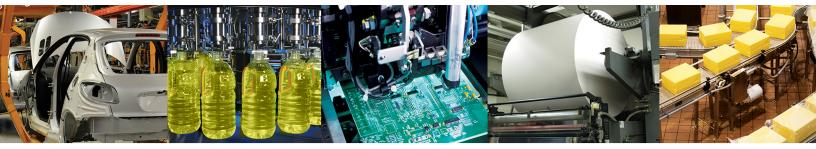
Sentronic^{LP} | 617 Series

Proportional Technology







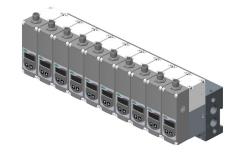
AVENTICS[®]

Sentronic^{LP}

The Sentronic^{LP} is a highly efficient and cost-effective option for your pressure regulation requirements.

Offering a small footprint, an easy to use and modular design, and advanced software capabilities, the Sentronic^{*LP*} and the full Sentronic range offers unrivaled value and product versatility to optimize your process, whatever the application requirements.

- Low power consumption (< 4 Watt) due to pilot controlled system
- A versatile, compact and lightweight design
- Intelligent digital communication and simple operation
- Pressure remains stable under flow conditions
- Holds pressure on loss of power
- Excellent value option



The Manifold Version

- Space saving design
- Only one pressure supply is needed, allowing for economic, simple and quick installation
- Offers the highest capabilities on the market can hold up to 10 valves





Series 617

Sentronic^{LP} Electronic Pressure Regulator

1/4 to 1/2 tapped body or subbase mounted body

Sentronic¹ is a low power, pilot operated electronic proportional valve. Like the entire Sentronic product line, performance can be modified as needed for specific applications using the free ASCO DaS setup software (USB interface cable required).

Fluids	Ambient Temperature	Body	Internal Parts	Seals
Air or neutral gas, filtered at 50 μm condensate-free, lubricated or unlubricated, class 5 according to ISO 8573-1:2010 [7:4:4]	0 °C to 50 °C (32 °F to 122 °F)	Aluminum	POM (polyacetal)	NBR (nitrile)



General Valve Information		
Fluid Temperature	0 °C to 60 °C (32 °F to 140 °F)	
Minimum Required Pressure	At least 15 psi above the maximum outlet pressure	
Pressure Range	0 – 50 psi, 0 – 100 psi, 0 – 150 psi	
Setpoint	0 – 10 V (Impedance 100 k), 0 – 20 mA/4 – 20 mA (Impedance 250)	
Hysteresis	1% of span	
Linearity	1% of span	
Repeatability	1% of span	
Minimum Setpoint	100 mV (0.2 mA/4.2mA) with shut-off function	
Minimum Outlet Pressure	1% of span	
Failsafe Behavior	Pressure hold on loss of power, without control	

Electrical Characteristics

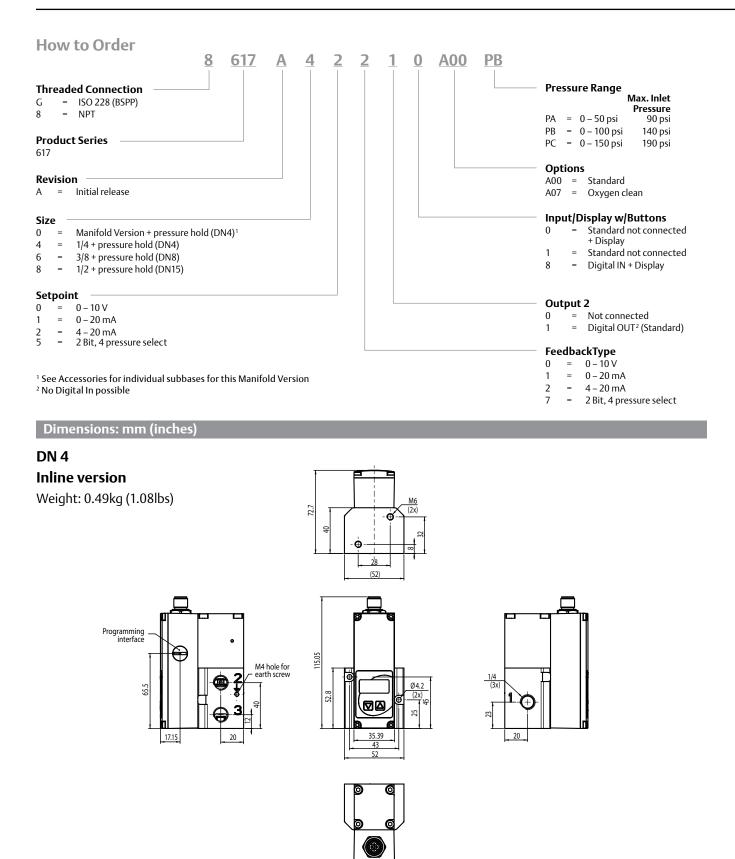
Nominal Diameter DN (mm)	Voltage *	Max. Power (W)	Max. Current (mA)	Insulation Class	Degree of Protection	Electrical Connection
4,8,15	24 VDC = ± 10%	3.8 W (< 1 W at pressure)	160	Н	IP65	5-pin M12 connector (not supplied)

* Max. ripple: 10%

Specifications				
Ø Ports Ø		Flow		
NPT or BSPP	Orifice DN (mm)	C _v Flow Factor (K _v Nm³/h)	at 6 Bar (l/min - ANR)	
1/4	4	0.50 (0.43)	470	
3/8	8	1.39 (1.20)	1300	
1/2	15	5.57 (4.80)	5200	



AVENTICSTM Pressure Control Sentronic^{LP}



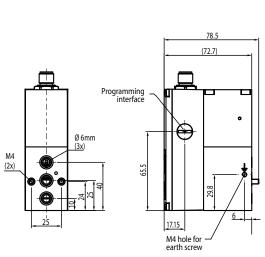


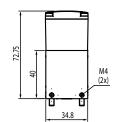
Dimensions: mm

DN 4

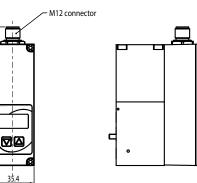
Subbase version

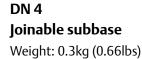
Weight: 0.49kg (1.08lbs)

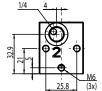


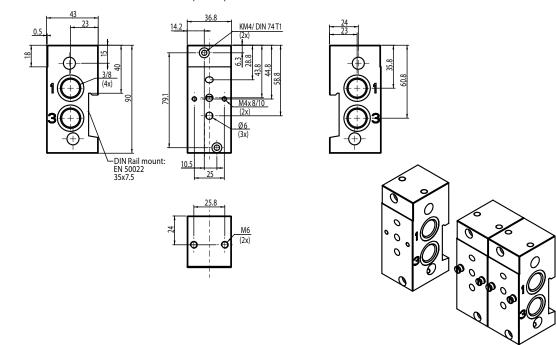


115.05







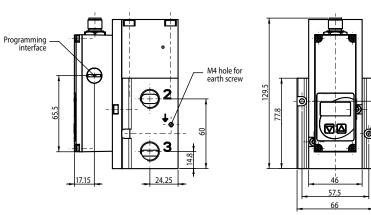


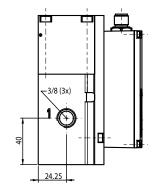


Dimensions: mm

DN 8

Weight: 0.93kg (2.05lbs)



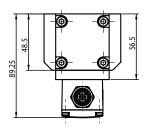


1/2 (3x)

30.5

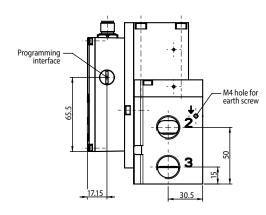
32

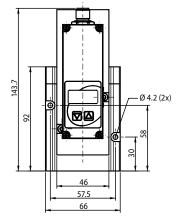
-Ø4.2 (2x)

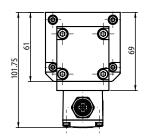




Weight: 1.33kg (2.93lbs)









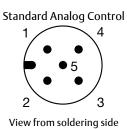
Model Number

TC05F20000000000

TD05F20000000000

Series 617

Connector Pin Out / Cable Wiring



Pin	Description	6-wire cable
1	24 VDC voltage supply	brown
2	Analog Setpoint Input	white
3	Supply common	blue
	Analog common *	yellow
4	Analog output (feedback)	black
5	Digital Output (pressure switch)	gray
Body	EMC screen	shield

* A 6-wire cable with separate common for the command signal is used for cable lengths over 2m to minimize the voltage drop for the command signal

2 Bit, 4 Pressure Select

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Pin	Description	
1	24 VDC voltage supply	
2	Input signal 1 (LSB)	
3	Supply common	
4	Input signal 2 (MSB)	
5	Unused	

PG 9 Cable Gland

PG 9 Cable Gland

5 Pin 12mm FEMALE Straight Field Attachable Connectors

5 Pin 12mm FEMALE 90 DEGREE Field Attachable Connectors

Accessories

To.	
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Micro Female 5 Pole Straight 6 Wire 24 AWG, Sh	ielded
3 Meter	TC0503MMS000671Y
5 Meter	TC0505MMS000671Y
Micro Female 5 Pole 90 Degree 6 Wire 24 AWG E	uro Color Code, Shielded
Micro Female 5 Pole 90 Degree 6 Wire 24 AWG E 3 Meter	uro Color Code, Shielded TD0503MMS000671Y



Micro F/M 4 Pole Straight 22 AWG Euro Color Code (for connecting to G3 analog I/O modules or digital I/O for 2Bit Setpoint units)			
Unshielded	Shielded		
3 Meter - TC0403MIETA04000	3 Meter - TC0403MMETA04000		
5 Meter - TC0405MIETA04000 5 Meter - TC0405MMETA04000			



Micro F 90°/M Straight 22 AWG Euro Color Code (for connecting to G3 analog I/O modules or digital I/O for 2Bit Setpoint units)			
Unshielded	Shielded		
2 Meter - TD0403MIETA04000	3 Meter - TD0403MMETA04000		
5 Meter - TD0405MIETA04000 5 Meter - TD0405MMETA04000			

Manifold (individual subbases that join together)		
Manifold for 617 DN4 with pressure supply/exhaust 3/8 NPT & output 1/4 NPT ¹	N50781800200000	
Manifold for 617 DN4 with pressure supply/exhaust G3/8 & output G1/4 (BSPP) ¹	N5078180000000	

PC Software & Cable Connectors	
DaS Light: Data Acquisition Software for Sentronic ^D - basic parameters - free download at asco.com	99100110
USB interface for software, 2m cable	N50930300100000
RS 232 cable converter; 2m cable with 9-pin Sub-D (plug connector)	88100732

¹ Manifold ships with required hardware and gaskets for connecting manifolds together.

