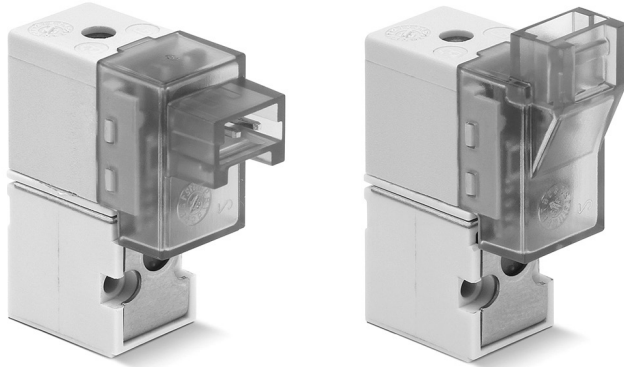


# Series KN and KN High Flow directly operated solenoid valves

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

SERIES KN AND KN HIGH FLOW SOLENOID VALVES



- » Low energy consumption
- » Compact design
- » High Flow
- » ISO 15218 Interface
- » Version for use with oxygen available

Thanks to its low energy consumption and to its compact design, the KN miniaturized solenoid valve can be used in industrial and scientific applications.

The Series KN directly operated solenoid valves are available also in the high flow version (KN High Flow).

## GENERAL DATA

### TECHNICAL FEATURES

<b>Function</b>	3/2 NC - 3/2 NO - 3/2 UNI
<b>Operation</b>	direct acting poppet type
<b>Pneumatic connections</b>	on subbase with ISO 15218 interface by means of screws
<b>Nominal diameter</b>	0.65 ... 1.1 mm
<b>Nominal flow</b>	10 ... 25 NL/min (air @ 6 bar ΔP 1 bar)
<b>Flow coefficient kv (l/min)</b>	0.15 ... 0.39
<b>Operating pressure</b>	0 ÷ 3 ... 7 bar
<b>Operating temperature</b>	0°C ÷ 50°C
<b>Media</b>	filtered compressed air, unlubricated, according to ISO 8573-1 class 3.4.3, inert gas
<b>Response time</b>	ON <10 msec - OFF <10 msec
<b>Manual override</b>	monostable button
<b>Installation</b>	in any position

### MATERIALS IN CONTACT WITH THE MEDIUM

<b>Body</b>	PBT technopolymer
<b>Seals</b>	FKM, NBR
<b>Internal parts</b>	stainless steel

### ELECTRICAL FEATURES

<b>Voltage</b>	5 ... 24 V DC - other voltages on demand
<b>Voltage tolerance</b>	1.3/0.25 ... 4/1 W (inrush/holding)
<b>Power consumption</b>	ED 100%
<b>Duty cycle</b>	connector
<b>Electrical connection</b>	IP50
<b>Protection class</b>	

Special versions available on demand

**CODING EXAMPLE**

<b>KN</b>	<b>0</b>	<b>00</b>	<b>-</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>-</b>	<b>K</b>	<b>1</b>	<b>3</b>	
-----------	----------	-----------	----------	----------	----------	----------	----------	----------	----------	----------	--

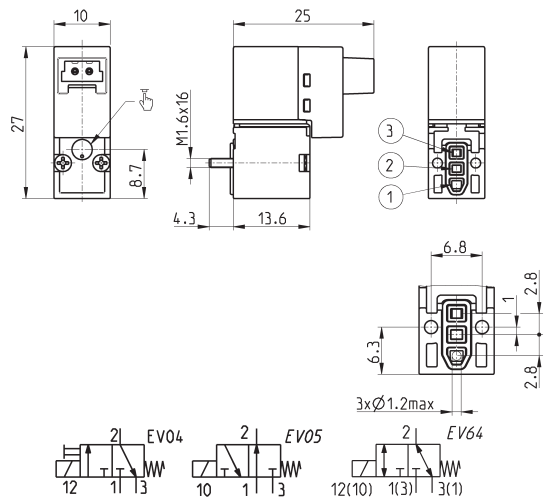
<b>KN</b>	SERIES
<b>0</b>	BODY DESIGN: 0 = single valve
<b>00</b>	NUMBER OF POSITIONS: 00 = interface
<b>3</b>	NUMBER OF WAYS - FUNCTIONS: 3 = 3/2-way NC 4 = 3/2-way NO 7 = 3/2-way UNI
<b>0</b>	PORTS: 0 = single valve
<b>3</b>	NOMINAL DIAMETER / MAX PRESSURE: 3 = Ø 0.65 mm 5 = Ø 1.1 mm - max pressure 7 bar 6 = Ø 1.1 mm - max pressure 3 bar
<b>K</b>	MATERIALS: F = PBT body, FKM poppet seal, FKM other seals K = PBT body, FKM poppet seal, NBR other seals
<b>1</b>	ELECTRICAL CONNECTION: 1 = 90° connection with protection and led B = in-line connection with protection and led
<b>3</b>	VOLTAGE - POWER CONSUMPTION: 2 = 12 V DC - 1.3/0.25 W 3 = 24 V DC - 1.3/0.25 W 5 = 5 V DC - 4/1 W 6 = 6 V DC - 4/1 W 7 = 12 V DC - 4/1 W 8 = 24 V DC - 4.1 W
	FIXING: = with screws for mounting on plastics M = with screws for mounting on metal
	OPTIONS: = standard OX2 = for use with oxygen (non volatile residual less than 33 mg/m <sup>3</sup> )

SERIES KN AND KN HIGH FLOW SOLENOID VALVES

**3/2-way solenoid valve - 90° electrical connection**



Supplied with:  
1x interface seal  
2x screws M1.6x16 UNI 10227  
(fixing for plastics, standard)  
or  
2x screws M1.6x16 UNI 7687  
(fixing for metal, M option)



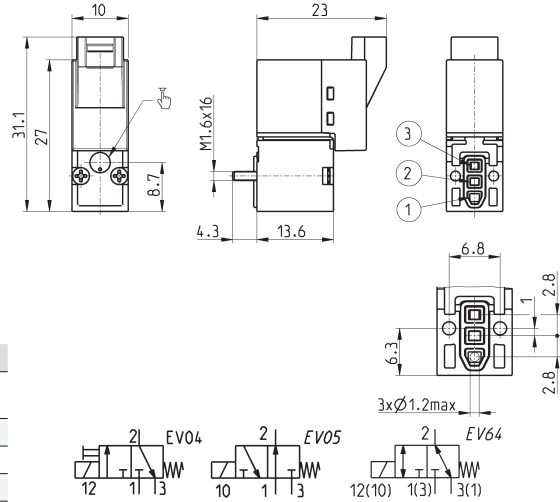
Mod.	Function	Orifice Ø (mm)	kv	(l/ Qn min)	(NI/ min)	Min-max pressure (bar)	Power consumption (W)	Symb.
KN000-303-K1*	3/2 NC	0.65	0.15	10	0 ÷ 7	1.3 / 0.25	EV04	
KN000-303-F1*	3/2 NC	0.65	0.15	10	0 ÷ 7	1.3 / 0.25	EV04	
KN000-305-F1*	3/2 NC	1.1	0.39	25	3 ÷ 7	4 / 1	EV04	
KN000-306-F1*	3/2 NC	1.1	0.39	-	0 ÷ 3	4 / 1	EV04	
KN000-403-F1*	3/2 NO	0.65	0.15	10	0 ÷ 7	1.3 / 0.25	EV05	
KN000-706-F1*	3/2 UNI	1.1	0.39	-	0 ÷ 1.5	4 / 1	EV64	

\* add VOLTAGE - POWER CONSUMPTION (see CODING EXAMPLE)

### 3/2-way solenoid valve - in-line electrical connection



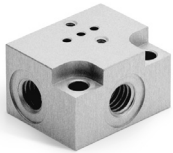
Supplied with:  
1x interface seal  
2x screws M1.6x16 UNI 10227  
(fixing for plastics, standard)  
or  
2x screws M1.6x16 UNI 7687  
(fixing for metal, M option)



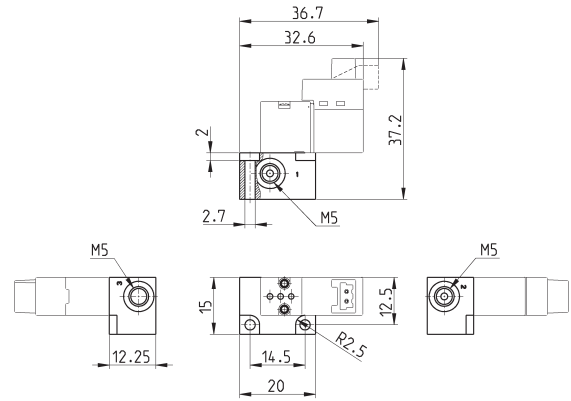
Mod.	Function	Orifice ∅ (mm)	kv (min)	(l/ Qn (min)	(Nl/ min)	Min= max pressure (bar)	Power consumption (W)	Symb.
KN000-303-KB*	3/2 NC	0.65	0.15	10		0 ÷ 7	1.3 / 0.25	EV04
KN000-303-FB*	3/2 NC	0.65	0.15	10		0 ÷ 7	1.3 / 0.25	EV04
KN000-305-FB*	3/2 NC	1.1	0.39	25		3 ÷ 7	4 / 1	EV04
KN000-306-FB*	3/2 NC	1.1	0.39	-		0 ÷ 3	4 / 1	EV04
KN000-403-FB*	3/2 NO	0.65	0.15	10		0 ÷ 7	1.3 / 0.25	EV05
KN000-706-FB*	3/2 UNI	1.1	0.39	-		0 ÷ 1.5	4 / 1	EV64

\* add VOLTAGE - POWER CONSUMPTION (see CODING EXAMPLE)

### Single sub-base

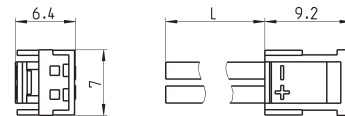


Note: use solenoid valves with mounting screws on metal interfaces (see codification).



Mod.
KN01-02

### Connector 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