

# SYNTESI® IN-SERIES REGULATOR

The in-series regulator is used to take air at a set pressure from the ports on the front and back of the body, while the pneumatic inlet and outlet ports are connected directly.

It is possible for instance to assemble several regulators side by side, all supplied at the same pressure, and obtain different regulated pressures, regardless of the pressure of the previous module.

The in-series regulator uses the same construction principles as the standard regulator, so the advantages are the same, such as compensation for upstream pressure changes, relief valve, rapid relief of the downstream pressure and a padlockable push-lock knob.

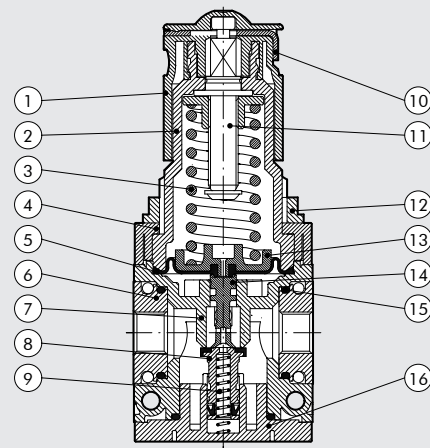


## TECHNICAL DATA

Threaded inlet port, through		1/8"	1/4"	3/8"
Utility threaded port			1/8"	
Max. input pressure	bar		15	
	MPa		1.5	
	psi		217	
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 0.5 bar (0.05 MPa; 7 psi)	Nl/min		330	
	scfm		12	
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	Nl/min		500	
	scfm		18	
Relief valve flow rate at 6.3 bar (0.63 MPa; 91 psi)	Nl/min		70	
	scfm		2.5	
Min/max temperature at 10 bar; 1 MPa; 145 psi	°C		From -20 to +50	
Full outflow with zero inlet pressure			Included	
Padlockable knob			Included	
Upstream pressure compensation			Included, via balanced valve	
Weight	g	193	188	179
Fluid			Compressed air or other inert gases	
Mounting position			In any position	
Wall fixing screws			No. 2 M4 screws	
Notes on use		The 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. On request version without overpressure exhaust		

## COMPONENTS

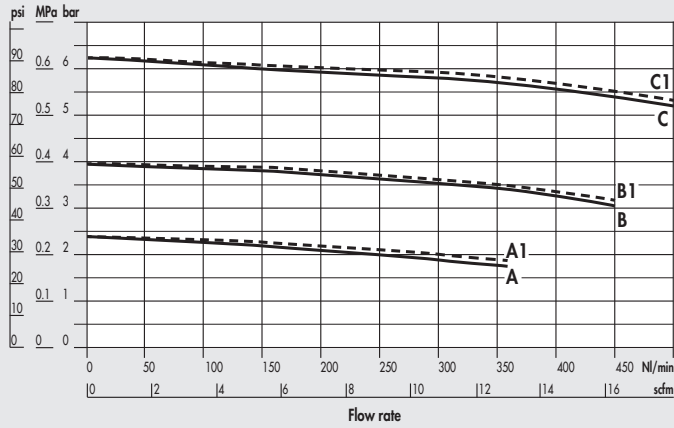
- ① Technopolymer adjusting knob
- ② Technopolymer bell
- ③ Steel adjusting spring
- ④ Technopolymer flange
- ⑤ Rolling diaphragm
- ⑥ OT58 brass IN/OUT bushing
- ⑦ Technopolymer body
- ⑧ OT58 brass valve, with NBR vulcanized gasket
- ⑨ Stainless steel valve spring
- ⑩ Plate for knob locking
- ⑪ OT58 brass adjusting screw
- ⑫ Technopolymer ring nut
- ⑬ Technopolymer plate
- ⑭ Technopolymer rod
- ⑮ NBR o-ring gaskets
- ⑯ Technopolymer plug



## FLOW CHARTS

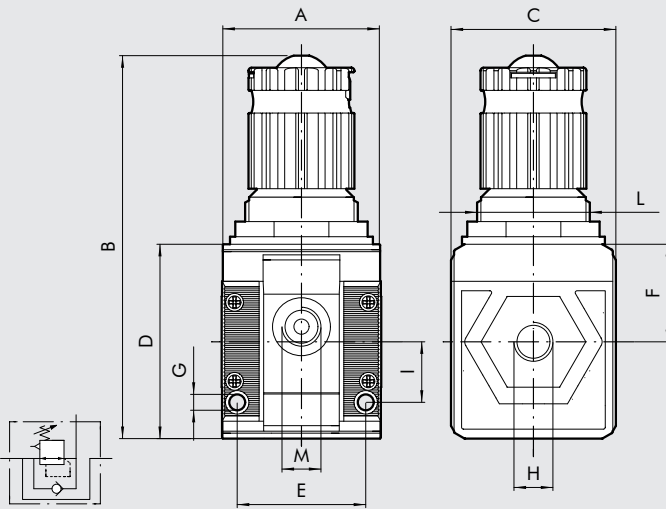
### REG BATTERY Syntesi® 1/4"-1/8"-3/8"

Regulated pressure



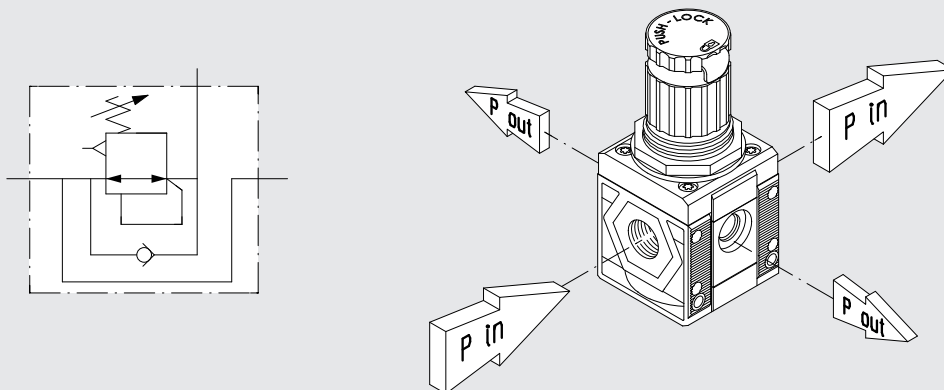
- A = P In 7 bar - P Out 2.5 bar
- B = P In 7 bar - P Out 4 bar
- C = P In 7 bar - P Out 6.3 bar
- A1 = P In 10 bar - P Out 2.5 bar
- B1 = P In 10 bar - P Out 4 bar
- C1 = P In 10 bar - P Out 6.3 bar

## DIMENSIONS



H (threaded port)	1/8"	1/4"	3/8"
A	42	42	44
B		102	
C		44	
D		51.5	
E		33.5	
F		25.8	
G		Hole for M4 screws	
I		16	
L		M30x1.5	
M (use)		1/8"	

## FUNCTION DIAGRAM



## KEY TO CODES

56	1	1	R	24	1
SYNTESI	SIZE	THREADED INPUT CONNECTION	ELEMENT	IN-SERIES REGULATOR SETTING RANGE	THREADED OUTPUT CONNECTION
56 Syntesi	1 Size 1	0 Without bushing 1 1/8" port 2 1/4" port 3 3/8" port	R Pressure regulator	20 0 - 2 bar 22 0 - 4 bar 24 0 - 8 bar 26 0 - 12 bar	0 Without bushing 1 1/8" port 2 1/4" port 3 3/8" port

## PURCHASE ORDER CODES HAVING A MORE FREQUENT USE

N.B. Besides the below mentioned codes, you can order elements composed at your will according to the key to codes.

Code	Description		
5610R240	In-series REG SY 08 without bushings		
5610R260	In-series REG SY 012 without bushings		
5611R241	In-series REG SY 1/8 08		
5611R261	In-series REG SY 1/8 012		
5612R242	In-series REG SY 1/4 08		
5612R262	In-series REG SY 1/4 012		
5613R243	In-series REG SY 3/8 08		
5613R263	In-series REG SY 3/8 012		

## NOTES