

PRECISION PROPORTIONAL PRESSURE REGULATOR SERIES "REGTRONIC"



Proportional pressure regulators series REGTRONIC have the job of precisely regulating the pressure in a system, the variables depending on the input command. The pressure value and a series of information and diagnostics are visible at all times on the graphic display. The user-display interface, LEDs and buttons are all on one side. The programming and reading software is comprehensive, simple and intuitive. Pressure control takes place in a "closed-loop" with an electronic precision pressure sensor that measures the downstream pressure, a control system that compares it with the desired pressure, and two mini solenoid valves that adjust the pressure to reach the target value. Perfect symbiosis between the electronic, mechanical and pneumatic components makes REGTRONIC one of the most accurate and reliable proportional pressure regulators on the market today.

LIQUID CRYSTAL GRAPHIC DISPLAY

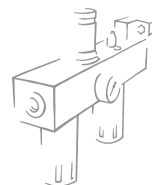


As well as the pressure, it displays complete intuitive messages covering several lines.

PROGRAMMABLE AND FLEXIBLE

Setting options:

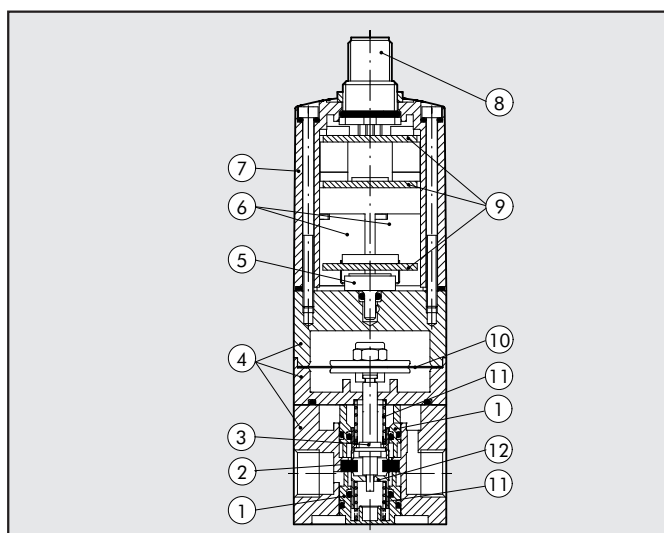
- LANGUAGE
- UNIT OF MEASUREMENT
- TYPE OF INPUT
- TYPE OF DIGITAL OUTPUT
- DEAD-BAND
- FULL SCALE
- MINIMUM PRESSURE



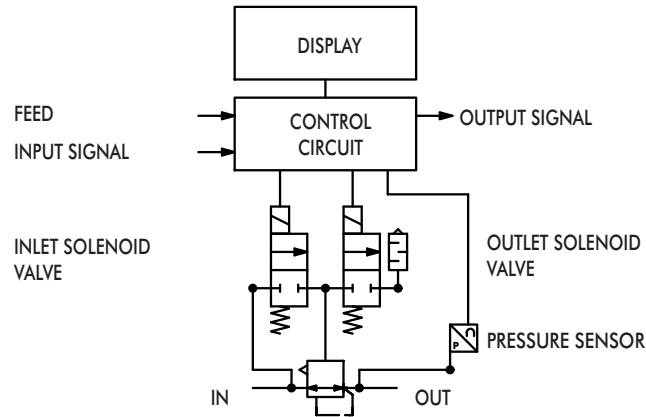
| TECHNICAL DATA | 1/8" | 1/4" | |
|--|---|--|-----------------------------|
| Fluid | Filtered, un lubricated air. The air must be filtered at at least 10 μm | | |
| MIN inlet pressure | Regulation pressure +1 bar | | |
| MAX inlet pressure | 11 | | |
| Temperature range | 0 ÷ 50 | | |
| Pressure regulation range | 0.05 ÷ 10 bar (settable full scale) | | |
| Flow rate at 6.3 bar ΔP 0.5 | Nl/min | 770 | 1490 |
| Flow rate at 6.3 bar ΔP 1 | Nl/min | 1050 | 1700 |
| Exhaust flow rate at 4 bar with 0.1 bar overpressure | Nl/min | 320 | 500 |
| Exhaust flow rate at 4 bar with 0.5 bar overpressure | Nl/min | 650 | 1200 |
| Installation position | in any position | | |
| Weight | gr | 380 | 385 |
| Class of protection | IP 65 | | |
| Power supply | 24 Vcc +10% - 5% I max 110 mA | | |
| Input signal (input impedance) | Voltage | 0 ÷ 5 Vcc, 0 ÷ 10 Vcc (approx. 168 KΩ) | |
| | Current | 4 ÷ 20 mA (approx. 100 KΩ) | |
| | Serial ports | RS 232 | |
| | Manual | Keypad | |
| Output signal | Analog | 0 ÷ 10 Vcc (1 V=1bar) - 1 mA max | |
| | Digital | PNP open collector output: max 24V 60 mA NPN open collector output: max 24V 60 mA | |
| Linearity | | | ≤ ± 0,5% (Full scale) |
| Hysteresis | | | ≤ ± 0,2% (Full scale) |
| Repeatability | | | ≤ ± 0,2% (Full scale) |
| Sensitivity/Dead-band | | | setting range 10 ÷ 100 mbar |
| Output pressure display | Accuracy | ≤ ± 0,3% (Full scale) | |
| | Unit of measurement | bar, Mpa, PSI | |
| | Minimum resolution | 0.01 bar - 0.001 MPa - 0.01 PSI | |
| Analog output accuracy | | | ≤ ± 0,4% (Full scale) |
| Temperature characteristics | | | max 2 mbar / °C |
| Response time with ΔP =1 bar and 100 cc volume | | | 0.2 sec |

COMPONENTS

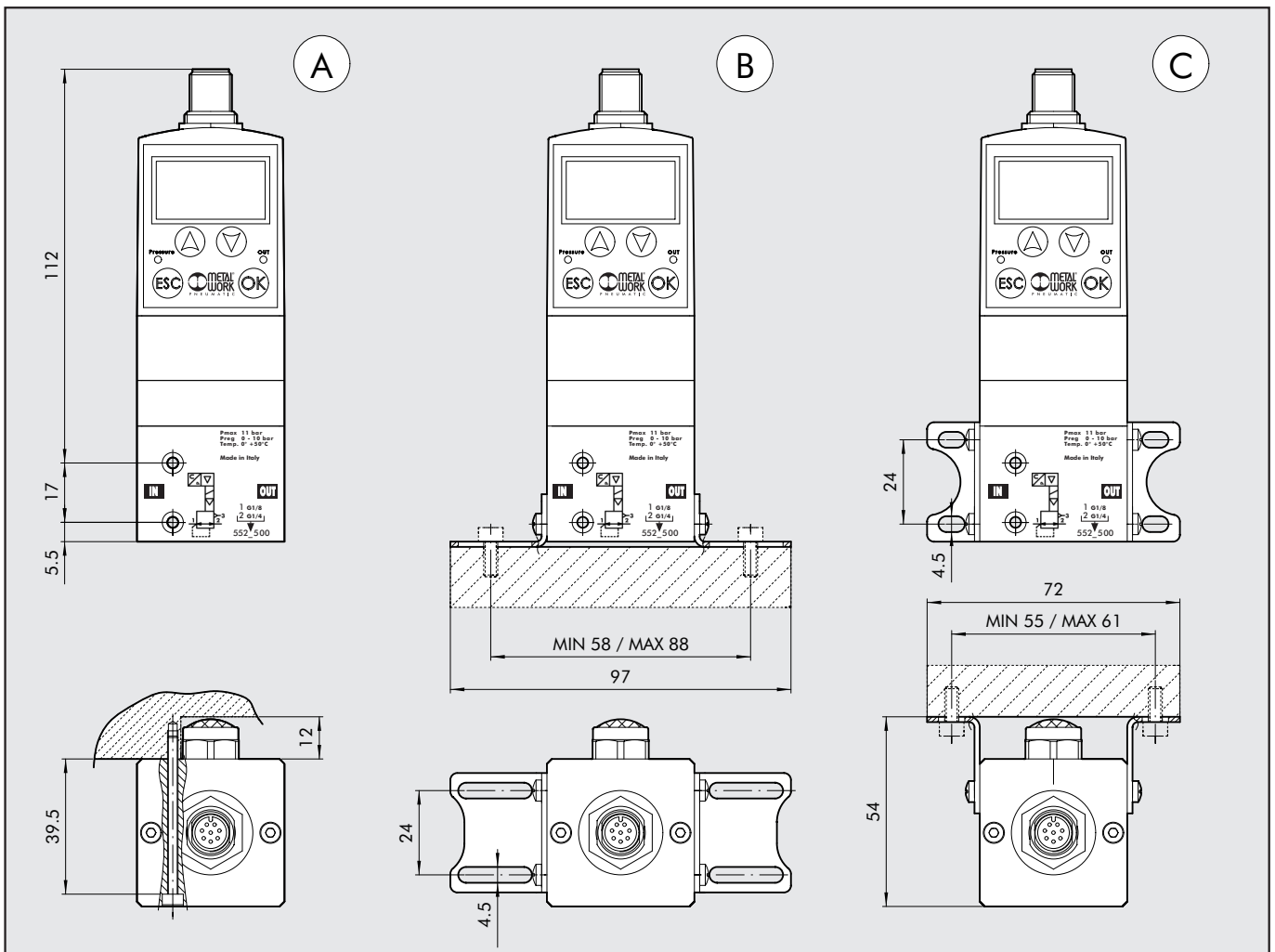
- ① Cartridges: nickel-plated brass
- ② Ring: vulcanized NBR
- ③ Rod: steel
- ④ Bodies: painted aluminium
- ⑤ Pressure sensor
- ⑥ Solenoid valve: 10 mm series PILOTino
- ⑦ Shell: technopolymer
- ⑧ Connector M12 8 pin
- ⑨ Electronic boards
- ⑩ Control diaphragm: anti-oil rubber
- ⑪ Spring: stainless steel
- ⑫ Poppet: nickel-plated brass



FUNCTION DIAGRAM



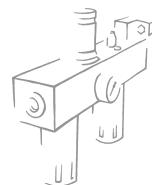
INSTALLATION



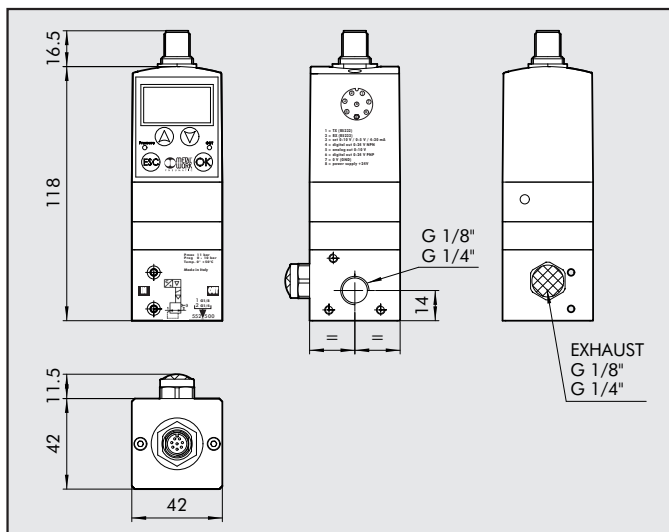
A On the wall with 2 M3 hex screws

B On the base with legs code 9200710

C On the wall with legs code 9200710



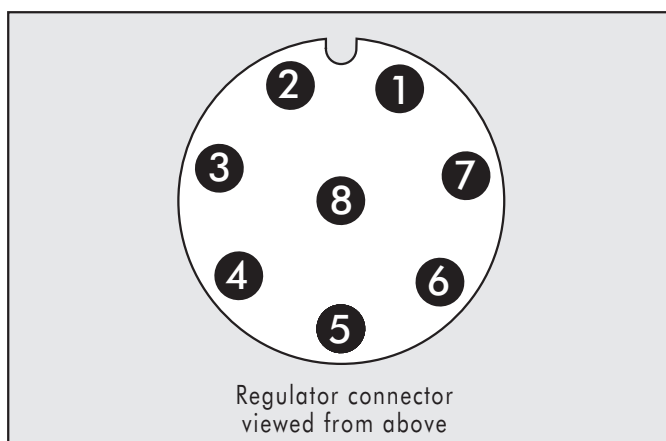
DIMENSIONS AND ORDERING CODES



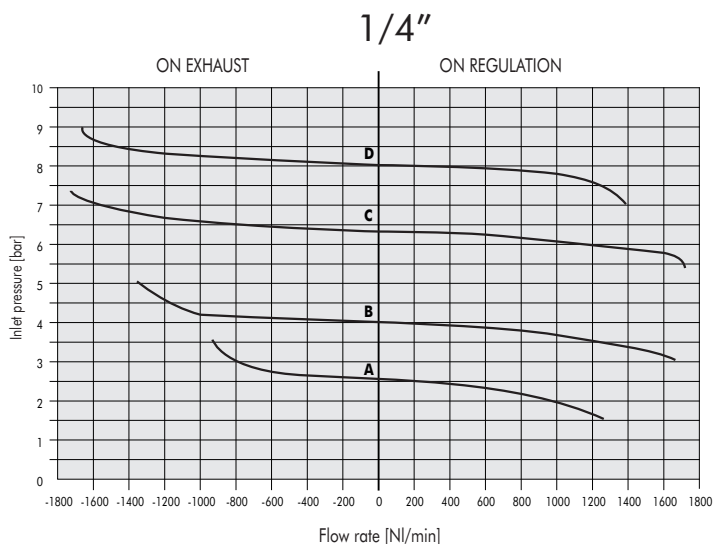
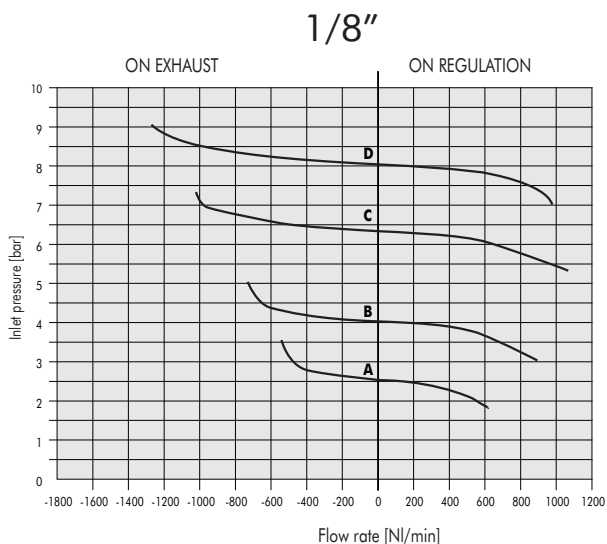
| Code | Description |
|---------|---------------|
| 5521500 | REGTRONIC 1/8 |
| 5522500 | REGTRONIC 1/4 |

CONFIGURATION OF THE M12X1 8-PIN CONNECTOR

- | | |
|----------------------------------|----------|
| 1 = TX (RS232) | (WHITE) |
| 2 = RX (RS232) | (BROWN) |
| 3 = set 0-10 V / 0-5 V / 4-20 mA | (GREEN) |
| 4 = digital out 0-24 V NPN | (YELLOW) |
| 5 = analog out 0-10 V | (GREY) |
| 6 = digital out 0-24 V PNP | (PINK) |
| 7 = 0 V (GND) | (BLUE) |
| 8 = power supply +24V | (RED) |



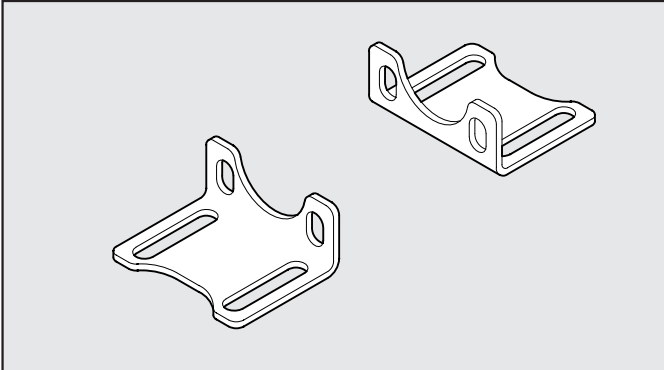
FLOW CHARTS



A = 2.5 bar B = 4 bar C = 6.3 bar D = 8 bar

ACCESSORIES

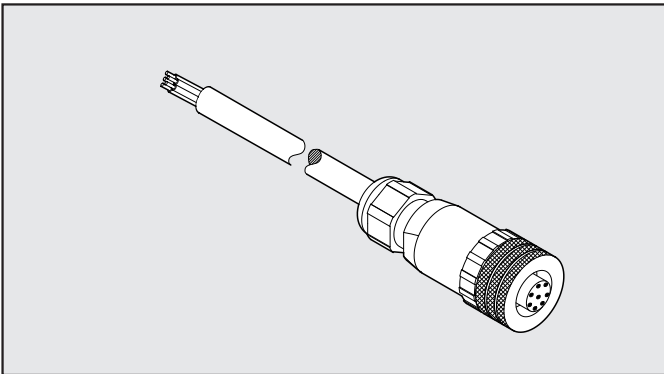
FIXING BRACKET KIT



| Code | Description |
|---------|--------------------|
| 9200710 | FIXING BRACKET KIT |

N.B. supplied complete with four M4X6 screws

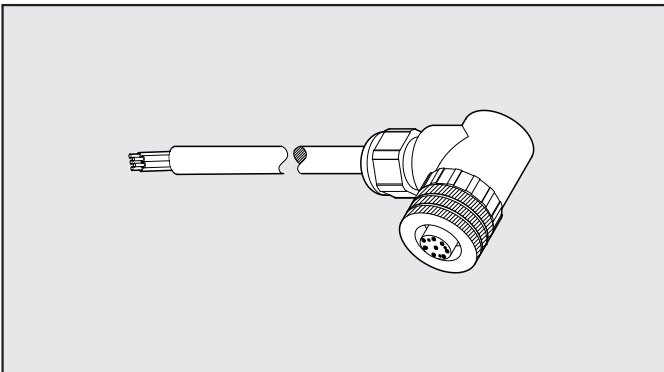
M12x1 PRE-WIRED 8-PIN FEMALE STRAIGHT CONNECTOR



| Code | Description |
|-------------|--|
| W0970513010 | M12X1 PRE-WIRED 8-PIN STRAIGHT CONNECTOR, CABLE L= 5 m |

- 1 - WHITE
- 2 - BROWN
- 3 - GREEN
- 4 - YELLOW
- 5 - GREY
- 6 - PINK
- 7 - BLUE
- 8 - RED

M12x1 PRE-WIRED 8-PIN FEMALE 90° CONNECTOR



| Code | Description |
|-------------|---|
| W0970513011 | M12X1 PRE-WIRED 8-PIN 90° CONNECTOR, CABLE L= 5 m |

- 1 - WHITE
- 2 - BROWN
- 3 - GREEN
- 4 - YELLOW
- 5 - GREY
- 6 - PINK
- 7 - BLUE
- 8 - RED

NOTES