

# 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.

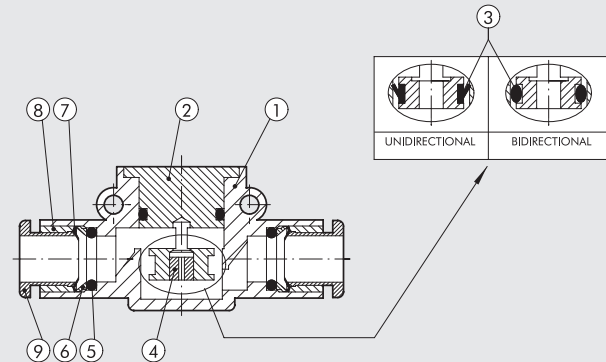


## TECHNICAL DATA

		Ø 4 (Ø5/32")	Ø 6	Ø 8 (Ø5/16")
Max. operating pressure	MPa		1	
	bar		10	
	psi		145	
Temperature range	°C		- 20 to + 60	
	°F		- 4 to + 140	
Choke flow rate	NI/min		See table below	
Recommended pipe		Rilsan PA 11 - Nylon 6 - Polyamide 12 - Polypropylene		
Fluid		Lubricated or unlubricated filtered compressed air; if used, must be continuous		
Compatibility with oils		See <b>chapter Z1</b>		

## 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



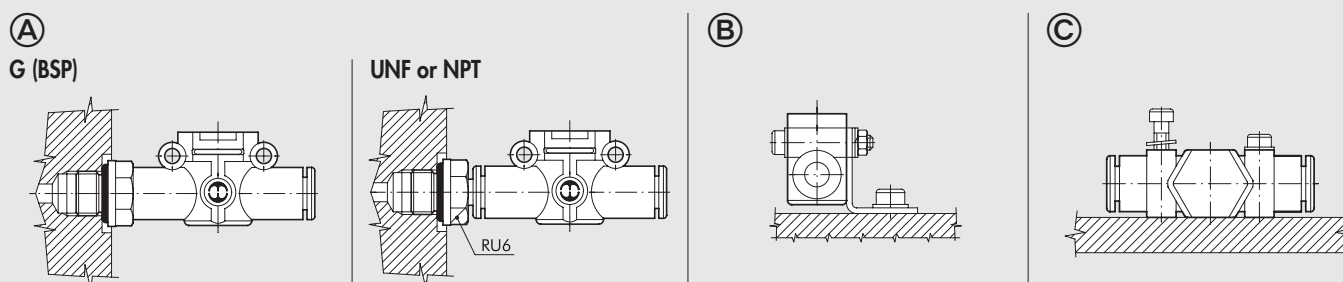
## EXHAUST FLOW RATE AT 6.3 bar FOR VERSIONS C-U-V [NI/min]

Choke [mm]	Ø 4 (Ø5/32")	Ø 6	Ø 8 (Ø5/16")
Ø 0.2	142	552	912
Ø 0.3	144	554	914
Ø 0.4	147	557	917
Ø 0.5	153	563	923
Ø 0.6	155	565	925
Ø 0.8	172	582	942
Ø 1.0	190	600	960
Ø 1.3	225	635	995
Ø 1.5	250	660	1020

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

Choke [mm]	Flow rate [NI/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

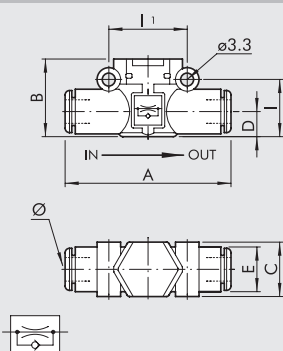
## ASSEMBLY OPTIONS



How to mount the RFF L:

- Fig. (A) **G (BSP)**: With the male threaded port it is possible to mount the RFF L straight onto the actuator or the control valve.  
**UNF or NPT**: Adding a RU6 fitting, with his male UNF or NPT thread, it is possible to mount the RFF L straight on to 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.

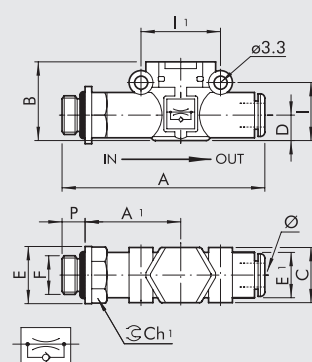
## RFF L PIPE - PIPE UNIDIRECTIONAL



Code	Ref.	Ø	A	B	C	D	E	I	II
9070U11_*	RFF-U L Ø4-Ø4	4 ▲	42	17.5	10.7	5.6	10	12.8	16
9070U22_*	RFF-U L Ø6-Ø6	6	49.4	20	14.7	6.4	11.4	14.6	20
9070U33_*	RFF-U L Ø8-Ø8	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.  
▲ Ø4 = Ø5/32"; Ø8 = Ø5/16"

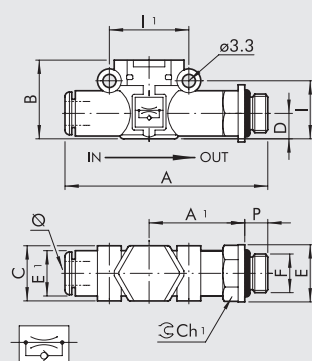
## RFF L G (BSP) THREAD - PIPE UNIDIRECTIONAL CYLINDER VERSION



Code	Ref.	F	Ø	P	A	A1	B	C	E	E1	I	II	Ch1
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

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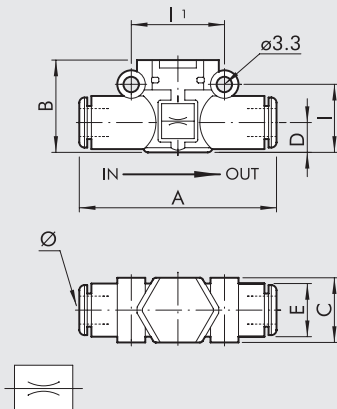
## RFF L PIPE - G (BSP) THREAD UNIDIRECTIONAL VALVE VERSION



Code	Ref.	Ø	F	P	A	A1	B	C	E	E1	I	II	Ch1
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

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## RFF L PIPE - PIPE BIDIRECTIONAL

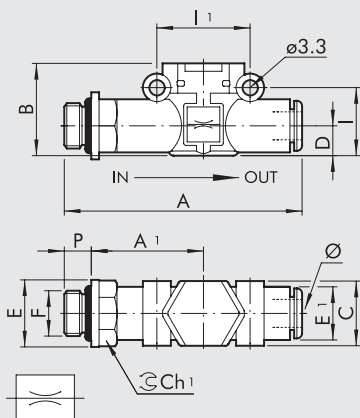


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## KEY TO CODES

9 0 7 0	B	11	02
TYPE	FUNCTION	Ø IN - Ø OUT	Ø CHOKE
9070 RFF L	B Bidirectional C For cylinder U Unidirectional V For valve	▲ ■ 11 = Ø 4 - Ø 4 ▲ * 15 = Ø 4 - M5 ▲ * 16 = Ø 4 - 1/8" ■ 22 = Ø 6 - Ø 6 * 26 = Ø 6 - 1/8" * 27 = Ø 6 - 1/4" ▲ ■ 33 = Ø 8 - Ø 8 ▲ * 36 = Ø 8 - 1/8" ▲ * 37 = Ø 8 - 1/4" ▲ * 38 = Ø 8 - 3/8" ▲ ● 51 = M5 - Ø 4 ▲ ● 61 = 1/8" - Ø 4 ● 62 = 1/8" - Ø 6 ▲ ● 63 = 1/8" - Ø 8 ● 72 = 1/4" - Ø 6 ▲ ● 73 = 1/4" - Ø 8 ▲ ● 83 = 3/8" - Ø 8	02 = Ø 0.2 03 = Ø 0.3 04 = Ø 0.4 05 = Ø 0.5 06 = Ø 0.6 08 = Ø 0.8 10 = Ø 1.0 13 = Ø 1.3 15 = Ø 1.5

▲ Ø4 = Ø5/32"; Ø8 = Ø5/16"

■ Only for B (bidirectional) and U (unidirectional) versions

\* Only for V (valve) versions

● Only for C (cylinder) and B (bidirectional) versions