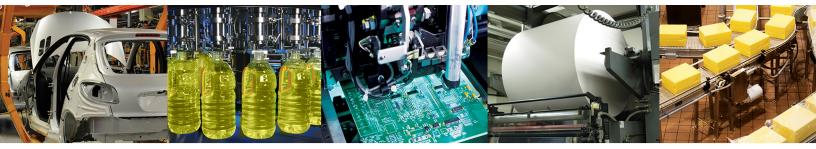
# **Sentronic**<sup>LP</sup> IO-Link CLASS A | 617 Series

Proportional Technology







# Sentronic<sup>LP</sup> Electronic Pressure Regulator

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

Sentronic<sup>LP</sup> is a low power, pilot operated electronic proportional valve.

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]	e-free, lubricated or 0°C to 50°C class 5 according to ISO (32 °F to 122 °F)		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	PSI Pressure Ranges:   PA & PB (50 & 100 psi ranges): in digital steps of 0.01 psi   PC (150 psi range): in digital steps of 0.1 psi   Bar Pressure Ranges:   All: in digital steps of 0.001 bar		
Hysteresis	1.5% of span		
Linearity 1.5% of span			
Repeatability	1.5% of span		
Minimum Setpoint	0.5% of span with shut-off function		
Minimum Outlet Pressure	1% of span		
Failsafe Behavior	Pressure hold on loss of power, without control		

IO-LINK		
Protocol Version	Specification V1.1	
Baudrate	COM3 (230.4 kBaud)	
Minimum cycle time	0.5 ms	
Process data	2 Byte IN, 2 Byte OUT	
Port type	Class A	

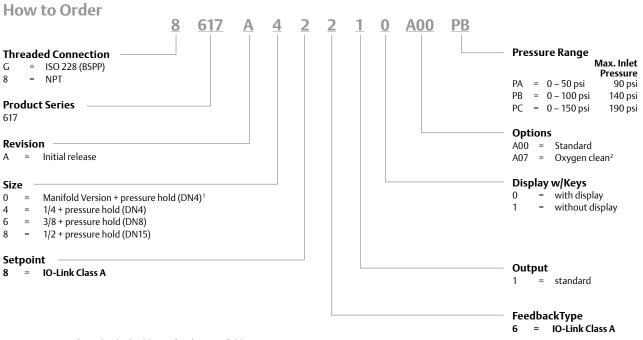
Electrical Characteristics						
Nominal Diameter DN (mm)	Voltage *	Max. Power (W)	Max. Current (mA)	Insulation Class	Degree of Protection	Electrical Connection
4,8,15	24 VDC = ± 10%	3.8 W (< 1 W at pressure)	160	Н	IP65	5-pin M12 connector (not supplied)

\* Max. ripple: 10%

Specifications				
Ø Ports Ø		Flow		
NPT or BSPP	Orifice DN (mm)	C <sub>v</sub> Flow Factor (K <sub>v</sub> 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	



#### Series 617



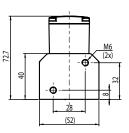
 $^1$  See Accessories for individual subbases for this Manifold Version  $^2$  Only possible with size 1/4 (DN4)

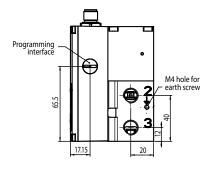
Dimensions: mm (inches)

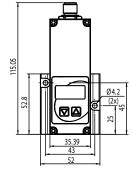
#### **DN 4**

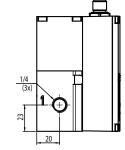
#### Inline version

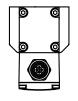
Weight: 0.49kg (1.08lbs)













# AVENTICS<sup>TM</sup> Pressure Control SENTRONIC<sup>LP</sup> IO-Link Version

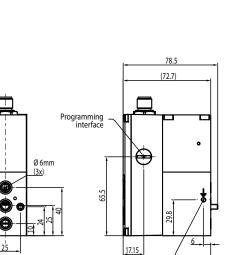
# Series 617

### Dimensions: mm

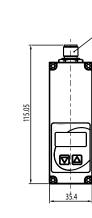
#### DN 4

#### Subbase version

Weight: 0.49kg (1.08lbs)



M4 hole for earth screw



72.75

≤

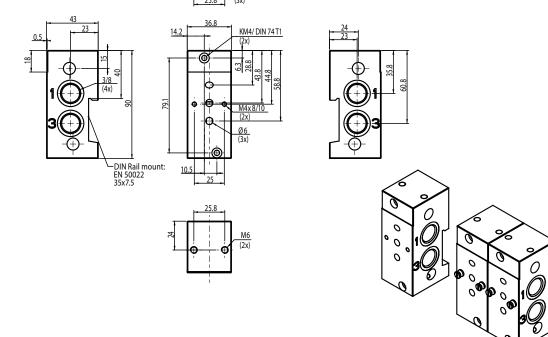
34.8

M4 (2x)



DN 4 Joinable subbase Weight: 0.3kg (0.66lbs)

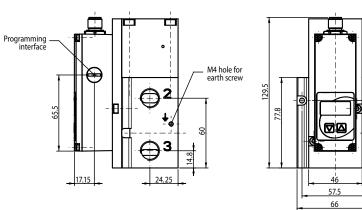
M4 (2x)

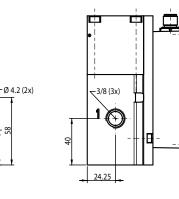


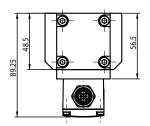
#### Dimensions: mm

# **DN 8**

Weight: 0.93kg (2.05lbs)

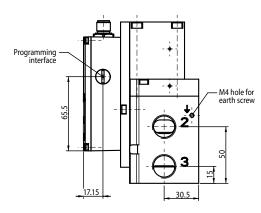


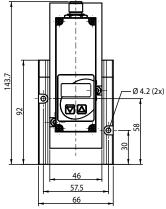


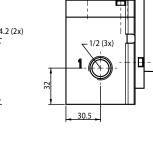


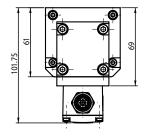


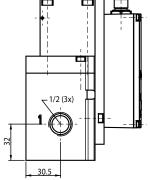
Weight: 1.33kg (2.93lbs)





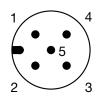








# Connector Pin Out / Cable Wiring



Pin	Description	
1	24 VDC voltage supply	
2	not connected	
3	Supply common	
4	C/Q	
5	not connected	
Body	EMC screen	

View from soldering side

### M12 Class A & B Compatible Cables\* and Accessories



M12 Straight 5 Pin Female Single Ended Cable - Unshielded			
TC0505MIE000071P – 5 Meter			
TC0510MIE000071P – 10 Meter			



M12 Straight 5 Pin Female to Male Double Ended Cable - Unshielded		
TC0505MIETA0571P – 5 Meter		
TC0510MIETA0571P – 10 Meter		



M12 90° 5 Pin Female Single Ended Cable - Unshielded	
TD0505MIE000071P – 5 Meter	
TD0510MIE000071P – 10 Meter	Ī



M12 90° 5 Pin Female to Male Double Ended Cable - Unshielded		
TD0505MIETA0571P – 5 Meter		
TD0510MIETA0571P – 10 Meter		

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

 $^{\scriptscriptstyle 1}$  Manifold ships with required hardware and gaskets for connecting manifolds together.

\*Reference our G3 Fieldbus catalog for M12 4 pin cables if the selected IO-Link® Master does not accept 5 pin cables. Maximum IO-Link cable length is 20m.



Series 617