

# MINIATURE REDUCER/ECONOMIZER, SERIES RML, RMC AND RMS

The RML R miniature pressure regulator belongs to the LINE ON LINE® family and can be connected in series or in parallel with all the other products. The miniature pressure regulator is available in five different types:

- In-line with push-in input and output fitting
- In-line with threaded input port and push-in output fitting
- In-line with push-in input fitting and threaded output port
- At an angle with threaded input port and push-in output fitting
- Cartridge type for direct assembly in suitably worked slot. The miniature pressure regulator is fitted with a relief valve for over-pressure exhaust.
- Particularly suitable for use between the valve and actuator and as a pressure regulator in secondary branches of the pneumatic system.

The data in brackets refer to the angle version.

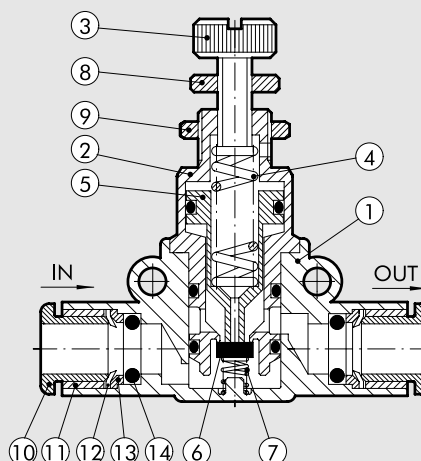


TECHNICAL DATA		RML Ø 6	RMC 1/8	RMS 1/8	RML Ø 8	RMC 1/4	RMS 1/4
Threaded ports		1/8"-1/4"	1/8"	1/8"	1/8"-1/4"-3/8"	1/4"	1/4"
Pipe coupling		Ø 6	Ø 4 - Ø 6 - Ø 8	-	Ø 8	Ø 6 - Ø 8 - Ø 10	-
Regulation range		1 to 8 bar - 0.1 to 0.8 MPa - 14.5 to 116 psi					
Inlet pressure		MPa	0.2 - 1				
		bar	2 - 10				
		psi	29 - 145				
Flow rate at 6.3 bar (0.63 MPa - 91 psi) ΔP 1 bar		Nl/min	150		260		
Flow rate on exhaust at 6.3 bar (0.63 MPa - 91 psi)			400		600		
Fluid		Lubricated or unlubricated filtered air					
Max. temperature at 1 MPa; 10 bar; 145 psi		°C	- 20 to + 60				
		°F	- 4 to + 140				
Assembly position		Available					
Notes		In the miniature regulator the pressure must always be set upwards					
Compatibility with oils		Please refer to page 6-7 of the technical documentation					

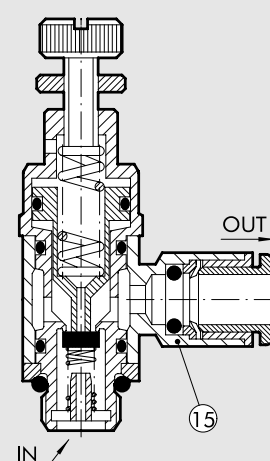
## COMPONENTS

- ① Technopolymer body (brass for RMC)
- ② Nickel-plated brass insert
- ③ Nickel-plated brass adjusting screw
- ④ Steel adjusting spring
- ⑤ Brass piston rod
- ⑥ NBR shutter
- ⑦ Stainless steel shutter spring
- ⑧ Adjusting screw ring nut
- ⑨ Nickel-plated brass wall ring nut
- ⑩ Technopolymer release bushing
- ⑪ Technopolymer stop bushing (brass for RMC)
- ⑫ Stainless steel crimping spring
- ⑬ Technopolymer spring ring
- ⑭ NBR gasket
- ⑮ Nickel-plated brass rotating ring

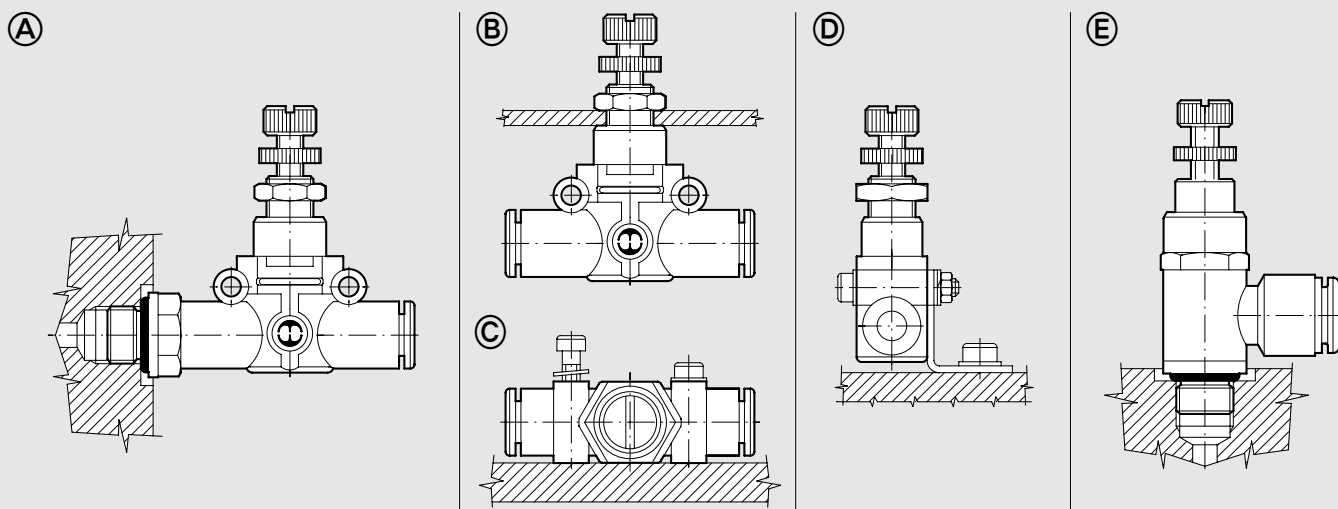
RML



RMC



## ASSEMBLY OPTIONS

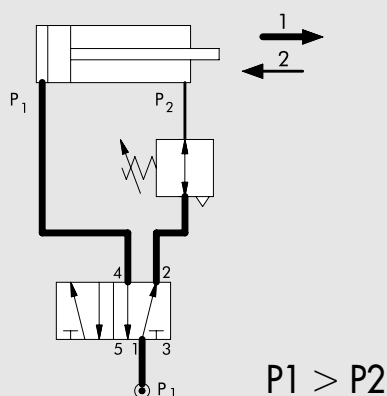


How to assembly RML/RMC:

- Fig. A Thanks to the male threaded part it's possible to assembly directly on the actuator or on the valve.
- Fig. B By using the ring nut screwed on the threaded body it's possible the assembling on panels.
- Fig. C On the plastic body there are two strong ring for the direct wall assembly.
- Fig. D Fixing on plate trough the proper small square SQU L.
- Fig. E For maintaining the tube the most parallel possible to the system , had been designed a specific version (RMC) with inlet and outlet at 90°.

## POSSIBLE APPLICATIONS

### ECONOMIZER

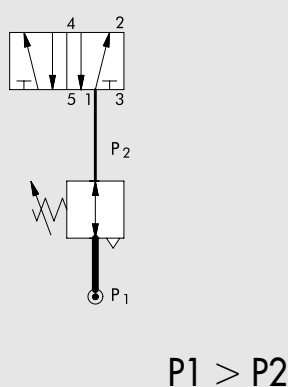


If in a cylinder you require a thrust in one direction only, e.g. piston rod extension, and a lower thrust and pressure is sufficient in the other direction, you can save a lot of energy by mounting an economizer valve.

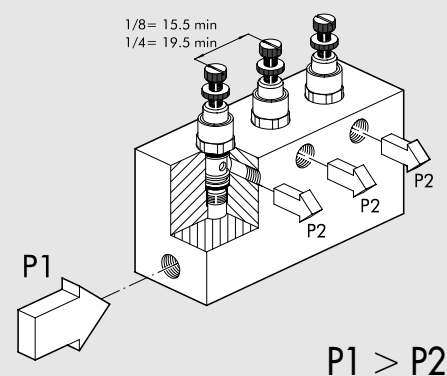
#### Example

Cylinder Ø 80 mm, stroke 200 mm, 6 bar,  
12 cycles/min, 16 hours a day, 230 days a year.  
Consumption: 144 Nl/min => 3460 kWh/year =>  
880 litres of oil => 2428 kg of CO<sub>2</sub> => € 346/year.  
If you install an economizer that reduces the pressure  
from 6 to 2 bar, you SAVE: € 115/year.

### REMOTE REDUCER



### CARTRIDGE REDUCER, SERIE RMS



The cartridge regulator can be used:

- Fitted directly into the structure or along the air supply ducting.
- Package with common feed and separate regulated outlets.