

# VP60 5⁄3 Proportional flow control valve (nominal dia. 8 mm) Directly operated spool valve with µP-electronics

Microprocessor control electronics High dynamic regulation On-board diagnostics CE conformance

Symbol





### **Technical data**

#### Medium

VALVES

Filtered unlubricated air. Note: Using lubricated air may affect dynamic response and lifespan of the valve.

Filtration Recommended 5µ Operation Moving coil Connection ¼ NPT and G¼" Flow rate

40 scfm (1200 l/min) for p1: 90 psi and p2: 75 psi **Mounting position** Any, preferred solenoid on top **Flow direction** 1→4+2→3; 1→2+4→5 Operating temperature: 32°F to 140°F (0°C to 60°C) No condensation permissible Materials

p1: 145 psi

Electronic housing: plastic (PAA) valve housing: aluminum alloy seals: NBR solenoid surface: steel **Degree of protection** IP65 **Operating pressure [p1]** 0 to 175 psi **Leakage** For center position 35 scfh with **Reaction time** 

At p1 = 90 psi and 100% stroke free exhausting: Dead time: 3 ms Rise time (10% - 90%): 5ms **Electromagnetic compatibility** The valve conforms to the EC requirements EN50081-2 (emission) and EN50082-2 (disturbance noise). For this specification shielded cables have to be used.

### **Electrical information**

Power supply requirements	
Supply voltage U <sub>B</sub> [VDC]	18 to 32
Current consumption with max. stroke 50 Hz (A)	2.0 at 24 VDC
Current consumpton in steady state [A]	0.1 at 24 VDC

### Input signal

Analog (single ended types)		
Voltage signal	UE [V]	0 to 10
Input resistance	$R_{I}[k\Omega]$	110
Current signal	I <sub>E</sub> [mA]	(0) 4 to 20
Load resistance	[Ω]	500
Analog (differential types)		
Voltage signal	U <sub>E</sub> [V]	0 to 10, -5 to +5
Input resistance	$R_{I}[k\Omega]$	110
max. Input voltage range	[V]	-10 to 40

# Output signal

Spool position feedback (voltage)		
Voltage signal slide position	U <sub>A</sub> [V]	010 V = minmax. stroke
Max. output current	I <sub>A</sub> [mA]	1
Spool position feedback (current)		
Current signal slide position	I <sub>A</sub> [mA]	0 to 20 mA = minmax. stroke
Load resistance	$R_{L}[\Omega]$	recommended 500





## **Order information**

VP Proportional valve	60 Family code	xx Flow range	x Unit	x Port size	x Input signal*	x Feedback**	x Power supply	x Electrical connector	xxxx Options
VP	60	10 = 1000	L = liter/	J = G ¼"	1 = 0-10V	6 = 0-10V	1 = required	M = M12 x 1	0000 = no options
			min	$K = G \frac{1}{4}$	4 = 4-20- mA	and		8-pin	B200
				NPT	6 = -5V  to  +5V	4-20mA			
					7 = 0-10V				

\*Input signal codes 6 and 7 are differential input versions.

\*\* Both 0-10V and 4-20 mA feedback signals are available simultaneously.

#### Accessories

Description	Specification	Туре
cordset	M12 x 1, 8-pin, 5m, straight	025081100000000
cordset	M12 x 1, 8-pin, 5m, 90° angle	025081300000000



Set point Flow Rate Curve VP60 P1=87psi (6 bars), P2=72.5 psi (5 bars)



Dimensions in inches (mm)

