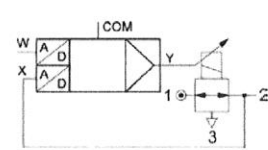


PROPORTIONAL VALVES

SENTRONIC^D - 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
FEATURES

- SENTRONIC^D is a highly dynamical 3-way proportional valve with digital control.
- SENTRONIC^D stands for:
 - Digital communication and control
 - Display (integrated)
 - Direct operated valve
 - Dynamic behaviour (high speed)
- A special feature of the SENTRONIC^D 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

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

CONSTRUCTION

| | |
|-----------------------|---|
| Body | aluminium |
| Internal parts | POM (polyacetal) |
| Seals | NBR (nitrile) and FPM (fluoroelastomer) |

ELECTRICAL CHARACTERISTICS

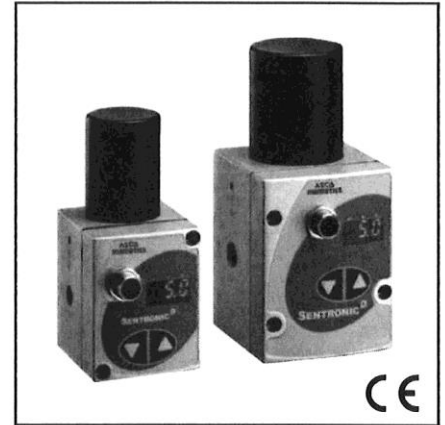
| nominal diameter DN (mm) | stabilised voltage * | max. power (W) | max. current (mA) | insulation class | degree of protection | electrical connection |
|--------------------------|----------------------|----------------|-------------------|------------------|----------------------|------------------------------------|
| 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 _v coefficient (Nm ³ /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

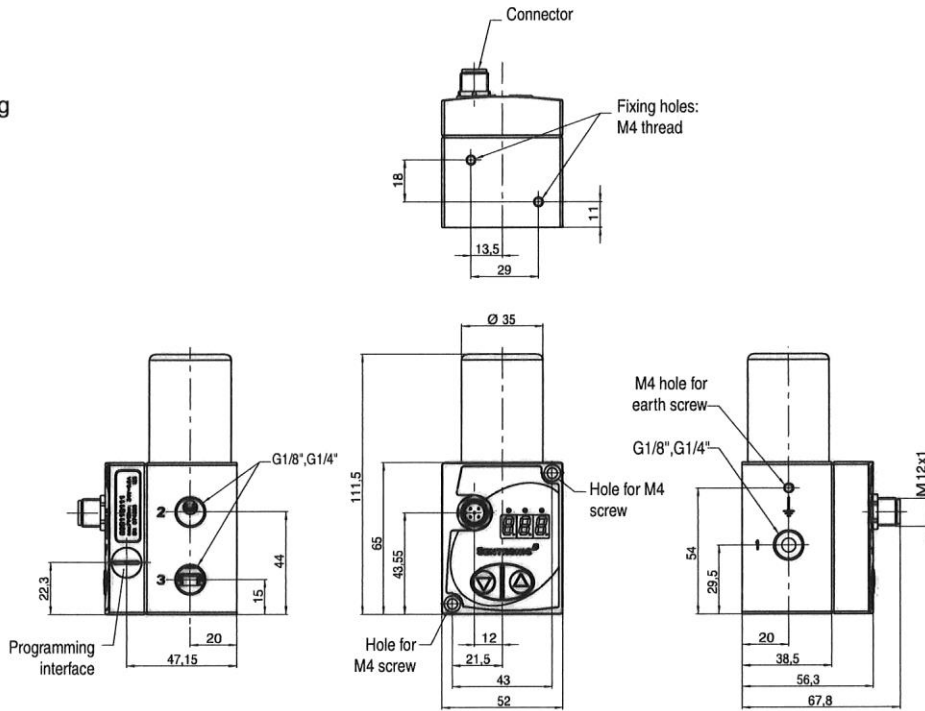


DIMENSIONS (mm), WEIGHT (kg)

Inline version

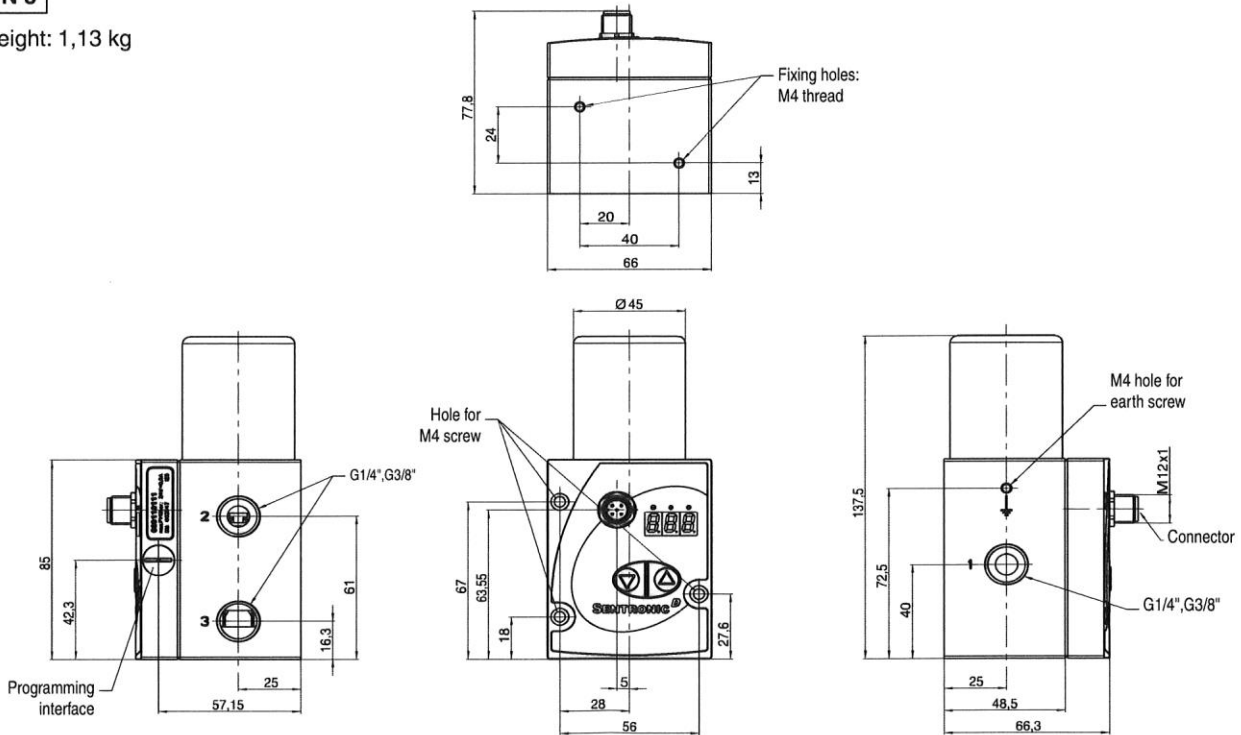
DN 4


Weight: 0,56 kg



DN 8

Weight: 1,13 kg

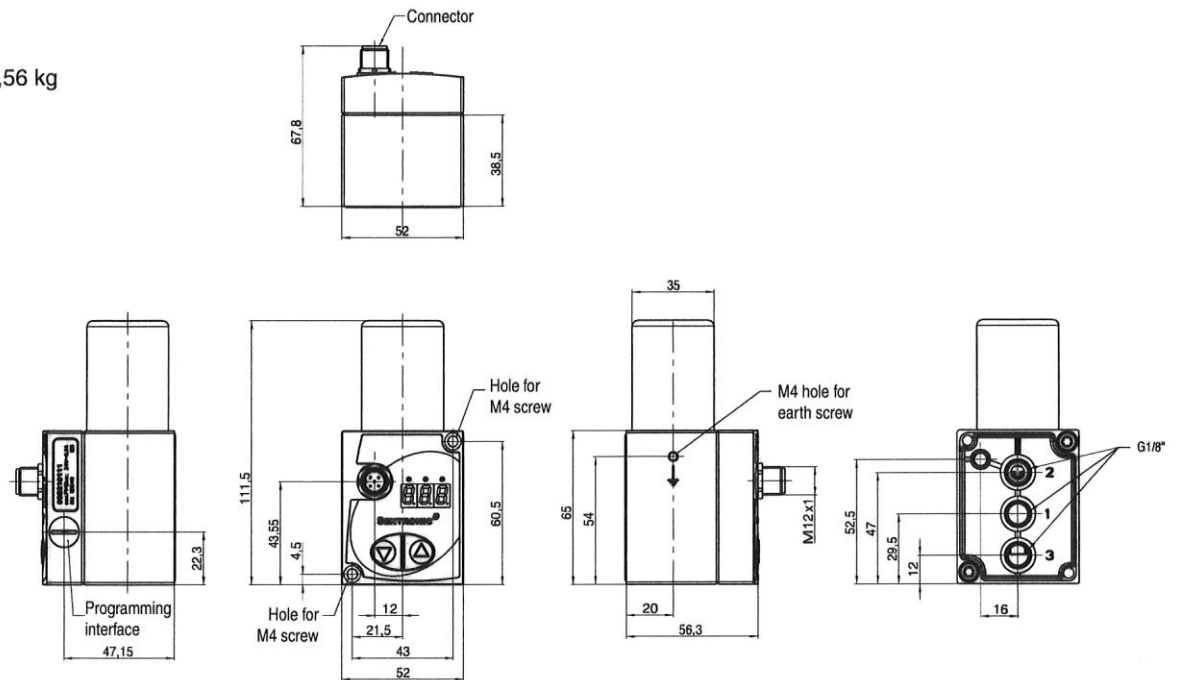


DIMENSIONS (mm), WEIGHT (kg) 

Subbase version

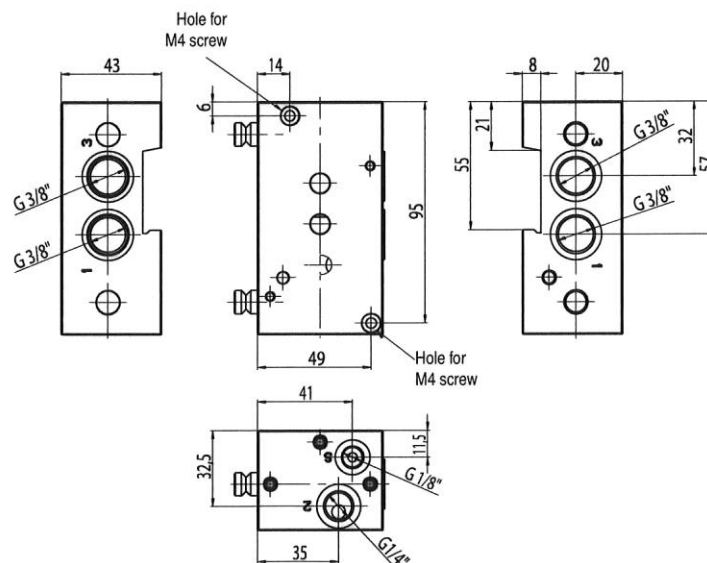
DN 4

Weight: 0,56 kg



DN 4

Subbase

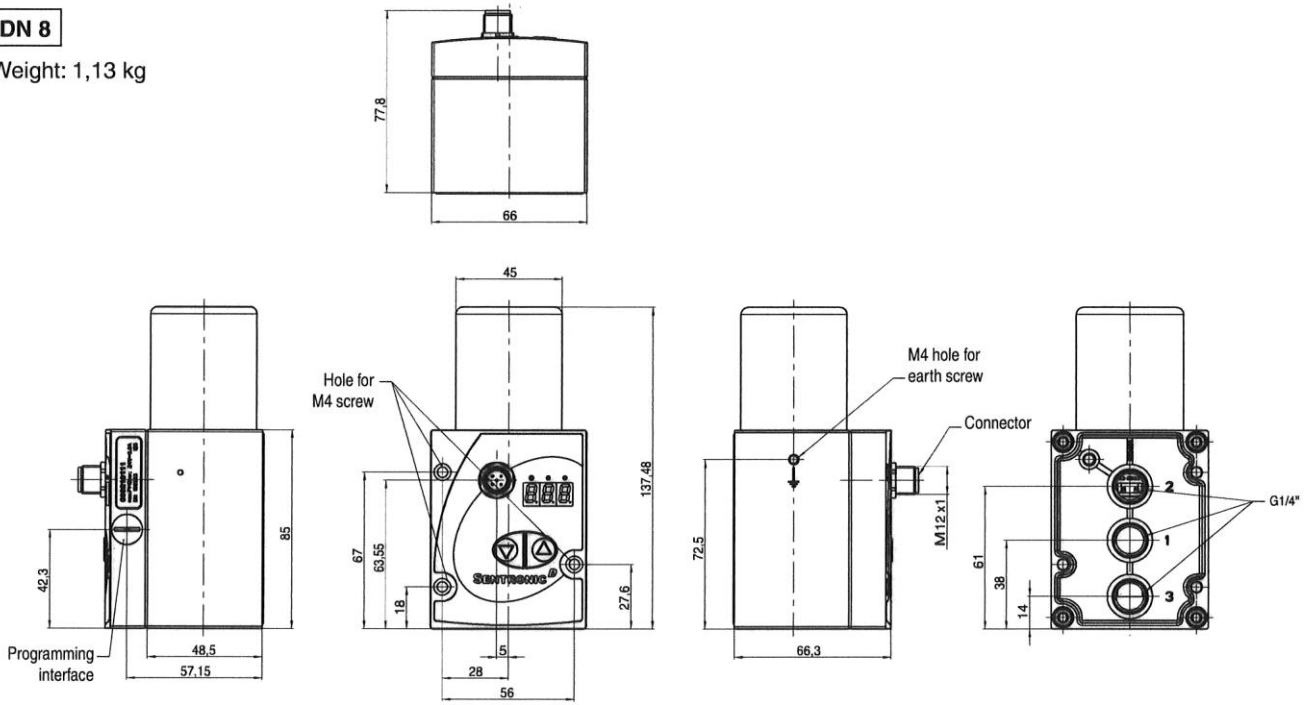


DIMENSIONS (mm), WEIGHT (kg)

Subbase version

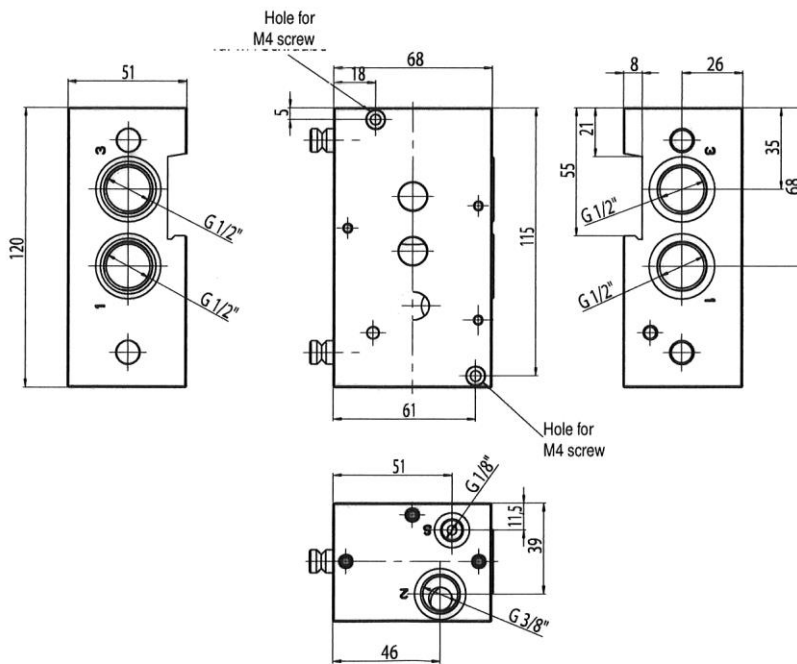
DN 8

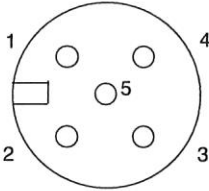
Weight: 1,13 kg



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 |
|---|
| Straight M12 female connector, 5 pins, with screw terminals |
| Right-angle M12 female connector, 5 pins, with screw terminals |
| Supply cable 2 m, 2 x 0,25 mm ² , straight connector |
| Supply cable 2 m, 2 x 0,25 mm ² , right-angle connector |
| Supply cable 5 m, 6 x 0,56 mm ² , straight connector |
| Supply cable 5 m, 6 x 0,56 mm ² , right-angle connector |
| Supply cable 10 m, 6 x 0,56 mm ² , straight connector |
| Supply cable 10 m, 6 x 0,56 mm ² , right-angle connector |
| RS 232 cable converter; 2m cable with 9-pin Sub-D (plug connector) |
| RS 232 cable converter; 2 m cable with 9-pin Sub-D (screw connector) |
| Joinable subbase for 608 (DN 4 mm) with G 3/8", common supply and exhaust |
| Joinable subbase for 609 (DN 8 mm) with G 1/2", common supply and exhaust |
| DaS Light: Data Acquisition Software for SENTRONIC D - basic parameters - CD-ROM |
| DaS Expert: Data Acquisition Software for SENTRONIC D - full parameters - CD-ROM |