

PROPORTIONAL VALVES

SENTRONIC - G1/8 to G1 tapped body

3 ports
Series
601

JOUCOMATIC

GENERAL

Fluid	Air or neutral gas, filtered at 50 µm, without condensate, lubricated or not
Maximum allowable pressure (MAP)	2 to 25 bar
Control range	0-0,1 bar to 0-20 bar
Fluid temperature	0°C to +60°C (+50°C in G1/8)
Ambient temperature	0°C to +40°C
Flow (Qv at 6 bar)	210 to 5600 l/min (ANR)
Setpoint	0 - 10 V (0 - 20 mA or 4 - 20 mA as option)
- analog	8 bits + memory function
- digital (option)	8 bits + pressure reset
Hysteresis	< 1% of span
Linearity	< 0,5% of span
Repeatability	< 0,5% of span
Minimum setpoint	50 ± 20 mV (0,1 mA) with shutoff function

OPERATING DIAGRAM: see page 2

CONSTRUCTION

Body	brass (G1/8) - anodised aluminium (G1/4 to G1)
Internal parts	stainless steel and brass
Seals	FPM (fluoroelastomer) (G1/8) NBR (nitrile) (G1/4 to G1)



C

ELECTRICAL CHARACTERISTICS

nominal diameter DN (mm)	stabilised voltage (1)	max. power (W)	max. current (2) (mA)	insulation class	degree of protection	electrical connection
3	24 V = +/-10%	15	600	F	IP 65	7-pin plug-in connector DIN 43651 (supplied) (16 pins for digital)
6		29	1200			
12		34	1400			
20		44	1800			

(1) Max. ripple: 10 %

(2) Max. current consumption in highest control range version

SPECIFICATIONS

Ø connection	Ø orifice (mm)	flow		control range (bar)	maximum allowable pressure (MAP) (bar)	catalogue number
		Kv coefficient	at 6 bar (l/min) (ANR)			
G 1/8	3	3	210	0 - 0,1	2	60100041
				0 - 0,5	2	60100042
				0 - 1	2	60100043
				0 - 3	8	60100045
				0 - 6	9	60100047
				0 - 10	12	60100048
				0 - 16	18	60100185
G 1/4	6	10	700	0 - 0,1	2	60100104
				0 - 0,5	2	60100101
				0 - 1	2	60100105
				0 - 3	8	60100003
				0 - 6	9	60100037
				0 - 10	12	60100002
				0 - 16	18	60100001
G 1/2	12	20	1400	0 - 0,1	2	60100116
				0 - 0,5	2	60100102
				0 - 1	2	60100117
				0 - 3	8	60100006
				0 - 6	9	60100005
				0 - 12	14	60100004
				G 1	20	80
0 - 0,5	2	60100103				
0 - 1	2	60100130				
0 - 3	8	60100009				
0 - 6	9	60100008				
0 - 12	14	60100007				

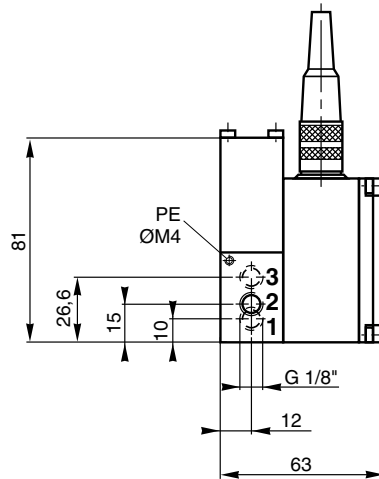
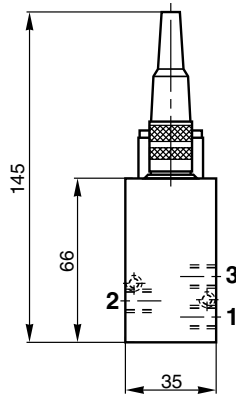
OPTIONS

Analog setpoint 0 - 20 mA (sensitivity < 0,1 mA - impedance 500 Ω)	_____	cat. no.: 010713	Metallic sensor _____	cat. no.: 010607
Analog setpoint 4 - 20 mA (sensitivity < 0,1 mA - impedance 500 Ω)	_____	cat. no.: 910507	FPM seals (except G1/8) _____	cat. no.: 460594
Optional ramp _____	_____	cat. no.: 010610	Oxygen application _____	cat. no.: 970518
Digital setpoint (8 bits + memory function) _____	_____	cat. no.: 010537		
Digital setpoint (8 bits + pressure reset) _____	_____	cat. no.: 010606		
Sensor output 0 - 20 mA (0 - 10 V standard version) _____	_____	cat. no.: 010538		
Sensor output 4 - 20 mA (0 - 10 V standard version) _____	_____	cat. no.: 010616		
Pressure switch / SENTRONIC: (PNP) reference 24 V = if setting is reached _____	_____	cat. no.: 010579		
Pressure switch / SENTRONIC: (NPN) ground reference if setting is reached _____	_____	cat. no.: 010539		
Pressure switch / SENTRONIC: (PNP) reference 24 V = if setting is not reached _____	_____	cat. no.: 010612		
Pressure switch / SENTRONIC: (NPN) ground reference if setting is not reached _____	_____	cat. no.: 010613		
SENTRONIC pneumatic servovalve with external pressure sensor (consult us)				

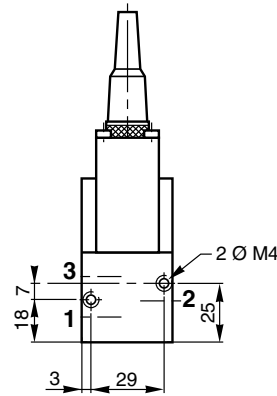
00245GB-2005/R01
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DIMENSIONS (mm), WEIGHT (kg)

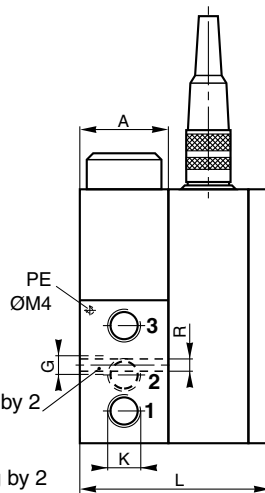
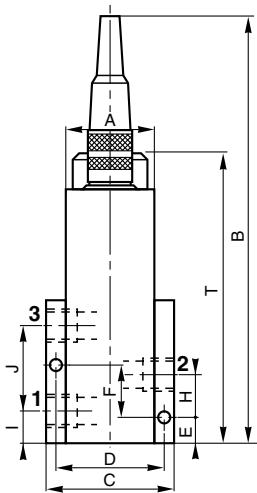
G 1/8
weight: 0,65 kg



Bottom view

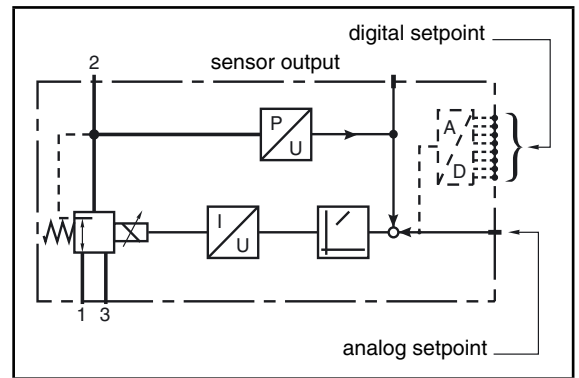


G 1/4 to G 1



- Rear mounting by 2 tapped holes Ø G depth S
- Front mounting by 2 holes Ø R

OPERATING DIAGRAM

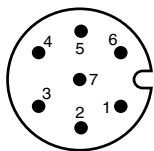


Ø nominal	A	B	C	D	E	F	G	H	I	J	K	L	R	S	T	weight
6	36	175	52	43	10	20	M6	16	11	34,3	G 1/4	74	4	10	105	0,950
12	45	205	70	57,5	12	28	M6	22,5	15	48,5	G 1/2	93	4	10	136	1,900
20	60	240	96	79	15	33	M8	30,5	20	60	G 1	117	6	15	178	3,900

CONNECTOR WIRING

Analog setpoint version

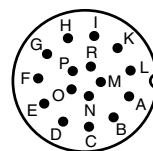
view direction " V " (solder side of female connector)



- 1 - Power + 24V ±10%
- 2 - GND (Power)
- 3 - Input setpoint
- 4 - GND (Input)
- 5 - Output voltage stabilised 12 V, max. 30 mA
- 6 - Actual pressure (sensor output) (signal 0-10 V for the max. control range - max. 10 mA)
- 7 - Not connected (standard)
As option: pressure switch output connection NPN or PNP (max. 500 mA)

Digital setpoint version

view direction " V " (solder side of female connector)



- A - Power +24V ±10%
- B - GND (Power)
- C - Bit 1 (LSB)
- D - Bit 2
- E - Bit 3
- F - Bit 4
- G - Bit 5
- H - Bit 6
- I - Bit 7
- K - Bit 8 (MSB)
- L - Memory function (option 010537)
Pressure reset (option 010606)
- M - Not connected (standard)
As option: pressure switch output connection NPN or PNP (max. 500 mA)
- N - Not connected
- O - Not connected
- P - Pressure signal (pressure sensor output 0 - 10V for the pressure range in question)
- R - Not connected