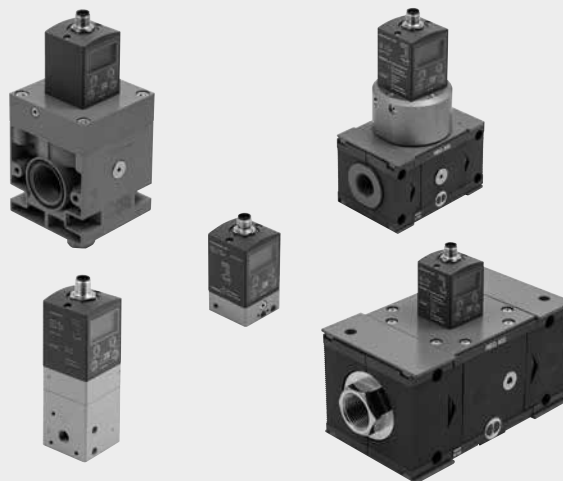


PROPORTIONAL PRECISION PRESSURE REGULATOR REGTRONIC SERIES

Proportional pressure regulators series REGTRONIC have the job of precisely regulating the pressure in a system, the variables depending on the input command. Remote control regulators are controlled by means of an M12x1 cable and connector and can have Volt, mA, RS232 control or via IO-Link. Regulators with a display can be controlled via a cable or directly using the keys below the display. The pressure value and a series of information and diagnostics are visible at all times on the graphic display.

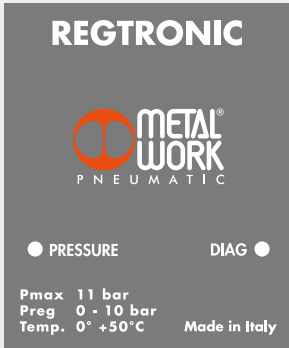
The user-display interface, LEDs and buttons are all on one side. The programming and reading software is comprehensive, simple and intuitive. Pressure control takes place in a "closed-loop" with an electronic precision pressure sensor that measures the downstream pressure, a control system that compares it with the desired pressure, and two mini solenoid valves that adjust the pressure to reach the target value.



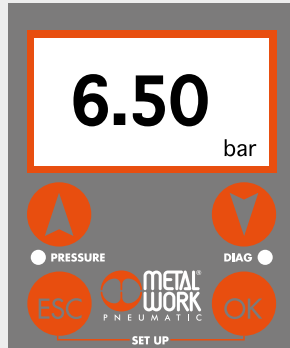
TECHNICAL DATA	REGTRONIC			REGTRONIC NEW DEAL		REGTRONIC 300		REGTRONIC 400				
	M5	1/8"	1/4"	3/4"	1"	1/2"	3/4"	1"	1"	1 1/4"	1 1/2"	2"
Threaded port	M5 1/8" 1/4" 3/4" 1" 1/2" 3/4" 1" 1" 1 1/4" 1 1/2" 2"											
Fluid	Filtered, unlubricated air. The air must be filtered at least 10 µm and without condensation.											
MIN inlet pressure	bar Regulation pressure + 1 bar											
MAX inlet pressure	bar 11											
Temperature range	°C from 0 to 50											
Pressure regulation range	bar from 0.05 to 10 (settable full scale and minimum pressure)											
Flow rate at 6.3 bar ΔP 0.5	10	1300	1500	10000	4500	18000	20000					
Flow rate at 6.3 bar ΔP 1	10	1450	1700	13000	7000	-	-					
Exhaust flow rate at 6.3 bar with 0.1 bar overpressure	2	600	1300	1800	250	400	400					
Exhaust flow rate at 6.3 bar with 0.5 bar overpressure	9	1000	1500	2000	500	850	850					
Response time with ΔP = 1 bar	100	100	1000	100	1000	1000	1000	1000	1000	1000	1000	1000
from 6 to 7 bar	0.5	0.1	0.15	0.1	0.15	0.27	0.25	0.2	0.2	0.2	0.2	0.2
from 7 to 6 bar	0.55	0.1	0.15	0.1	0.15	0.27	0.33	0.35	0.35	0.35	0.35	0.35
Weight	0.2	0.38	0.38	1.3	1.5	5	5.8					
Class of protection	IP 65											
Supply voltage range IO-Link version	VDC from 18 to 30											
Current absorption	Max 150 mA at 18VDC											
Supply voltage range analog version	VDC 12 -10% 24 +30%											
Minimum operating voltage	VDC 10.8											
Maximum operating voltage	VDC 31.2											
Maximum admissible voltage	VDC 32 *											
Current absorption	max 220 mA at 12VDC											
Input signal (input impedance)	Voltage 0 to 5 VDC, 0 to 10 VDC (approx. 6.3 KΩ)											
Current	4 to 20 mA (approx. 100 Ω)											
Serial ports	RS 232											
Manual	Keypad											
Output signal	Analog version voltage 0 to 10 VDC (1 VDC = 1 bar) - 1 mA max											
Analog version current	4 to 20 mA (4 mA = 0 bar, 20 mA = 10 bar)											
Digital	PNP open collector output: max 24VDC 60 mA NPN open collector output: max 24VDC 60 mA											
Hysteresis	± 0.2% (Full scale)											
Repeatability	± 0.2% (Full scale)											
Sensitivity/Dead-band	setting range 10 to 300 mbar											
Output pressure (display version)	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	± 0.1% of the reading											
Temperature characteristics	max 2 mbar / °C											
Installation position	In any position											
Notes	The features shown refer to the static condition only. With air consumption on the output side, the pressure may vary. On all analog versions you can set the parameters using the software "MWRegtronic" downloadable from the website www.metalwork.eu ; to connect the PC to Regtronic you can use the cable code W0970513019.											

* IMPORTANT! Voltage greater than 32VDC will damage the system irreparably.

REMOTE-CONTROL VERSION



DISPLAY VERSION



PROGRAMMABLE AND FLEXIBLE

Setting options:

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

The remote-control version of the Regtronic has two diagnostic LEDs.

The display version also has buttons for entering the various parameters.

PRECISION

Linearity
± 0.5 % (full scale)

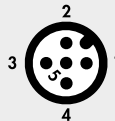
Hysteresis
± 0.2 % (full scale)

Repeatability
± 0.2 % (full scale)

Sensitivity
range 10 to 300 mbar

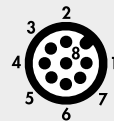
IO-Link CONNECTOR 5-PIN M12x1

IO-Link



Pin	Signal	Description of Class A Port	Lead colour
1	L+	+24 VDC power supply	Brown
2	NC	/	White
3	L-	0 VDC power supply	Blue
4	C/Q	IO-Link communication	Black
5	NC	/	Gray

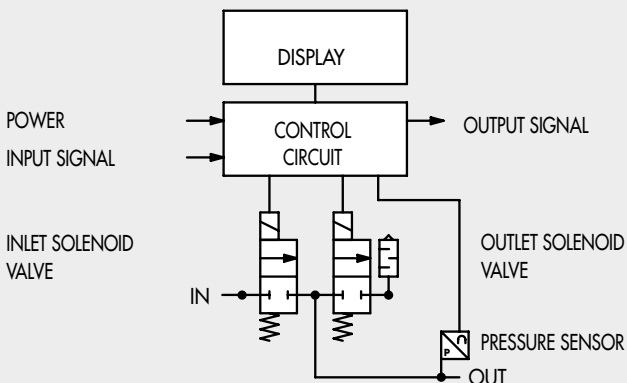
ANALOG CONNECTOR 8-PIN M12x1



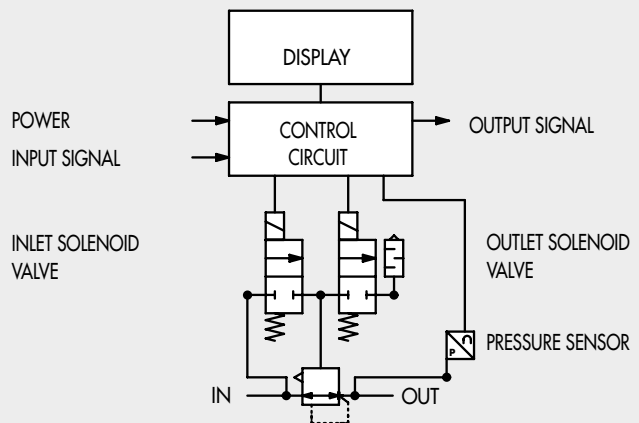
Pin	Signal	Description	Lead colour
1	TX	RS232	White
2	RX	RS232	Brown
3	Pressure set	0 to 10 VDC / 0 to 5 VDC / 4 to 20 mA	Green
4	Digital out	NPN	Yellow
5	Analog out	Voltage version 0 to 10 VDC Current version 4 to 20 mA	Gray
6	Digital out	PNP	Pink
7	0 VDC	Power supply	Blue
8	+ VDC	Power supply	Red

FUNCTION DIAGRAM

REGTRONIC M5



REGTRONIC 1/8" - 1/4" - SK300 - SK400 - NEW DEAL

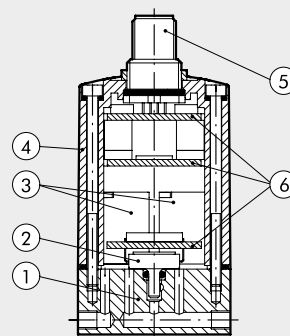


REGTRONIC M5

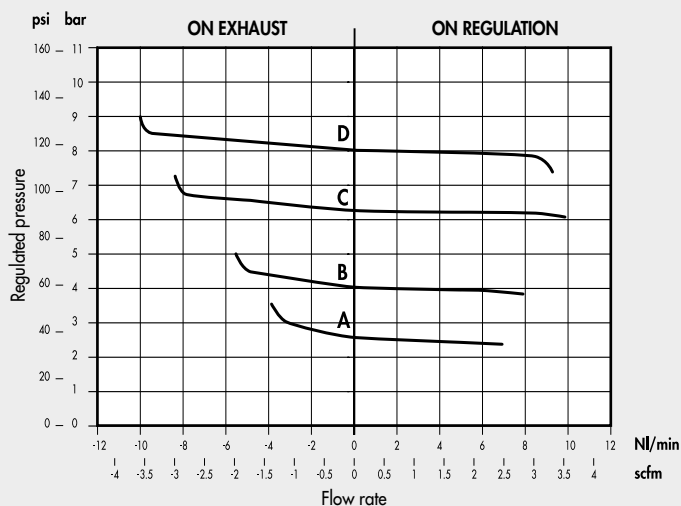
COMPONENTS



- ① BODY: painted aluminium
- ② PRESSURE SENSOR
- ③ SOLENOID VALVE: 10 mm series PLT-10
- ④ SHELL: technopolymer
- ⑤ CONNECTOR M12
- ⑥ ELECTRONIC BOARDS

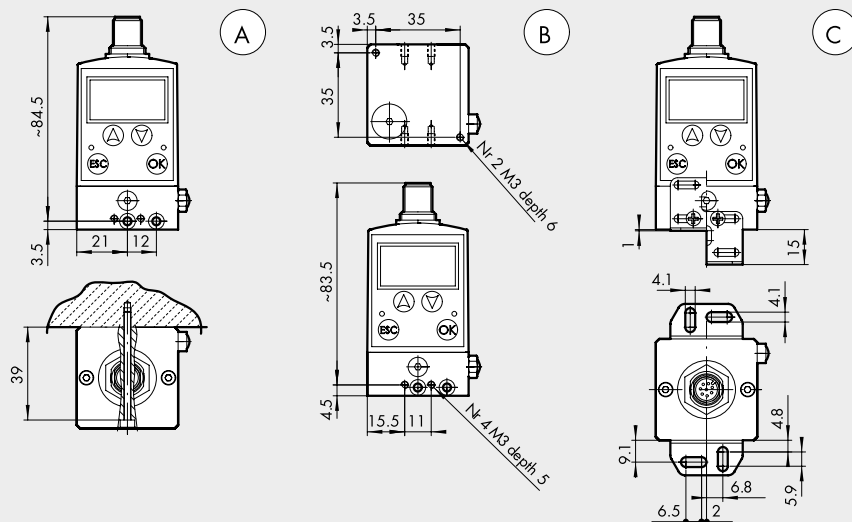


FLOW CHARTS



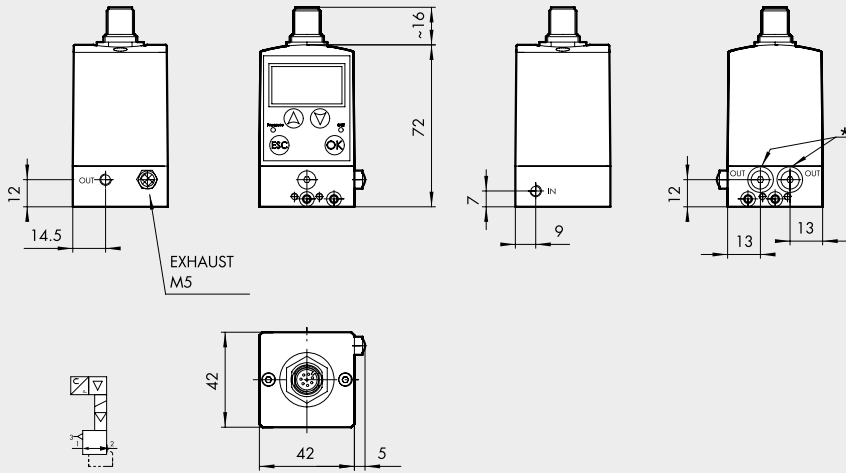
- A = 2.5 bar
- B = 4 bar
- C = 6.3 bar
- D = 8 bar
- Pm = 10 bar

FIXING OPTIONS



- Ⓐ On the wall with 2 M3 screws, with through holes
- Ⓑ On the wall using the M3 threaded holes on the front, rear and underside
- Ⓒ On the wall with legs code 920071

DIMENSIONS AND ORDERING CODES



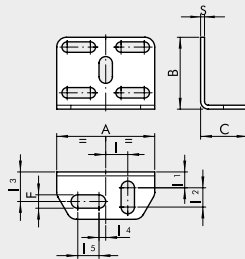
Code	Description
5520500	REGTRONIC M5 with display OUT 0-10 V
5520502	REGTRONIC M5 remote control OUT 0-10 V
5540500	REGTRONIC M5 with display OUT 4-20 mA
5540502	REGTRONIC M5 remote control OUT 4-20 mA

5530500	REGTRONIC IO-Link M5 with display
5530502	REGTRONIC IO-Link M5 remote control

* alternative outputs, removing the M5 cap

ACCESSORIES

FIXING BRACKET KIT



Code	Description									
9200711	Regtronic M5 Fixing bracket kit									
A	B	C	F	I	I1	I2	I3	I4	I5	S
30	22	14.5	4.2	6.8	4.8	5.9	9.1	2	6.5	1.2

Note: supplied complete with four M3x6 screws

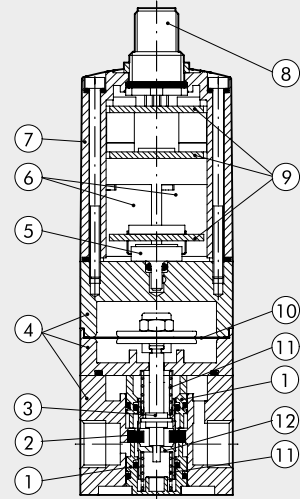
NOTES

REGTRONIC 1/8"; 1/4"



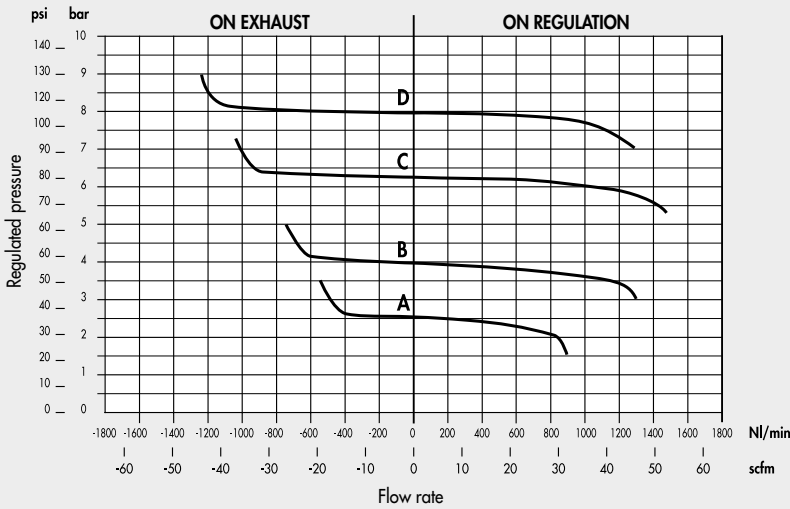
COMPONENTS

- 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 PLT-10
- ⑦ SHELL: technopolymer
- ⑧ CONNECTOR M12
- ⑨ ELECTRONIC BOARDS
- ⑩ CONTROL DIAPHRAGM: anti-oil rubber
- ⑪ SPRING: stainless steel
- ⑫ POPPET: nickel-plated brass



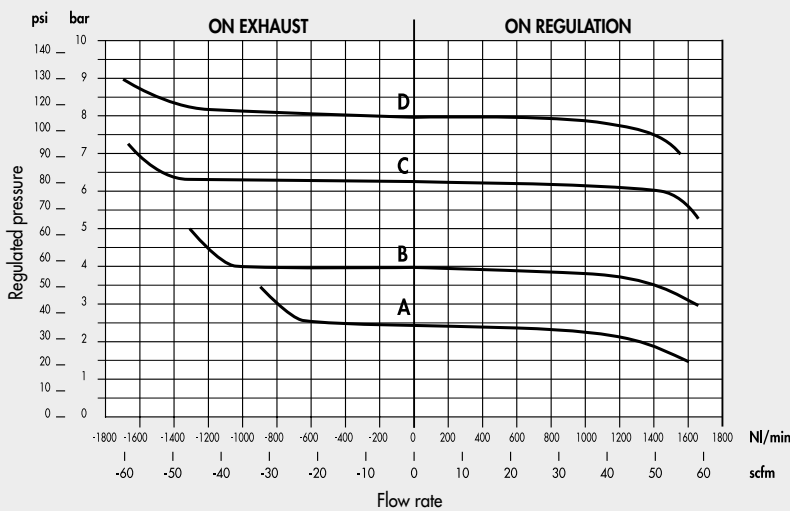
FLOW CHARTS

REGTRONIC 1/8"



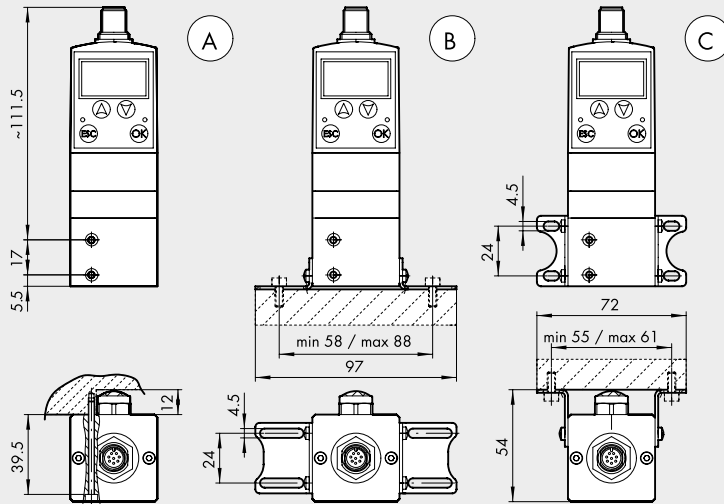
A = 2.5 bar
 B = 4 bar
 C = 6.3 bar
 D = 8 bar
 Pm = 10 bar

REGTRONIC 1/4"



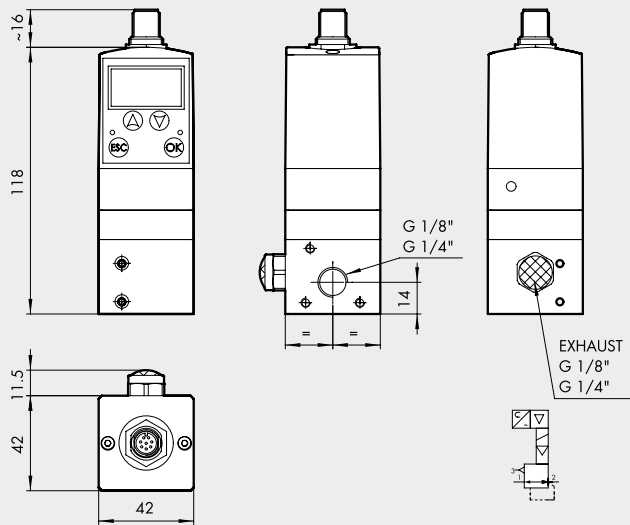
A = 2.5 bar
 B = 4 bar
 C = 6.3 bar
 D = 8 bar
 Pm = 10 bar

FIXING OPTIONS



- Ⓐ On the wall with 2 M3 screws
- Ⓑ On the base with legs code 9200710
- Ⓒ On the wall with legs code 9200710

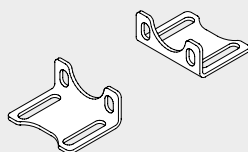
DIMENSIONS AND ORDERING CODES



Code	Description
5521500	REGTRONIC 1/8 with display OUT 0-10 V
5521502	REGTRONIC 1/8 remote control OUT 0-10 V
5522500	REGTRONIC 1/4 with display OUT 0-10 V
5522502	REGTRONIC 1/4 remote control OUT 0-10 V
5541500	REGTRONIC 1/8 with display OUT 4-20 mA
5541502	REGTRONIC 1/8 remote control OUT 4-20 mA
5542500	REGTRONIC 1/4 with display OUT 4-20 mA
5542502	REGTRONIC 1/4 remote control OUT 4-20 mA
5531500	REGTRONIC IO-Link 1/8 with display
5531502	REGTRONIC IO-Link 1/8 remote control
5532500	REGTRONIC IO-Link 1/4 with display
5532502	REGTRONIC IO-Link 1/4 remote control

ACCESSORIES

FIXING BRACKET KIT



Code	Description
9200710	Fixing bracket kit

Note: supplied complete with four M4x6 screws

NOTES