

AVENTICS™ Proportional Valves SENTRONIC^D

With Digital Pressure Control

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.

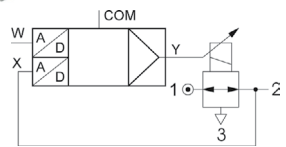


GENERAL

Fluids	Air or neutral gases filtered at 50 µm, without condensate, lubricated or unlubricated
Maximum allowable pressure (MAP)	6 to 13 bar
Pressure range	0-3 bar, 0-6 bar, 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 %

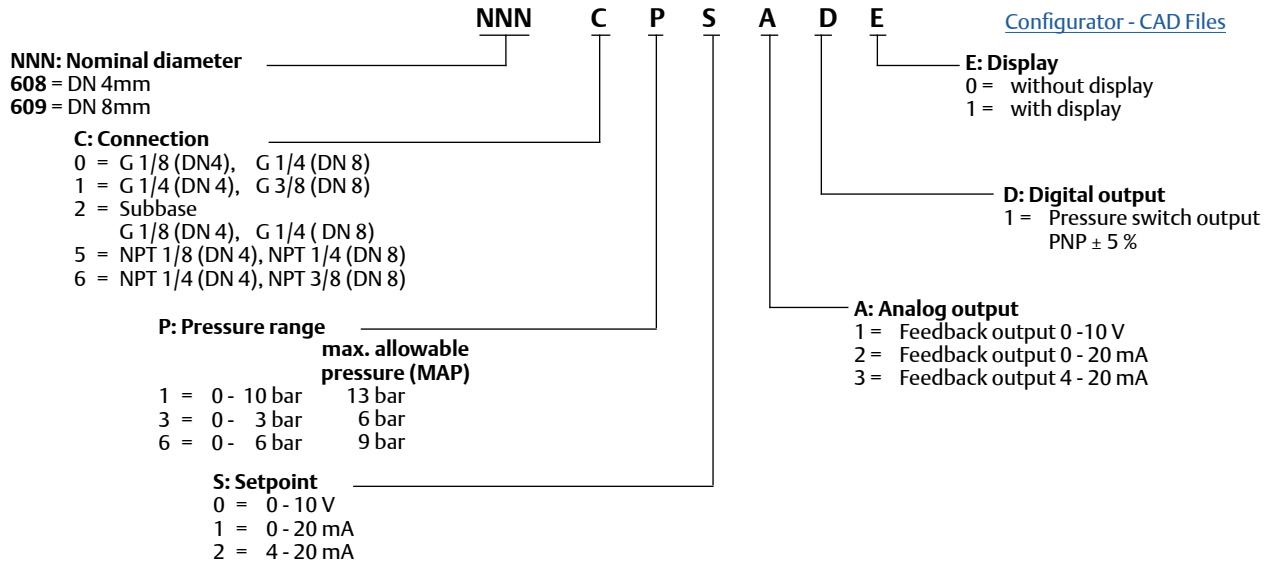
SPECIFICATIONS

Ø ports	Ø orifice 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


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HOW TO ORDER



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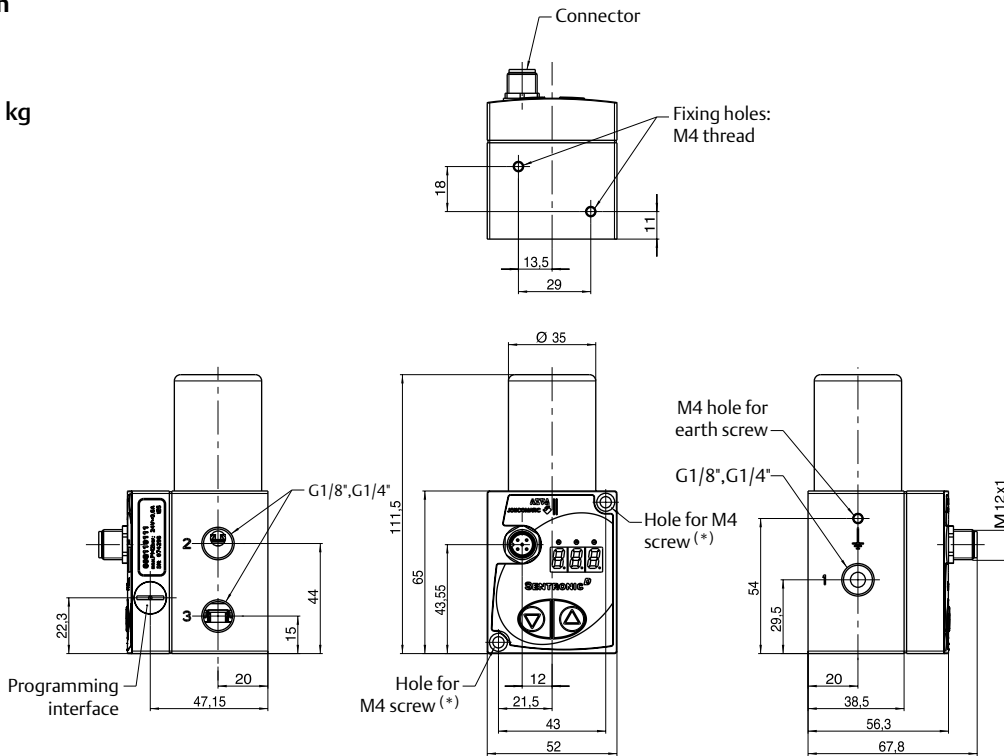
DIMENSIONS (mm), WEIGHT (kg) 

[Configurator - CAD Files](#)

Inline version

DN 4

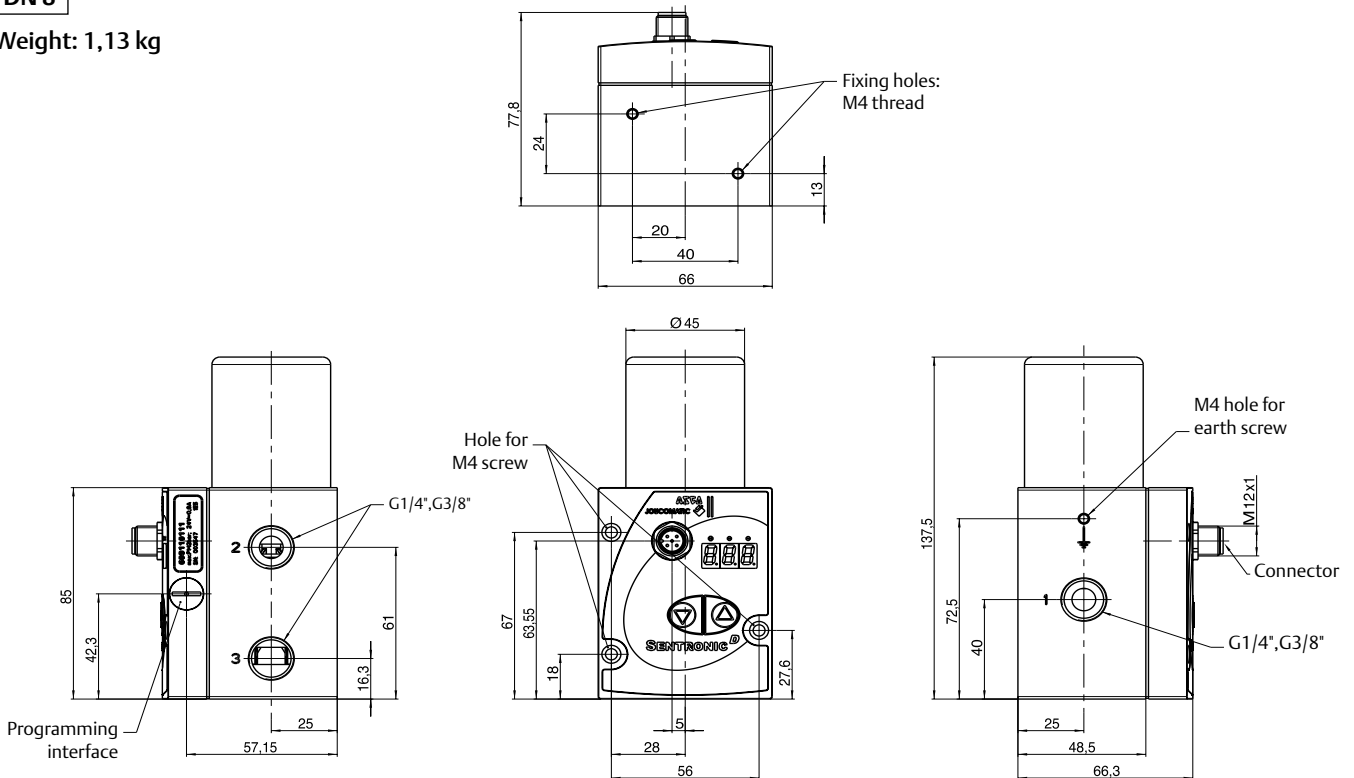
Weight: 0,56 kg




*Remove the pre-installed screws to use the through holes to mount the valve.

DN 8

Weight: 1,13 kg



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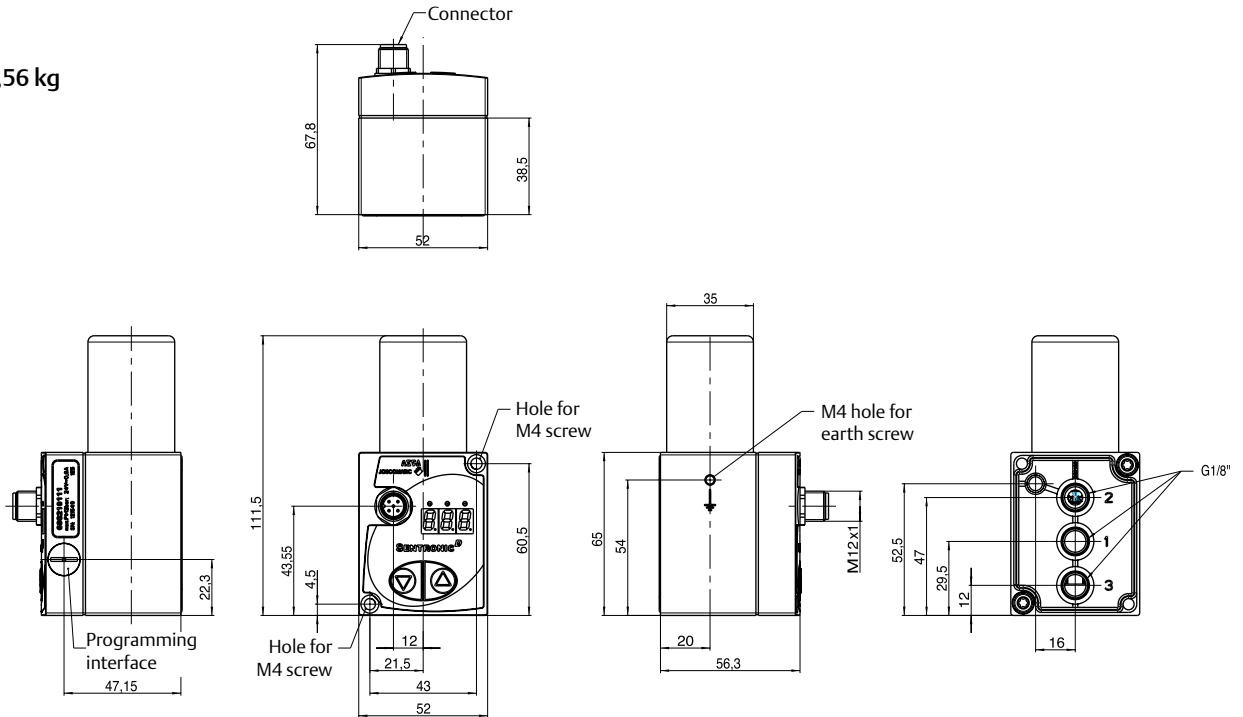
DIMENSIONS (mm), WEIGHT (kg) 

[Configurator - CAD Files](#)

Subbase version

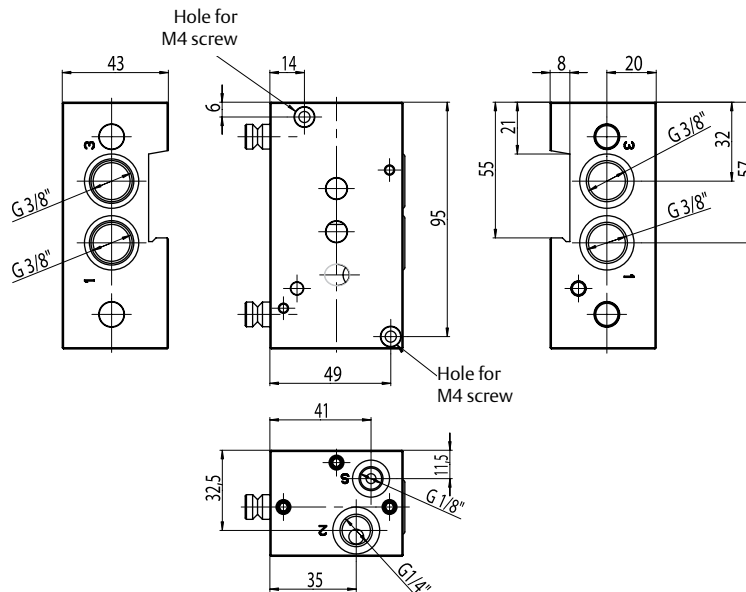
DN 4

Weight: 0,56 kg



DN 4

Subbase



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AVENTICS™ Proportional Valves SENTRONIC^D

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Series
608/609

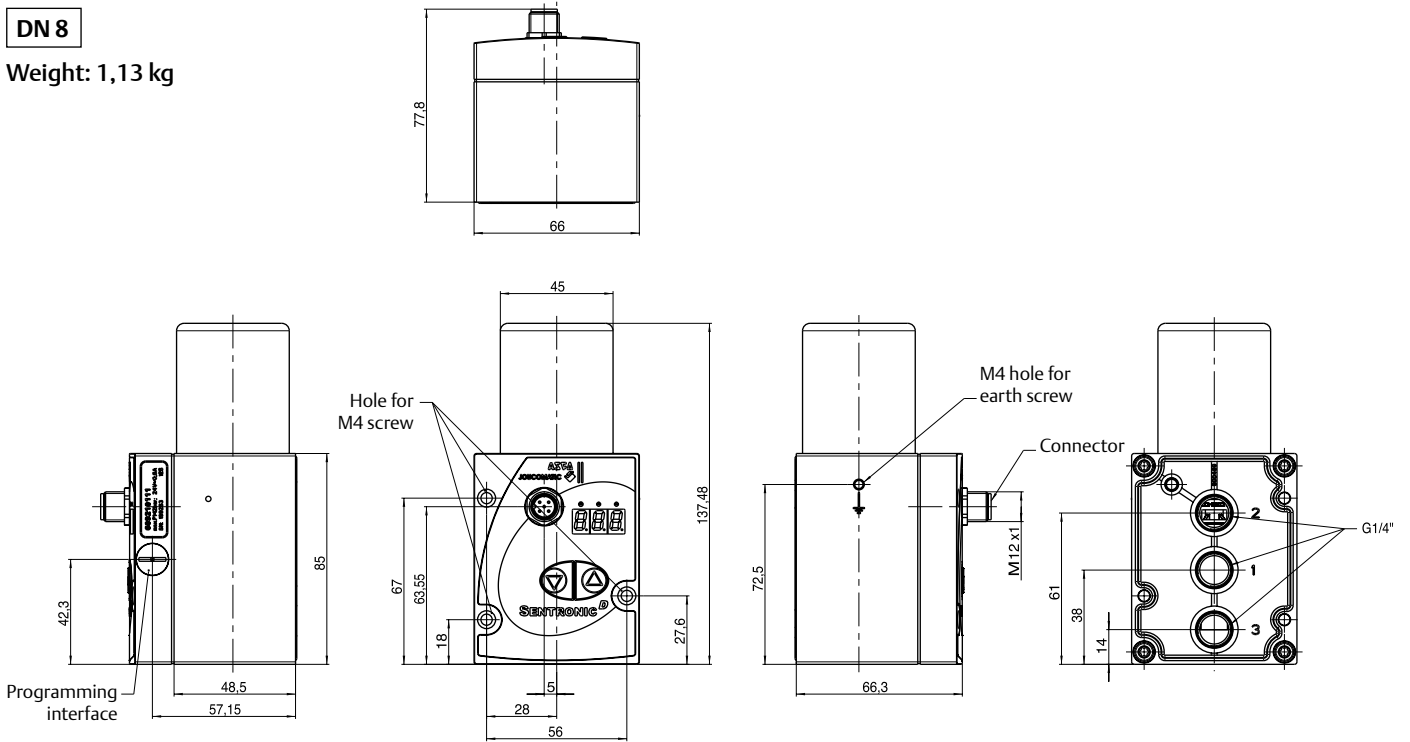
DIMENSIONS (mm), WEIGHT (kg)

[Configurator - CAD Files](#)

Subbase version

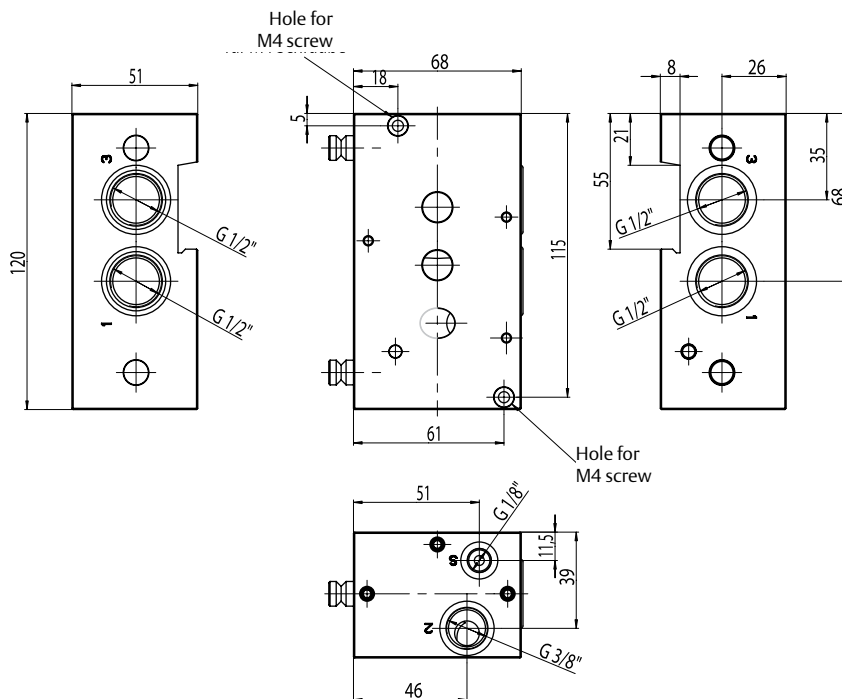
DN 8

Weight: 1,13 kg



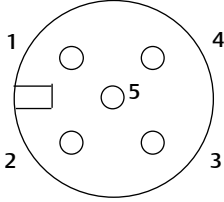
DN 8

Subbase



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CONNECTOR PINNING / CABLE WIRING



pin	description	5-wire cable (2m)	6-wire cable (5m, 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 ² , straight connector	88100726
Supply cable 2 m, 2 x 0,25 mm ² , right-angle connector	88100727
Supply cable 5 m, 6 x 0,56 mm ² , straight connector	88100728
Supply cable 5 m, 6 x 0,56 mm ² , right-angle connector	88100729
Supply cable 10 m, 6 x 0,56 mm ² , straight connector	88100730
Supply cable 10 m, 6 x 0,56 mm ² , 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 <i>SENTRONIC^D</i> - basic parameters - CD-ROM	99100110
DaS Expert: Data Acquisition Software for <i>SENTRONIC^D</i> - full parameters - CD-ROM	99100111

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