

# Skillair® REGULATORS

Each system served by the air supply mains (e.g. actuators and general appliances) requires its own constant operating pressure. It is necessary to use a regulator to regulate the pressure within a set range by means of regulating springs, with the pressure never exceeding the mains pressure. The new Skillair regulator uses a rolling diaphragm which gives a much better performance than the flat version.

Advantages of this system:

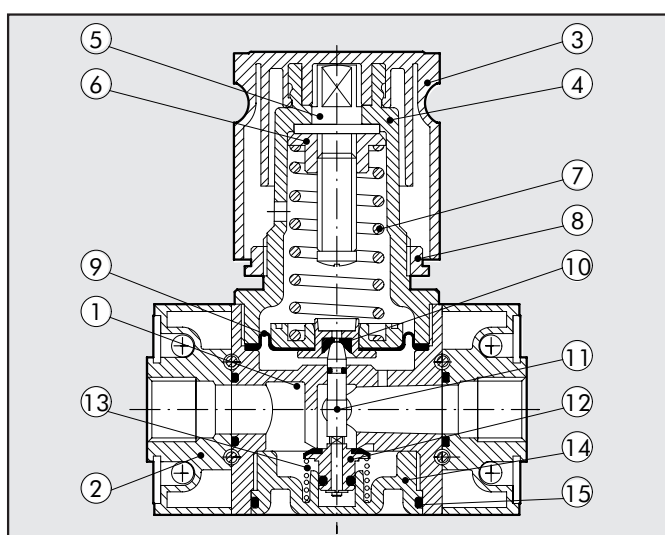
- Increased stroke, increased valve opening and hence higher flow rate.
- Decreased dynamic and inrush friction; prompter, more sensitive operation.
- Reduced working stress and hence longer life allowing the use of thinner diaphragms (0.45 mm versus 1.5 mm for a flat one) which increases regulator sensitivity and prompt action.
- Increased accuracy in maintaining the set pressure with both variable flow rates and different feed pressures.
- Downstream overpressures relieved quickly.



TECHNICAL DATA		REG 100	REG 100	REG 200	REG 200	REG 200	REG 300	REG 300	REG 300
Threaded port		G 1/4"	G 3/8"	G 1/4"	G 3/8"	G 1/2"	G 1/2"	G 3/4"	G 1"
Setting range	bar	0÷2 - 0÷4 - 0÷8 - 0÷12		0÷2 - 0÷4 - 0÷8 - 0÷12		0÷2 - 0÷4 - 0÷8 - 0÷12			
Max. input pressure	MPa	1.5		1.3		1.3			
	bar	15		13		13			
	psi	217		188		188			
Flow rate at 6.3 bar (0.63 MPa-91 psi)	NI/min	1100		2500		3500			
ΔP 0.5 bar (0.05 MPa – 7 psi)	scfm	39		88		124			
Flow rate at 6.3 bar (0.63 MPa-91 psi)	NI/min	1600		3500		7000			
ΔP 1 bar (0.1 MPa – 14 psi)	scfm	57		124		247			
Fluid		Filtered lubricated or unlubricated compressed air. Lubrication, if used, must be continuous.							
Max temperature at 1 MPa; 10 bar; 145 psi	°C	50		50		50			
	°F	122		122		122			
Weight	Kg	0.4		0.7		1.4			
Wall fixing screws		M4x50		M5x60		M5x70			
Mounting		In any position							
Pressure gauge port		G 1/8"							
Notes on use		The regulator pressure must always be set upwards. For increased sensitivity, use a pressure regulator with a rated pressure as close as possible to the required value. Do not take air from pressure gauge ports.							

## COMPONENTS

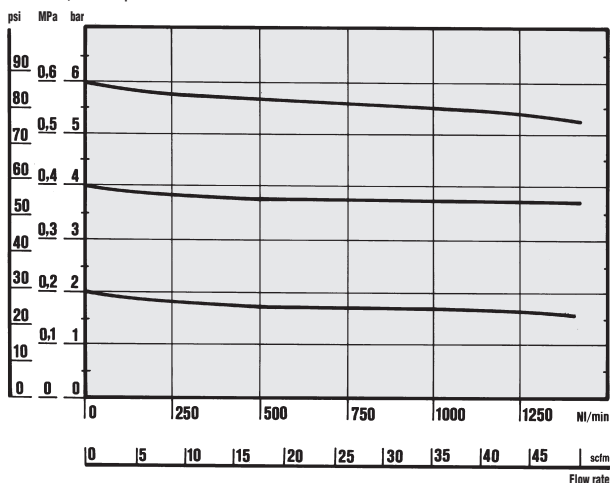
- ① Technopolymer body
- ② Zamak end plate
- ③ Technopolymer knob
- ④ Technopolymer bell
- ⑤ OT58 brass adjusting screw
- ⑥ OT58 brass scroll
- ⑦ Steel adjusting spring
- ⑧ Technopolymer ring nut
- ⑨ Rolling diaphragm
- ⑩ NBR relieving gaskets
- ⑪ OT58 brass stem
- ⑫ Valve with NBR vulcanized gasket
- ⑬ Stainless steel valve spring
- ⑭ Technopolymer plug
- ⑮ NBR gaskets



## FLOW CHARTS

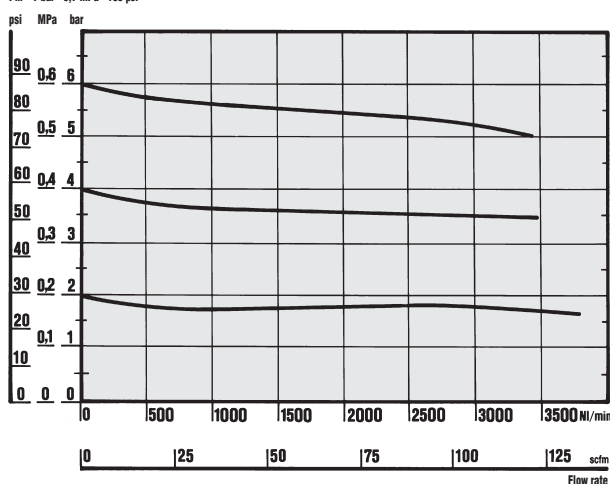
### REG 100 1/4 - 3/8

Preset pressure  
Pm = 7 bar - 0,7 MPa - 100 psi



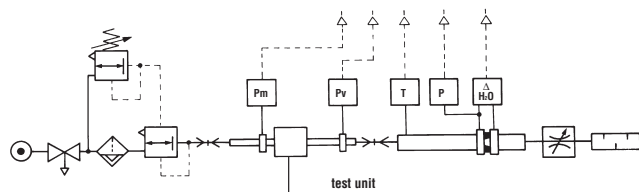
### REG 200 1/4 - 3/8 - 1/2

Preset pressure  
Pm = 7 bar - 0,7 MPa - 100 psi



**Department  
of Mechanics**

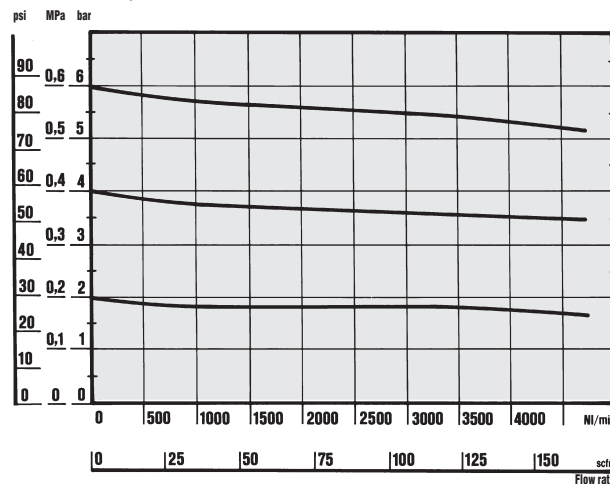
Turin Polytechnic



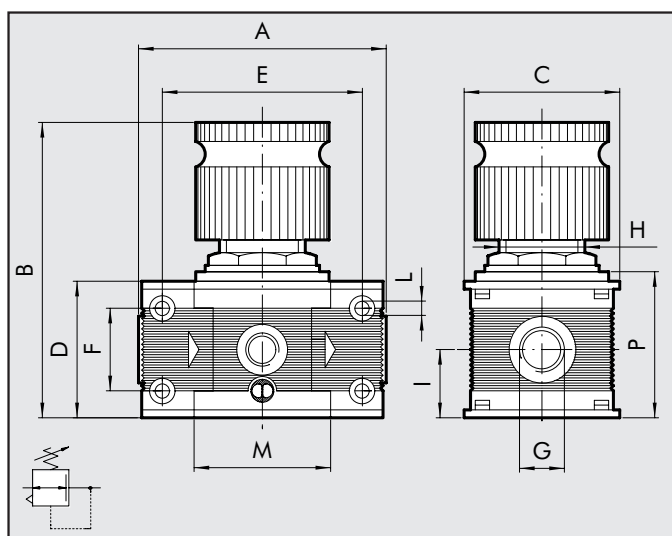
- Flow tests carried out at the Department of Mechanics, Turin Polytechnic, using the computerized test bench following CETOP RP50R recommendations (ISO DIS 6358-2-approved) with ISO 5167 diaphragm gauge.

### REG 300 1/2 - 3/4 - 1

Preset pressure  
Pm = 7 bar - 0,7 MPa - 100 psi



## DIMENSIONS



	REG 100	REG 100	REG 200	REG 200	REG 200	REG 300	REG 300	REG 300
	G 1/4	G 3/8	G 1/4	G 3/8	G 1/2	G 1/2	G 3/4	G 1"
A	78		93.5			110		112
B	98		125			148		
C	50		63			72		
D	43		55			65		
E	63		78.5			92		
F	26		36			42		
G	G 1/4	G 3/8	G 1/4	G 3/8	G 1/2	G 1/2	G 3/4	G 1"
H	30x1.5		40x1.5			48x1.5		
I	21.5		27.5			32.5		
L	M4 hole		M5 hole			M5 hole		
M	43		55.5			65		
P	46		58			69		