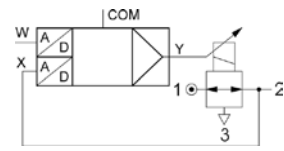


# PROPORTIONAL VALVES

## SENTRONIC<sup>D</sup> - G 1/8 to G 3/8 tapped body or G 1/8 - G 1/4 subbase mounted body with digital pressure control



3 ports  
Series  
**608**  
**609**

### FEATURES

- 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.

### GENERAL

<b>Fluid</b>	Air or inert gas filtered at 50 µm, without condensate, lubricated or unlubricated
<b>Maximum allowable pressure (MAP)</b>	6 to 13 bar
<b>Control range</b>	0-3 bar to 0-10 bar
<b>Fluid temperature</b>	0°C to +60°C
<b>Ambient temperature</b>	0°C to +50°C
<b>Flow (Qv at 6 bar)</b>	470 to 1300 l/min (ANR)
<b>Setpoint</b>	0 - 10 V (impedance 100 kΩ) 0 - 20 mA / 4 - 20 mA (impedance 250 Ω)
<b>Hysteresis</b>	< 1% of span
<b>Linearity</b>	< 0,5% of span
<b>Repeatability</b>	< 0,5% of span
<b>Minimum setpoint</b>	100 mV (0,2 mA/4,2mA) with shutoff function
<b>Minimum outlet pressure</b>	1% of span

### CONSTRUCTION

<b>Body</b>	aluminium
<b>Internal parts</b>	POM (polyacetal)
<b>Seals</b>	NBR (nitrile) and FPM (fluoroelastomer)

### ELECTRICAL CHARACTERISTICS

nominal diameter DN (mm)	stabilised 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 (not supplied)
8		40	1650			

\* Max. ripple: 10 %

### SPECIFICATIONS

Ø connection	Ø nominal diameter DN (mm)	flow	
		K <sub>v</sub> coefficient (Nm <sup>3</sup> /h)	at 6 bar (l/min) (ANR)
G 1/8 G 1/4	4	0,43	470
G 1/4 G 3/8	8	1,2	1300


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

### Catalogue number:

<b>NNN</b> : Nominal diameter 608 = DN 4mm 609 = DN 8mm	<b>C</b> : Connection 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</b> : Control range max. allowable pressure (MAP) 1 = 0 - 10 bar 13 bar 3 = 0 - 3 bar 6 bar 6 = 0 - 6 bar 9 bar	<b>S</b> : Setpoint 0 = 0 - 10 V 1 = 0 - 20 mA 2 = 4 - 20 mA	<b>A</b> : Analog output 1 = Feedback output 0 -10 V 2 = Feedback output 0 - 20 mA 3 = Feedback output 4 - 20 mA	<b>D</b> : Digital output 1 = Pressure switch output PNP ± 5 %	<b>E</b> : Display 0 = without display 1 = with display
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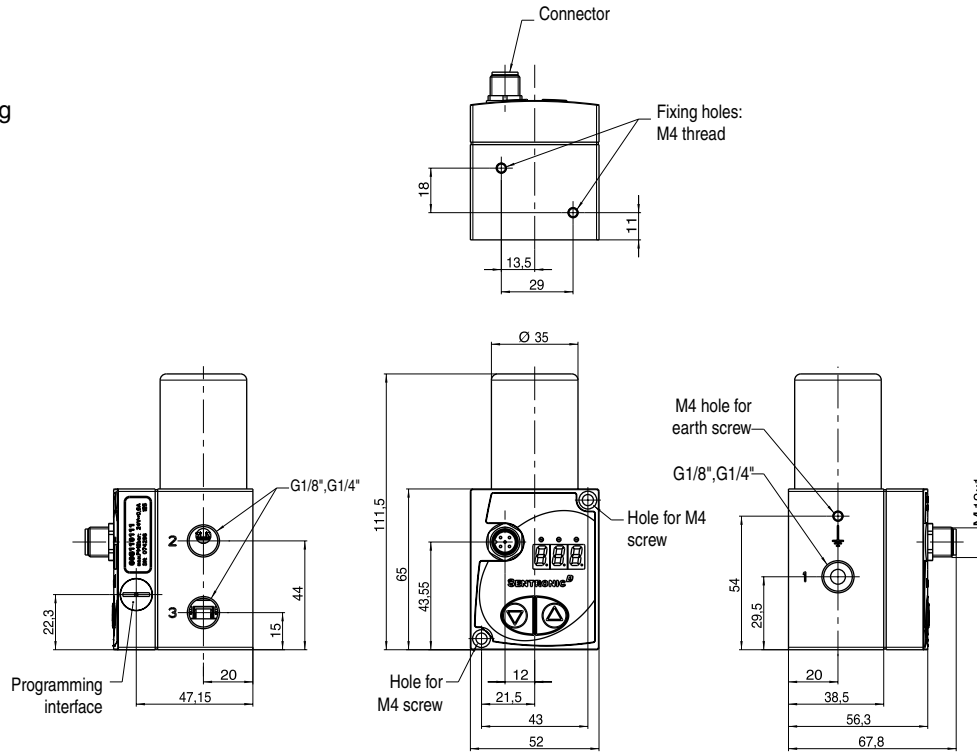
00249GB-2014/R01  
Availability, design and specifications are subject to change without notice. All rights reserved.

**DIMENSIONS (mm), WEIGHT (kg)** 

**Inline version**

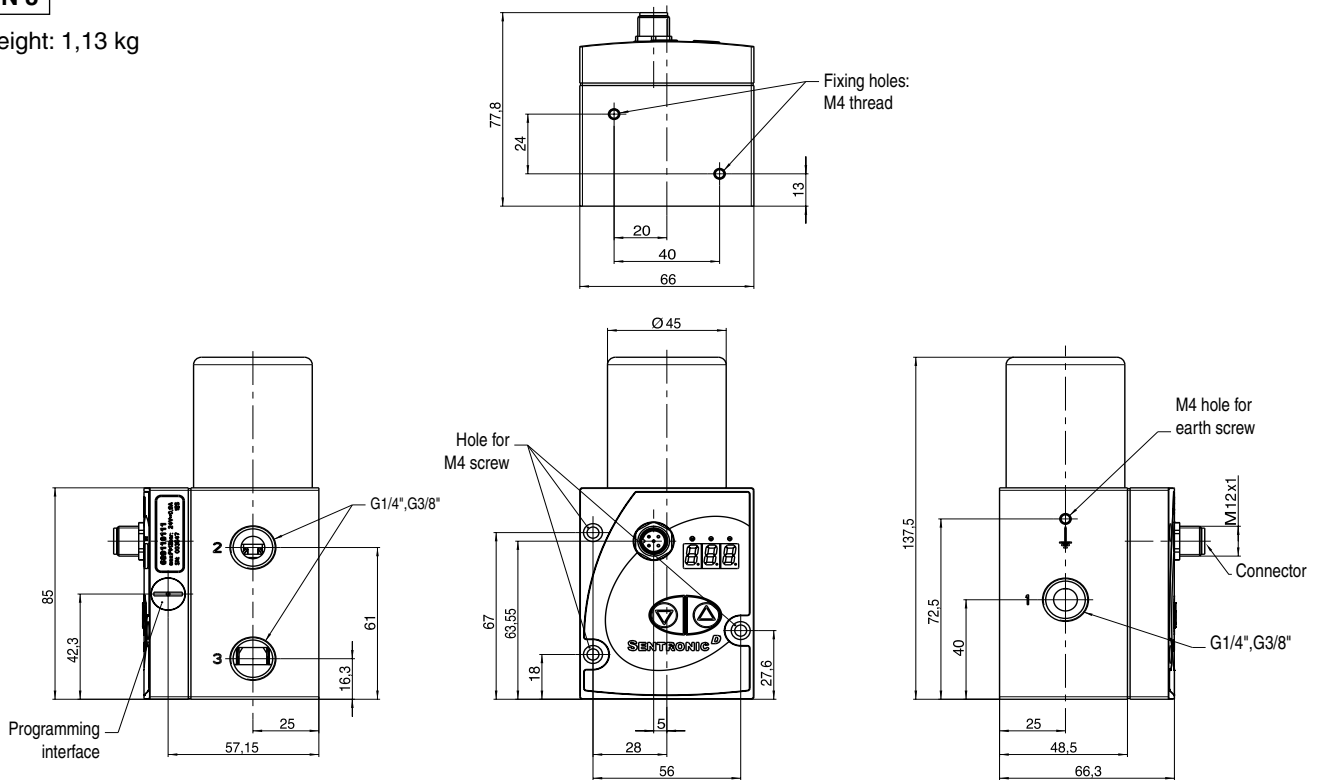
**DN 4**


Weight: 0,56 kg



**DN 8**

Weight: 1,13 kg

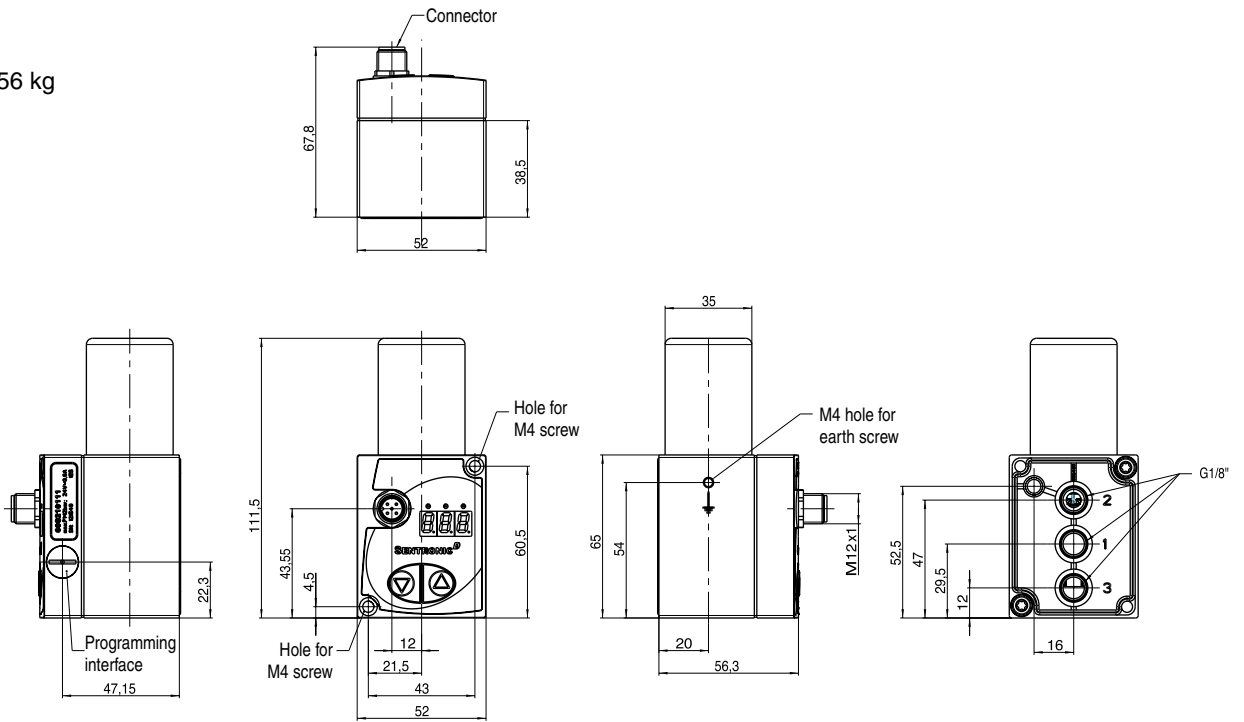


**DIMENSIONS (mm), WEIGHT (kg)** 

**Subbase version**

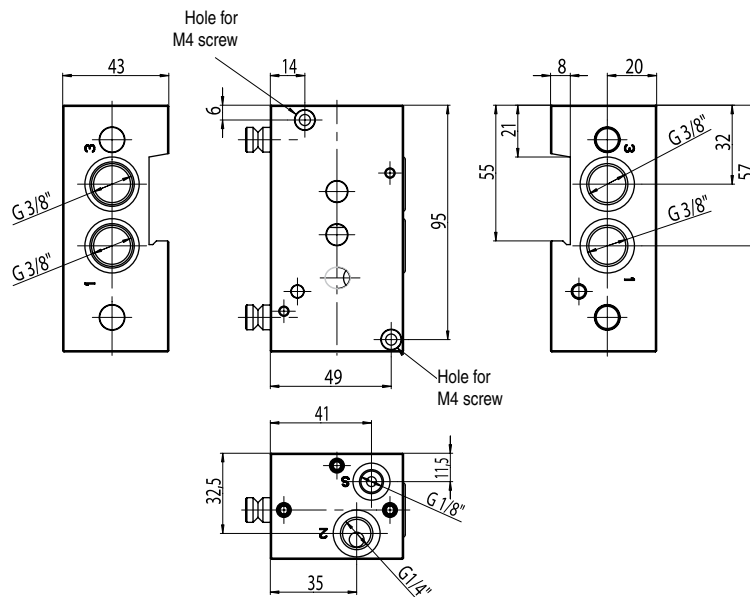
**DN 4**

Weight: 0,56 kg



**DN 4**

**Subbase**

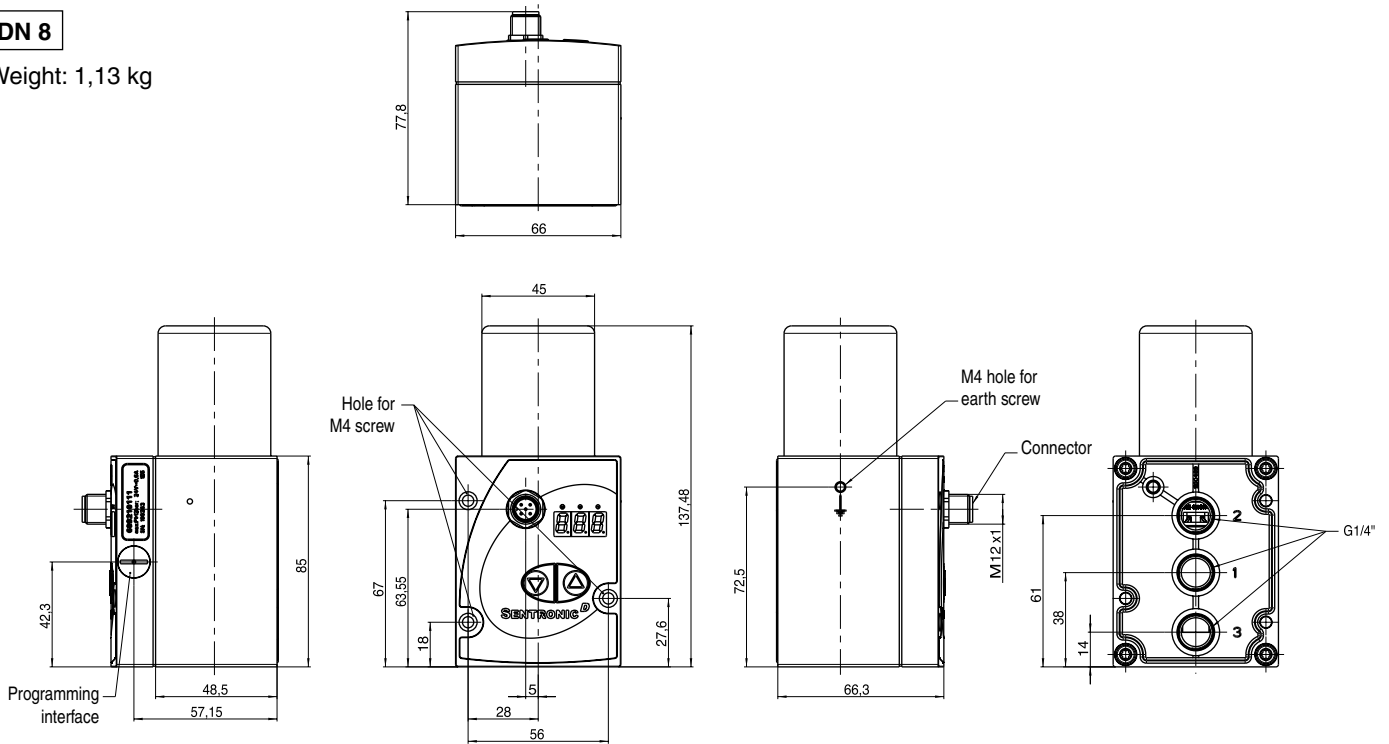


### DIMENSIONS (mm), WEIGHT (kg)

#### Subbase version

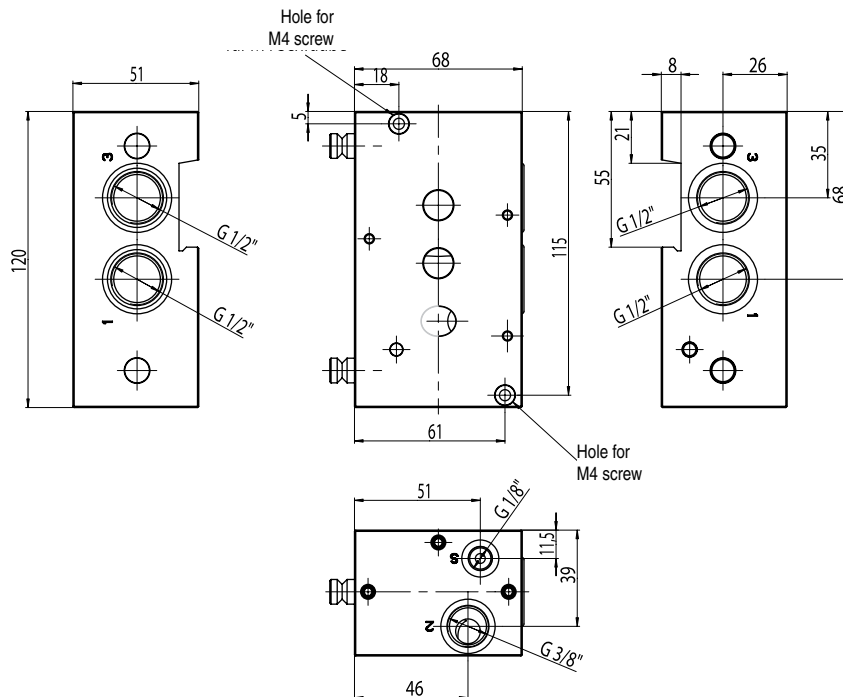
**DN 8**

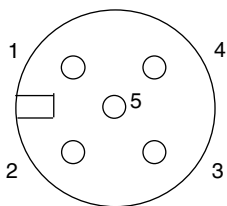
Weight: 1,13 kg



**DN 8**

#### Subbase



**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	catalogue 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, 2 x 0,25 mm <sup>2</sup> , straight connector	88100726
Supply cable 2 m, 2 x 0,25 mm <sup>2</sup> , right-angle connector	88100727
Supply cable 5 m, 6 x 0,56 mm <sup>2</sup> , straight connector	88100728
Supply cable 5 m, 6 x 0,56 mm <sup>2</sup> , right-angle connector	88100729
Supply cable 10 m, 6 x 0,56 mm <sup>2</sup> , straight connector	88100730
Supply cable 10 m, 6 x 0,56 mm <sup>2</sup> , right-angle connector	88100731
RS 232 cable converter; 2m cable with 9-pin Sub-D (plug connector)	88100732
RS 232 cable converter; 2 m cable with 9-pin Sub-D (screw connector)	88100970
Joinable subbase for 608 (DN 4 mm) with G 3/8", common supply and exhaust	35500558
Joinable subbase for 609 (DN 8 mm) with G 1/2", common supply and exhaust	35500559
DaS Light: Data Acquisition Software for <b>SENTRONIC<sup>D</sup></b> - basic parameters - CD-ROM	99100110
DaS Expert: Data Acquisition Software for <b>SENTRONIC<sup>D</sup></b> - full parameters - CD-ROM	99100111

