

Series  
608 / 609

# SENTRONIC<sup>D</sup> DIGITAL ELECTRONIC PRESSURE REGULATOR

Threaded versions NG4: G1/8, G1/4 - NG8: G1/4, G3/8 or subbase mounted

## GENERAL

Sentronic<sup>D</sup> is a highly dynamical 3-way proportional valve with digital control.

Sentronic<sup>D</sup> stands for:

- Digital communication and control
- Display (integrated)
- Direct operated valve
- Dynamic behaviour (high speed)

A special feature of the Sentronic<sup>D</sup> is its *DaS* software supplied for optimum adjustment over PC and viewing of setpoint and feedback signals. 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.



## SPECIFICATIONS

FLUIDS	: Air or neutral gas, filtered 50 µm, without condensate, lubricated or not
PORTS	: G1/8-G1/4-G3/8, see table below
MAX. INLET PRESSURE	: see table below
TEMPERATURE / FLUID	: 0°C, +60 °C
TEMPERATURE / AMBIENT	: 0°C, +50 °C
ELECTRICAL SETPOINT	: 0...10 Volts (impedance 100 kOhm) 0...20 mA / 4...20 mA (impedance 250 Ohm)
HYSTERESIS	: <1% of span
LINEARITY	: <0.5% of span
REPEATABILITY	: <0.5% of span
MINIMUM SETPOINT	: 100mV (0,2 mA/4,2mA) with shutoff function
MINIMUM OUTLET PRESSURE	: 1% of span

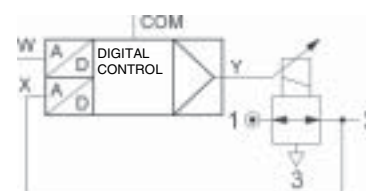
## CONSTRUCTION

Direct operated poppet valve

Body: Aluminium

Internal parts: POM

Seals: NBR and FPM



## ELECTRICAL CHARACTERISTICS

Nominal diameter DN (mm)	Stabilized voltage *	Max. power (W)	Max. current (mA)	Insulation class	Degree of protection	Electrical connection
4	24 V = +/-10%	21	850	H	IP 65	5 pin M12 connector
8		40	1650			

\* Max. ripple: 10 %

## CHOICE OF EQUIPMENT

Ø connection	Ø Nominal diameter DN (mm)	Flow	
		K <sub>v</sub> coefficient (Nm <sup>3</sup> /h)	NI/min
G 1/8 G 1/4	4	0.25	470
G 1/4 G 3/8	8	0.7	1300

## CODE:

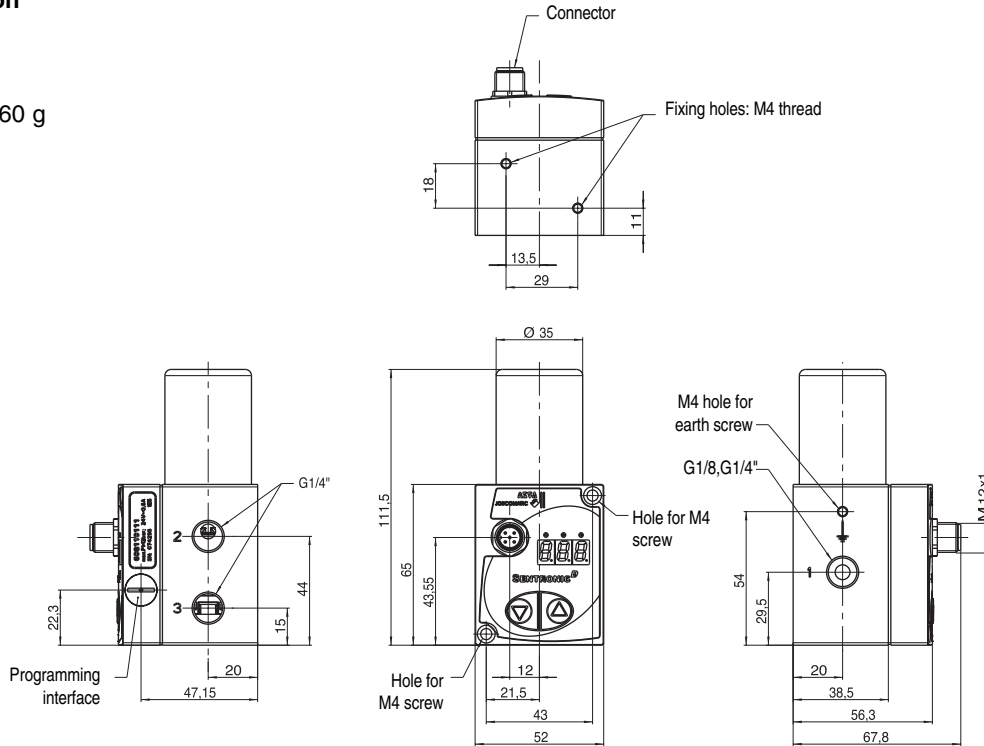
<b>NNN</b>	<b>C</b>	<b>P</b>	<b>S</b>	<b>A</b>	<b>D</b>	<b>E</b>
<b>NNN: Nominal diameter</b> 608 = DN 4mm 609 = DN 8mm	<b>C: Connection</b> 0 = G 1/8 (DN4), G 1/4 (DN 8) 1 = G 1/4 (DN 4), G 3/8 (DN 8) 2 = Subbase G 1/8 (DN 4), G 1/4 (DN 8) 5 = NPT 1/8 (DN 4), NPT 1/4 (DN 8) 6 = NPT 1/4 (DN 4), NPT 3/8 (DN 8)	<b>P: Pressure range</b> <b>max. inlet pressure (bar)</b> 1 = 0 - 10 bar      13 3 = 0 - 3 bar        6 6 = 0 - 6 bar        9	<b>S: Setpoint</b> 0 = 0 ... 10 Volts 1 = 0 ... 20 mA 2 = 4 ... 20 mA	<b>A: Analog output</b> 1 = Setpoint output 0...10 Volt 2 = Setpoint output 0...20 mA 3 = Setpoint output 4...20 mA	<b>D: Digital output</b> 1 = Pressure switch output PNP ± 5 %	<b>E: Display</b> 0 = without display 1 = with display

## DIMENSIONS AND WEIGHTS

### Inline version

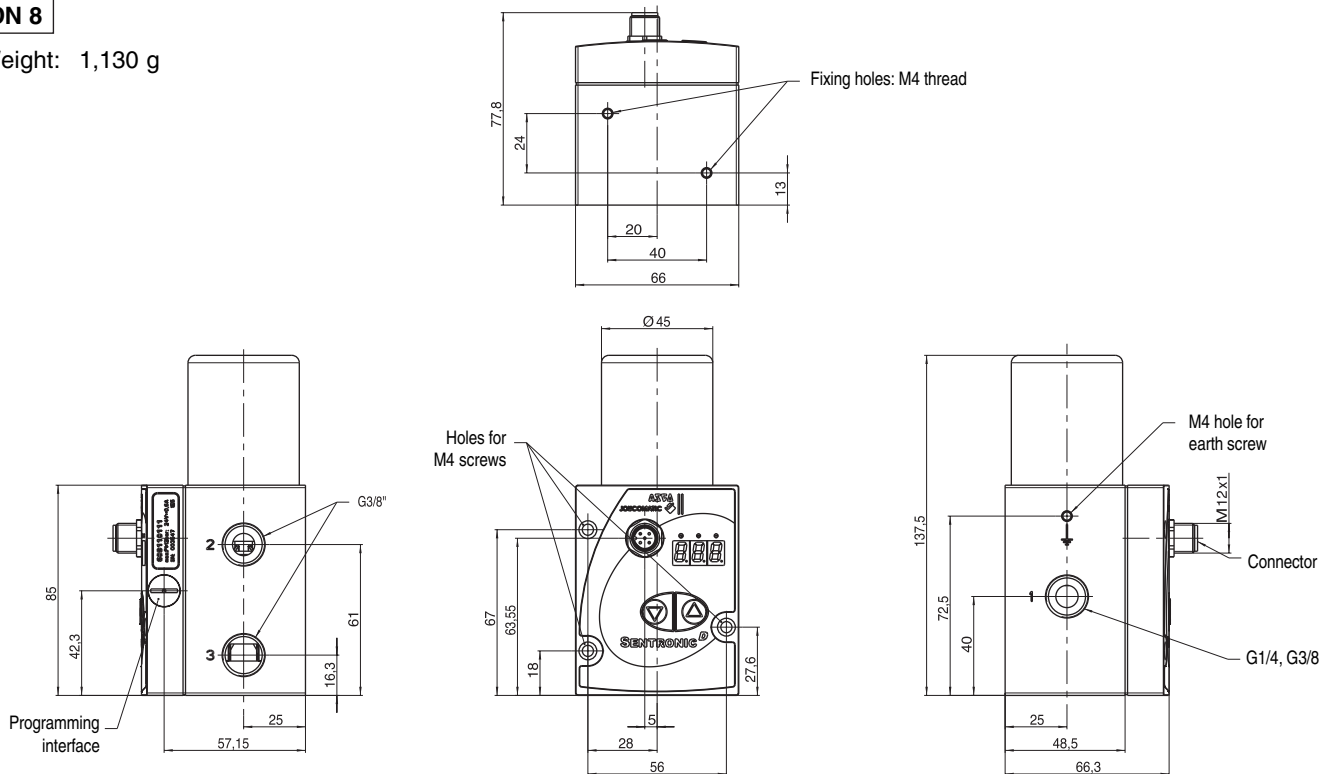
**DN 4**

Weight: 560 g



**DN 8**

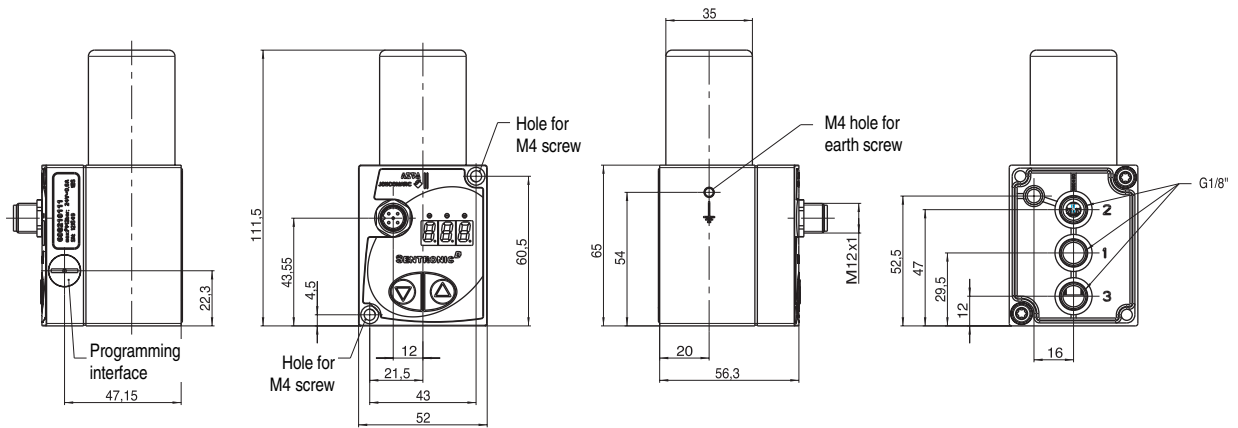
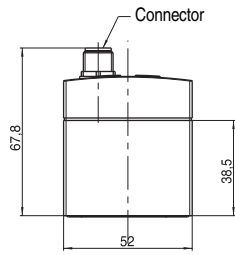
Weight: 1,130 g



Subbase version

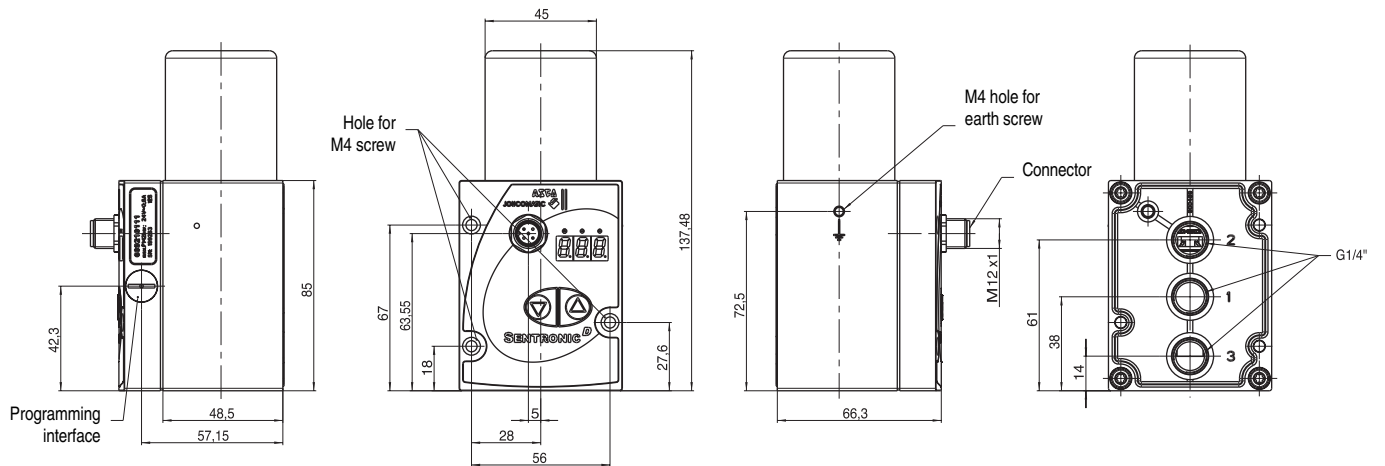
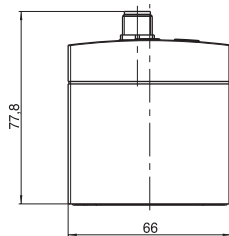
DN 4

Weight: 560 g



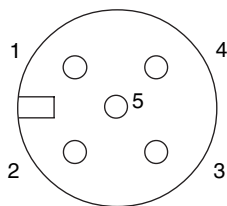
DN 8

Weight: 1,130 g



3

## CONNECTOR PINNING / CABLE WIRING



Pin	Description	5-wire cable (2m)	6-wire cable (2m, 10m)
1	24V voltage supply	brown	brown
2	Analog setpoint input	white	white
3	Supply ground	blue	green
	Analog ground *		yellow
4	Analog output (feedback)	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.

## ACCESSORIES

DESCRIPTION	CODES
Straight M12 female connector, 5 pins, with screw terminals	881 00 256
Right-angle M12 female connector, 5 pins, with screw terminals	881 00 725
Supply cable 2m; 5x 0.25 mm <sup>2</sup> ; straight connector	881 00 726
Supply cable 2m; 5x 0.25 mm <sup>2</sup> ; right-angle connector	881 00 727
Supply cable 5m; 6x 0.56 mm <sup>2</sup> ; straight connector	881 00 728
Supply cable 5m; 6x 0.56 mm <sup>2</sup> ; right-angle connector	881 00 729
Supply cable 10m; 6x 0.56 mm <sup>2</sup> ; straight connector	881 00 730
Supply cable 10m; 6x 0.56 mm <sup>2</sup> ; right-angle connector	881 00 731
RS 232 cable converter; 2m cable with 9-pin Sub-D	881 00 732
Joinable subbase for 608 (DN 4mm) with G3/8"; common supply and exhaust	335 00 558
Joinable subbase for 609 (DN 8mm) with G1/2"; common supply and exhaust	335 00 559
DaS Light: Data Acquisition Software for <b>SentronicD</b> - basic parameters, disk	991 00 108
DaS Expert: Data Acquisition Software for <b>SentronicD</b> - full parameters, disk	991 00 109
DaS Light: Data Acquisition Software for <b>SentronicD</b> - basic parameters, CD-ROM	991 00 110
DaS Expert: Data Acquisition Software for <b>SentronicD</b> - full parameters, CD-ROM	991 00 111

ASCO/JOUCOMATIC reserves the right to alter the availability, design and specifications without notice.