

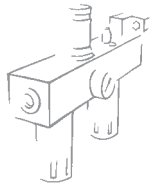
PROPORTIONAL PRECISION PRESSURE REGULATOR "REGTRONIC" SERIES

Proportional pressure regulators series REGTRONIC have the job of precisely regulating the pressure in a system, the variables depending on the input command. 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			
	1/8"	1/4"	3/4"	1"	1/2"	3/4"	1"	1"	1 1/4"	1 1/2"	2"
Threaded ports	Filtered, unlubricated air. The air must be filtered at										
Fluid	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 (settable full scale and minimum pressure)										
Flow rate at 6.3 bar ΔP 0.5	770	1490	10000		4500		18000		20000		
Flow rate at 6.3 bar ΔP 1	1050	1700	13000		7000		-		-		
Exhaust flow rate at 6.3 bar with 0.1 bar overpressure	320	500	1800		250		400		400		
Exhaust flow rate at 6.3 bar with 0.5 bar overpressure	650	1200	2000		500		850		850		
Weight	0.38	0.38	1.3		1.5		5		5.8		
Class of protection	IP 65										
Power supply	24 Vcc +10% -5% I max 110 mA										
Input signal (input impedance)	0 ÷ 5 Vcc, 0 ÷ 10 Vcc (approx. 168 KΩ)										
	4 ÷ 20 mA (approx. 100 KΩ)										
	Serial ports										
	Manual										
	Keypad										
Output signal	0 ÷ 10 Vcc (1 V=1bar) - 1 mA max										
	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										
Analogue output accuracy	≤ ± 0,4% (Full scale)										
Temperature characteristics	max 2 mbar / °C										
Response time with ΔP =1 bar	volume 100 cc		volume 1000 cc		volume 1000 cc			volume 1000 cc			
from 6 to 7 bar	s	0.2	s	0.3	s	0.45	s	0.35	s	0.7	
from 7 to 6 bar	s	0.3	s	0.3	s	0.45	s	0.7	s		
Installation position	in any position										

N.B.: The features shown refer to the static condition only. With air consumption on the output side, the pressure may vary.



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

PRECISION

Linearity $\pm 0,5 \%$ (full scale)

Hysteresis $\pm 0,2 \%$ (full scale)

Repeatability $\pm 0,2 \%$ (full scale)

Sensitivity range **10 ÷ 100** mbar

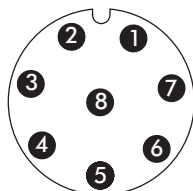
M12 x 1 CONNECTOR



8-pin connector
 - standard
 - available from the trade

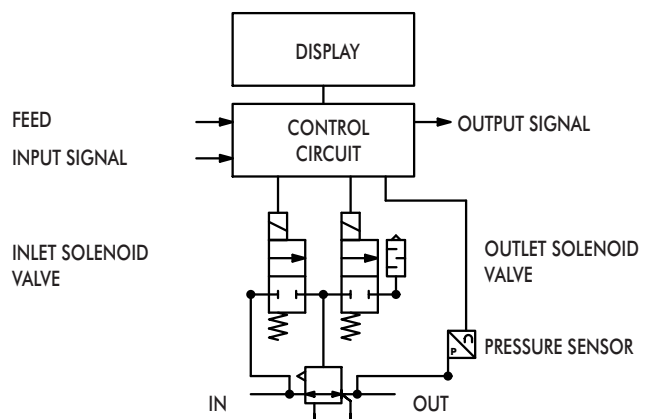
CONFIGURATION OF THE M12X1 8-PIN CONNECTOR

- | | |
|----------------------------------|----------|
| 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) |



Regulator connector viewed from above

FUNCTION DIAGRAM

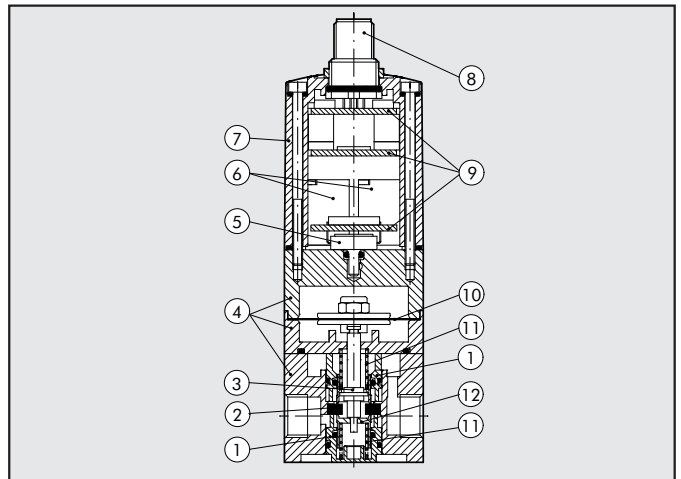


REGTRONIC 1/8"; 1/4"

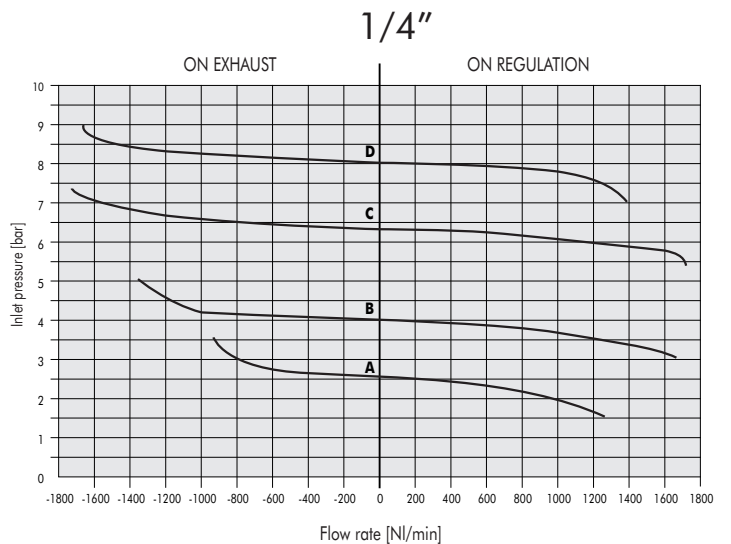
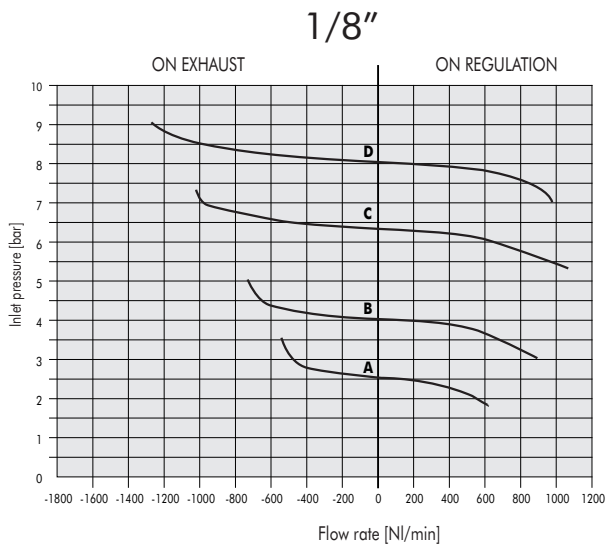


COMPONENTS

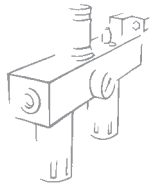
- ① CARTRIDGES: nickel-plated brass
- ② RING: vulcanized NBR
- ③ ROD: steel
- ④ BODIES: painted aluminium
- ⑤ PRESSURE SENSOR
- ⑥ SOLENOID VALVE: 10 mm series PLT-10
- ⑦ SHELL: technopolymer
- ⑧ CONNECTOR M12 8 pin
- ⑨ ELECTRONIC BOARDS
- ⑩ CONTROL DIAPHRAGM: anti-oil rubber
- ⑪ SPRING: stainless steel
- ⑫ POPPET: nickel-plated brass



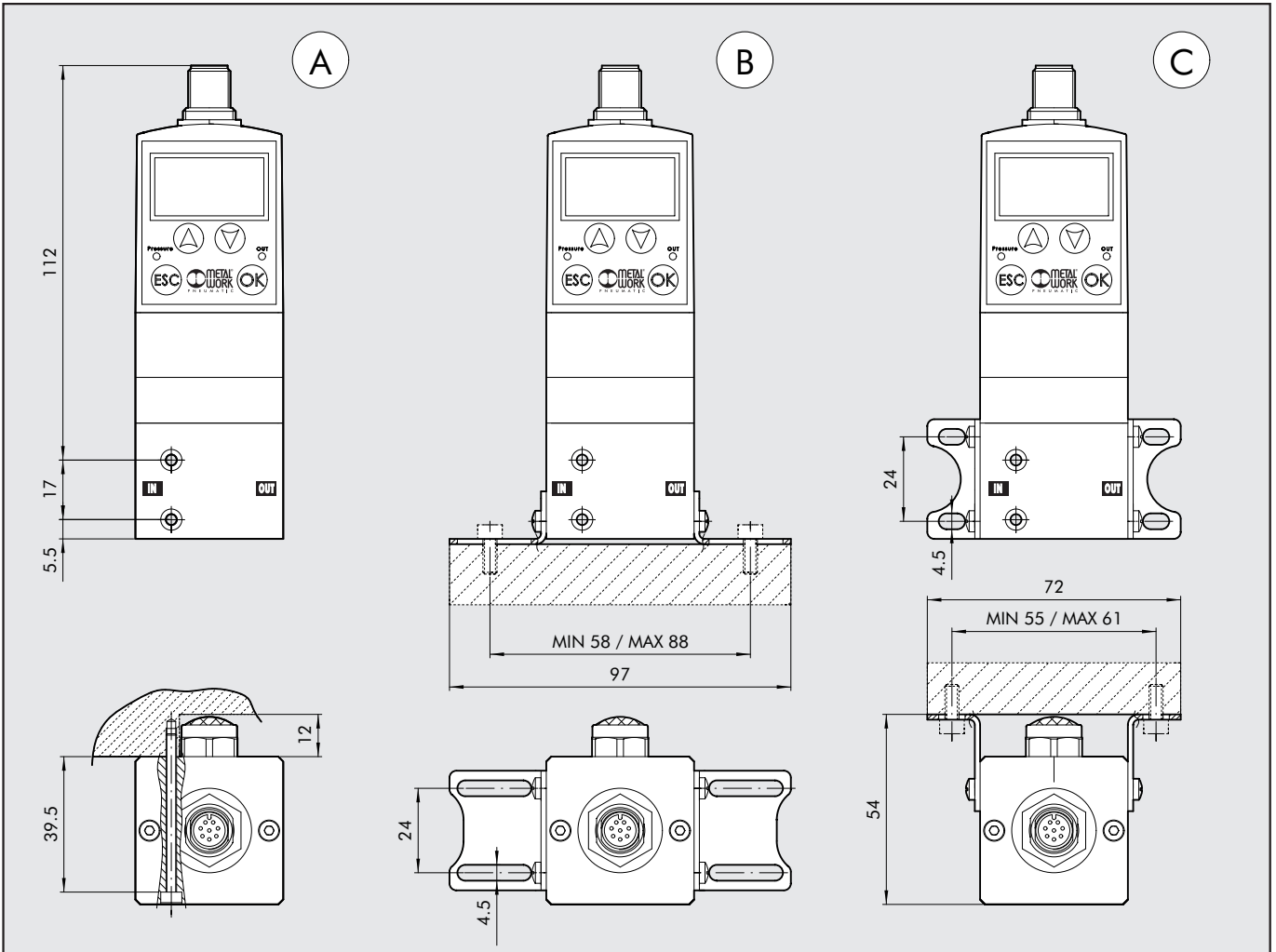
FLOW CHARTS



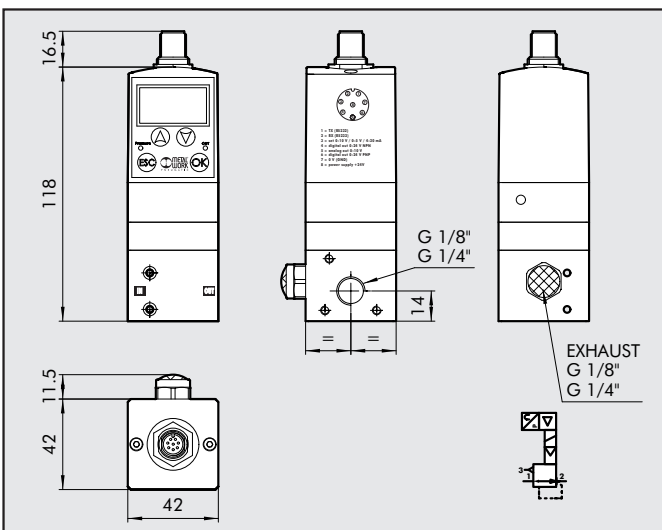
A = 2.5 bar B = 4 bar C = 6.3 bar D = 8 bar Pm = 7 bar



INSTALLATION



DIMENSIONS AND ORDERING CODES

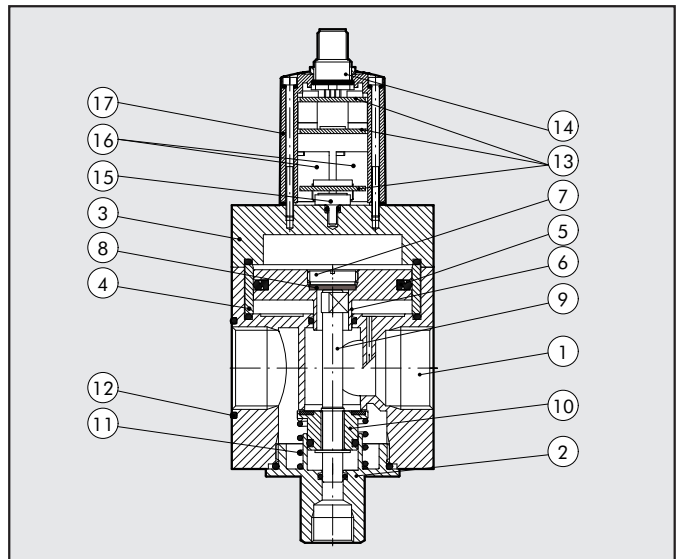


Code	Description
5521500	REGTRONIC 1/8
5522500	REGTRONIC 1/4

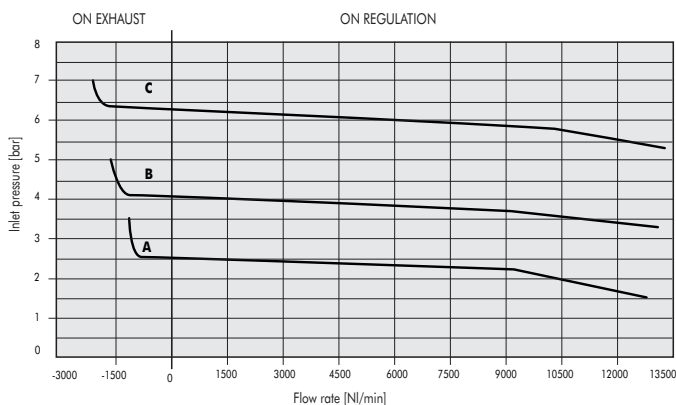


COMPONENTS

- ① REGULATOR BODY: aluminium
- ② LOWER CAP: aluminium
- ③ UPPER PLATE: aluminium
- ④ SPACER: aluminium
- ⑤ GASKET: NBR
- ⑥ PISTON ROD: aluminium
- ⑦ CAP FOR PLAIN GASKET: OT58 brass
- ⑧ PLAIN GASKET: NBR
- ⑨ ROD: OT58 brass
- ⑩ VALVE: OT58 brass
- ⑪ VALVE SPRING: steel
- ⑫ GASKETS: NBR
- ⑬ ELECTRONIC BOARDS
- ⑭ CONNECTOR M12 8 PIN
- ⑮ PRESSURE SENSOR
- ⑯ SOLENOID VALVE: 10 mm series PLT-10
- ⑰ SHELL: tecnopolymer

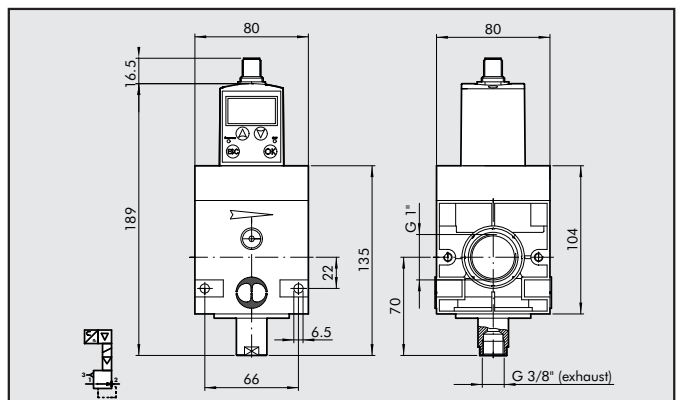


FLOW CHARTS

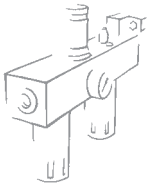


A = 2.5 bar B = 4 bar C = 6.3 bar Pm = 7 bar

DIMENSIONS AND ORDERING CODES



Code	Description
1520003	REGTRONIC 3/4
1620003	REGTRONIC 1

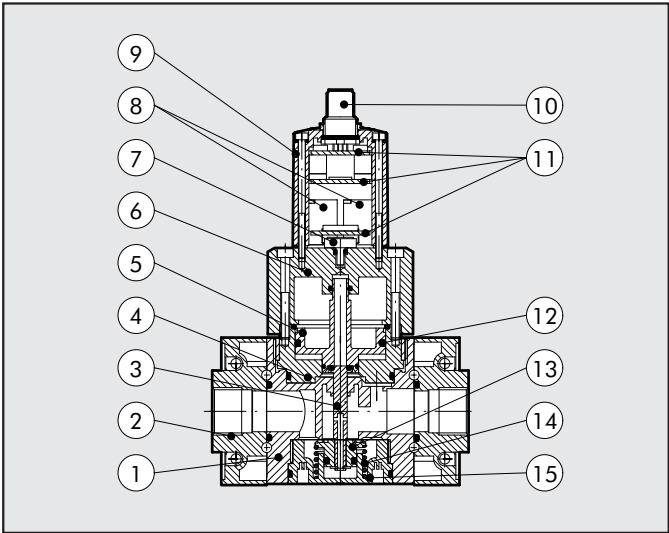


REGTRONIC 300

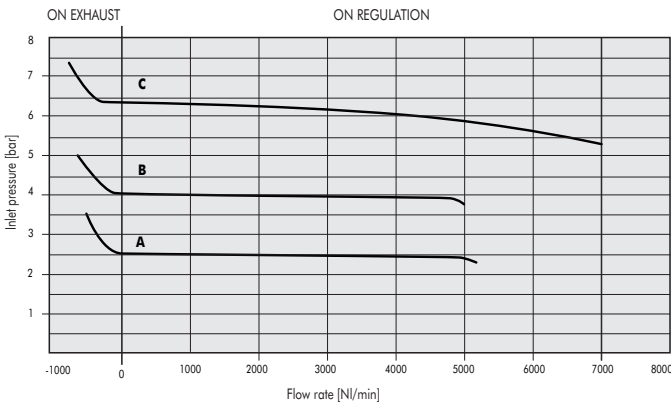


COMPONENTS

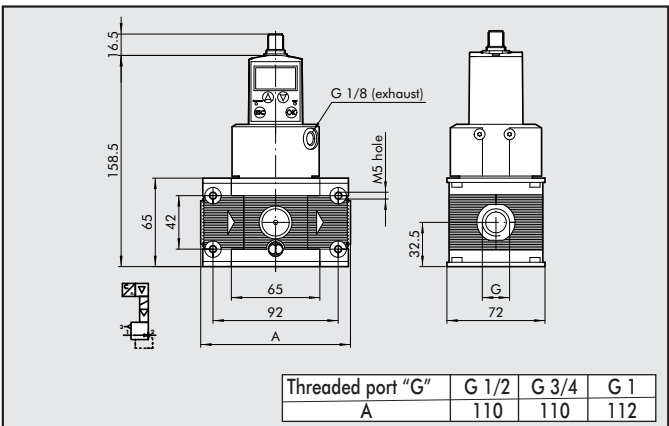
- ① BODY: tecnopolymer
- ② END PLATE: zamak
- ③ STEM: OT58 brass
- ④ UPPER CUP: aluminium
- ⑤ PISTON: OT58 brass
- ⑥ CUP: aluminium
- ⑦ PRESSURE SENSOR
- ⑧ SOLENOID VALVE: 10 mm series PLT-10
- ⑨ SHELL: tecnopolymer
- ⑩ CONNECTOR M12 8 PIN
- ⑪ ELECTRONIC BOARDS
- ⑫ GASKET: NBR
- ⑬ VALVE WITH NBR VULCANIZED GASKET
- ⑭ VALVE SPRING: stainless steel
- ⑮ LOWER CUP: tecnopolymer



FLOW CHARTS



DIMENSIONS AND ORDERING CODES



A = 2.5 bar B = 4 bar C = 6.3 bar Pm = 7 bar

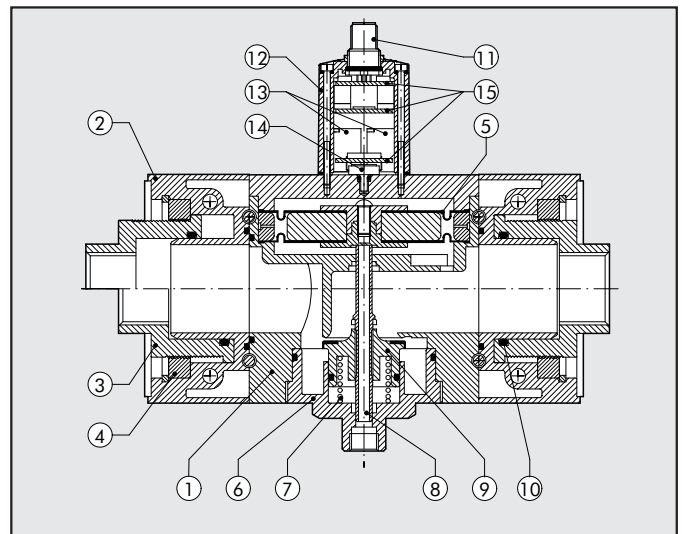
Code	Description
4402012A	REGTRONIC 300 WITHOUT END PLATES
4402012	REGTRONIC 300 1/2
4502012	REGTRONIC 300 3/4
4602012	REGTRONIC 300 1

REGTRONIC 400



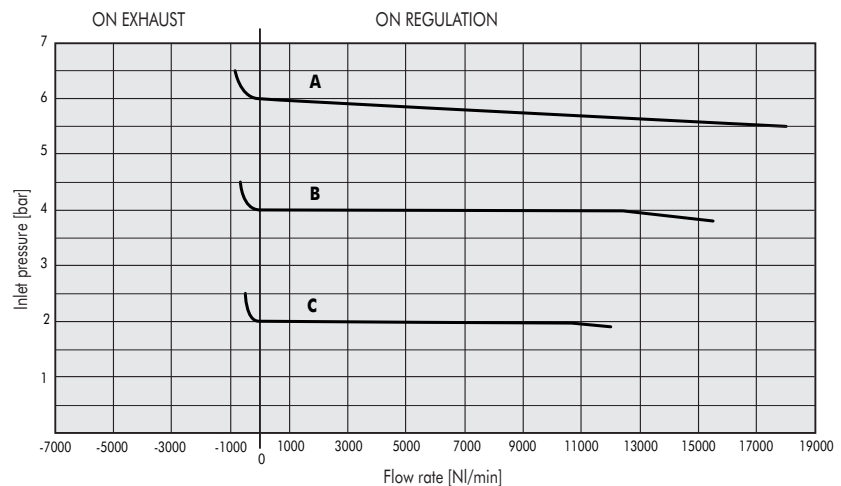
COMPONENTS

- ① BODY: Aluminium
- ② END PLATE: Aluminium
- ③ THREADED BUSH, AXIAL ADJUSTMENT: OT58 brass
- ④ RETAINING RING: OT58 brass
- ⑤ ROLLING DIAPHRAGM
- ⑥ BRASS PLUG: OT58 brass
- ⑦ VALVE SPRING: Stainless steel
- ⑧ STEM: OT58 brass with air relief hole
- ⑨ VALVE WITH NBR VULCANIZED GASKET
- ⑩ GASKETS: NBR
- ⑪ CONNECTOR M12 8 PIN
- ⑫ SHELL: technopolymer
- ⑬ SOLENOID VALVE: 10 mm series PLT-10
- ⑭ PRESSURE SENSOR
- ⑮ ELECTRONIC BOARDS



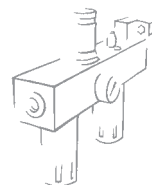
FLOW CHARTS

REGTRONIC 400 1" ÷ 1 1/2"

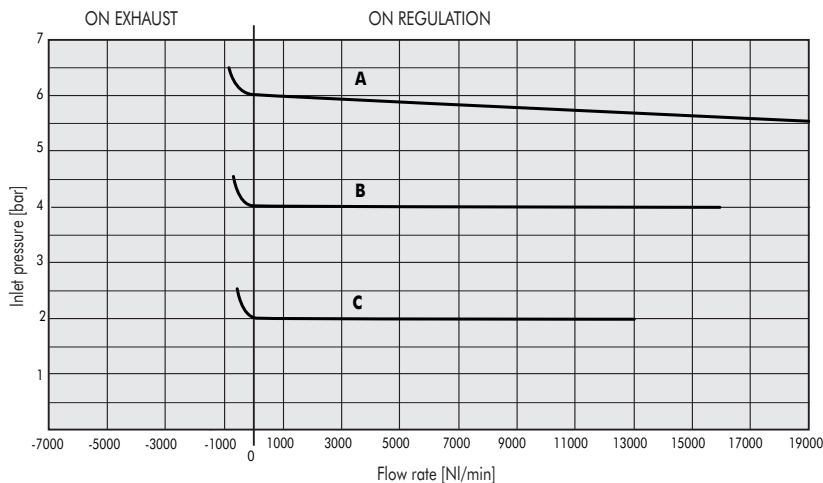


A = 6 bar
B = 4 bar
C = 2 bar

Pm = 7 bar



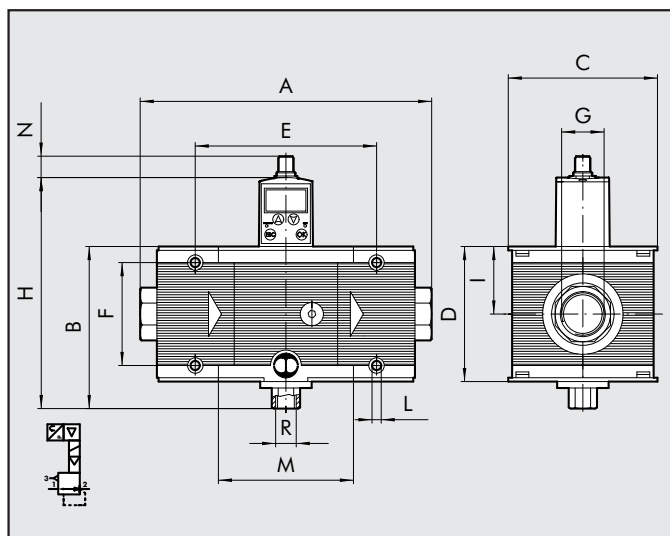
REGTRONIC 400 2"



A = 6 bar
B = 4 bar
C = 2 bar

Pm = 7 bar

DIMENSIONS



	REGTRONIC 400			
	1"	1 1/4"	1 1/2"	2"
A		225÷255		283÷313
B		127		
C		116		
D		105		
E		141.4		
F		80		
G	1"	1 1/4"	1 1/2"	2"
H		182		
I		52.5		
L		M6 hole		
M		105.4		
N		16.5		
R (exhaust)		1/4"		

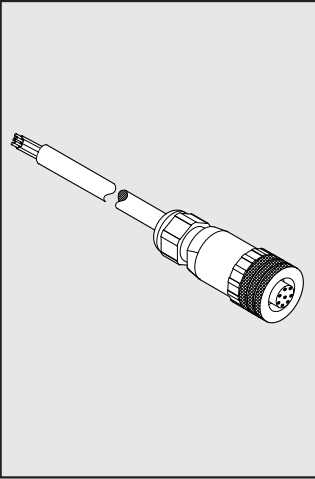
ORDERING CODES

Code	Description
6102012A	REGTRONIC 400 WITHOUT EDN PLATES
6102012	REGTRONIC 400 1
6202012	REGTRONIC 400 1 1/4
6302012	REGTRONIC 400 1 1/2
6402012	REGTRONIC 400 2

NOTES

ACCESSORIES REGTRONIC

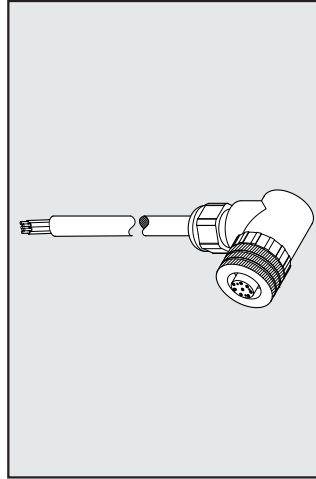
M12x1 PRE-WIRED 8-PIN FEMALE STRAIGHT CONNECTOR



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

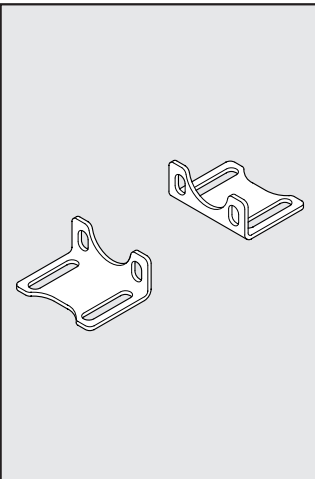
M12x1 PRE-WIRED 8-PIN FEMALE 90° CONNECTOR



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

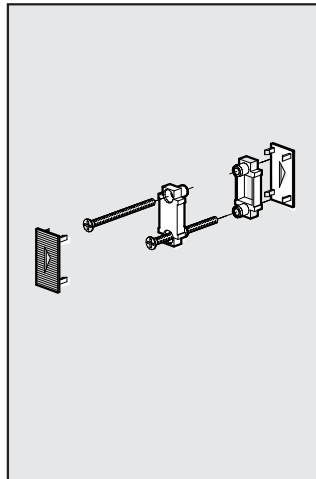
FIXING BRACKET KIT FOR REGTRONIC 1/8"-1/4"



Code	Description
9200710	FIXING BRACKET KIT

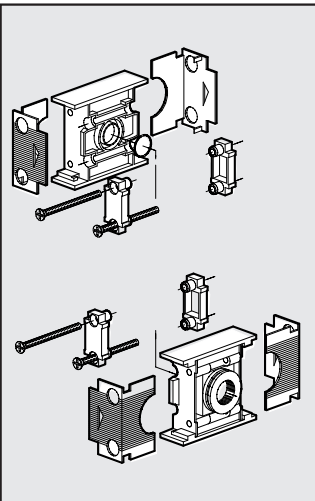
N.B. supplied complete with four M4X6 screws

CONNECTOR KIT FOR SKILLAIR CODE A



Code	Description
9430301	CONNECTOR KIT 300
9630301	CONNECTOR KIT 400

INPUT/OUTPUT END PLATE KIT FOR SKILLAIR



Code	Description
9430701	IN/OUT END PLATE KIT 300 1/2"
9530901	IN/OUT END PLATE KIT 300 3/4"
9531001	IN/OUT END PLATE KIT 300 1"
9631001	IN/OUT END PLATE KIT 400 1"
9631101	IN/OUT END PLATE KIT 400 1 1/4"
9631201	IN/OUT END PLATE KIT 400 1 1/2"
9631301	IN/OUT END PLATE KIT 400 2"

NOTES