

Series 8 pneumatic operated cartridge valves

2/2-way - Normally Closed (NC)
3/2-way - Normally Closed (NC)

SERIES 8 CARTRIDGE VALVES



Series 8 pneumatic operated valves are particularly suitable for applications requiring high flow combined with compact design. The valve is pneumatic operated by electro-pilots which are dimensioned according to the size. The cartridge design, which is ideal for manifold assembly, allows to reduce both dimensions and the number of pneumatic connections.

The standard function of the valve is 2/2-way NC. It can however fulfill the 3/2-way NC function if inserted in a proper seat (see the following pages).

- » New versions with PPS body
- » High flow
- » Manifold assembly
- » Oxygen use
- » Suitable also for general purpose

GENERAL DATA

TECHNICAL FEATURES

Function	2/2 NC - 3/2 NC
Operation	pneumatic operated poppet type
Pneumatic connections	cartridge seat in manifold
Orifice diameter	5 ... 9 mm
Nominal flow	420 ... 1480 Nl/min (air at 6 bar ΔP 1 bar)
Flow coefficient kv (l/min)	6.5 ... 23
Operating pressure	3 ÷ 6 bar (0 ÷ 6 bar with external pilot supply)
Piloting pressure	3 ÷ 6 bar
Operating temperature	0 ÷ 50 °C
Media	filtered air class [5:4:4] according to ISO 8573-1:2010 (max oil viscosity 32 cSt), inert gas, oxygen
Installation	in any position

MATERIALS IN CONTACT WITH THE MEDIUM

Body	PPS - brass
Internal parts	aluminium
Seals	FKM

CODING EXAMPLE

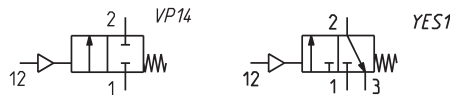
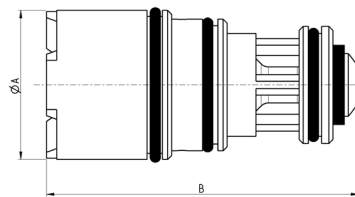
8	10	C5	1	00	-	F1	3	2	-	OX2
8	SERIES									
10	SIZE 10 = size 1 - \varnothing 10.0 mm 20 = size 2 - \varnothing 14.5 mm 30 = size 3 - \varnothing 22.0 mm									
C5	BODY DESIGN C5 = cartridge									
1	NUMBER OF WAYS - FUNCTIONS 1 = 2/2 or 3/2-way - NC NOTE: the function 2/2 or 3/2-way depends on the seat used (see the following pages)									
00	PNEUMATIC CONNECTIONS 00 = cartridge									
F1	ORIFICE DIAMETER F1 = \varnothing 5.0 mm - size 1 only G7 = \varnothing 6.6 mm - size 2 only K1 = \varnothing 9.0 mm - size 3 only									
3	SEAL MATERIAL 3 = FKM									
2	BODY MATERIAL 2 = brass B = PPS - size 2 and size 3 only									
OX2	OX2 = for use with oxygen (non volatile residual less than 33 mg/m ³) NOTE: the OX2 suffix must be added also in case of use with air/gas.									

Series 8 pneumatic cartridge valve - 2/2-way NC and 3/2-way NC

New



For 2/2-way (pneumatic symbol VP14) or 3/2-way (pneumatic symbol YES1) function, see the seat dimensioning in the next pages.

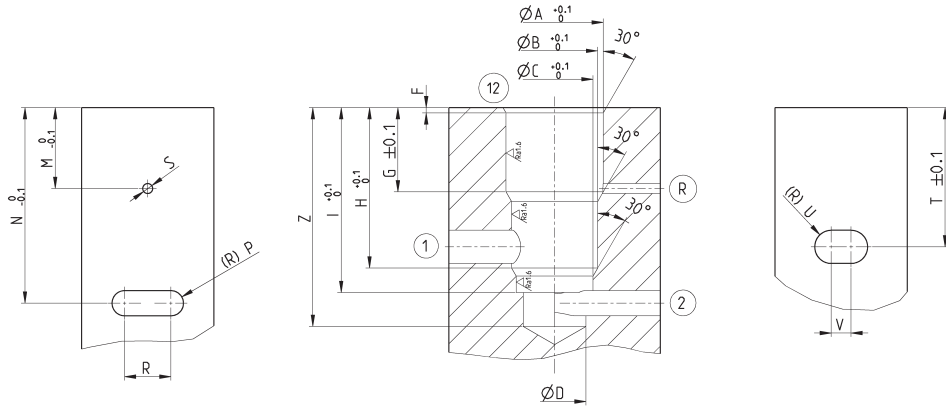


Mod.	Function	Orifice \varnothing (mm)	kv (l/min)	Min ÷ max pressure (bar)	Min ÷ max pilot pressure (bar)	Body material	A \varnothing (mm)	B (mm)
810C5100-F132-OX2	2/2 - 3/2 NC	5.0	6.5	0 ÷ 6	3 ÷ 6	brass	10	26.7
820C5100-G73B-OX2	2/2 - 3/2 NC	6.6	12.5	0 ÷ 6	3 ÷ 6	PPS	14.5	30.3
820C5100-G732-OX2	2/2 - 3/2 NC	6.6	12.5	0 ÷ 6	3 ÷ 6	brass	14.5	30.3
830C5100-K13B-OX2	2/2 - 3/2 NC	9.0	23	0 ÷ 6	3 ÷ 6	PPS	22	34.8
830C5100-K132-OX2*	2/2 - 3/2 NC	9.0	23	0 ÷ 6	3 ÷ 6	brass	22	34.8

*On request pressure 0 ÷ 8 bar

Series 8 pneumatic cartridge valve - 2/2-way NC - valve seat dimensions

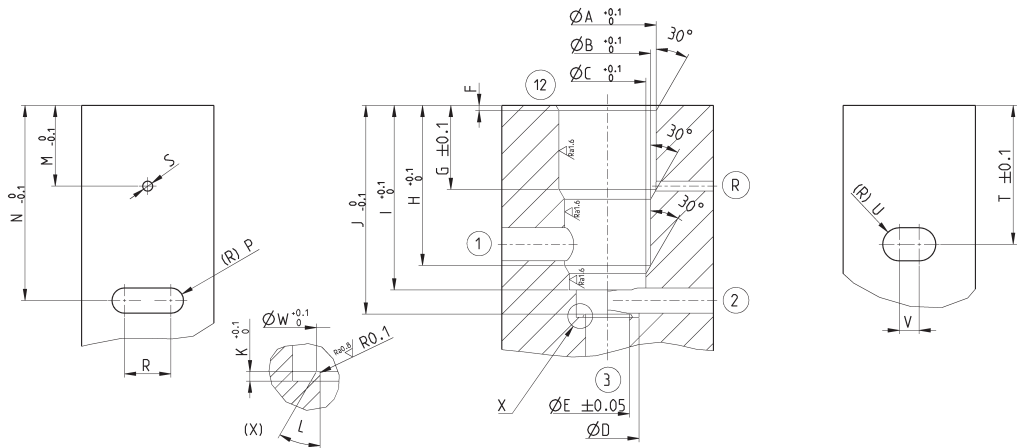
1 = inlet
2 = outlet
12 = piloting
R = poppet chamber exhaust



SERIES 8																	
Size	A	B	C	D	F	G	H	I	M	N	P	R	S	T	U	V	Z
1	10.4	9.7	9	8.2	0.8	14.5	20.7	25	13.2	26.2	1.5	5	1.5	19.1	1.5	5	30
2	14.65	12.95	11.55	9.5	0.8	12.8	24.2	27.9	12.2	29.3	1.9	7	1.5	20.5	2.5	4	33
3	22.1	20.6	19.6	16.2	0.5	15	28.7	33.4	12.5	37.1	4	4.4	2.5	24.8	3.75	5	41

Series 8 pneumatic cartridge valve - 3/2-way NC - valve seat dimensions

1 = inlet
2 = outlet
3 = exhaust
12 = piloting
R = poppet chamber exhaust



SERIES 8																					
Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	R	S	T	U	V	W
1	10.4	9.7	9	8.2	5	0.8	14.5	20.7	25	28	0.3	45	13.2	26.2	1.5	5	1.5	19.1	1.5	5	5.4
2	14.65	12.95	11.55	9.5	6.6	0.8	12.8	24.2	27.9	31.55	0.5	45	12.2	29.3	1.9	7	1.5	20.5	2.5	4	7
3	22.1	20.6	19.6	16.2	9	0.5	15	28.7	33.4	38.05	1	60	12.5	37.1	4	4.4	2.5	24.8	3.75	5	10