

Skillair® PADLOCKABLE REGULATOR

The padlockable regulator has a pin with a hole in it that projects from the top of the knob. When the knob is in the push-lock position, the padlock can be inserted in the hole, preventing the knob from being operated. A padlock and two keys are supplied with the regulator.

The new Skillair regulator uses a rolling diaphragm which gives a much better performance than the flat version.

Advantages of this system:

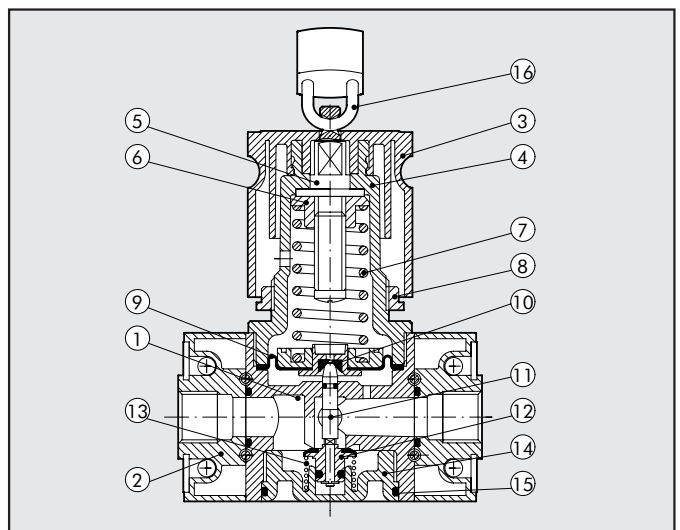
- Increased stroke, increased valve opening and hence higher flow rate.
- Decreased dynamic and inrush friction; prompter, more sensitive operation.
- Reduced working stress and hence longer life allowing the use of thinner diaphragms (0.45 mm versus 1.5 mm for a flat one) which increases regulator sensitivity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

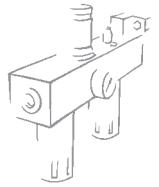


TECHNICAL DATA	REG 100 KEY	REG 100 KEY	REG 200 KEY	REG 200 KEY	REG 200 KEY	REG 300 KEY	REG 300 KEY	REG 300 KEY
Threaded port	G 1/4"	G 3/8"	G 1/4"	G 3/8"	G 1/2"	G 1/2"	G 3/4"	G 1"
Setting range	0÷2 - 0÷4 - 0÷8 - 0÷12		0÷2 - 0÷4 - 0÷8 - 0÷12			0÷2 - 0÷4 - 0÷8 - 0÷12		
Max. input pressure	MPa	1.5	1.3			1.3		
	bar	15	13			13		
Flow rate at 6.3 bar (0.63 MPa-91 psi)	NI/min	1100	2500			3500		
	scfm	39	88			124		
ΔP 0.5 bar (0.05 MPa - 7 psi)	NI/min	1600	3500			7000		
	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 Nickel-plated brass OT58 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
- ⑯ Padlock

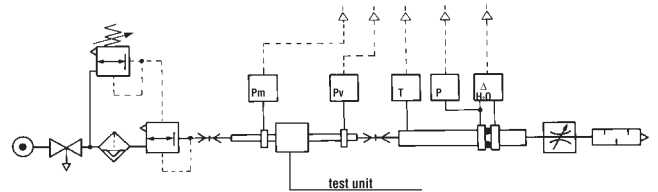
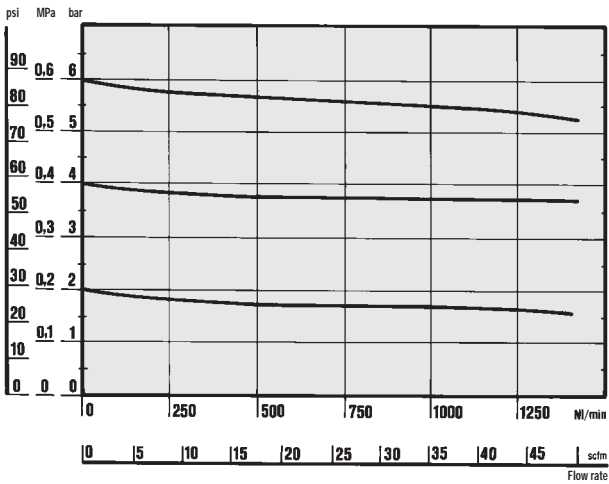




FLOW CHARTS

REG 100 1/4 - 3/8

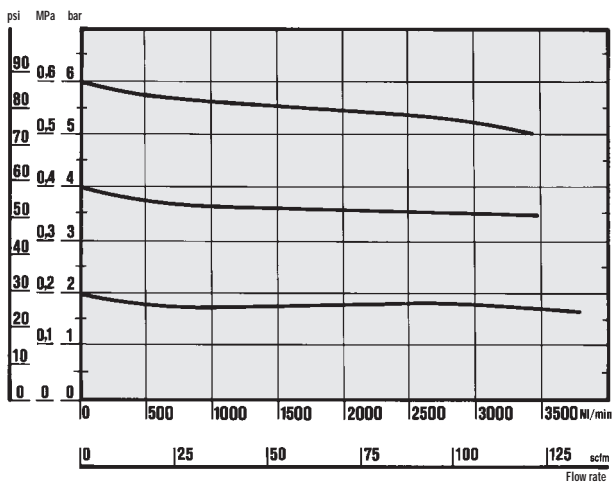
Preset pressure
Pm = 7 bar - 0,7 MPa - 100 psi



• 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.

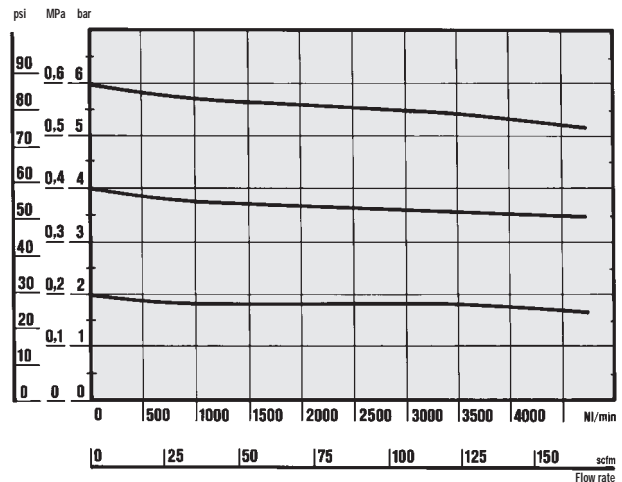
REG 200 1/4 - 3/8 - 1/2

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

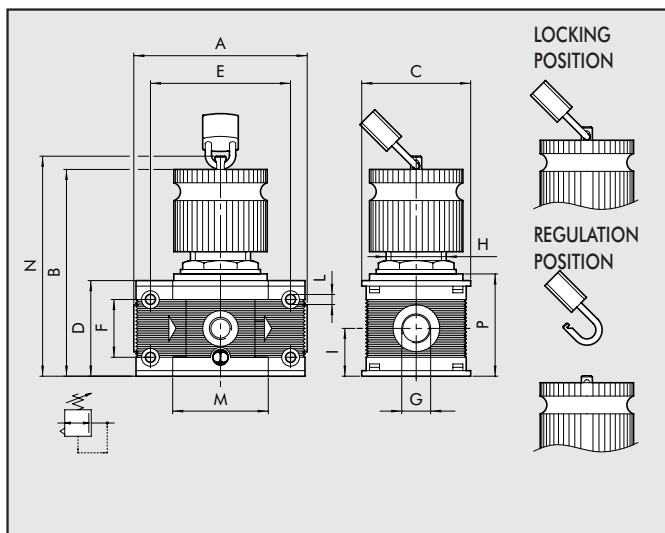


REG 300 1/2 - 3/4 - 1

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

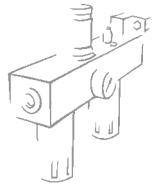


DIMENSIONS



	REG 100 KEY	REG 100 KEY	REG 200 KEY	REG 200 KEY	REG 200 KEY	REG 300 KEY	REG 300 KEY	REG 300 KEY
	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	95 ÷ 98			123 ÷ 125			145 ÷ 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	
N	101			127			151	
P	46			58			69	

Skillair® PILOT PADLOCKABLE REGULATOR



The pilot regulator is used when great accuracy is required in maintaining the set pressure under changing operating conditions.

It is ideal for use as:

- a precision regulator for flow rates < 100 NI/min.
- a pilot in general – typically for large size regulators (see REG 400).

The system's high operating accuracy and low hysteresis are determined by the virtually total lack of friction. The presence of a slight air leak is necessary for the regulator to operate properly – it is not a malfunction.

It is advisable to use filtered air.

The pilot padlockable regulator has a pin with a hole in it that projects from the top of the knob. When the knob is in the push-lock position, the padlock can be inserted in the hole, preventing the knob from being operated. A padlock and two keys are supplied with the regulator.



TECHNICAL DATA

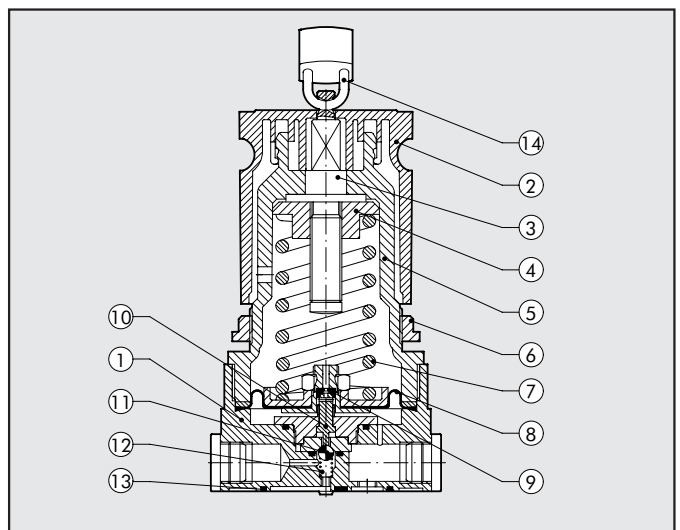
Threaded port	
Setting range	bar
Max. input pressure	MPa
	bar
	psi
Flow rate at 6.3 bar (0.63 MPa-91 psi) ΔP 0.5 bar (0.05 MPa – 7 psi)	
Flow rate at 6.3 bar (0.63 MPa-91 psi) ΔP 1 bar (0.1 MPa – 14 psi)	
Fluid	
Max temperature at 1 MPa; 10 bar; 145 psi	°C
	°F
Weight	Kg
Mounting	
Pressure gauge port	
Notes on use	

PILOT PADLOCKABLE REGULATOR

	G 1/4"
	0÷2 - 0÷4 - 0÷8 - 0÷12
	1.3
	13
	188
	120 NI/min - 4,3 scfm
	140 NI/min - 5 scfm
	Filtered, lubricated or unlubricated compressed air.
	Lubrication, if used, must be continuous.
	50
	122
	0.6
	In any position
	G 1/8"
	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 the pressure gauge ports. Mount directly on REG 400.

COMPONENTS

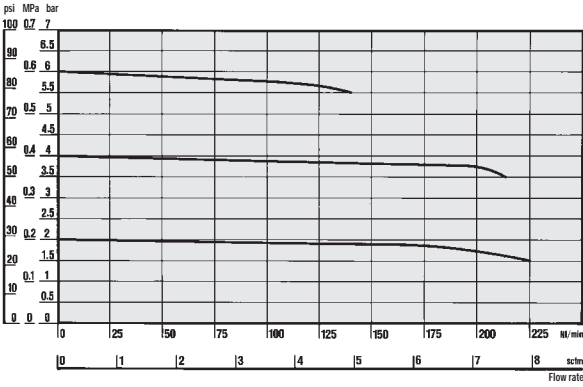
- ① Aluminium body
- ② Technopolymer knob
- ③ Nickel-plated brass OT58 adjusting screw
- ④ OT58 brass scroll
- ⑤ Technopolymer bell
- ⑥ Technopolymer ring nut
- ⑦ Steel adjusting spring
- ⑧ Rolling diaphragm
- ⑨ NBR relieving gaskets
- ⑩ OT58 brass stem
- ⑪ Stainless steel ball valve
- ⑫ Stainless steel valve spring
- ⑬ NBR gaskets
- ⑭ Padlock



FLOW CHARTS

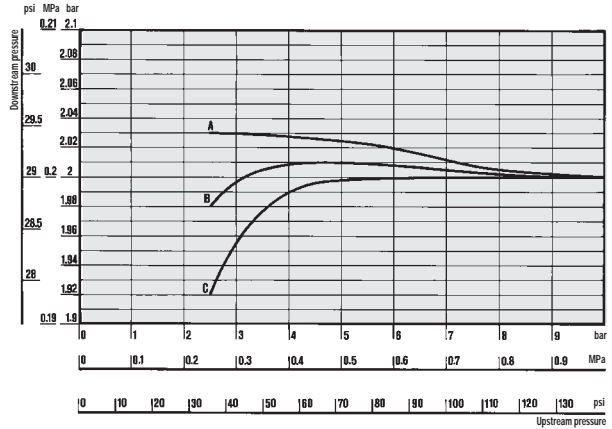
FLOW FEATURES REG. P 1/4''

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



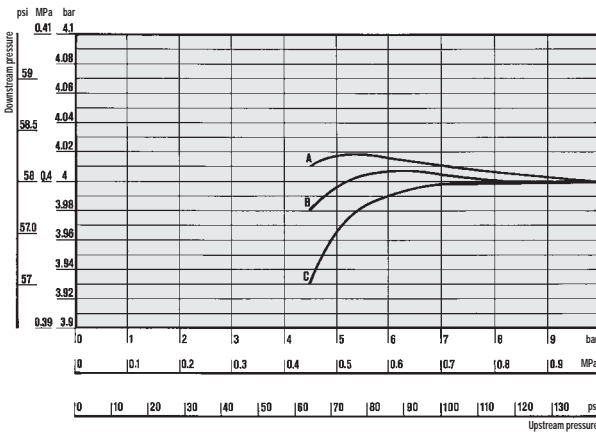
REGULATION FEATURES REG. P 1/4'' *

Flow: A = 0 Nl/min = 0 scfm
B = 25 Nl/min = 0,88 scfm - C = 50 Nl/min = 1,76 scfm



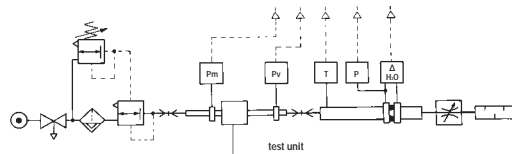
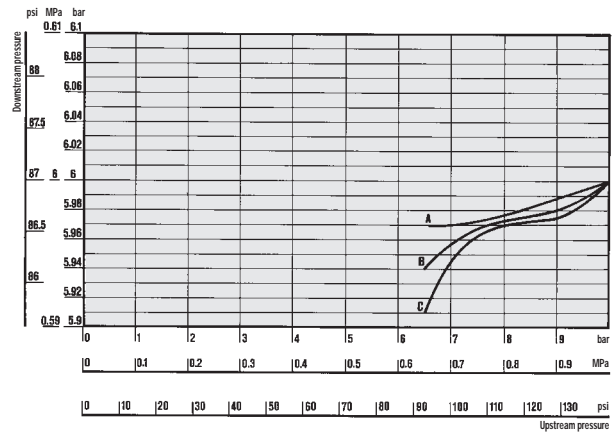
REGULATION FEATURES REG. P 1/4'' *

Flow: A = 0 Nl/min = 0 scfm
B = 25 Nl/min = 0,88 scfm - C = 50 Nl/min = 1,76 scfm



REGULATION FEATURES REG. P 1/4'' *

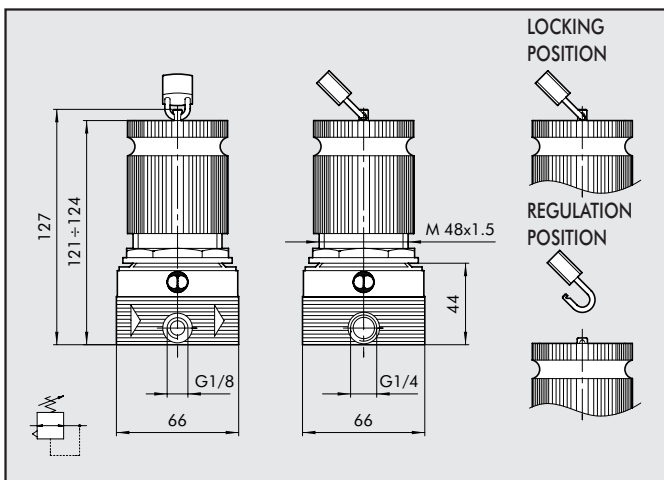
Flow: A = 0 Nl/min = 0 scfm
B = 25 Nl/min = 0,88 scfm - C = 50 Nl/min = 1,76 scfm



● 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.

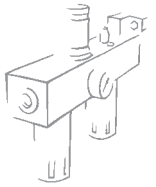
* Pressure stability adjusted according to changes in upstream pressure.

DIMENSIONS



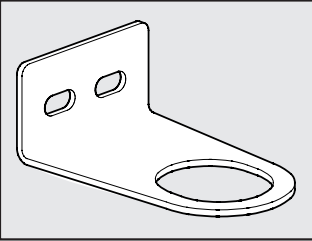
ORDERING CODES

Code	Description
3208001	REG. P KEY 1/4'' 02
3208002	REG. P KEY 1/4'' 04
3208003	REG. P KEY 1/4'' 08
3208004	REG. P KEY 1/4'' 012



Skillair® ACCESSORIES

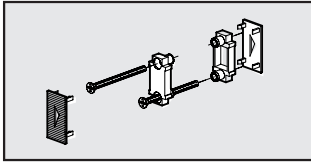
MOUNTING BRACKET FOR REG.



Code Description

- 9200701 SF100- BIT-ND1/4
- 9400701 SF200-ND-3/8 1/2
- 9400702 SF300

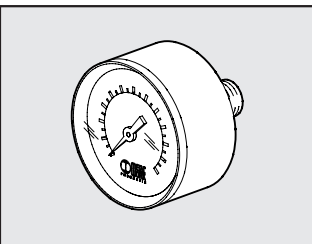
CONNECTOR KIT FOR SKILLAIR CODE A



Code Description

- 9230301 ACC. CONNECTOR KIT 100
- 9330301 ACC. CONNECTOR KIT 200
- 9430301 ACC. CONNECTOR KIT 300

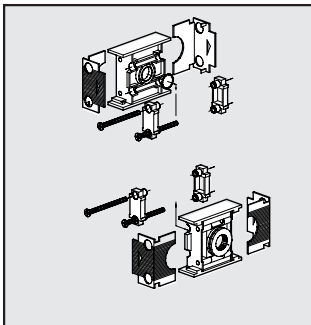
PRESSURE GAUGES



Code Description

- 9700101 ACC. M 40 1/8 12
- 9700102 ACC. M 40 1/8 04
- 9800101 ACC. M 50 1/8 12
- 9800102 ACC. M 50 1/8 04

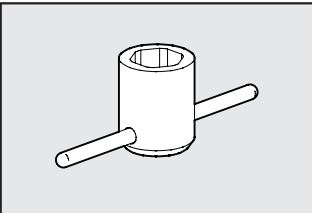
INPUT/OUTPUT END PLATE KIT



Code Description

- 9230401 ACC. IN/OUT END PLATE KIT 100 1/4
- 9330501 ACC. IN/OUT END PLATE KIT 100 3/8
- 9330601 ACC. IN/OUT END PLATE KIT 200 1/4
- 9330701 ACC. IN/OUT END PLATE KIT 200 3/8
- 9330801 ACC. IN/OUT END PLATE KIT 200 1/2
- 9430701 ACC. IN/OUT END PLATE KIT 300 1/2
- 9530901 ACC. IN/OUT END PLATE KIT 300 3/4
- 9531001 ACC. IN/OUT END PLATE KIT 300 1"

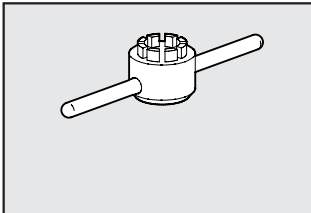
REG VISUAL DOME DISASSEMBLY SPANNER



Code Description

- 9220401 SPARES DOME DIS. SPANNER 100
- 9323401 SPARES DOME DIS. SPANNER 200
- 9420401 SPARES DOME DIS. SPANNER 300

POPPET DISASSEMBLY SPANNER (FOR REG.)

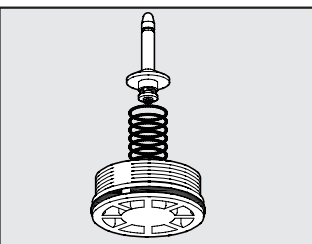


Code Description

- 9220501 SPARES R CAP DISASS. WR. 100
- 9323501 SPARES R CAP DISASS. WR. 200
- 9420501 SPARES R CAP DISASS. WR. 300

Skillair® SPARE PARTS

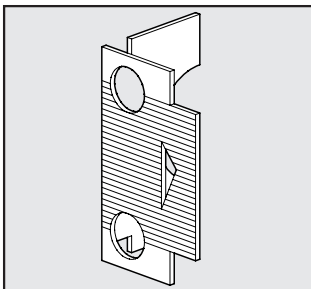
COMPLETE POPPET FOR REGULATORS



Code Description

- 9250704 SPARES OTR 100
- 9350704 SPARES OTR 200
- 9450704 SPARES OTR 300

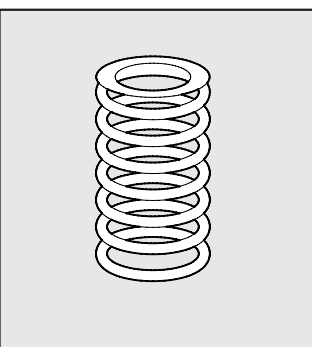
INPUT/OUTPUT COVER PLATE



Code Description

- 9152103 SPARES OUTPUT COVER PLATE 100
- 9152105 SPARES INPUT COVER PLATE 100
- 9152115 SPARES OUTPUT COVER PLATE 200
- 9152116 SPARES INPUT COVER PLATE 200
- 9152104 SPARES OUTPUT COVER PLATE 300
- 9152106 SPARES INPUT COVER PLATE 300
- 9152118 SPARES OUTPUT COVER PLATE 400
- 9152119 SPARES INPUT COVER PLATE 400

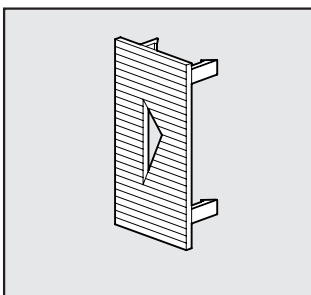
SPRINGS FOR REGULATORS



Code Description

- 9250605 RIC.MO 100 02
- 9250606 RIC.MO 100 04
- 9250607 RIC.MO 100 08
- 9250608 RIC.MO 100 012
- 9350605 RIC.MO 200 02
- 9350606 RIC.MO 200 04
- 9350607 RIC.MO 200 08
- 9350608 RIC.MO 200 012
- 9450605 RIC.MO 300 04
- 9450606 RIC.MO 300 08
- 9450607 RIC.MO 300 012
- 9450608 RIC.MO 300 02

INTERMEDIATE COVER PLATE



Code Description

- 9152107 SPARES INTERM. COVER PLATE 100
- 9152114 SPARES INTERM. COVER PLATE 200
- 9152108 SPARES INTERM. COVER PLATE 300
- 9152117 SPARES INTERM. COVER PLATE 400

bit PADLOCKABLE MICROREGULATOR

The Bit microregulator uses a rolling diaphragm system that ensures:

- stability of the pressure setting when the upstream pressure changes.
- high flow rate with reduced drops in pressure
- rapid relief of overpressures.

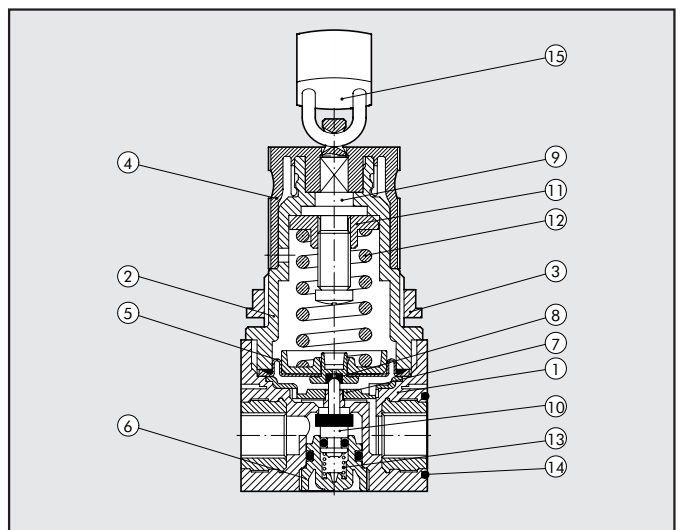
The padlockable microregulator has a pin with a hole in it that projects from the top of the knob. When the knob is in the push-lock position, the padlock can be inserted in the hole, preventing the knob from being operated. A padlock and two keys are supplied with the regulator.

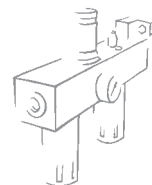


TECHNICAL DATA	MR BIT KEY 1/8"		MR BIT KEY 1/4"	
		1/8"		1/4"
Threaded port		1/8"		1/4"
Setting range	Bar	0 to 2 - 0 to 4 - 0 to 8 - 0 to 12		
Max. inlet pressure	MPa		1.3	
	bar		13	
	psi		188	
Flow rate at 6.3 bar (0.63 MPa-91 psi) ΔP 0.5 bar (0.05 MPa - 7 psi)		340 NI/min = 12 scfm		
Flow rate at 6.3 bar (0.63 MPa-91 psi) ΔP 1 bar (0.1 MPa - 14 psi)		600 NI/min = 21 scfm		
Fluid		Filtered, lubricated or unlubricated compressed air. Lubrication, if used, must be continuous		
Max temperature at 1 Mpa; 10 bar; 145 psi	°C	50		
	°F	122		
Weight	gr	80		
Wall fixing screws		M 4		
Mounting		In any position		
Gauge port		G 1/8"		
Notes:		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.		

COMPONENTS

- ① Technopolymer body with OT58 threaded elements
- ② Technopolymer bell
- ③ Technopolymer fixing ring nut
- ④ Technopolymer knob
- ⑤ Rolling diaphragm
- ⑥ Technopolymer plug
- ⑦ Technopolymer anti-vibration screen
- ⑧ NBR relieving gasket
- ⑨ Nickel-plated brass OT58 adjusting screws
- ⑩ OT58 valve with NBR vulcanized gasket
- ⑪ OT58 brass nut
- ⑫ Steel adjusting spring
- ⑬ Stainless steel valve compression spring
- ⑭ NBR gaskets
- ⑮ Padlock





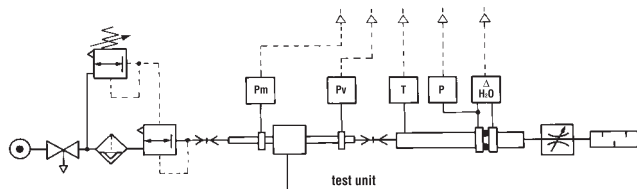
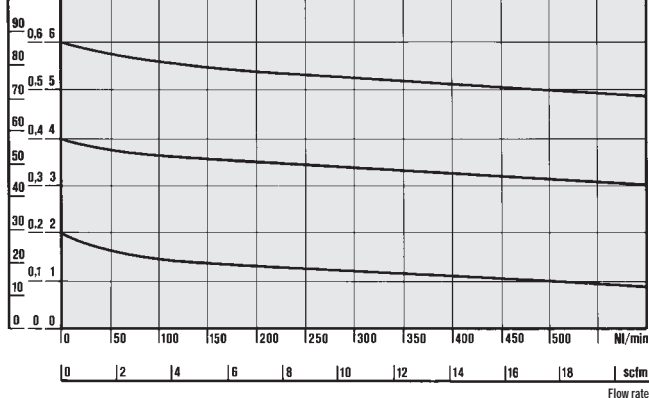
FLOW CHARTS

MR

$P_m = 0,7 \text{ MPa}$; 7 bar; 102 psi
Inlet pressure

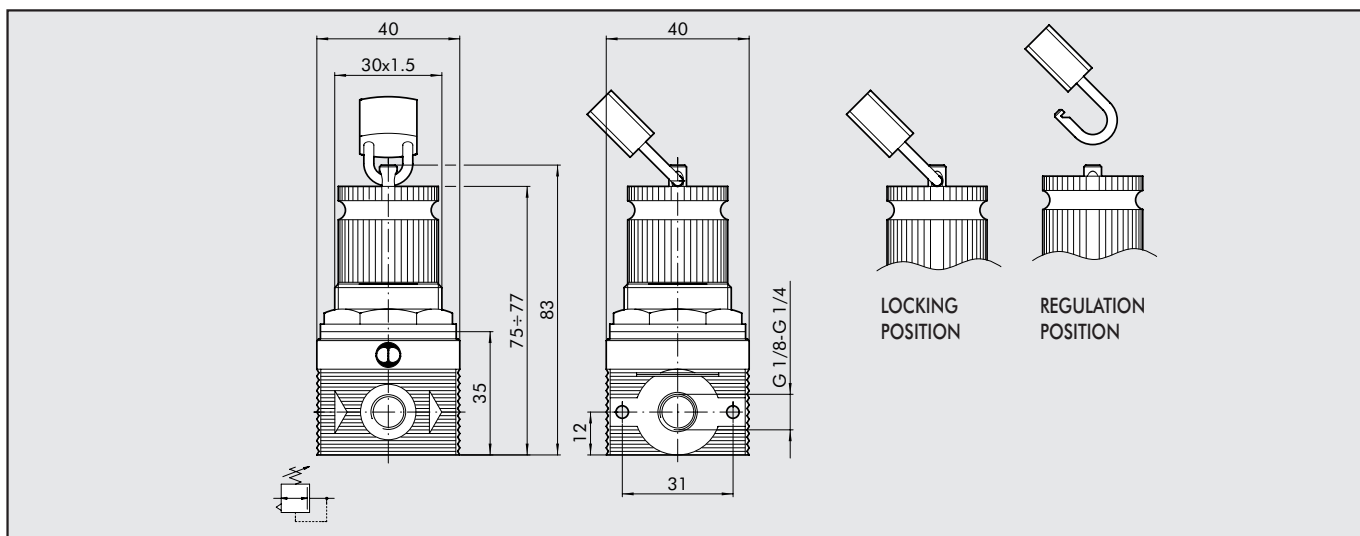
psi MPa bar

100 0,7 7



- 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.

DIMENSIONS



KEY TO CODES

MR ELEMENT	BIT SIZE	KEY TYPE	1/8 THREADED PORT	02 SETTING RANGE
MR	BIT	PADLOCKABLE	1/8 1/4	02 = 0÷2 bar 04 = 0÷4 bar 08 = 0÷8 bar 012 = 0÷12 bar

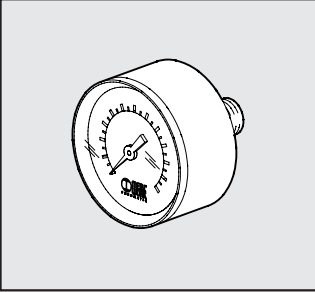
ORDERING CODES

Code	Description
5110001	MR BIT KEY 1/8 02
5110002	MR BIT KEY 1/8 04
5110003	MR BIT KEY 1/8 08
5110004	MR BIT KEY 1/8 012
5210001	MR BIT KEY 1/4 02
5210002	MR BIT KEY 1/4 04
5210003	MR BIT KEY 1/4 08
5210004	MR BIT KEY 1/4 012

bit ACCESSORIES

PRESSURE GAUGE

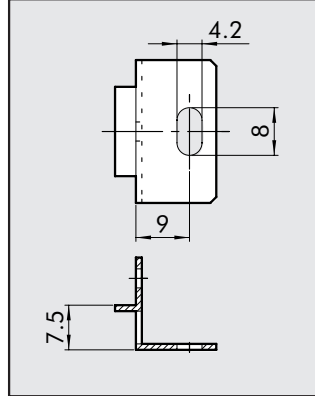
Code Description



9700102 ACC.M 40 1/8 04
9700101 ACC.M 40 1/8 12

WALL MOUNTING BRACKET (PAIR)

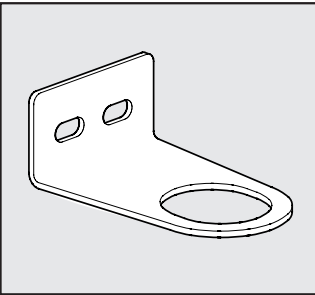
Code Description



9170301 ACC SF 1/8 - 1/4 BIT

R/FR FIXING BRACKET

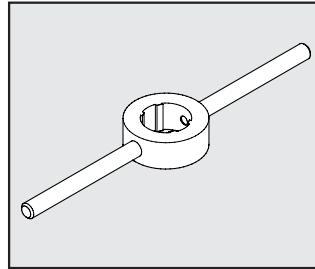
Code Description



9200701 ACC. SF100 - BIT - ND 1/4

COVER DISASSEMBLY SPANNER

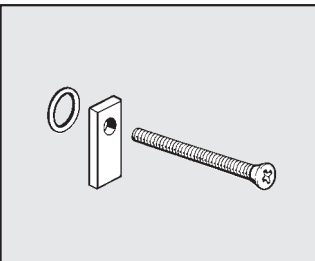
Code Description



9170401 ACC CS CS BIT

ASSEMBLY PLATE (PAIR)

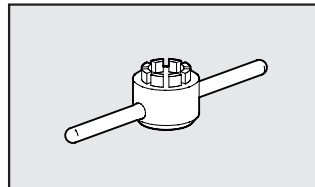
Code Description



9170201 ACC PA 1/8 - 1/4 BIT

REDUCER PLUG DISASSEMBLY SPANNER

Code Description

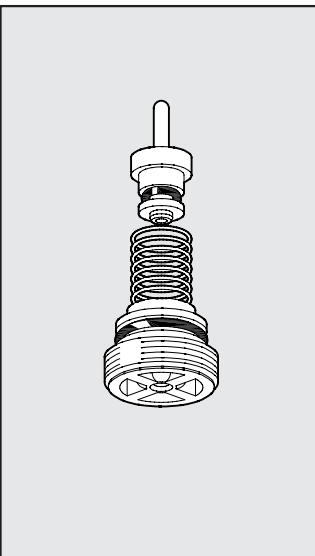


9170501 ACC CS OTR BIT

bit SPARE PARTS

COMPLETE POPPET FOR MR

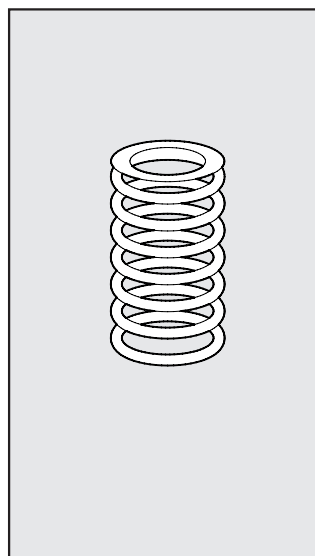
Code Description



9250705 SPARES POPPET FOR MR

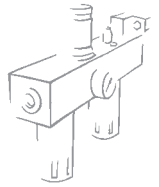
SPRING FOR MR

Code Description



9250610 SPARES MO 02 BIT
9250611 SPARES MO 04 BIT
9250612 SPARES MO 08 BIT
9250613 SPARES MO 012 BIT

New deal PADLOCKABLE REGULATOR



Highly reliable, heavy-duty piston-operated regulator.

- Stability of the set pressure as the upstream pressure varies
- Standard overpressure blowoff valve
- Can be fixed to the wall using the holes in the sides of the body.

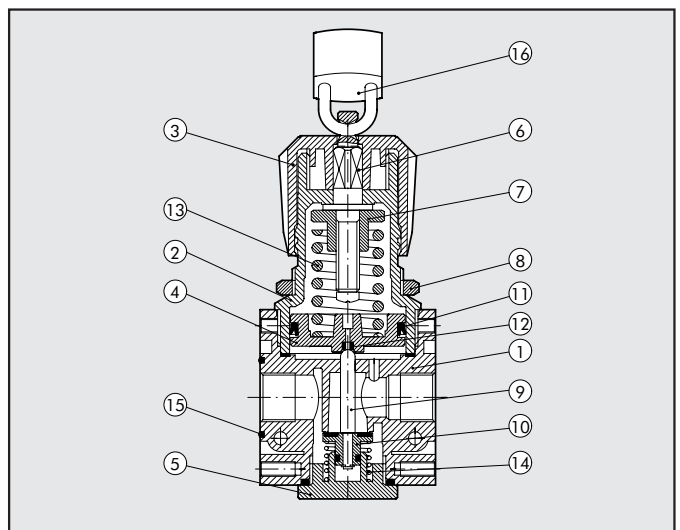
The New Deal padlockable regulator has a pin with a hole in it that projects from the top of the knob. When the knob is in the push-lock position, the padlock can be inserted in the hole, preventing the knob from being operated. A padlock and two keys are supplied with the regulator.



TECHNICAL DATA	REG. KEY ND 1/4"	REG. KEY ND 3/8"	REG. KEY ND 1/2"
Threaded port	1/4"	3/8"	1/2"
Setting range	0 ÷ 2 - 0 ÷ 4 - 0 ÷ 8 - 0 ÷ 12		
Max. inlet pressure	1.8		
	bar		
	18		
	psi		
Flow rate at 6.3 bar (0.63 MPa-91 psi)	200	1100	
ΔP 0.5 bar (0.05 MPa - 7 psi)	7	39	
Flow rate at 6.3 bar (0.63 MPa-91 psi)	650	2500	
ΔP 1 bar (0.1 MPa - 14 psi)	23	89	
Fluid	Filtered, lubricated or unlubricated compressed air. Lubrication, if used, must be continuous		
Max temperature at 1 MPa; 10 bar; 145 psi	50°		
	°C		
	122°		
	°F		
Weight	0.3	0.8	
	Kg		
Wall fixing screws	M4x40	M4x55	
Mounting	In any position		
Gauge port	G 1/8"	G 1/8"	G 1/8"
Notes:	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 off air from gauge ports.		

COMPONENTS

- ① Zamak body
- ② Technopolymer bell
- ③ Technopolymer knob
- ④ Technopolymer piston rod
- ⑤ Technopolymer plug
- ⑥ Nickel-plated brass OT58 adjusting screw
- ⑦ OT58 brass nut
- ⑧ Technopolymer ring nut
- ⑨ OT brass rod
- ⑩ Valve with NBR vulcanized gasket
- ⑪ NBR lip seal
- ⑫ NBR relieving seal
- ⑬ Steel adjusting spring
- ⑭ Steel valve compression spring
- ⑮ NBR gaskets
- ⑯ Padlock

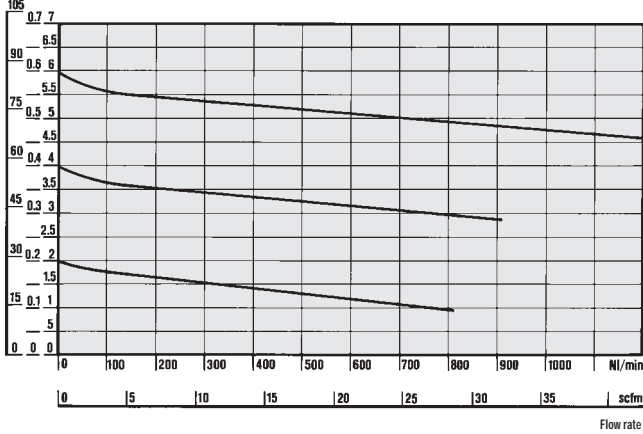


FLOW CHARTS

REG 1/4

$P_m = 0,7$ MPa; 7 bar; 102 psi
Inlet pressure

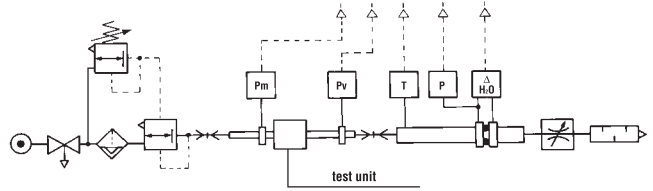
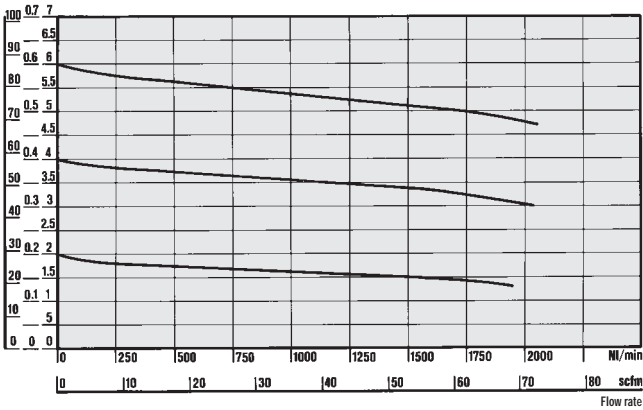
psi MPa bar



REG 3/8 - 1/2

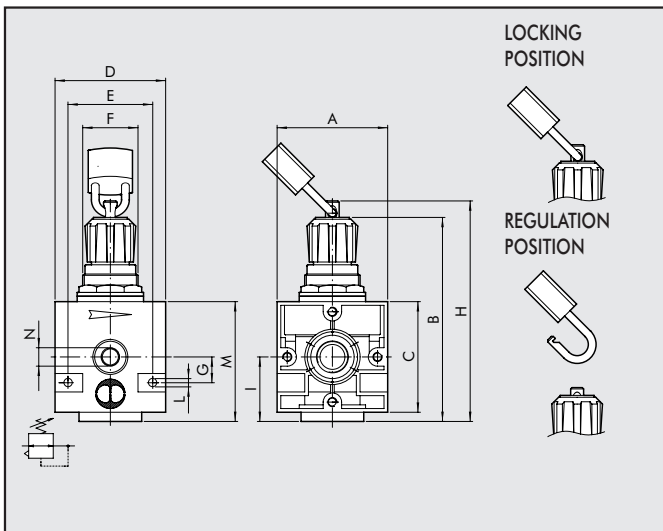
$P_m = 0,7$ MPa; 7 bar; 102 psi
Inlet pressure

psi MPa bar



- 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.

DIMENSIONS



	G 1/4	G 3/8	G 1/2
A	42		60
B	90÷94		126÷130
C	42		60
D	42		60
E	32		46
F	30x1.5		38x2
G	10		14
H	96		131
I	25		35
L	M4 hole		M4 hole
M	49		70
N	1/8		1/8

