

This device combines in a single unit the functions of filtration, condensate separation and pressure regulation.

It is made up of the same elements forming the filter and the regulator, so the performance and advantages are the same:

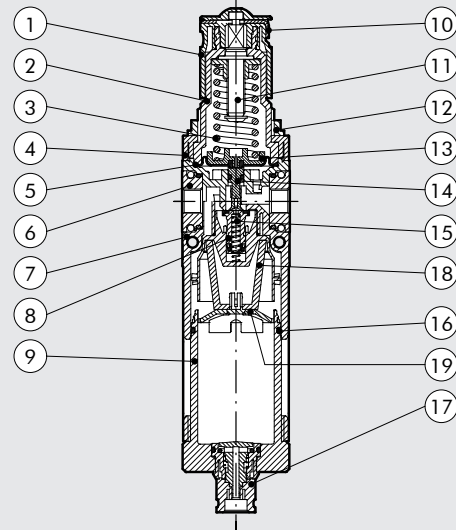
- Separation of condensate and larger liquid and solid particles by centrifugation.
- Two condensate drain options (RMSA and RA).
- 360° visually inspection of the condensate level, via transport spy-holes.
- Rolling diaphragm regulator, allowing maximum precision and flow rate, and minimal friction.
- Compensation for upstream pressure changes.
- Pressure relief valve.
- Quick downstream pressure relief.
- Padlockable push-lock knob.
- Front and rear ports for pressure gauges, pressure switches or, considering the high flow rate, for use as additional filtered and regulated air take-off.



TECHNICAL DATA				
		1/8"	1/4"	3/8"
Threaded port				
Degree of filtration	µm	5 (yellow) - output air purity class ISO8573-1: 3.7.4 20 (white) - output air purity class ISO8573-1: 4.7.4 50 (blue) - output air purity class ISO8573-1: 5.7.4		
Max. inlet pressure	bar	15		
	MPa	1.5		
	psi	217		
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 0.5 bar (0.5 MPa; 7 psi)	Nl/min	500	800	2200
(inlet pressure 10 bar)	scfm	18	28	78
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	Nl/min	1300	2000	3000
(inlet pressure 10 bar)	scfm	46	71	106
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	244	239	230
Fluid		Compressed air or other inert gases		
Mounting position		Vertical		
Additional air take-off, for pressure gauges or fittings		1/8", front and rear		
Additional air take-off flow rate at 6.3 bar	Nl/min	500		
(0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	scfm	18		
Cup capacity	cm³	15		
Condensate drain		RMSA: drain with manual condensate discharge and automatic discharge at zero pressure RA: automatic drain with condensate discharge, independent of pressure and flow rate Note: the maximum input pressure for the RA version must not exceed 10 bar No. 2 M4 screws		
Wall fixing screws		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		
Notes on use				

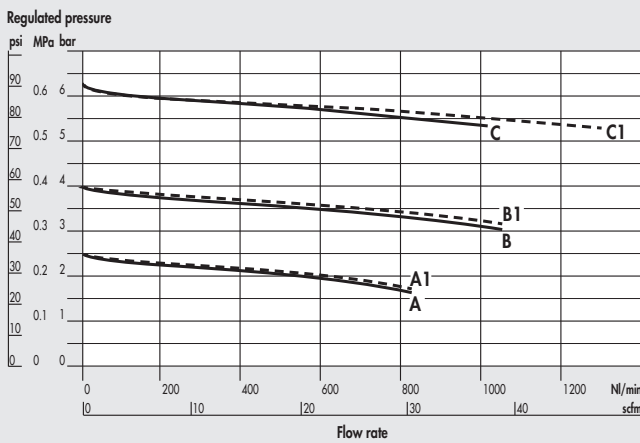
COMPONENTS

- 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 valve
- ⑨ Clear technopolymer cup
- ⑩ Plate for knob locking
- ⑪ OT58 brass adjusting screw
- ⑫ Technopolymer ring nut
- ⑬ Technopolymer plate
- ⑭ Technopolymer rod
- ⑮ Stainless steel valve spring
- ⑯ O-ring NBR gaskets
- ⑰ Drain (RMSA)
- ⑱ Sintered HDPE filter cartridge
- ⑲ Technopolymer screen

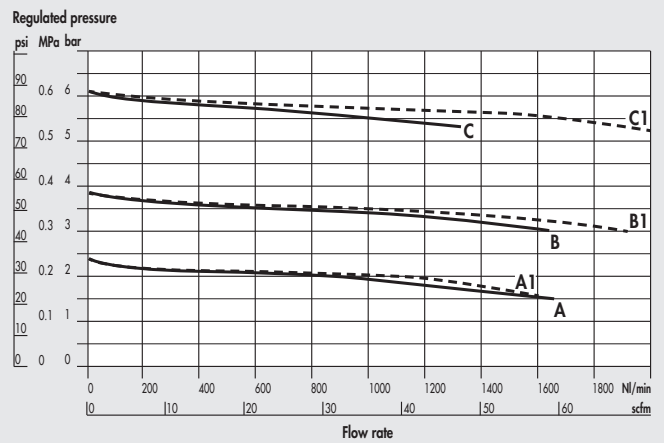


FLOW CHARTS

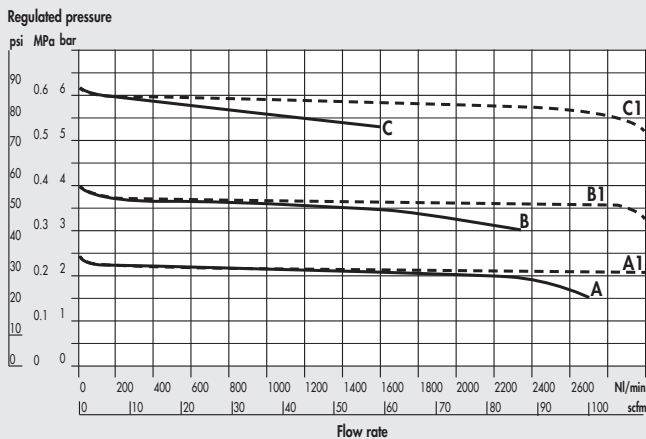
FR Syntesi® 1/8"



FR Syntesi® 1/4"

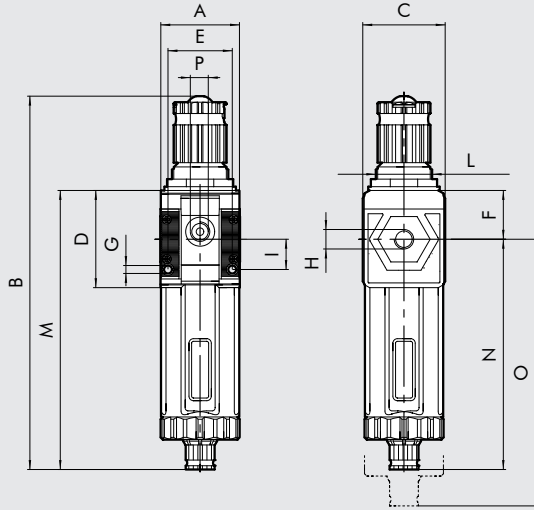


FR Syntesi® 3/8"



- 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	RMSA		198	
	RA		202	
C			44	
D			51.5	
E			33.5	
F			25.8	
G		Hole for M4 screws		
I			16	
L			M30x1.5	
M	RMSA		148	
	RA		152	
N	RMSA		122.2	
	RA		126.2	
O	RMSA		202	
	RA		206	
P (pressure gauge port)			1/8"	

KEY TO CODES

56	1	1	B	24	1
SYNTESI	SIZE	THREADED INPUT CONNECTION	ELEMENT	DEGREE OF FILTRATION, TYPE OF CONDENSATE DRAIN AND 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	B Filter-regulator	10 5 µm, RMSA, 0 - 2 bar 20 20 µm, RMSA, 0 - 2 bar 30 50 µm, RMSA, 0 - 2 bar 40 5 µm, RA, 0 - 2 bar 50 20 µm, RA, 0 - 2 bar 60 50 µm, RA, 0 - 2 bar 12 5 µm, RMSA, 0 - 4 bar 22 20 µm, RMSA, 0 - 4 bar 32 50 µm, RMSA, 0 - 4 bar 42 5 µm, RA, 0 - 4 bar 52 20 µm, RA, 0 - 4 bar 62 50 µm, RA, 0 - 4 bar 14 5 µm, RMSA, 0 - 8 bar 24 20 µm, RMSA, 0 - 8 bar 34 50 µm, RMSA, 0 - 8 bar 44 5 µm, RA, 0 - 8 bar 54 20 µm, RA, 0 - 8 bar 64 50 µm, RA, 0 - 8 bar 16 5 µm, RMSA, 0 - 12 bar 26 20 µm, RMSA, 0 - 12 bar 36 50 µm, RMSA, 0 - 12 bar 46 5 µm, RA, 0 - 12 bar 56 20 µm, RA, 0 - 12 bar 66 50 µm, RA, 0 - 12 bar	0 Without bushing 1 1/8" port 2 1/4" port 3 3/8" port

RMSA: drain with manual condensate discharge and automatic discharge at zero pressure.
RA: automatic drain with condensate discharge, independent of pressure and flow rate.

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	Code	Description
5610B140	FR SY 5 08 RMSA without bushings	5612B142	FR SY 1/4 5 08 RMSA
5610B240	FR SY 20 08 RMSA without bushings	5612B242	FR SY 1/4 20 08 RMSA
5610B440	FR SY 5 08 RA without bushings	5612B442	FR SY 1/4 5 08 RA
5610B540	FR SY 20 08 RA without bushings	5612B542	FR SY 1/4 20 08 RA
5610B160	FR SY 5 012 RMSA without bushings	5612B162	FR SY 1/4 5 012 RMSA
5610B260	FR SY 20 012 RMSA without bushings	5612B262	FR SY 1/4 20 012 RMSA
5610B460	FR SY 5 012 RA without bushings	5612B462	FR SY 1/4 5 012 RA
5610B560	FR SY 20 012 RA without bushings	5612B562	FR SY 1/4 20 012 RA
5611B141	FR SY 1/8 5 08 RMSA	5613B143	FR SY 3/8 5 08 RMSA
5611B241	FR SY 1/8 20 08 RMSA	5613B243	FR SY 3/8 20 08 RMSA
5611B441	FR SY 1/8 5 08 RA	5613B443	FR SY 3/8 5 08 RA
5611B541	FR SY 1/8 20 08 RA	5613B543	FR SY 3/8 20 08 RA
5611B161	FR SY 1/8 5 012 RMSA	5613B163	FR SY 3/8 5 012 RMSA
5611B261	FR SY 1/8 20 012 RMSA	5613B263	FR SY 3/8 20 012 RMSA
5611B461	FR SY 1/8 5 012 RA	5613B463	FR SY 3/8 5 012 RA
5611B561	FR SY 1/8 20 012 RA	5613B563	FR SY 3/8 20 012 RA

NOTES