

# MINIATURE REDUCER, Series "RML" and "RMC"

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.

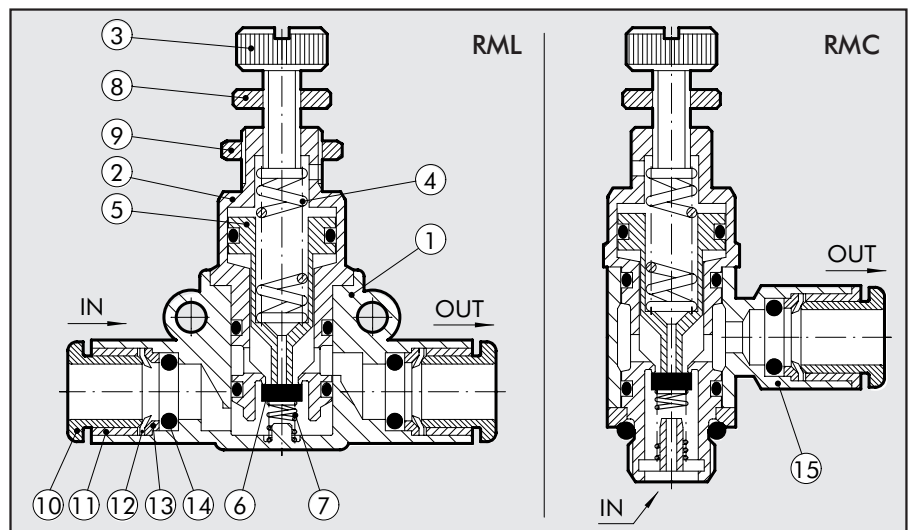


The data in brackets refer to the angle version.

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 ÷ 8 bar - 0.1 ÷ 0.8 MPa - 14.5 ÷ 116 psi					
Inlet pressure	MPa		0.2 ÷ 1 MPa			
	bar		2 ÷ 10 bar			
	psi		29 ÷ 145 psi			
Flow rate at 6.3 bar (0.63 MPa ÷ 91 psi) ΔP 1 bar	1/8": 150 NI/min				1/4": 260 NI/min	
Flow rate on relief at 6.3 bar (0.63 MPa ÷ 91 psi)	1/8": 400 NI/min				1/4": 600 NI/min	
Fluid	lubricated or unlubricated filtered air					
Max. temperature at 1 MPa, 10 bar, 145 psi	°C		-20°C ÷ +60°C			
	°F		-4°F ÷ +140°F			
Assembly position	available					
Comments	In the miniature regulator the pressure must always be set upwards.					

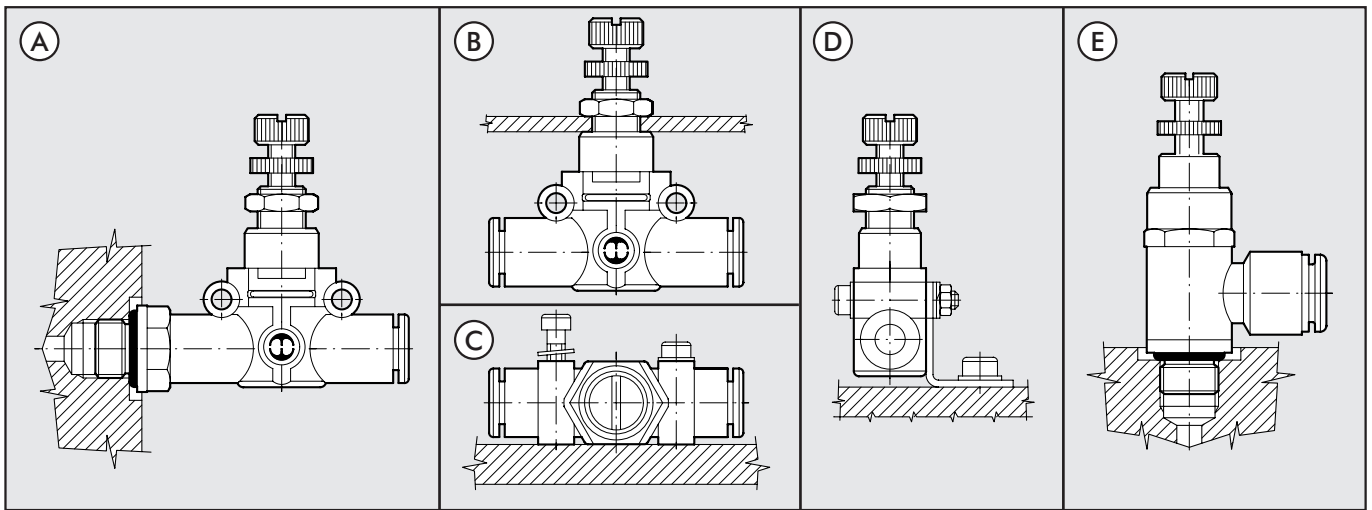
## COMPONENTS

- ① Technopolymer body (brass)
  - 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)
  - ⑫ Stainless steel crimping spring
  - ⑬ Technopolymer spring ring
  - ⑭ NBR gasket
  - ⑮ Nickel-plated brass rotating ring
- In brackets data relevant RMC version





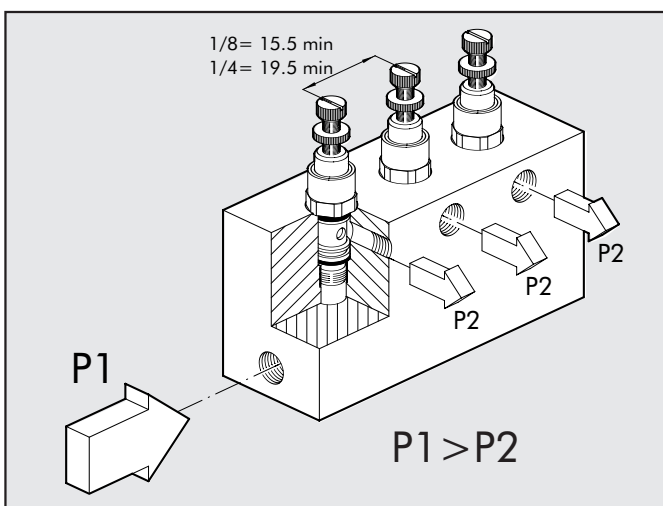
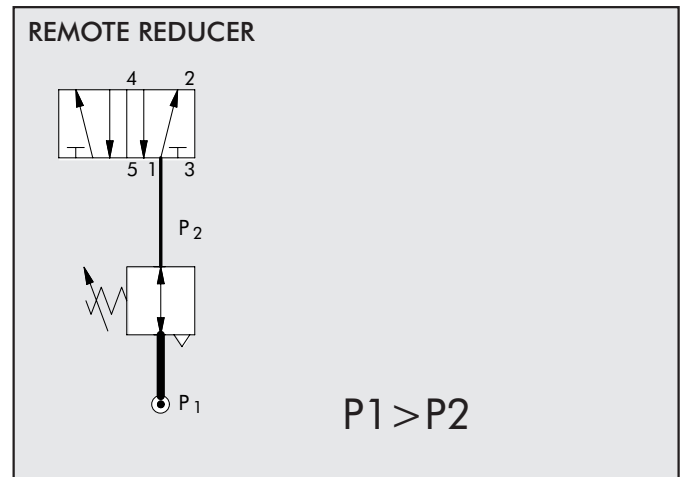
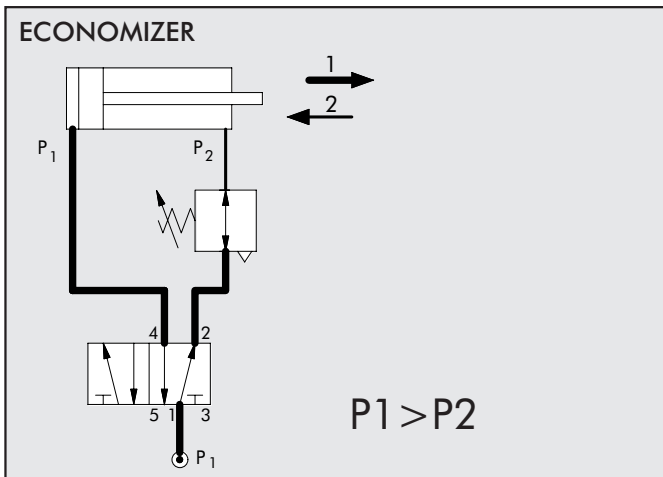
## ASSEMBLY OPTION



### 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°.

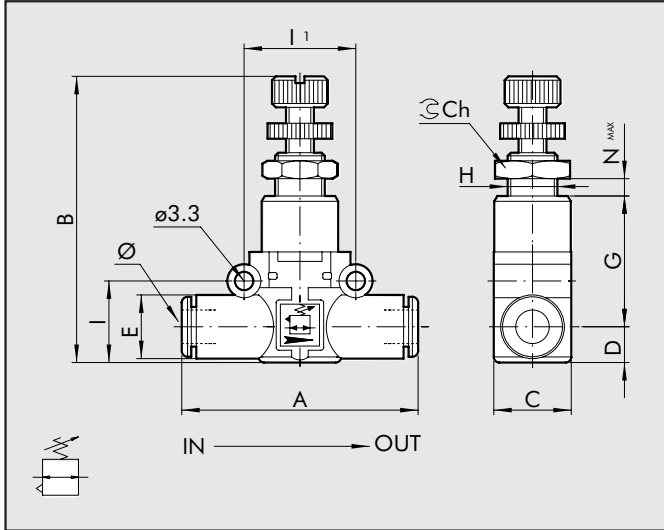
## POSSIBLE APPLICATIONS



The cartridge regulator can be used:

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

### LINE-MOUNTED MINIATURE REDUCER, SERIES RML



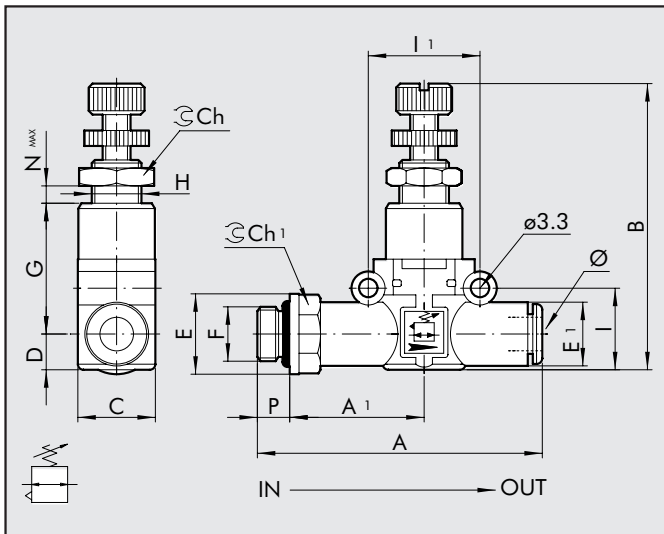
Code	Ref.	Ø	A	B	C	D	E
------	------	---	---	---	---	---	---

9061316	RML 6-6	6	47	46÷52	14.7	6.4	11.4
9061324	RML 8-8	8	55.5	52÷58	18.7	9.1	13.8

G	H	I	I1	Ch	Nmax
---	---	---	----	----	------

24.8	M9x0.75	14.6	20	11	4.5
27.4	M11x1	18.7	24	13	3.8

### LINE-MOUNTED R/F MINIATURE REDUCER SERIES RML



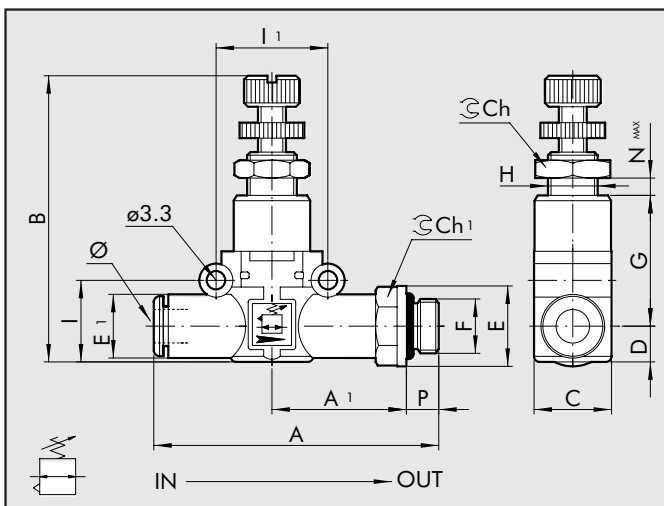
Code	Ref.	F	Ø	P	A	A1	B	C	D
------	------	---	---	---	---	----	---	---	---

9061408	RML 1/8-6	1/8	6	6	57.3	27.8	46÷52	14.7	6.4
9061409	RML 1/4-6	1/4	6	8	60.3	28.8	46÷52	14.7	6.4
9061410	RML 1/8-8	1/8	8	6	65.3	31.8	52÷58	18.7	9.1
9061411	RML 1/4-8	1/4	8	8	69.7	34.2	52÷58	18.7	9.1
9061412	RML 3/8-8	3/8	8	9	71.3	34.8	52÷58	18.7	9.1

E	E1	G	H	I	I1	Ch	Ch1	Nmax
---	----	---	---	---	----	----	-----	------

14	11.4	24.8	M9x0.75	14.6	20	11	12	4.5
18	11.4	24.8	M9x0.75	14.6	20	11	14	4.5
15	13.8	27.4	M11x1	18.7	24	13	14	3.8
18	13.8	27.4	M11x1	18.7	24	13	14	3.8
22	13.8	27.4	M11x1	18.7	24	13	17	3.8

### LINE-MOUNTED F/R MINIATURE REDUCER, SERIES RML



Code	Ref.	Ø	F	P	A	A1	B	C	D
------	------	---	---	---	---	----	---	---	---

9061508	RML 6-1/8	6	1/8	6	57.3	27.8	46÷52	14.7	6.4
9061509	RML 6-1/4	6	1/4	8	60.3	28.8	46÷52	14.7	6.4
9061510	RML 8-1/8	8	1/8	6	65.3	31.8	52÷58	18.7	9.1
9061511	RML 8-1/4	8	1/4	8	69.7	34.2	52÷58	18.7	9.1
9061512	RML 8-3/8	8	3/8	9	71.3	34.8	52÷58	18.7	9.1

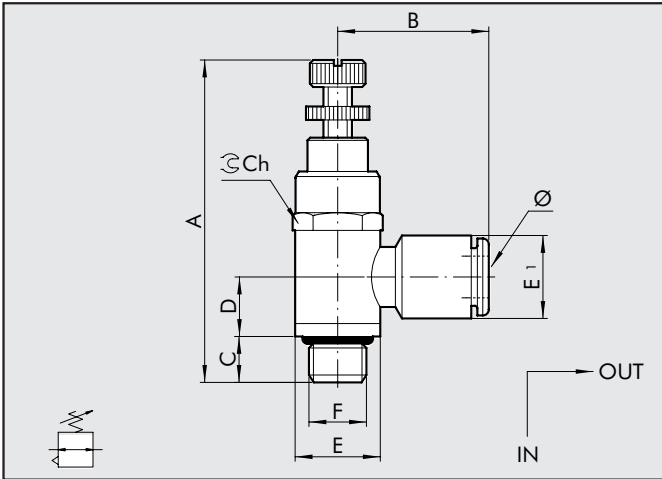
E	E1	G	H	I	I1	Ch	Ch1	Nmax
---	----	---	---	---	----	----	-----	------

14	11.4	24.8	M9x0.75	14.6	20	11	12	4.5
18	11.4	24.8	M9x0.75	14.6	20	11	14	4.5
15	13.8	27.4	M11x1	18.7	24	13	14	3.8
18	13.8	27.4	M11x1	18.7	24	13	14	3.8
22	13.8	27.4	M11x1	18.7	24	13	17	3.8



### MINIATURE REDUCER, SERIES RMC

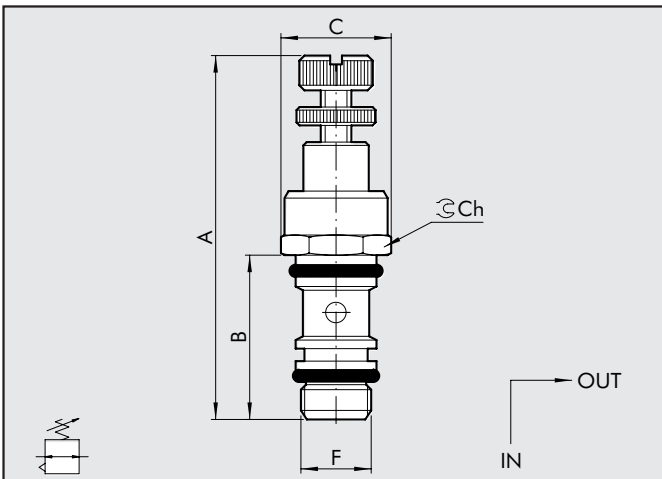
Code Ref. Ø A B C D E E1 Ch



9061102	RMC 1/8-4	4	51±57	20.3	6	12.7	14	9.5	14
9061108	RMC 1/8-6	6	51±57	22.5	6	12.7	14	11.3	14
9061110	RMC 1/8-8	8	51±57	24.4	6	12.7	14	13.8	14
9061109	RMC 1/4-6	6	57±63	24.2	8	11	18	11.3	17
9061111	RMC 1/4-8	8	57±63	26.1	8	11	18	13.8	17
9061112	RMC 1/4-10	10	57±63	31.3	8	11	18	16.5	17

### CARTRIDGE REDUCER, SERIES RMS

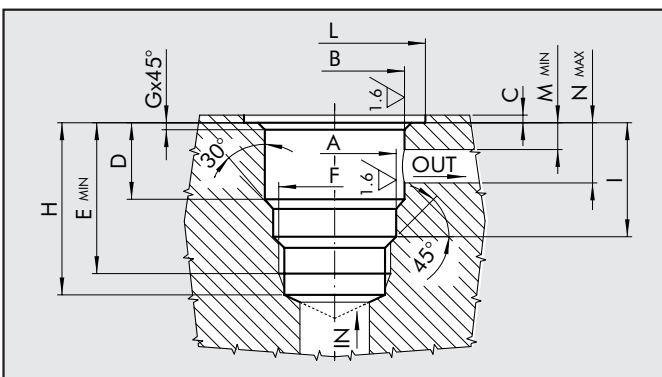
Code Ref. F A B C Ch



9061001	RMS 1/8	1/8	51±57	24.3	15	14
9061002	RMS 1/4	1/4	57±63	27.8	19	17

### SEAT OF A MINIATURE CARTRIDGE REDUCER

F A B C D

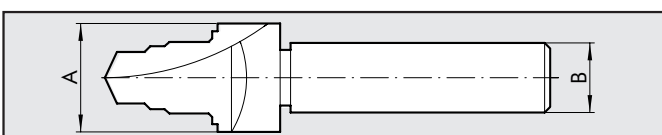


SE.RMS 1/8	1/8	9.8 +0.1/-0	11.2 ±0.05	0.5 ±0.5	15.6 ±0.07
SE.RMS 1/4	1/4	13.5 +0.1/-0	14.4 ±0.05	0.5 ±0.5	17.5 ±0.07

E	G	H	I	L	M	N
24.6	0.3	27	18.1 ±0.2	15.4	3.5	12
28	0.4	31.2	20.8 ±0.2	19.4	3.5	13.5

### TOOL FOR RMS SEAT

Code Ref. A B



9062001	UT.SE 1/8	16	12
9062002	UT.SE 1/4	20	15