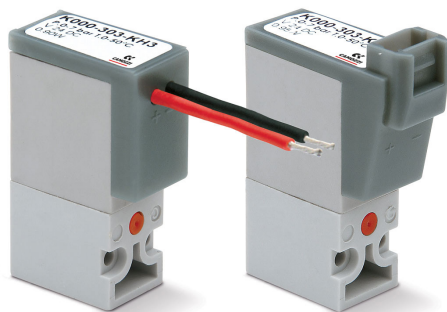


# DIRECT ACTING SOLENOID VALVES

## SERIES K

2/2-way - Normally Closed (NC)

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



- Low power consumption
- Compact design
- Version for use with oxygen available

The Series K direct acting solenoid valves can be mounted on single sub-bases or manifolds.

Thanks to the same mounting pad 2/2-way and 3/2-way versions can be installed on the same manifold.

The manual override is available only for the 3/2-way versions.

### GENERAL DATA

TECHNICAL FEATURES	
Function	2/2 NC - 3/2 NC - 3/2 NO
Operation	direct acting poppet type
Pneumatic connections	on subbase
Orifice diameter	0.6 ... 1 mm
Flow coefficient kv (l/min)	0.12 ... 0.30
Operating pressure	0 ÷ 3 ... 7 bar
Operating temperature	0 ÷ 50 °C
Fluid	filtered compressed air, unlubricated, according to ISO 8573-1:2010 class [3:4:3], inert gas
Response time	ON <10 ms - OFF <10 ms
Manual override	monostable - only for 3/2 versions
Installation	in any position
MATERIALS IN CONTACT WITH THE MEDIUM	
Body	PBT
Seals	NBR - FKM
Internal parts	stainless steel
ELECTRICAL FEATURES	
Voltage	6 ... 24 V DC - other voltages on demand
Voltage tolerance	±10%
Power consumption	1 W
Duty cycle	ED 100%
Electrical connection	connector mod. 121-8... - 300 mm flying leads
Protection class	IP50
Special versions available on demand	

DIRECT ACTING SOLENOID VALVES  
SERIES K - CODING EXAMPLE

Coding example

K	0	00	-	3	0	3	-	K	2	3
K	SERIES									
0	BODY DESIGN 0 = single sub-base (only M5) or interface 1 = manifold									
00	NUMBER OF POSITIONS 00 = interface 01 = single base (only M5) 02 + 99 = manifold number of positions									
3	NUWAYS - FUNCTMBER OF IONS 0 = manifold or single base 1 = 2/2-way - NC 2 = 2/2-way - NC electric part revolved by 180° 3 = 3/2-way - NC 4 = 3/2-way - NO 5 = 3/2-way - NC electric part revolved by 180° 6 = 3/2-way - NO electric part revolved by 180°									
0	PORTS 0 = on subbase or manifold 2 = M5 side outlets									
3	ORIFICE DIAMETER 2 = Ø 0.6 mm - 2/2 versions 3 = Ø 0.6 mm - 3/2 versions 5 = Ø 1.0 mm - 2/2 versions									
K	MATERIALS F = PBT body - FKM poppet seal K = PBT body - HNBR poppet seal (only for 3/2-way versions)									
2	ELECTRICAL CONNECTION 1 = 90° connection with protection and led 2 = 90° connection with protection 3 = 90° connection B = in-line connection with protection and led C = in-line connection with protection D = in-line connection F = 300 mm flying leads with protection and led G = 300 mm flying leads with protection H = 300 mm flying leads									
3	VOLTAGE - POWER CONSUMPTION 1 = 6V DC - 1W 2 = 12V DC - 1W 3 = 24V DC - 1W									
	FIXING = fixing screws for plastic M = fixing screws for metal									
	OPTIONS = standard OX1 = for use with oxygen (non volatile residual less than 550 mg/m²) OX2 = for use with oxygen (non volatile residual less than 33 mg/m²)									

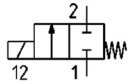
## DIRECT ACTING SOLENOID VALVES

### SERIES K - DIMENSIONAL CHARACTERISTICS

#### Series K solenoid valve - 2/2-way NC - 90° connector



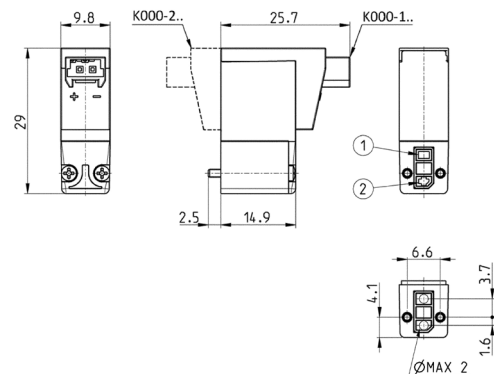
Supplied with:  
1x interface seal  
2x Ø1.6x16 screws for mounting on plastic  
or  
2x M1.6x16 screws for mounting on metal



EV01

Mod.	Function	Orifice Ø (mm)	Kv (l/min)	Min+max pressure (bar)
K000-102-F1*	2/2 NC	0,6	0,15	0 ÷ 6
K000-102-F2*	2/2 NC	0,6	0,15	0 ÷ 6
K000-102-F3*	2/2 NC	0,6	0,15	0 ÷ 6
K000-105-F1*	2/2 NC	1	0,30	0 ÷ 3
K000-105-F2*	2/2 NC	1	0,30	0 ÷ 3
K000-105-F3*	2/2 NC	1	0,30	0 ÷ 3

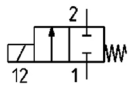
\* add  
- VOLTAGE  
(see CODING EXAMPLE)



#### Series K solenoid valve - 2/2-way NC - in-line connector



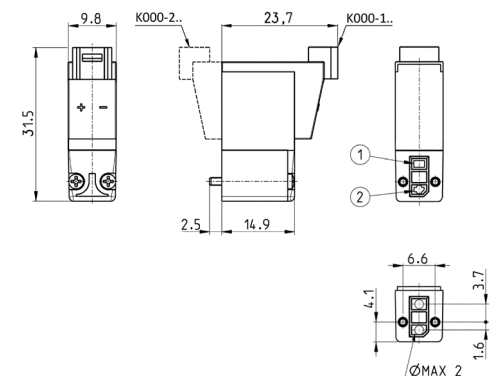
Supplied with:  
1x interface seal  
2x Ø1.6x16 screws for mounting on plastic  
or  
2x M1.6x16 screws for mounting on metal



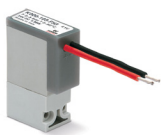
EV01

Mod.	Function	Orifice Ø (mm)	Kv (l/min)	Min+max pressure (bar)
K000-102-FB*	2/2 NC	0,6	0,15	0 ÷ 6
K000-102-FC*	2/2 NC	0,6	0,15	0 ÷ 6
K000-102-FD*	2/2 NC	0,6	0,15	0 ÷ 6
K000-105-FB*	2/2 NC	1	0,30	0 ÷ 3
K000-105-FC*	2/2 NC	1	0,30	0 ÷ 3
K000-105-FD*	2/2 NC	1	0,30	0 ÷ 3

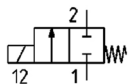
\* add  
- VOLTAGE  
(see CODING EXAMPLE)



#### Series K solenoid valve - 2/2-way NC - 300 mm flying leads



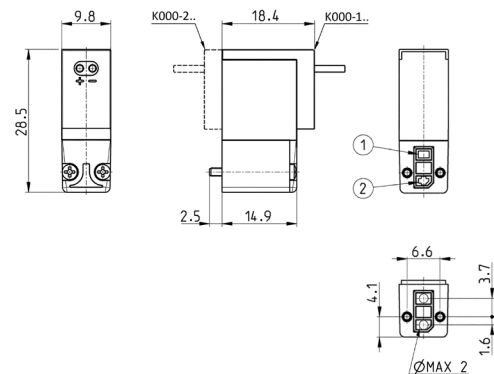
Supplied with:  
1x interface seal  
2x Ø1.6x16 screws for mounting on plastic  
or  
2x M1.6x16 screws for mounting on metal



EV01

Mod.	Function	Orifice Ø (mm)	Kv (l/min)	Min+max pressure (bar)
K000-102-FF*	2/2 NC	0,6	0,15	0 ÷ 6
K000-102-FG*	2/2 NC	0,6	0,15	0 ÷ 6
K000-102-FH*	2/2 NC	0,6	0,15	0 ÷ 6
K000-105-FF*	2/2 NC	1	0,30	0 ÷ 3
K000-105-FG*	2/2 NC	1	0,30	0 ÷ 3
K000-105-FH*	2/2 NC	1	0,30	0 ÷ 3

\* add  
- VOLTAGE  
(see CODING EXAMPLE)



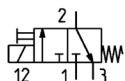
## DIRECT ACTING SOLENOID VALVES

### SERIES K - DIMENSIONAL CHARACTERISTICS

#### Seris K solenoid valve - 3/2-way NC - 90° connector



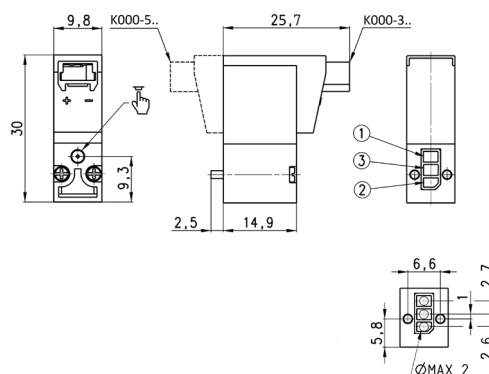
Supplied with:  
1x interface seal  
2x Ø1.6x16 screws for mounting on plastic  
or  
2x M1.6x16 screws for mounting on metal



EV04

Mod.	Function	Orifice Ø (mm)	Kv (l/min)	Min+max pressure (bar)
K000-303-K1*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-F1*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-K2*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-F2*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-K3*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-F3*	3/2 NC	0,6	0,12	0 ÷ 7

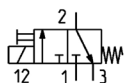
\* add  
- VOLTAGE  
(see CODING EXAMPLE)



#### Series K solenoid valve - 3/2-way NC - in-line connector



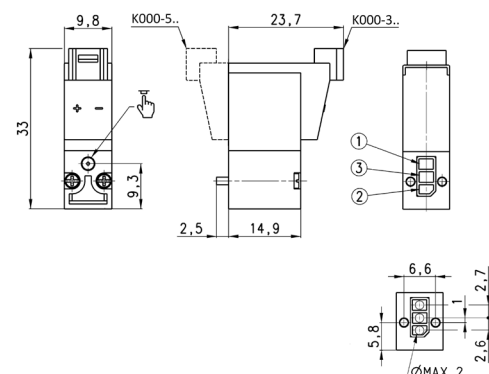
Supplied with:  
1x interface seal  
2x Ø1.6x16 screws for mounting on plastic  
or  
2x M1.6x16 screws for mounting on metal



EV04

Mod.	Function	Orifice Ø (mm)	Kv (l/min)	Min+max pressure (bar)
K000-303-KB*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-FB*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-KC*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-FC*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-KD*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-FD*	3/2 NC	0,6	0,12	0 ÷ 7

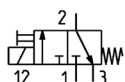
\* add  
- VOLTAGE  
(see CODING EXAMPLE)



#### Series K solenoid valve - 3/2-way NC - 300 mm flying leads



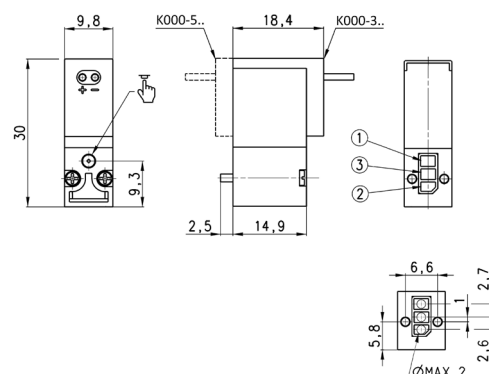
Supplied with:  
1x interface seal  
2x Ø1.6x16 screws for mounting on plastic  
or  
2x M1.6x16 screws for mounting on metal



EV04

Mod.	Function	Orifice Ø (mm)	Kv (l/min)	Min+max pressure (bar)
K000-303-KF*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-FF*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-KG*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-FG*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-KH*	3/2 NC	0,6	0,12	0 ÷ 7
K000-303-FH*	3/2 NC	0,6	0,12	0 ÷ 7

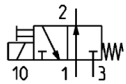
\* add  
- VOLTAGE  
(see CODING EXAMPLE)



## DIRECT ACTING SOLENOID VALVES

### SERIES K - DIMENSIONAL CHARACTERISTICS

#### Series K solenoid valve - 3/2-way NO - 90° connector

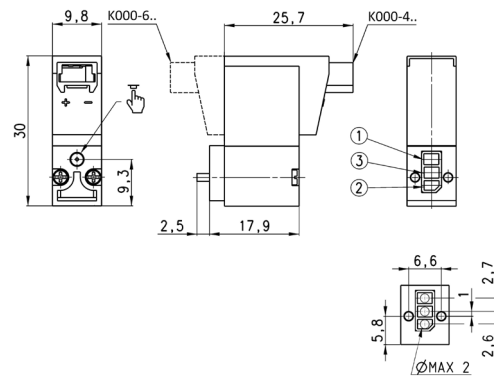


EV06

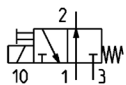
Supplied with:  
 1x interface for NO with position ports as per NC  
 2x interface seals  
 2x Ø1.6x19 screws for mounting on plastic  
 or  
 2x M1.6x19 screws for mounting on metal  
 For use without port 1 and 3 inversion interface,  
 use 16 mm long screws (see accessories)

Mod.	Function	Orifice Ø (mm)	Kv (l/min)	Min+max pressure (bar)
K000-403-K1*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-F1*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-K2*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-F2*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-K3*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-F3*	3/2 NO	0,6	0,12	0 ÷ 5

\* add  
 - VOLTAGE  
 (see CODING EXAMPLE)



#### Series K solenoid valve - 3/2-way NO - in-line connector

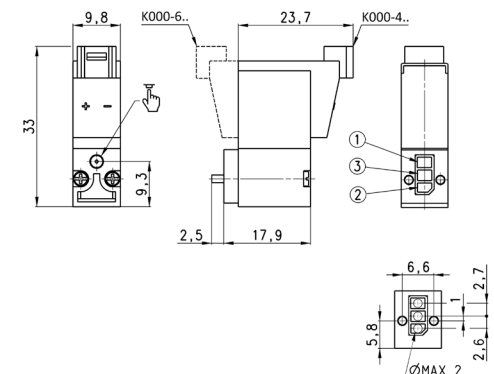


EV06

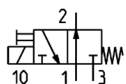
Supplied with:  
 1x interface for NO with position ports as per NC  
 2x interface seals  
 2x Ø1.6x19 screws for mounting on plastic  
 or  
 2x M1.6x19 screws for mounting on metal  
 For use without port 1 and 3 inversion interface,  
 use 16 mm long screws (see accessories)

Mod.	Function	Orifice Ø (mm)	Kv (l/min)	Min+max pressure (bar)
K000-403-KB*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-FB*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-KC*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-FC*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-KD*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-FD*	3/2 NO	0,6	0,12	0 ÷ 5

\* add  
 - VOLTAGE  
 (see CODING EXAMPLE)



#### Series K solenoid valve - 3/2-way NO - 300 mm flying leads

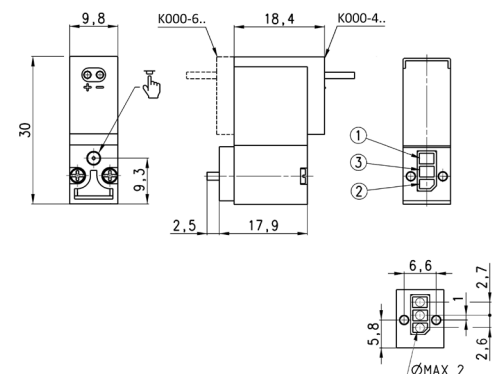


EV06

Supplied with:  
 1x interface for NO with position ports as per NC  
 2x interface seals  
 2x Ø1.6x19 screws for mounting on plastic  
 or  
 2x M1.6x19 screws for mounting on metal  
 For use without port 1 and 3 inversion interface,  
 use 16 mm long screws (see accessories)

Mod.	Function	Orifice Ø (mm)	Kv (l/min)	Min+max pressure (bar)
K000-403-KF*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-FF*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-KG*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-FG*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-KH*	3/2 NO	0,6	0,12	0 ÷ 5
K000-403-FH*	3/2 NO	0,6	0,12	0 ÷ 5

\* add  
 - VOLTAGE  
 (see CODING EXAMPLE)



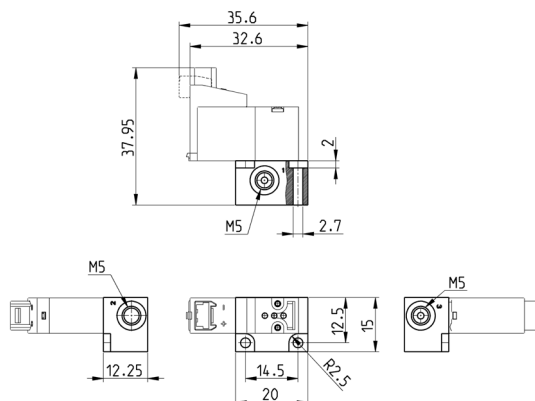
**DIRECT ACTING SOLENOID VALVES**  
**SERIES K - ACCESSORIES**

**Single sub-base for solenoid valve size 10 mm**



Single sub-base suitable for Series K 2-way or 3-way solenoid valve  
Use solenoid valves with screws for mounting on metal (see coding)

Material: anodized aluminium  
Connections: M5 threads



Mod.
K001-02

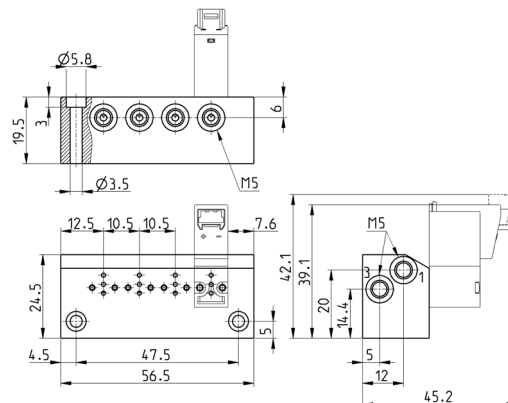
**Manifold Mod. K1\*\*-02**



\*\* Number of positions  
With side outlets and conveyed inlet and exhaust.

Use solenoid valves with screws for mounting on metal (see coding)

Material: anodized aluminium  
Connections: M5 threads

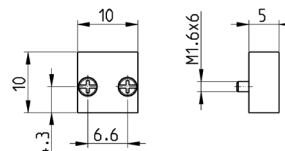


Mod.	A	B	Number of ports
K102-02	35,5	26,5	2
K103-02	46	37	3
K104-02	56,5	47,5	4
K105-02	67	58	5
K106-02	77,5	68,5	6
K107-02	88	79	7
K108-02	98,5	89,5	8
K109-02	109	100	9
K110-02	119,5	110,5	10

**Position valve cap**



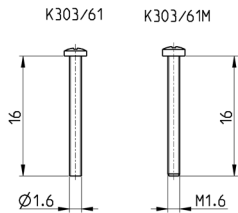
Supplied with:  
1x position valve cap  
3x O-Rings  
2x M1.6x6 screws for mounting on metal



Mod.
K000-TP

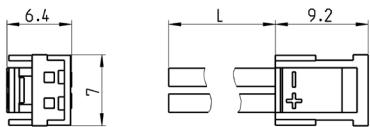
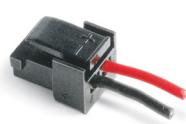
Mounting screws for Series K solenoid valves

16 mm long screws for use with Series K 3/2-way NO solenoid valves without port 1 and 3 inversion interface



Mod.	Description
K303/61	Ø1.6x16 mm screw for mounting on plastic
K303/61M	M1.6x16 mm screw for mounting on metal

Connector with flying leads Mod. 121-8...



Mod.	Description	Colour	L = cable length (mm)	cable holding
121-803	crimped cable	black	300	crimping
121-806	crimped cable	black	600	crimping
121-810	crimped cable	black	1000	crimping
121-830	crimped cable	black	3000	crimping