

**GENERAL**

|   |  |
|---|--|
| <b>Fluid</b>                            | Air or neutral gas, filtered at 50 µm, without condensate, lubricated or not |
| <b>Maximum allowable pressure (MAP)</b> | 2 to 18 bar  |
| <b>Control range</b>                    | 0-0,1 bar to 0-16 bar  |
| <b>Fluid temperature</b>                | 0°C to +60°C   |
| <b>Ambient temperature</b>              | 0°C to +40°C   |
| <b>Flow (Qv at 6 bar)</b>               | 700 to 5600 l/min (ANR)  |
| <b>Setpoint - analog</b>                | 0 - 10 V (0 - 20 mA or 4 - 20 mA as option)                                  |
| <b>- digital (option)</b>               | 8 bits + memory function<br>8 bits + pressure reset                          |
| <b>Hysteresis</b>                       | < 1% of span   |
| <b>Linearity</b>                        | < 0,5% of span   |
| <b>Repeatability</b>                    | < 0,5% of span   |
| <b>Minimum setpoint</b>                 | 50 ± 20 mV (0,1 mA) with shutoff function                                    |



**OPERATING DIAGRAM:** see page 4

**CONSTRUCTION**

|                       |                           |
|-----------------------|---------------------------|
| <b>Body</b>           | anodised aluminium        |
| <b>Internal parts</b> | stainless steel and brass |
| <b>Seals</b>          | NBR (nitrile)             |

**ELECTRICAL CHARACTERISTICS**

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

(1) Max. ripple: 10 %

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

**SPECIFICATIONS**


| Ø<br>connection | Ø<br>orifice<br>(mm) | flow              |                           | control range<br>(bar) | maximum allowable<br>pressure (MAP)<br>(bar) | catalogue number |
|-----------------|----------------------|-------------------|---------------------------|------------------------|--|------------------|
|                 |                      | Kv<br>coefficient | at 6 bar<br>(l/min) (ANR) |                        |  |                  |
| G 1/4 *         | 6                    | 10                | 700                       | 0 - 0,1                | 2  | 60100109         |
|                 |                      |                   |                           | 0 - 0,5                | 2  | 60100110         |
|                 |                      |                   |                           | 0 - 1                  | 2  | 60100111         |
|                 |                      |                   |                           | 0 - 3                  | 8  | 60100030         |
|                 |                      |                   |                           | 0 - 6                  | 9  | 60100114         |
|                 |                      |                   |                           | 0 - 10                 | 12   | 60100029         |
|                 |                      |                   |                           | 0 - 16                 | 18   | 60100028         |
| G 1/2           | 12                   | 20                | 1400                      | 0 - 0,1                | 2  | 60100122         |
|                 |                      |                   |                           | 0 - 0,5                | 2  | 60100123         |
|                 |                      |                   |                           | 0 - 1                  | 2  | 60100124         |
|                 |                      |                   |                           | 0 - 3                  | 8  | 60100033         |
|                 |                      |                   |                           | 0 - 6                  | 9  | 60100032         |
|                 |                      |                   |                           | 0 - 12                 | 14   | 60100031         |
|                 |                      |                   |                           | G 1                    | 20   | 80               |
| 0 - 0,5         | 2                    | 60100136          |                           |                        |  |                  |
| 0 - 1           | 2                    | 60100137          |                           |                        |  |                  |
| 0 - 3           | 8                    | 60100036          |                           |                        |  |                  |
| 0 - 6           | 9                    | 60100035          |                           |                        |  |                  |
| 0 - 12          | 14                   | 60100034          |                           |                        |  |                  |

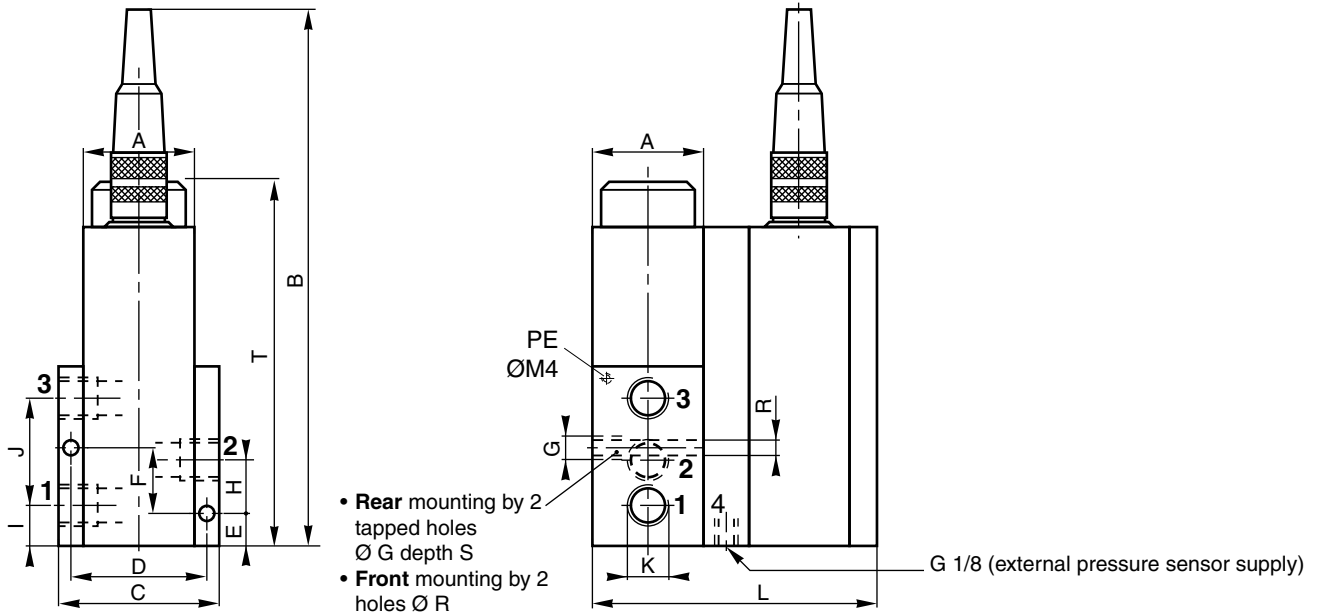
\* G1/8 version on request

**OPTIONS**

|   |                                       |
|---|---------------------------------------|
| Analog setpoint 0 - 20 mA (sensitivity < 0,1 mA - impedance 500 Ω)            | ..... catalogue number: <b>010713</b> |
| Analog setpoint 4 - 20 mA (sensitivity < 0,1 mA - impedance 500 Ω)            | ..... catalogue number: <b>910507</b> |
| Optional ramp   | ..... catalogue number: <b>010610</b> |
| Digital setpoint (8 bits + memory function)                                   | ..... catalogue number: <b>010537</b> |
| Digital setpoint (8 bits + pressure reset)                                    | ..... catalogue number: <b>010606</b> |
| Sensor output 0 - 20 mA (0 - 10 V standard version)                           | ..... catalogue number: <b>010538</b> |
| Sensor output 4 - 20 mA (0 - 10 V standard version)                           | ..... catalogue number: <b>010616</b> |
| Pressure switch / SENTRONIC: (PNP) reference 24 V = if setting is reached     | ..... catalogue number: <b>010579</b> |
| Pressure switch / SENTRONIC: (NPN) ground reference if setting is reached     | ..... catalogue number: <b>010539</b> |
| Pressure switch / SENTRONIC: (PNP) reference 24 V = if setting is not reached | ..... catalogue number: <b>010612</b> |
| Pressure switch / SENTRONIC: (NPN) ground reference if setting is not reached | ..... catalogue number: <b>010613</b> |
| SENTRONIC pneumatic servovalve with external pressure sensor (consult us)     |                                       |
| Metallic sensor   | ..... catalogue number: <b>010607</b> |
| FPM seals (except G1/8)   | ..... catalogue number: <b>460594</b> |
| Oxygen application  | ..... catalogue number: <b>970518</b> |

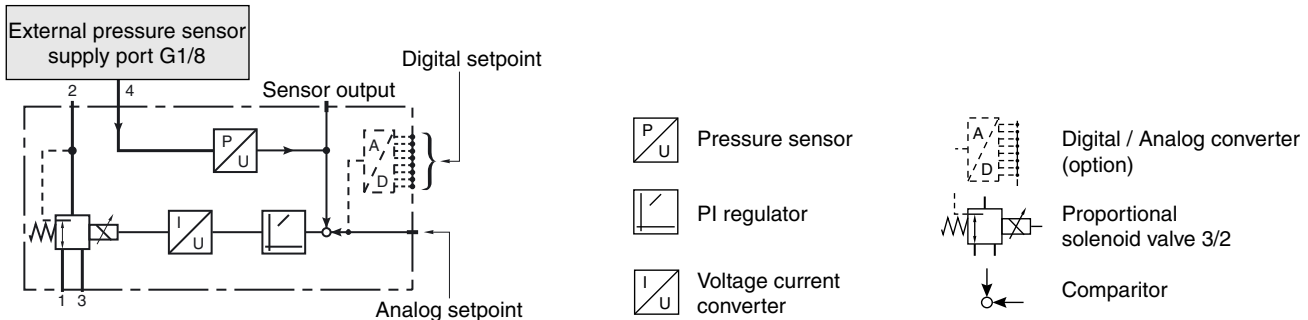
00246GB-2005/R01  
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DIMENSIONS (mm), WEIGHT (kg) 



| 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 | 92  | 4 | 10 | 105 | 1,070  |
| 12        | 45 | 205 | 70 | 57,5 | 12 | 28 | M6 | 22,5 | 15 | 48,5 | G 1/2 | 111 | 4 | 10 | 136 | 2,110  |
| 20        | 60 | 240 | 96 | 79   | 15 | 33 | M8 | 30,5 | 20 | 60   | G 1   | 135 | 6 | 15 | 178 | 4,290  |

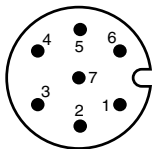
### OPERATING DIAGRAM



### CONNECTOR WIRING

#### Analog setpoint version

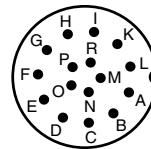
view direction " V " (solder side of female connector)



- 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