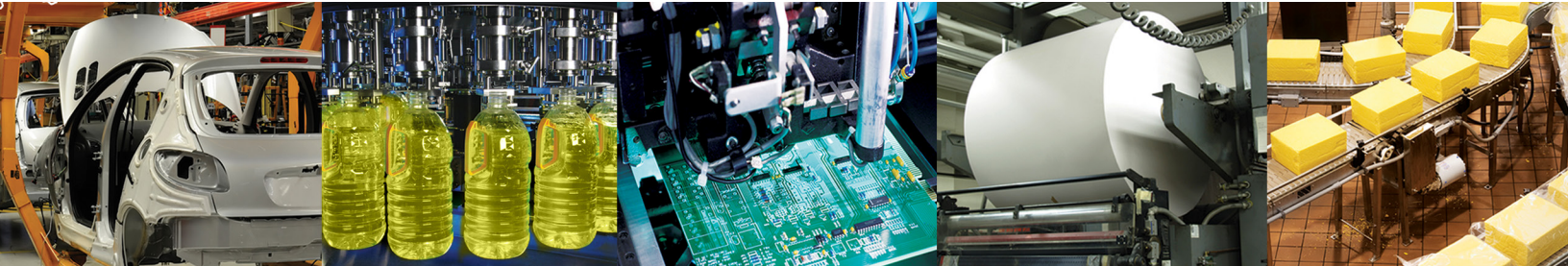


Sentronic^{LP} | 617 Series
Proportional Technology



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

M12 Connection:
Power Supply
Target/Actual Value

Pressure Supply

Digital Display

Adjustment Buttons



Output:
1/4 , 3/8 or 1/2 Connection

**Protective Ground
Connection: M4**

Mounting

Exhaust:
1/4 , 3/8 or 1/2 Connection

Sentronic^{LP} Electronic Pressure Regulator

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

Sentronic^{LP} 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 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 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	H	IP65	5-pin M12 connector (not supplied)

* Max. ripple: 10%

Specifications			
Ø Ports NPT or BSPP	Ø Orifice DN (mm)	Flow	
		C _v Flow Factor (K _v Nm ³ /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

How to Order

8 617 A 4 2 2 1 0 A00 PB

Threaded Connection

G = ISO 228 (BSPP)
8 = NPT

Product Series

617

Revision

A = Initial release

Size

0 = Manifold Version + pressure hold (DN4)¹
4 = 1/4 + pressure hold (DN4)
6 = 3/8 + pressure hold (DN8)
8 = 1/2 + pressure hold (DN15)

Setpoint

0 = 0 – 10 V
1 = 0 – 20 mA
2 = 4 – 20 mA
5 = 2 Bit, 4 pressure select

Pressure Range

Max. Inlet Pressure

PA = 0 – 50 psi 90 psi
PB = 0 – 100 psi 140 psi
PC = 0 – 150 psi 190 psi

Options

A00 = Standard
A07 = Oxygen clean

Input/Display w/Buttons

0 = Standard not connected + Display
1 = Standard not connected
8 = Digital IN + Display

Output 2

0 = Not connected
1 = Digital OUT² (Standard)

FeedbackType

0 = 0 – 10 V
1 = 0 – 20 mA
2 = 4 – 20 mA
7 = 2 Bit, 4 pressure select

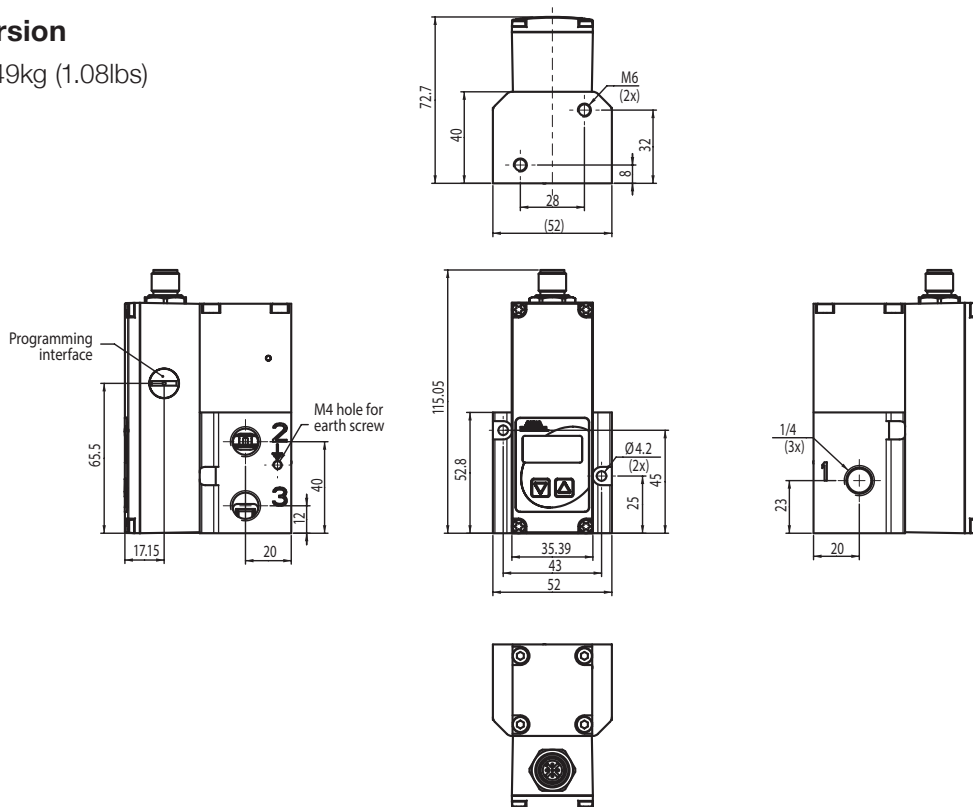
¹ See Accessories for individual subbases for this Manifold Version
² No Digital In possible

Dimensions: mm (inches)

DN 4

Inline version

Weight: 0.49kg (1.08lbs)

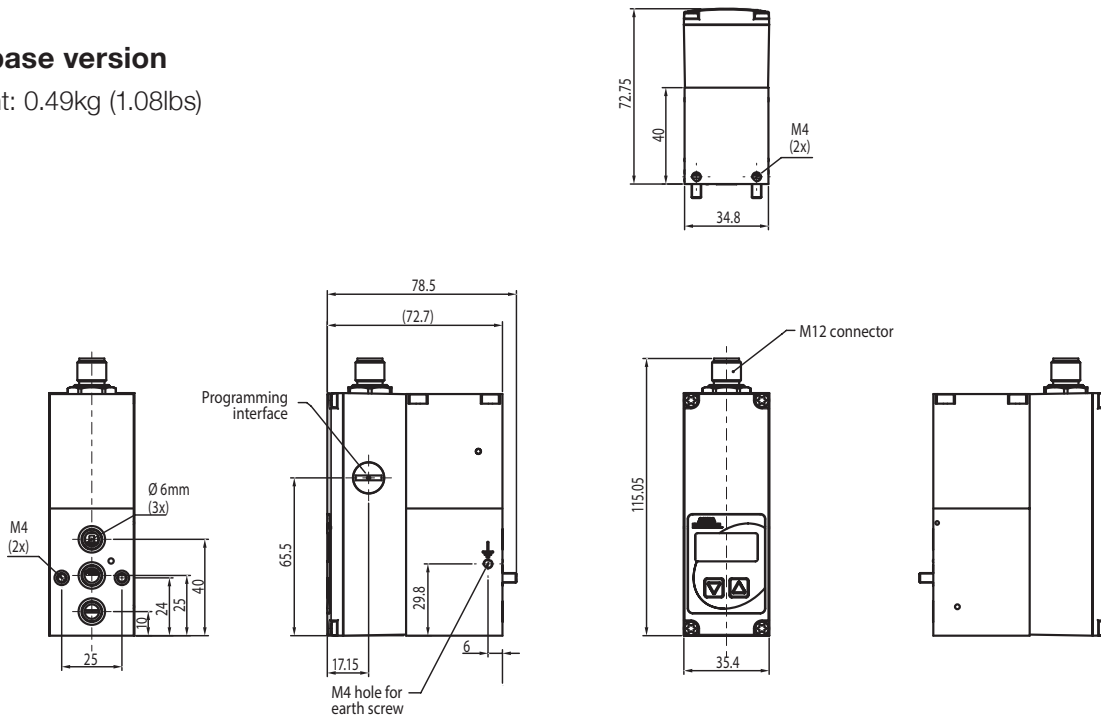


Dimensions: mm

DN 4

Subbase version

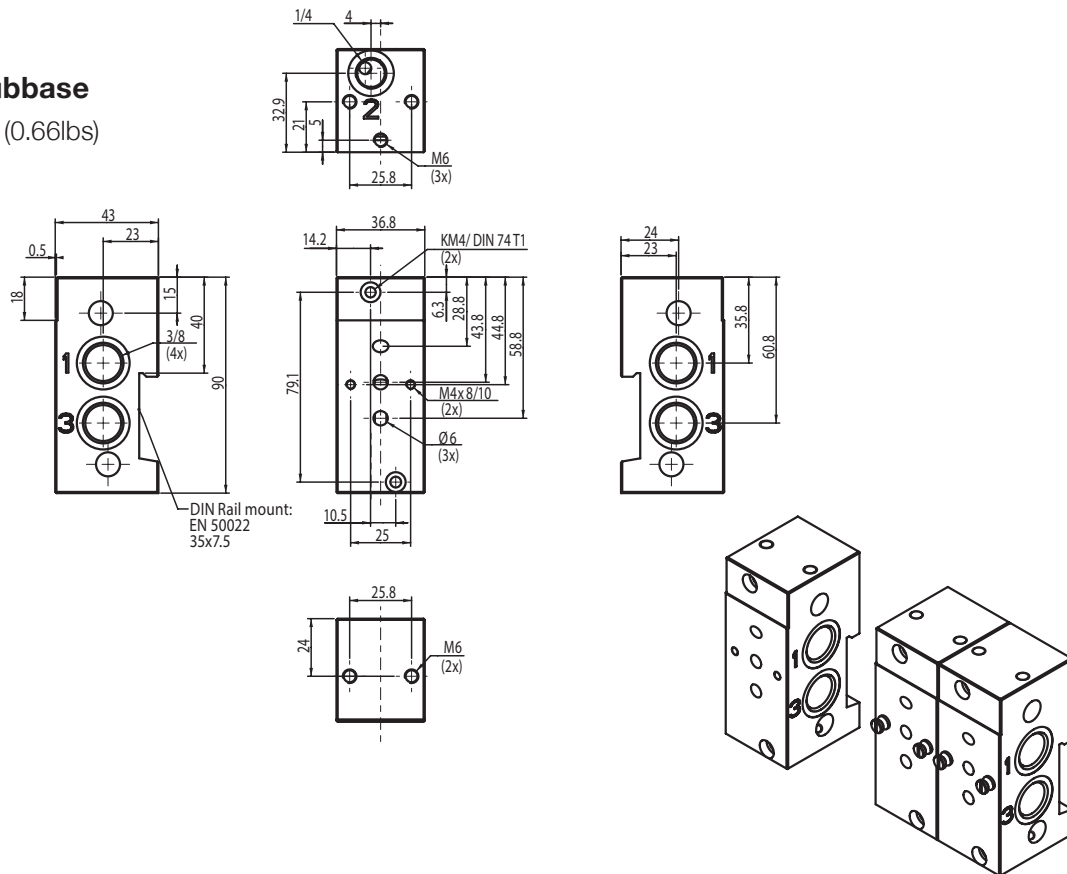
Weight: 0.49kg (1.08lbs)



DN 4

Joinable subbase

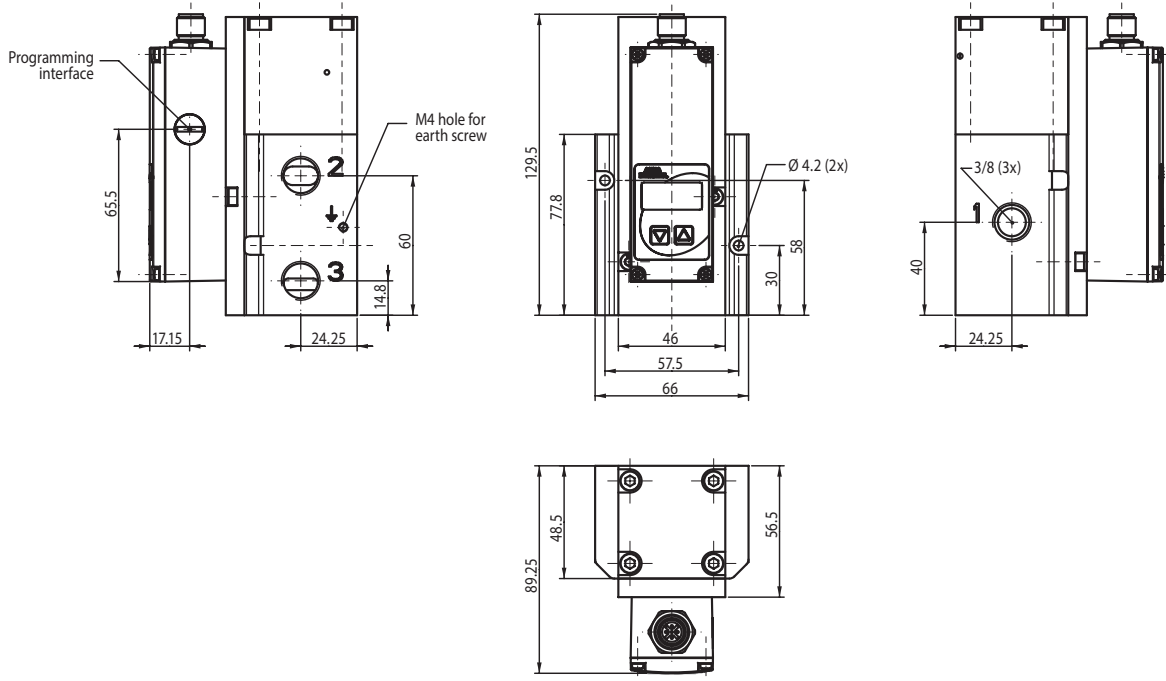
Weight: 0.3kg (0.66lbs)



Dimensions: mm

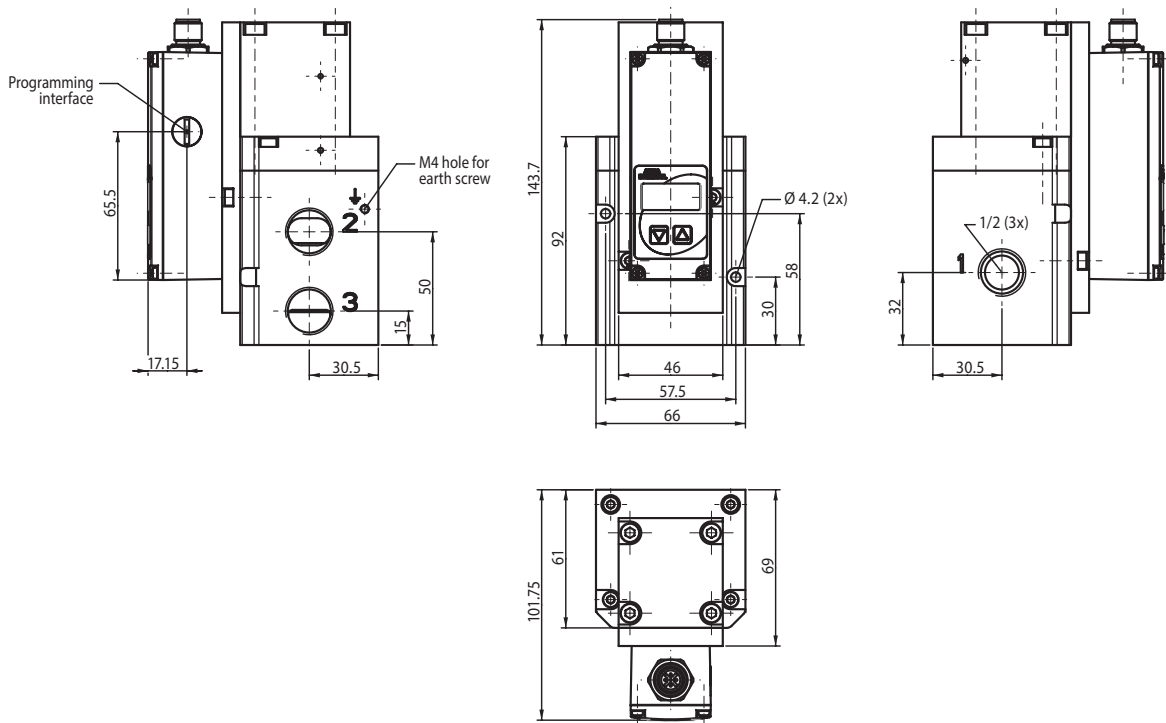
DN 8

Weight: 0.93kg (2.05lbs)



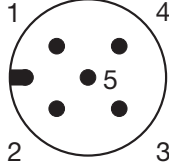
DN 15

Weight: 1.33kg (2.93lbs)



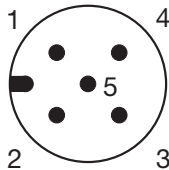
Connector Pin Out / Cable Wiring

Standard Analog Control



View from soldering side

2 Bit, 4 Pressure Select



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

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

Accessories



5 Pin 12mm FEMALE Straight Field Attachable Connectors	Model Number
PG 9 Cable Gland	TC05F20000000000



5 Pin 12mm FEMALE 90 DEGREE Field Attachable Connectors	Model Number
PG 9 Cable Gland	TD05F20000000000



Micro Female 5 Pole Straight 6 Wire 24 AWG, Shielded	Model Number
3 Meter	TC0503MMS000671Y
5 Meter	TC0505MMS000671Y



Micro Female 5 Pole 90 Degree 6 Wire 24 AWG Euro Color Code, Shielded	Model Number
3 Meter	TD0503MMS000671Y
5 Meter	TD0505MMS000671Y



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	N50781800000000

PC Software & Cable Connectors	
DaS Light: Data Acquisition Software for Sentronic [®] - 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.