

PROPORTIONAL VALVES

SENTRONIC^{LP}

G1/4 tapped body or subbase mounted body
with digital pressure control

FEATURES

- **SENTRONIC^{LP}** stands for:
 - Low power consumption (3,8 W)
 - Digital communication and control
 - Display (integrated) with function buttons (option)
 - Pilot operated proportional valve
- 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.
- RoHS, REACH compliant.

GENERAL

Fluids	Air or neutral gas filtered at 50 µm, without condensate, lubricated or unlubricated, class 5 according to ISO 8573-1:2010 [7:4:4]
Max. allowable pressure (MAP)	At least 1 bar above the maximum outlet pressure
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 (Qv at 6 bar)	470 NI/min
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 shutoff function
Minimum outlet pressure	1% of span
Failsafe behaviour	Pressure hold on loss of power, without control

CONSTRUCTION

Body	Aluminium
Internal parts	POM (polyacetal)
Seals	NBR (nitrile)

ELECTRICAL CHARACTERISTICS

nominal diameter DN (mm)	stabilised voltage *	max. power (W)	max. current (mA)	insulation class	degree of protection	electrical connection
4	24VDC	3,8 W (<1W compensate)	160	H	IP 65	5-pin M12 connector (to be ordered separately)

* Max. ripple: 10 %

SPECIFICATIONS

Ø port	Ø orifice DN (mm)	flow	
		K _v -coefficient (Nm ³ /h)	at 6 bar (NI/min)
G 1/4	4	0,43	470

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

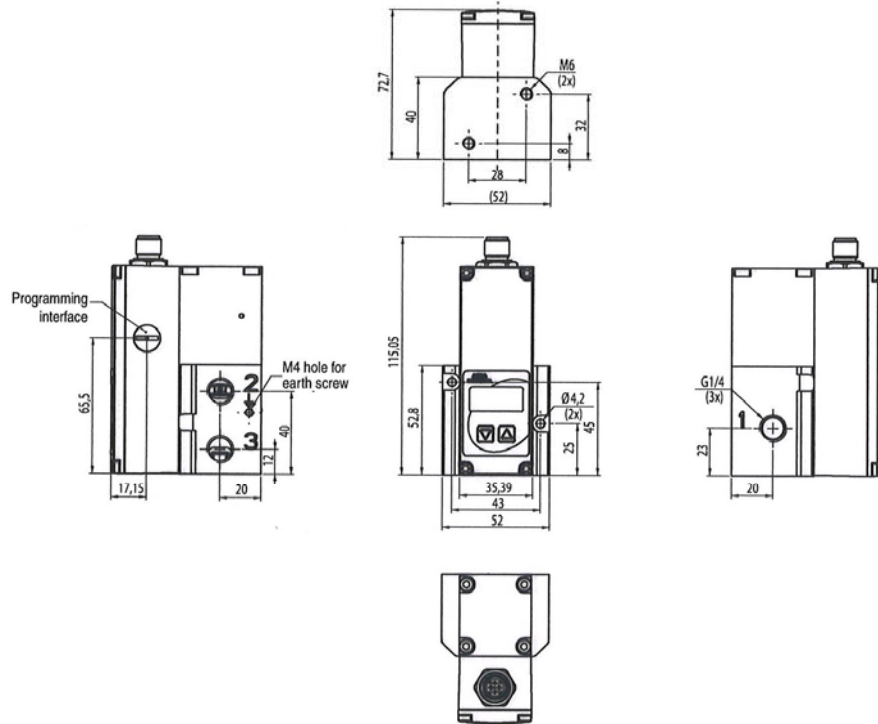


DIMENSIONS (mm), WEIGHT (kg)

Inline version

DN 4

Weight: 0,49 kg

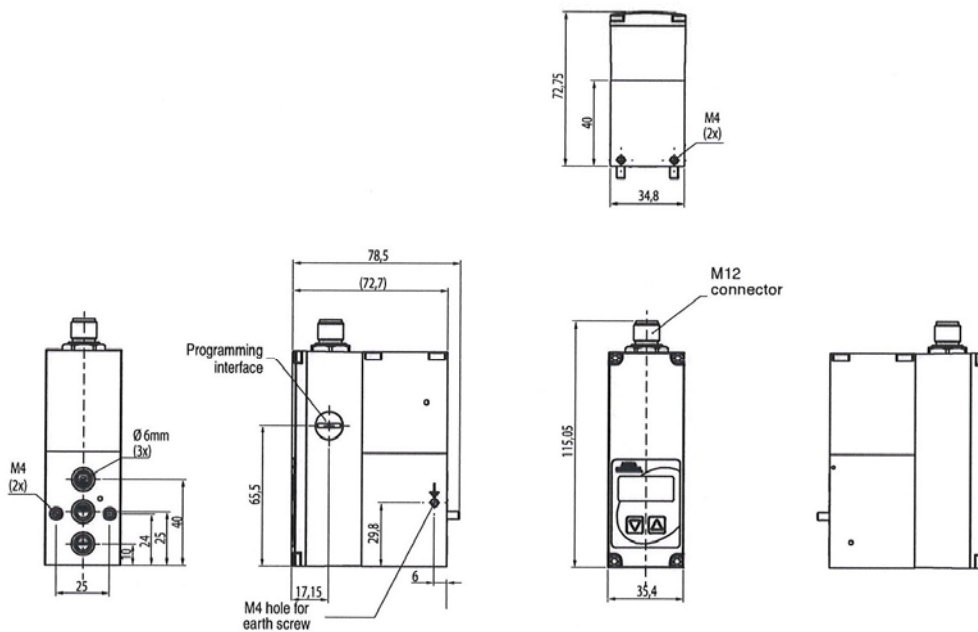


DIMENSIONS (mm), WEIGHT (kg)

Subbase version

DN 4

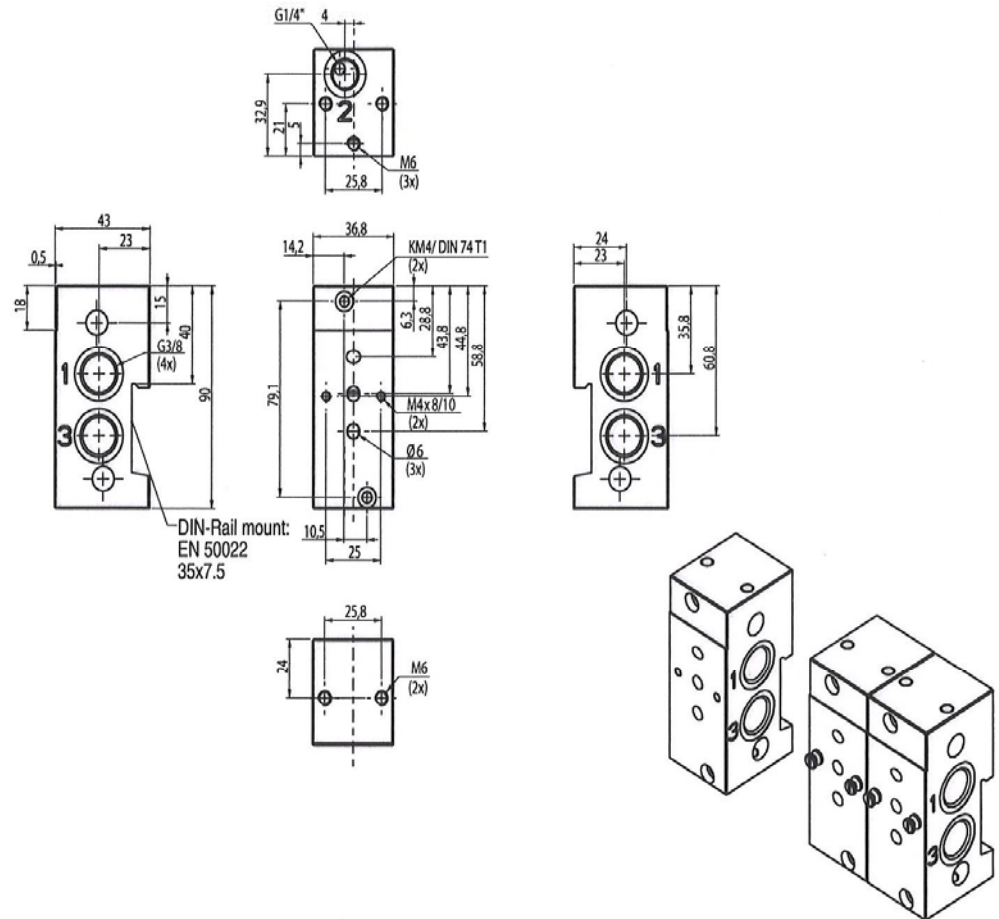
Weight: 0,49 kg



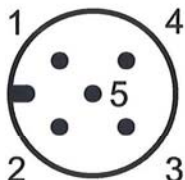
DN 4

Joinable subbase

Weight: 0,3 kg



CONNECTOR PINNING / CABLE WIRING



View from soldering side

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) ¹	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.

¹ Analog input when using cascade control

CONNECTOR PINNING / 2BIT - SETPOINT



pin	description
1	24V voltage supply
2	Input signal 1 (LSB)
3	Supply ground
4	Input signal 2 (MSB)
5	unused

ACCESSORIES

description	catalogue number
Right-angle M12 female connector , 5 pins, with screw terminals	101635
RS 232 cable converter; 2m cable with 9-pin Sub-D (plug connector)	101637