

# IN-LINE FIXED-REGULATION FLOW REGULATOR Series RFF L

The in-line fixed regulation flow regulator belongs to the LINE ON LINE® family and can be connected in series or in parallel with the other products in the same family. The RFF L regulates the flow of air, and hence the rate of operation of pneumatic actuators. Air flow is regulated by means of a choke with a calibrated diameter. A full range of diameters is available.

The advantage of the RFF L over other adjustable versions is that there is no need for regulation during machine installation. Subsequent adjustments are not required either. Two versions are available. Version U (unidirectional) regulates the flow in one direction only. Version B (bidirectional) regulates the air flow in both directions. The flow regulator can be mounted in three different ways (see next page).



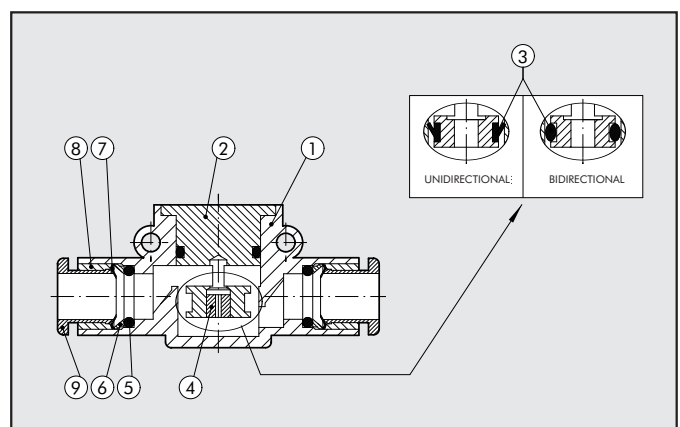
TECHNICAL DATA		Ø 4	Ø 6	Ø 8
Max. operating pressure	MPa		1	
	bar		10	
	psi		145	
Temperature range	°C		-20 ÷ +60	
	°F		-4 ÷ +140	
Choke flow rate	Nl/min		see table on page 2	
Recommended pipe			Rilsan PA 11 – Nylon 6 – Polyamide 12 - Polypropylene	
Fluid			Lubricated or unlubricated filtered air	
Compatibility with oils:			see GENERAL CATALOGUE page 6.1/08 or webpage <a href="http://www.metalwork.it/eng/materiali_compatibilita.html">www.metalwork.it/eng/materiali_compatibilita.html</a>	

## CHOKE FLOW-RATE AT 6 bar WITH RELIEF VALVE OPEN

Choke (mm)	Flow rate (Nl/min)
Ø 0.2	2
Ø 0.3	4
Ø 0.4	7
Ø 0.5	13
Ø 0.6	15
Ø 0.8	32
Ø 1.0	50
Ø 1.3	85
Ø 1.5	110

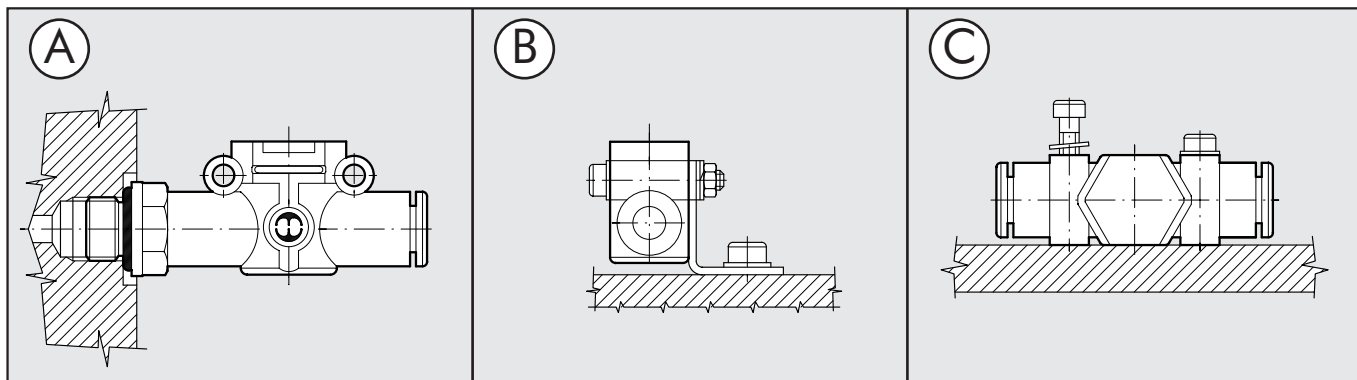
## COMPONENTS

- ① Technopolymer body
- ② Nickel-plated brass gasket holding insert
- ③ NBR gasket
- ④ Brass choke cartridge
- ⑤ NBR seal
- ⑥ Technopolymer spring ring
- ⑦ Stainless steel clip-on spring
- ⑧ Technopolymer stop bushing
- ⑨ Technopolymer release bushing





## ASSEMBLY OPTIONS



How to mount the RFF L:

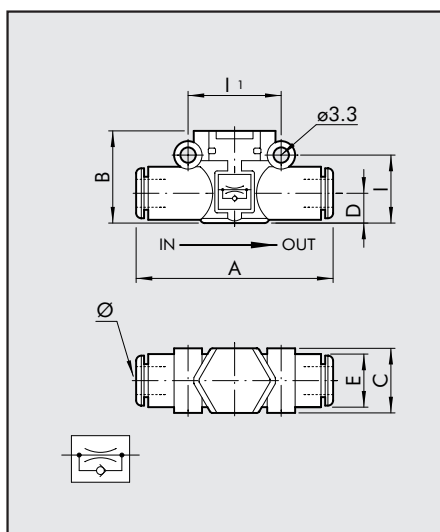
- Fig. A: With the male threaded port it is possible to mount the RFF L straight onto the actuator or the control valve.
- Fig. B: Fixing to the plate with the special SQU L bracket.
- Fig. C: There are two robust rings on the plastic body for fixing the RFF L straight onto the wall.

### RFF L PIPE - PIPE UNIDIRECTIONAL

Code	Ref.	Ø	A	B	C	D	E	I	II
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9070U11_*	RFF-U L 4-4	4	42	17.5	10.7	5.6	10	12.8	16
9070U22_*	RFF-U L 6-6	6	49.4	20	14.7	6.4	11.4	14.6	20
9070U33_*	RFF-U L 8-8	8	57.3	25.5	18.7	9.1	13.8	18.7	24

\* The last two digits indicate the narrowing Ø. To complete the code please look at the key to codes.

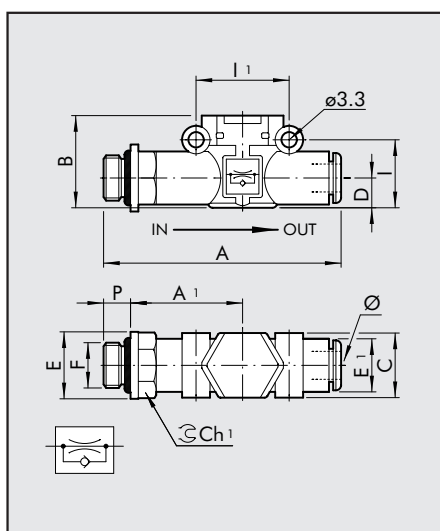


### RFF L THREAD - PIPE UNIDIRECTIONAL CYLINDER VERSION

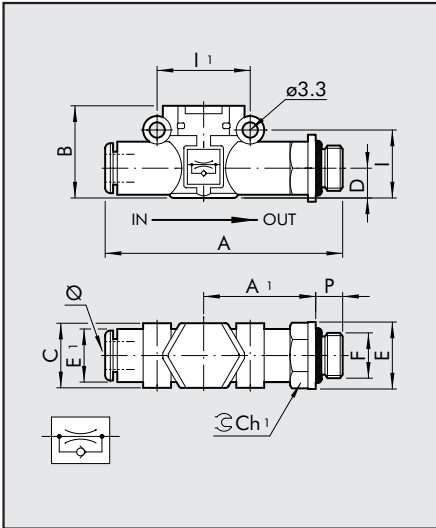
Code	Ref.	F	Ø	P	A	A1	B	C	E	E1	I	II	Ch
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9070C51_*	RFF-C L M5 - Ø4	M5	4	4	47.7	22.7	17.5	10.7	9.9	10	12.8	16	9
9070C61_*	RFF-C L 1/8" - Ø4	1/8	4	6	51.6	24.6	17.5	10.7	14	10	12.8	16	12
9070C62_*	RFF-C L 1/8" - Ø6	1/8	6	6	58.5	27.8	20	14.7	14	11.4	14.6	20	12
9070C72_*	RFF-C L 1/4" - Ø6	1/4	6	8	61.5	28.8	20	14.7	18	11.4	14.6	20	14
9070C63_*	RFF-C L 1/8" - Ø8	1/8	8	6	66.2	31.8	25.5	18.7	15	13.8	18.7	24	14
9070C73_*	RFF-C L 1/4" - Ø8	1/4	8	8	70.6	34.2	25.5	18.7	18	13.8	18.7	24	14
9070C83_*	RFF-C L 3/8" - Ø8	3/8	8	9	72.2	34.8	25.5	18.7	22	13.8	18.7	24	17

\* The last two digits indicate the narrowing Ø. To complete the code please look at the key to codes.



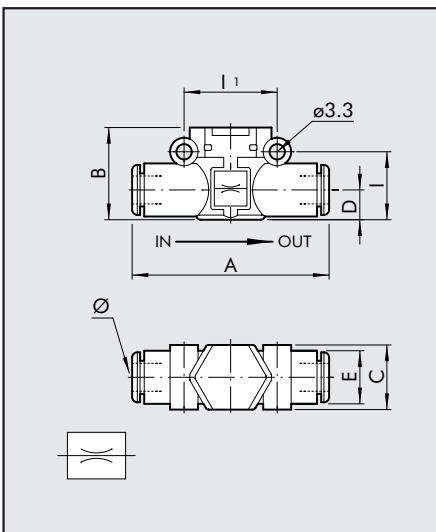
### RFF L PIPE - THREAD UNIDIRECTIONAL VALVE VERSION



Code	Ref.	Ø	F	P	A	A1	B	C	E	E1	I	I1	Ch
9070V15_*	RFF-V L Ø4 - M5	4	M5	4	47.7	22.7	17.5	10.7	9.9	10	12.8	16	9
9070V16_*	RFF-V L Ø4 - 1/8"	4	1/8	6	51.6	24.6	17.5	10.7	14	10	12.8	16	12
9070V26_*	RFF-V L Ø6 - 1/8"	6	1/8	6	58.5	27.8	20	14.7	14	11.4	14.6	20	12
9070V27_*	RFF-V L Ø6 - 1/4"	6	1/4	8	61.5	28.8	20	14.7	18	11.4	14.6	20	14
9070V36_*	RFF-V L Ø8 - 1/8"	8	1/8	6	66.2	31.8	25.5	18.7	15	13.8	18.7	24	14
9070V37_*	RFF-V L Ø8 - 1/4"	8	1/4	8	70.6	34.2	25.5	18.7	18	13.8	18.7	24	14
9070V38_*	RFF-V L Ø8 - 3/8"	8	3/8	9	72.2	34.8	25.5	18.7	22	13.8	18.7	24	17

\* The last two digits indicate the narrowing Ø. To complete the code please look at the key to codes.

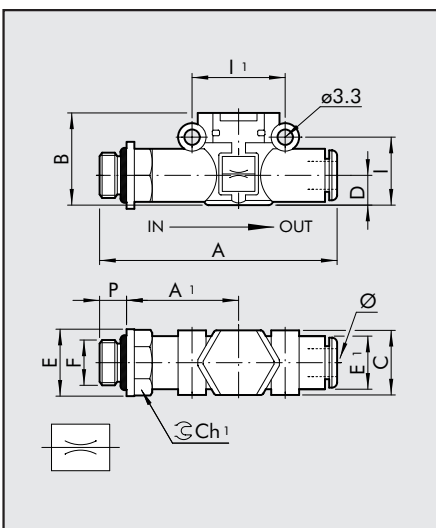
### RFF L PIPE - PIPE BIDIRECTIONAL



Code	Ref.	Ø	A	B	C	D	E	I	I1
9070B11_*	RFF-B L 4-4	4	42	17.5	10.7	5.6	10	12.8	16
9070B22_*	RFF-B L 6-6	6	49,4	20	14.7	6.4	11.4	14.6	20
9070B33_*	RFF-B L 8-8	8	57,3	25.5	18.7	9.1	13.8	18.7	24

\* The last two digits indicate the narrowing Ø. To complete the code please look at the key to codes.

### RFF L THREAD - PIPE BIDIRECTIONAL



Code	Ref.	F	Ø	P	A	A1	B	C	E	E1	I	I1	Ch
9070B51_*	RFF-B L M5 - Ø4	M5	4	4	47.7	22.7	17.5	10.7	9.9	10	12.8	16	9
9070B61_*	RFF-B L 1/8" - Ø4	1/8	4	6	51.6	24.6	17.5	10.7	14	10	12.8	16	12
9070B62_*	RFF-B L 1/8" - Ø6	1/8	6	6	58.5	27.8	20	14.7	14	11.4	14.6	20	12
9070B72_*	RFF-B L 1/4" - Ø6	1/4	6	8	61.5	28.8	20	14.7	18	11.4	14.6	20	14
9070B63_*	RFF-B L 1/8" - Ø8	1/8	8	6	66.2	31.8	25.5	18.7	15	13.8	18.7	24	14
9070B73_*	RFF-B L 1/4" - Ø8	1/4	8	8	70.6	34.2	25.5	18.7	18	13.8	18.7	24	14
9070B83_*	RFF-B L 3/8" - Ø8	3/8	8	9	72.2	34.8	25.5	18.7	22	13.8	18.7	24	17

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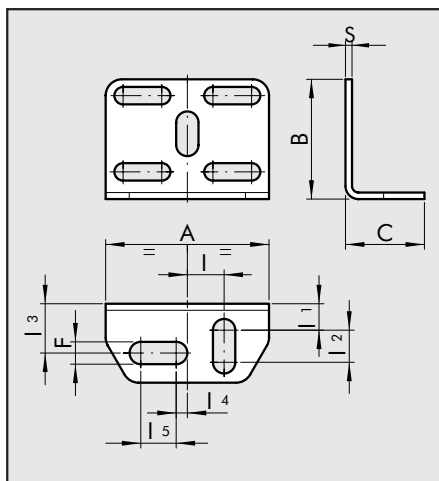
## KEY TO CODING

9 0 7 0	B	11	02
TYPE	FUNCTION	Ø IN - Ø OUT	Ø CHOKE
<b>9070</b> RFF L	<b>B</b> Bidirectional <b>C</b> for cylinder <b>U</b> Unidirectional <b>V</b> for valve	■ <b>11</b> = Ø4 - Ø4 * <b>15</b> = Ø4 - M5 * <b>16</b> = Ø4 - 1/8" ■ <b>22</b> = Ø6 - Ø6 * <b>26</b> = Ø6 - 1/8" * <b>27</b> = Ø6 - 1/4" ■ <b>33</b> = Ø8 - Ø8 * <b>36</b> = Ø8 - 1/8" * <b>37</b> = Ø8 - 1/4" * <b>38</b> = Ø8 - 3/8" ● <b>51</b> = M5 - Ø4 ● <b>61</b> = 1/8" - Ø4 ● <b>62</b> = 1/8" - Ø6 ● <b>63</b> = 1/8" - Ø8 ● <b>72</b> = 1/4" - Ø6 ● <b>73</b> = 1/4" - Ø8 ● <b>83</b> = 3/8" - Ø8	<b>02</b> = Ø0.2 <b>03</b> = Ø0.3 <b>04</b> = Ø0.4 <b>05</b> = Ø0.5 <b>06</b> = Ø0.6 <b>08</b> = Ø0.8 <b>10</b> = Ø1.0 <b>13</b> = Ø1.3 <b>15</b> = Ø1.5

■ Only for **B** (bidirectional) and **U** (unidirectional) versions  
 \* Only for **V** (valve) versions  
 ● Only for **C** (cylinder) and **V** (valve) versions

## LINE ON LINE® ACCESSORIES

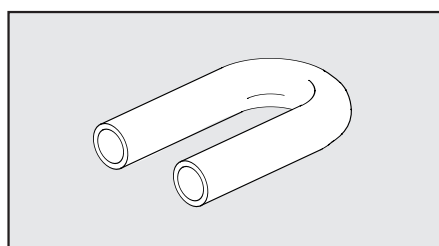
### FIXING SQUARE KIT



Code	Description	A	B	C	F	I	11	12	13	14	15	S
9062110	SQU L	30	22	14.5	4.2	6.8	4.8	5.9	9.1	2	6.5	1.2

NOTE: comes with two m3x16 screws (for L.O.L. Ø 6 - 8), two m3 hexagonal nuts, 2 groovers, 4 washers.

### U-BOLT



Code	Description
9062216	TUB L 6-6
9062224	TUB L 8-8

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 www.metalwork.it - metalwork@metalwork.it

The dimensions shown in this catalogue are subject to variations at any time without prior notice