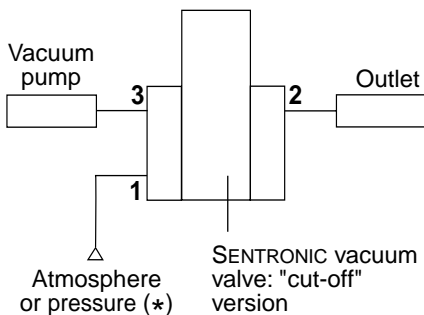


FEATURES

- **SENTRONIC valves can be used for applications where pressure and vacuum control is required.**
For instance, for testing the strength of piping, for testing car brake amplifiers, etc.
- **2 versions are available:**

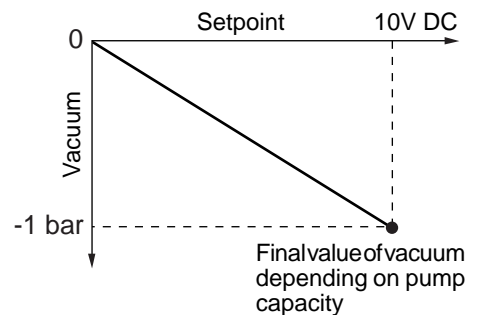
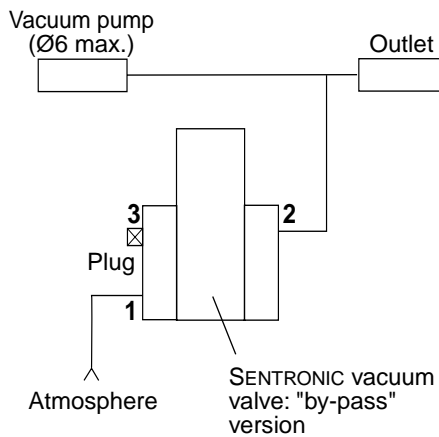
"Cut-off" version

The valve is connected between the vacuum pump and the system to be regulated as shown in the diagram below. As long as the level of vacuum is not reached, the SENTRYONIC valve allows free flow between the pump and the load system. When the setpoint is reached, the valve closes the circuit and no more air is consumed. In the event of leakage of the load system, the valve provides regulation by reconnecting the volume to the vacuum pump. When the setpoint is switched off, the valve breaks the vacuum by connecting the volume to atmosphere. When the 24V DC is switched off, the valve connects the outlet to maximum vacuum.



"By-pass" version

The vacuum pump operates continuously and the SENTRYONIC is installed in a branch to regulate the level of the vacuum in the load system as a function of the setpoint by allowing a variable rate of air at atmospheric pressure to enter the system. In this case, port 3 must be blanked off.



GENERAL

Fluid

Vacuum or air, filtered at 50 µm, without condensate

Control range

0-1 bar

Ambient temperature

0°C to +40°C

Flow (at -1 bar)

210 to 5600 l/min (ANR)

Setpoint

- analog 0 - 10 V (0 - 20 mA or 4 - 20 mA as option)

- digital (option)

8 bits + memory function

8 bits + pressure reset

Hysteresis

< 1% of span

Linearity

< 0,5% of span

Repeatability

< 0,5% of span

(*) To accelerate vacuum control, it is possible to apply pressure (max. 5 bar) instead of atmospheric pressure to port 1.

CONSTRUCTION (same as standard SENTRYONIC, see page 1)

ELECTRICAL CHARACTERISTICS

nominal diameter DN (mm)	stabilised voltage (1)	max. power (W)	max. current (2) (mA)	insulation class	degree of protection	electrical connection
3	24 V = +/-10%	15	600	F	IP 65	7-pin plug-in connector DIN 43651 (supplied) (16 pins for digital)
6		29	1200			
12		34	1400			
20		44	1800			

(1) Max. ripple: 10 %

(2) Max. current consumption in highest control range version

SPECIFICATIONS

Ø connection	Ø orifice (mm)	flow		control range (bar)	SENTRONIC version	catalogue number
		Kv coefficient	at -1 bar (l/min)			
G 1/8	3	3	210	0 - 1	cut-off by-pass	consult us
G 1/4	6	10	700	0 - 1	cut-off	60100204
					by-pass	60100201
G 1/2	12	20	1400	0 - 1	cut-off	60100205
					by-pass	60100202
G 1	20	80	5600	0 - 1	cut-off	60100206
					by-pass	60100203

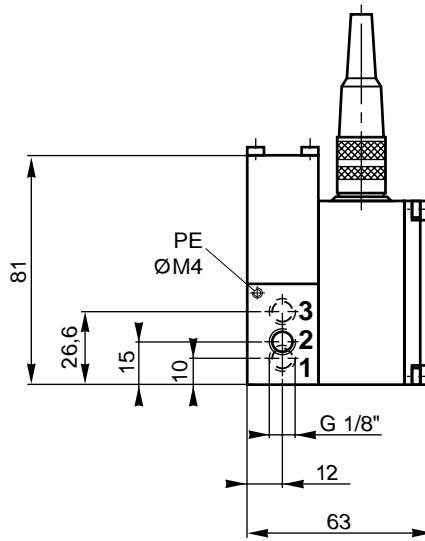
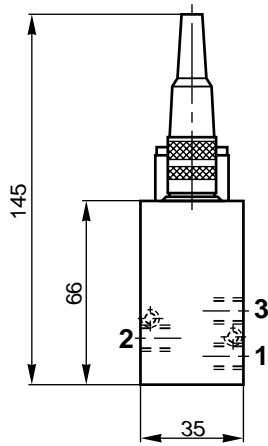
OPTIONS

Same as standard SENTRYONIC (see page 1)

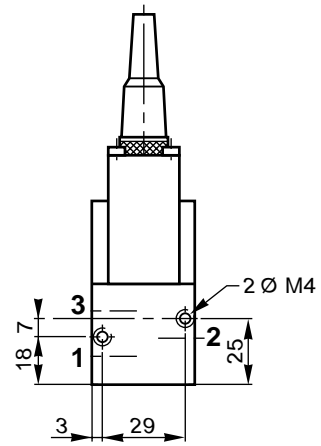
Control: The same SENTRYONIC can regulate pressure or vacuum (-1 ... +5 bar, for example), consult us.

DIMENSIONS (mm), WEIGHT (kg)

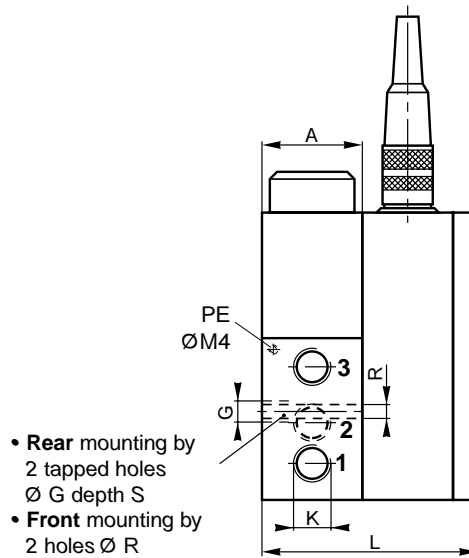
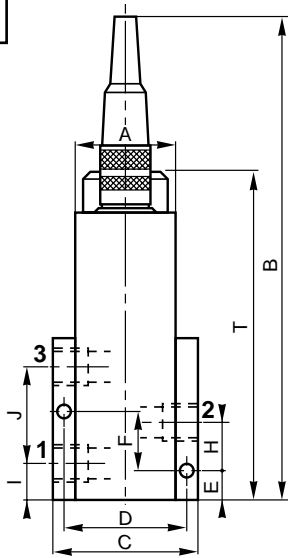
G 1/8
Weight: 0,65 kg



Bottom view



G 1/4 to G 1



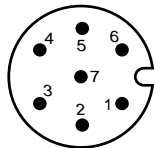
- Rear mounting by 2 tapped holes Ø G depth S
- Front mounting by 2 holes Ø R

Ø nominal	A	B	C	D	E	F	G	H	I	J	K	L	R	S	T	weight
6	36	175	52	43	10	20	M6	16	11	34,3	G 1/4	74	4	10	105	0,950
12	45	205	70	57,5	12	28	M6	22,5	15	48,5	G 1/2	93	4	10	136	1,900
20	60	240	96	79	15	33	M8	30,5	20	60	G 1	117	6	15	178	3,900

CONNECTOR WIRING

Analog setpoint version

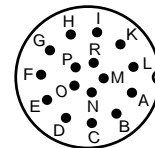
view direction "V"
(solder side of female connector)



- 1 - Power + 24V ±10%
- 2 - GND (Power)
- 3 - Input setpoint
- 4 - GND (Input)
- 5 - Output voltage stabilised 12 V, max. 30 mA
- 6 - Actual pressure (sensor output) (signal 0-10 V for the max. control range - max. 10 mA)
- 7 - Not connected (standard)
As option: pressure switch output connection NPN or PNP (max. 500 mA)

Digital setpoint version

view direction "V"
(solder side of female connector)



- A - Power +24V ±10%
- B - GND (Power)
- C - Bit 1 (LSB)
- D - Bit 2
- E - Bit 3
- F - Bit 4
- G - Bit 5
- H - Bit 6
- I - Bit 7
- K - Bit 8 (MSB)
- L - Memory function (option 010537)
Pressure reset (option 010606)
- M - Not connected (standard)
As option: pressure switch output connection NPN or PNP (max. 500 mA)
- N - Not connected
- O - Not connected
- P - Pressure signal (pressure sensor output 0 - 10V for the pressure range in question)
- R - Not connected