

AVENTICS™ PROPORTIONAL VALVES SENTRONIC^{LP} WITH DIGITAL PRESSURE CONTROL

- Sentronic^{LP} stands for:
 - Low power consumption (3,8 W)
 - Digital communication and control
 - Display (integrated) with function buttons (option)
 - Pilot operated proportional valve
- Other functions are valve diagnostics, parameter setting and maintenance.
- The valve's outlet pressure can also be adjusted over the integrated display and the function buttons.
- RoHS, REACH compliant.



Fluids*	Temperature Range	Seal Materials*
Air or neutral gas ¹	0°C to +60°C (32 °F to 140 °F)	NBR (nitrile)

* Ensure that the compatibility of the materials in contact with the fluids is verified.

¹ Filtered at 50 µm, without condensate, lubricated or unlubricated, class 5 according to ISO 8573-1:2010 [7:4:4]1

General Valve Information	
Body	Aluminium
Internal parts	POM (polyacetal)
Max. allowable pressure (MAP)	At least 1 bar above the maximum outlet pressure
Pressure range	0-3 bar , 0-6 bar, 0-10 bar
Ambient temperature	0°C to +50°C (32°F to 122°F)
Flow (Q _v at 6 bar)	470 NI/min - 5200 NI/min
Setpoint	0 - 10 V (impedance 100 kΩ) 0 - 20 mA / 4 - 20 mA (impedance 250 Ω)
Hysteresis	1% of span
Linearity	1% of span
Repeatability	1% of span
Minimum setpoint	100 mV (0,2 mA/4,2mA) with shutoff function
Minimum outlet pressure	1% of span
Failsafe behaviour	Pressure hold on loss of power, without control

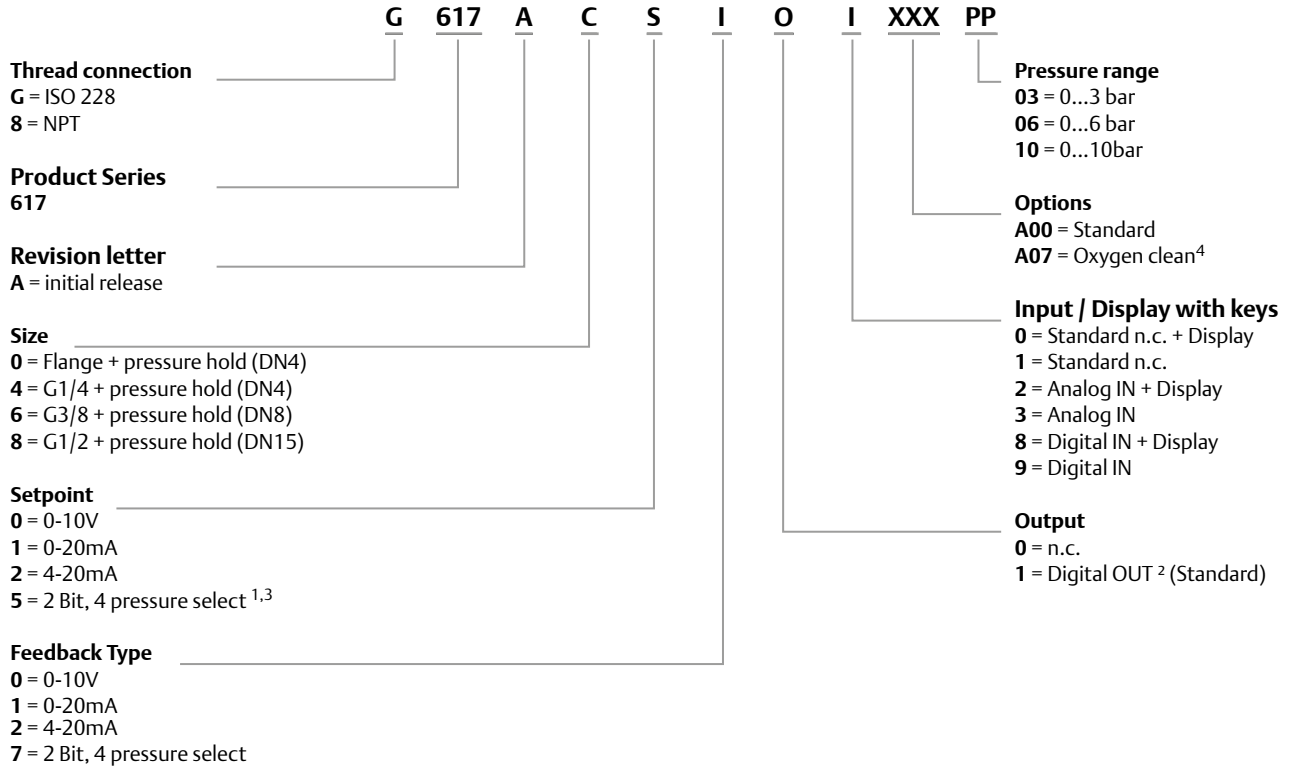
Electrical Characteristics						
Nominal diameter DN	Stabilised voltage *	Max. power (W)	Max. current (mA)	Insulation class	Degree of protection	Electrical connection
4, 8, 15	24VDC	3,8 W (< 1 W compensate)	160	H	IP 65	5-pin M12 connector (to be ordered separately)

* Max. ripple: 10 %

Specifications			
Pipe size	Orifice size (mm)	Flow	
		Coefficient Kv (Nm ³ /h)	At 6 bar (NI/min)
G 1/4	4	0,43	470
G 3/8	8	1,2	1300
G 1/2	15	4,8	5200

Test conditions according to ISO 8778: temperature: 20 °C, relative inlet pressure: 6 bar, relative outlet pressure: 5 bar

How to Order



¹ only Digital IN, no Digital OUT

³ only possible with feedback type 7 = 2 Bit, 4 pressure select

² no Digital IN possible

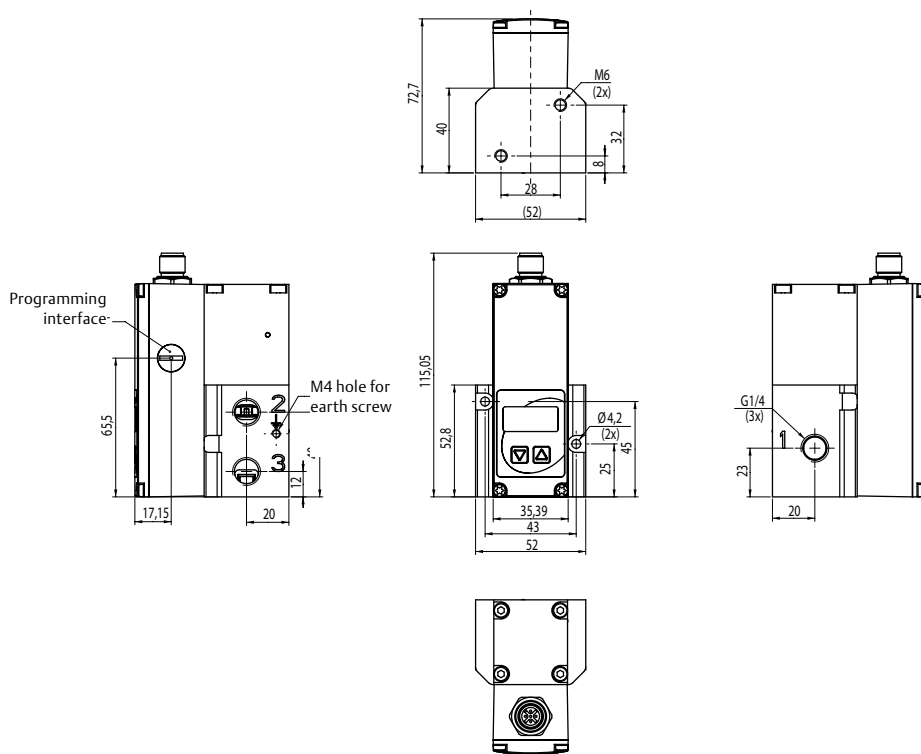
⁴ only possible with size G1/4 (DN4)

Dimensions: mm (inches)

Inline version

DN 4

Weight: 0,49 kg



AVENTICS™ PROPORTIONAL VALVES SENTRONIC LP

WITH DIGITAL PRESSURE CONTROL

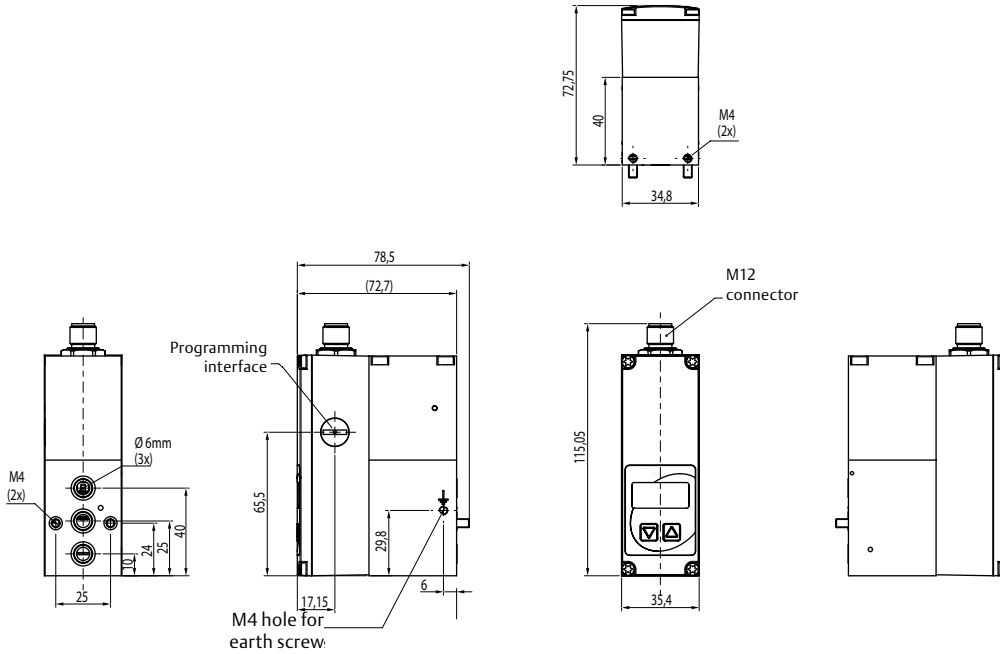
**3 PORTS
SERIES
617**

Dimensions: mm (inches)

Subbase version

DN 4

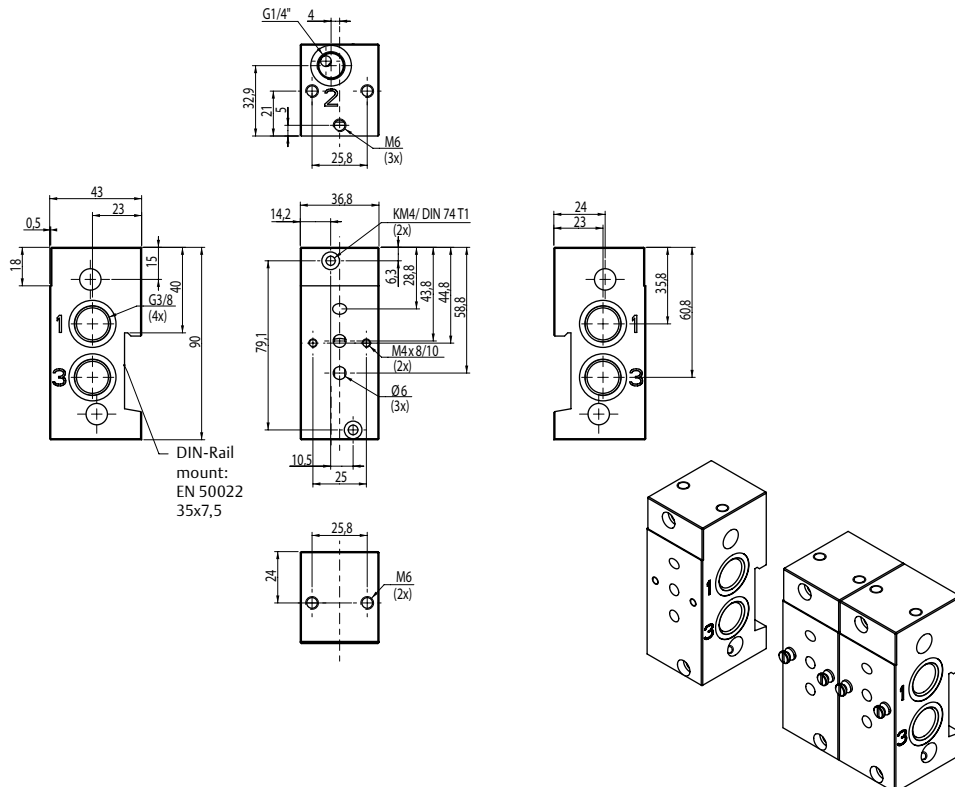
Weight: 0,49 kg



Joinable subbase

DN 4

Weight: 0,3 kg

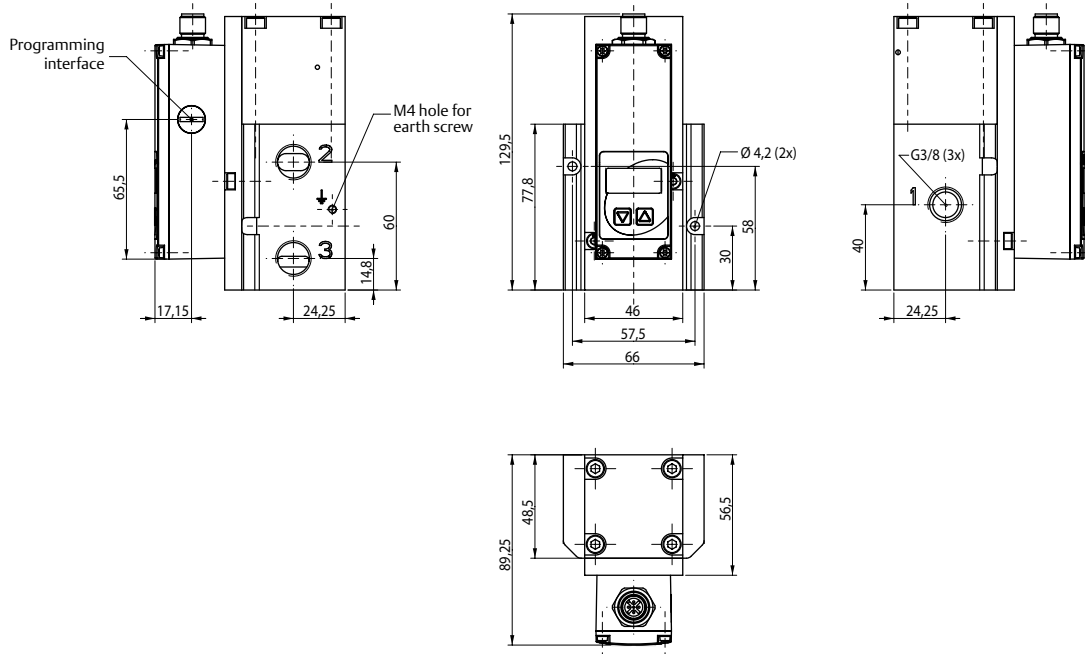


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Dimensions: mm (inches)

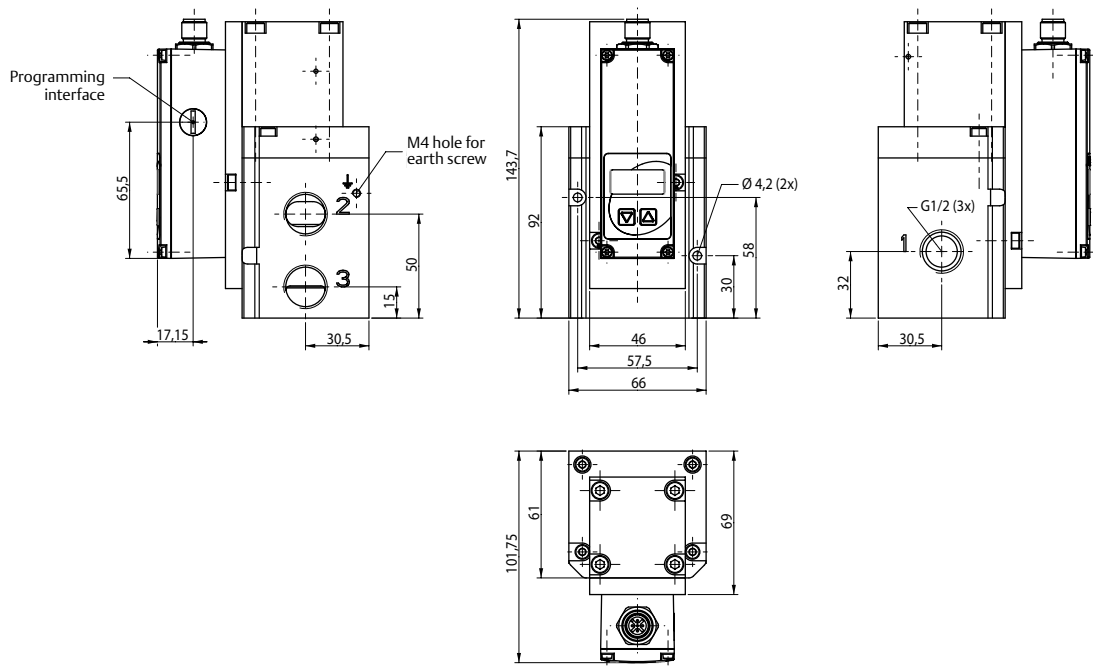
DN 8

Weight: 0.93 kg

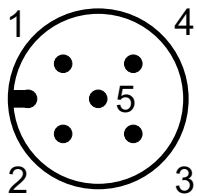


DN 15

Weight: 1.33 kg



Connector pinning / cable wiring



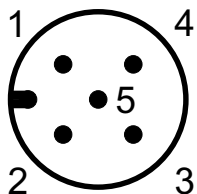
View from soldering side

Pin	Description	5-wire cable (2m)	6-wire cable (5 m, 10 m)
1	24V voltage supply	brown	brown
2	Analog setpoint input	white	white
3	Supply ground	blue	green
	Analog ground *	-	yellow
4	Analog output (Feedback) ¹⁾	black	pink
5	Digital output (Pressure switch)	grey	grey
Body	EMC shield	shield	shield

* A 6-wire cable with separate analog ground is used for cable lengths over 2 m to set off the voltage drop for the setpoint.

¹⁾ Analog input when using cascade control

Connector pinning / 2BIT - setpoint



Pin	Description
1	24 V voltage supply
2	Input signal 1 (LSB)
3	Supply ground
4	Input signal 2 (MSB)
5	unused

ACCESSORIES

Description	Catalog number
Straight M12 female connector, 5 pins, with screw terminals	88100256
Right-angle M12 female connector, 5 pins, with screw terminals	88100725
Supply cable 2 m; 5x0,25 mm ² , straight connector	88100726
Supply cable 2 m; 5x0,25 mm ² , right-angle connector	88100727
Supply cable 5 m, 6 x 0,56 mm ² , straight connector	88100728
Supply cable 5 m, 6 x 0,56 mm ² , right-angle connector	88100729
Supply cable 10 m, 6 x 0,56 mm ² , straight connector	88100730
Supply cable 10 m, 6 x 0,56 mm ² , right-angle connector	88100731
Supply cable (2Bit - Setpoint) 3 m, straight connector	TC0403MMETA04000
Supply cable (2Bit - Setpoint) 5 m, straight connector	TC0405MMETA04000
Supply cable (2Bit - Setpoint) 3 m, right-angle connector	TD0403MMETA04000
Supply cable (2Bit - Setpoint) 5 m, right-angle connector	TD0405MMETA04000
RS 232 cable converter; 2 m cable with 9-pin Sub-D (plug connector)	88100732
USB interface, 1m cable	N50930300100000
Joinable subbases for 617 DN4 with pressure supply G 3/8"	N50781800000000