAILABLE FUNCTIONS



Series K8 solenoid valve - cartridge version



* add
- VOLTAGE
(see CODING EXAMPLE)

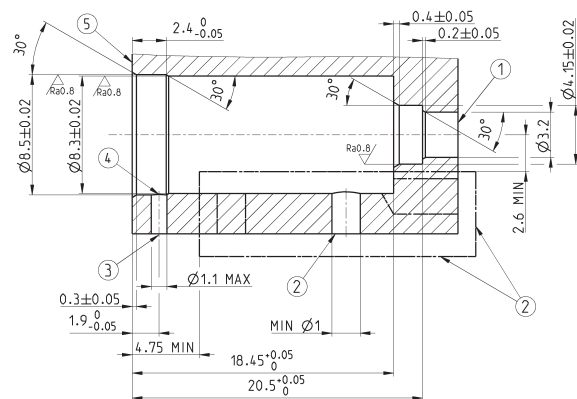


SERIES - K8-K8X SOLENOID VALVES

Mod.	Function	Orifice Ø (mm)	kv (l/min)	Min= max pressure (bar)
K8000-503-K2 ²⁵	2/2 NC	0,5	0,08	1 ÷ 7
K8000-506-K2 ²⁵	2/2 NC	0,5	0,08	- 1 ÷ 4
K8000-505-K2 ²⁵	2/2 NC	0,7	0,15	- 1 ÷ 3
K8000-603-K2 ²⁵	2/2 NO	0,6	0,10	1 ÷ 7
K8000-606-K2 ²⁵	2/2 NO	0,6	0,10	- 1 ÷ 4
K8000-303-K2 ²⁵	3/2 NC	0,5	0,08	1 ÷ 7
K8000-306-K2 ²⁵	3/2 NO	0,5	0,08	- 1 ÷ 4
K8000-305-K2 ²⁵	3/2 NC	0,7	0,15	- 1 ÷ 3
K8000-403-K2 ²⁵	3/2 NO	0,6	0,10	1 ÷ 7
K8000-406-K2 ²⁵	3/2 NO	0,6	0,10	- 1 ÷ 4
K8000-405-K2 ²⁵	3/2 NO	0,6	0,10	1 ÷ 7
K8000-703-K2 ²⁵	3/2 UNI	0,5	0,08	0 ÷ 3
K8000-705-K2 ²⁵	3/2 UNI	0,7	0,15	- 1 ÷ 2

Series K8 solenoid valve - valve seat dimensions for manifolds

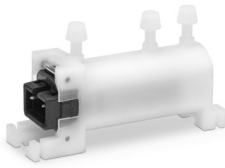
LEGEND:
1 = Port 1
2 = Port 2
3 = Port 3
4 = Free from burrs
5 = Surface to be aligned with the upper surface of the valve reinforcement



FUNCTION	2/2 NC	2/2 NO	3/2 NC	3/2 NO	3/2 UNI (mix.)	3/2 UNI (sel.)
PORT 1	inlet	-	inlet	exhaust	inlet A	outlet A
PORT 2	outlet	outlet	outlet	outlet	outlet	inlet
PORT 3	-	inlet	exhaust	inlet	inlet B	outlet B

New

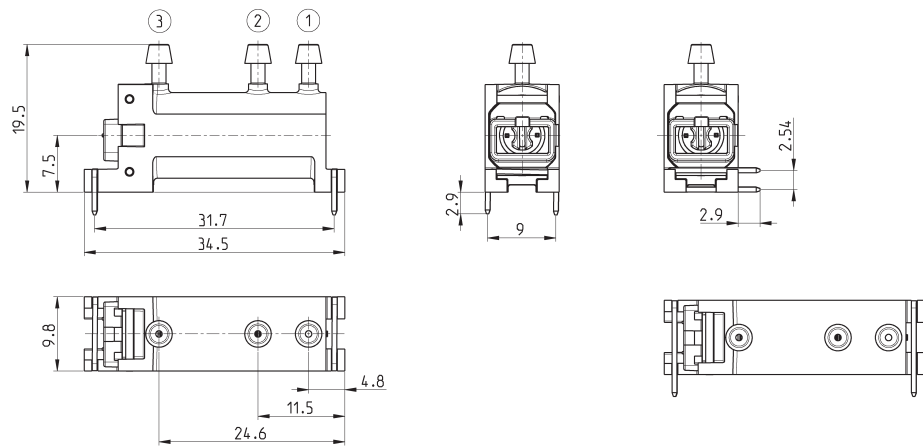
Series K8X solenoid valve - PBT version body



* add
 - BODY DESIGN
 - VOLTAGE
 (see CODING EXAMPLE)

Mod.	Function	Orifice Ø (mm)	kv (l/min)	Min-max pressure (bar)
K8X1*-503-K3*	2/2 NC	0,5	0,08	1 ÷ 7
K8X1*-506-K3*	2/2 NC	0,5	0,08	- 1 ÷ 4
K8X1*-505-K3*	2/2 NC	0,7	0,15	- 1 ÷ 3
K8X1*-603-K3*	2/2 NO	0,6	0,10	1 ÷ 7
K8X1*-606-K3*	2/2 NO	0,6	0,10	- 1 ÷ 4
K8X1*-303-K3*	3/2 NC	0,5	0,08	1 ÷ 7
K8X1*-306-K3*	3/2 NC	0,5	0,08	- 1 ÷ 4
K8X1*-305-K3*	3/2 NC	0,7	0,15	- 1 ÷ 3
K8X1*-403-K3*	3/2 NO	0,6	0,10	1 ÷ 7

Series K8X solenoid valve - dimensions



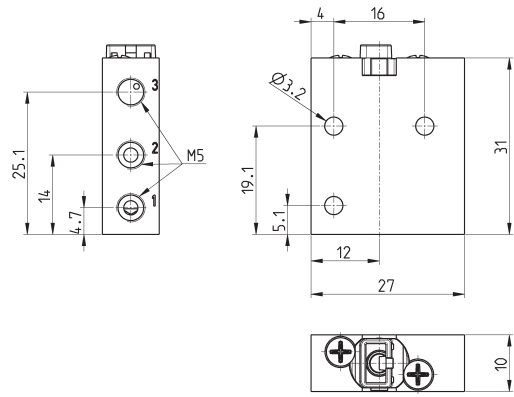
FUNCTION	2/2 NC	2/2 NO	3/2 NC	3/2 NO	3/2 UNI (mix.)	3/2 UNI (sel.)
PORT 1	inlet	-	inlet	exhaust	inlet A	outlet A
PORT 2	outlet	outlet	outlet	outlet	outlet	inlet
PORT 3	-	inlet	exhaust	inlet	inlet B	outlet B

Single body for Series K8 solenoid valve



Material: anodized aluminium
Connections: M5 threads

Valve restraint system to be used only with connector Mod. 120-J...

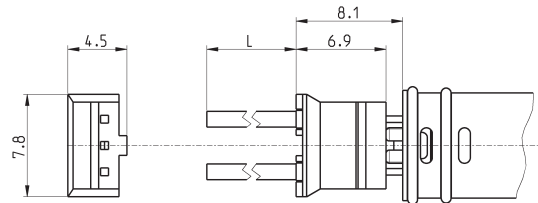


Mod.	
K8303/14C	

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



Flying leads section: 0.22 mm²
Flying lead external diameter: 1.1 mm
Material for the flying leads insulation: PVC

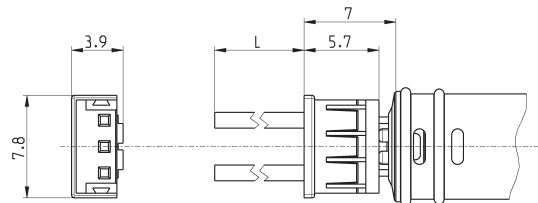


Mod.	description	colour	L = cable length (mm)	cable holding
120-J803	crimped cable connector J	white	300	crimping
120-J806	crimped cable connector J	white	600	crimping

Connector with flying leads Mod. 120-..



Cable section: 0.22 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