

IN-LINE FILTER SERIES FIL L



The FIL L filter is part of the LINE ON LINE® family, which means it can be connected in series or in parallel with all other products of the same line. Available in the version for pipe-pipe connection with two push-in fittings, and in the version for thread-pipe connection with a brass nickel-plated male thread and a push-in fitting.

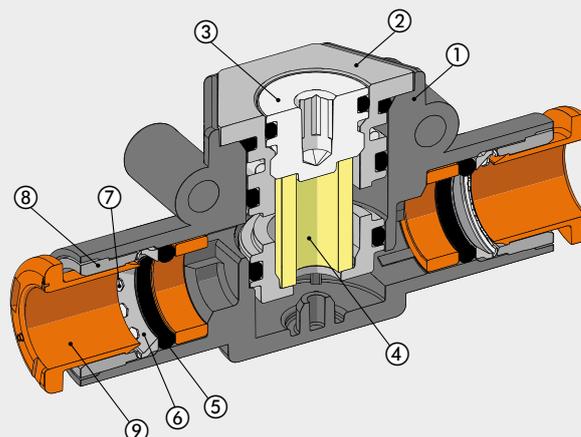
The sintered filter cartridge, which can be easily inspected and replaced by simply opening a removable cap, is available in 3 filtering grades of a different colour for easy identification: 5 µm (yellow), 20 µm (white) and 50 µm (blue).



TECHNICAL DATA		Ø 8 (Ø5/16")	Ø 3/8"	Ø 10
Inlet pressure	MPa		0.05 to 1.2	
	bar		0.5 to 12	
	psi		7.2 to 174	
Temperature range	°C		-20 to +60	
	°F		-4 to +140	
Flow rate at 6.3 bar ΔP 0.5 bar	Nl/min		200	
Flow rate at 6.3 bar ΔP 1 bar	Nl/min		280	
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 chapter Z1		

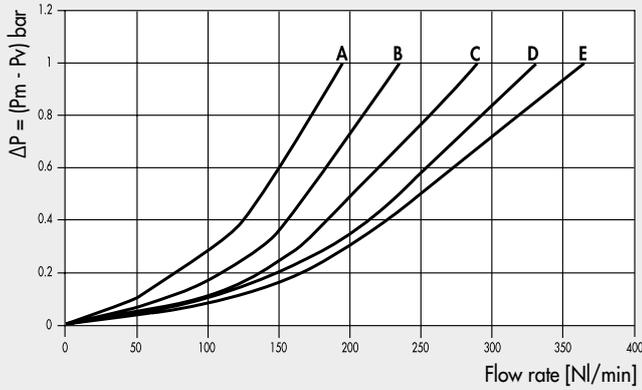
COMPONENTS

- ① Technopolymer body
- ② Nickel-plated brass filter insert
- ③ Nickel-plated brass filter cap
- ④ Sintered HDPE filter cartridge
- ⑤ NBR gasket
- ⑥ Technopolymer spring ring
- ⑦ Stainless steel clip-on spring
- ⑧ Technopolymer locking bushing
- ⑨ Technopolymer release bushing



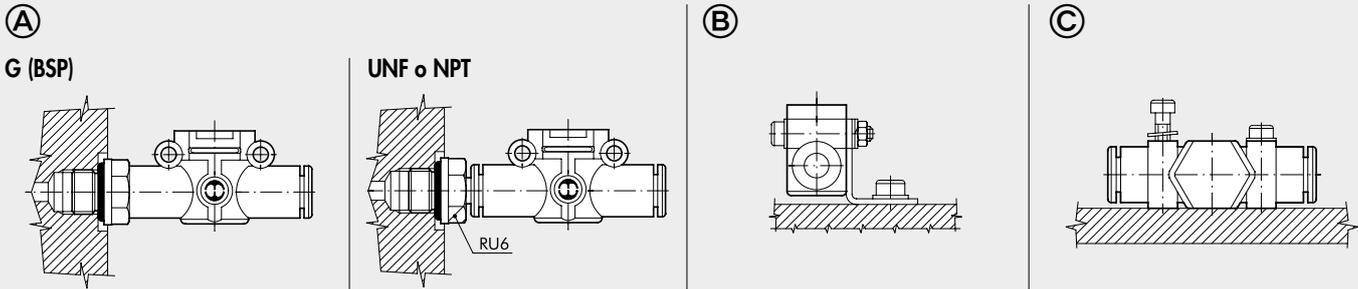
FLOW CHART

FIL L Ø 8 (Ø 5/16") 20 µm - FIL L Ø 3/8" 20 µm - FIL L Ø 10 20 µm



A = 2.5 bar C = 6.3 bar E = 10 bar
 B = 4 bar D = 8 bar

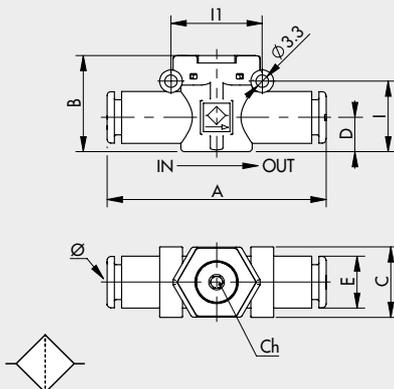
ASSEMBLY OPTIONS



How to mount the FIL L:

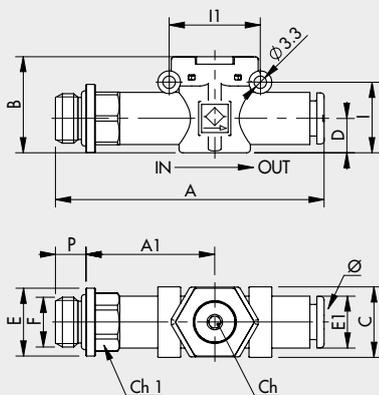
- Fig. **A** **G (BSP)**: With the male threaded port it is possible to mount the FIL L straight onto the female thread.
UNF or NPT: Adding a RU6 fitting, with his male UNF or NPT thread, it is possible to mount the FIL L straight on to the actuator or the control valve.
- Fig. **B** Fixing to the plate with the special SQU L bracket (only for Ø8).
- Fig. **C** There are two robust rings on the plastic body for fixing the FIL L straight onto the wall.

FIL L PIPE - PIPE



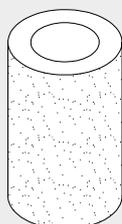
Code	Ref.	Ø	A	B	C	D	E	I	I1	Ch
9070424	FIL L Ø8-Ø8 5 µm	8 ▲	57.3	25.5	18.7	9.1	13.8	18.7	24	3
9070444	FIL L Ø8-Ø8 20 µm	8 ▲	57.3	25.5	18.7	9.1	13.8	18.7	24	3
9070464	FIL L Ø8-Ø8 50 µm	8 ▲	57.3	25.5	18.7	9.1	13.8	18.7	24	3
9070432U	FIL L Ø3/8-Ø3/8 5 µm	3/8	65.4	29.7	20.7	10.9	16	21.4	26	3
9070452U	FIL L Ø3/8-Ø3/8 20 µm	3/8	65.4	29.7	20.7	10.9	16	21.4	26	3
9070472U	FIL L Ø3/8-Ø3/8 50 µm	3/8	65.4	29.7	20.7	10.9	16	21.4	26	3
9070432	FIL L Ø10-Ø10 5 µm	10	65.7	29.7	20.7	10.9	16	21.4	26	3
9070452	FIL L Ø10-Ø10 20 µm	10	65.7	29.7	20.7	10.9	16	21.4	26	3
9070472	FIL L Ø10-Ø10 50 µm	10	65.7	29.7	20.7	10.9	16	21.4	26	3

▲ Ø8 = Ø5/16"

FIL L G (BSP) THREAD - PIPE


Code	Ref.	F	Ø	P	A	A1	B	C	D	E	E1	I	I1	Ch	Ch1
9070510	FIL L 1/8-Ø8 5 µm	1/8	8▲	6	66.2	31.8	25.5	18.7	9.1	15	13.8	18.7	24	3	14
9070530	FIL L 1/8-Ø8 20 µm	1/8	8▲	6	66.2	31.8	25.5	18.7	9.1	15	13.8	18.7	24	3	14
9070550	FIL L 1/8-Ø8 50 µm	1/8	8▲	6	66.2	31.8	25.5	18.7	9.1	15	13.8	18.7	24	3	14
9070511	FIL L 1/4-Ø8 5 µm	1/4	8▲	8	70.6	34.2	25.5	18.7	9.1	18	13.8	18.7	24	3	14
9070531	FIL L 1/4-Ø8 20 µm	1/4	8▲	8	70.6	34.2	25.5	18.7	9.1	18	13.8	18.7	24	3	14
9070551	FIL L 1/4-Ø8 50 µm	1/4	8▲	8	70.6	34.2	25.5	18.7	9.1	18	13.8	18.7	24	3	14
9070512	FIL L 3/8-Ø8 5 µm	3/8	8▲	9	72.2	34.8	25.5	18.7	9.1	22	13.8	18.7	24	3	17
9070532	FIL L 3/8-Ø8 20 µm	3/8	8▲	9	72.2	34.8	25.5	18.7	9.1	22	13.8	18.7	24	3	17
9070552	FIL L 3/8-Ø8 50 µm	3/8	8▲	9	72.2	34.8	25.5	18.7	9.1	22	13.8	18.7	24	3	17
9070515	FIL L 1/4-Ø10 5 µm	1/4	10	8	79.9	39.2	29.7	20.7	10.9	18	16	21.4	26	3	16
9070535	FIL L 1/4-Ø10 20 µm	1/4	10	8	79.9	39.2	29.7	20.7	10.9	18	16	21.4	26	3	16
9070555	FIL L 1/4-Ø10 50 µm	1/4	10	8	79.9	39.2	29.7	20.7	10.9	18	16	21.4	26	3	16
9070516	FIL L 3/8-Ø10 5 µm	3/8	10	9	81.2	40.4	29.7	20.7	10.9	20	16	21.4	26	3	17
9070536	FIL L 3/8-Ø10 20 µm	3/8	10	9	81.2	40.4	29.7	20.7	10.9	20	16	21.4	26	3	17
9070556	FIL L 3/8-Ø10 50 µm	3/8	10	9	81.2	40.4	29.7	20.7	10.9	20	16	21.4	26	3	17
9070517	FIL L 1/2-Ø10 5 µm	1/2	10	11	83.7	40	29.7	20.7	10.9	26	16	21.4	26	3	22
9070537	FIL L 1/2-Ø10 20 µm	1/2	10	11	83.7	40	29.7	20.7	10.9	26	16	21.4	26	3	22
9070557	FIL L 1/2-Ø10 50 µm	1/2	10	11	83.7	40	29.7	20.7	10.9	26	16	21.4	26	3	22

▲ Ø8 = Ø5/16"

SPARE PARTS
FILTERING ELEMENT


Code	Description
9062500	Filtering element 5 µm (yellow) LOL
9062501	Filtering element 20 µm (white) LOL
9062502	Filtering element 50 µm (blue) LOL

NOTES

lineonline®

LINE OF PRODUCTS ON LINE

LINE ON LINE® is an exclusive range of products for mounting on pneumatic circuits. With these small, highly efficient components it is possible

to perform all pneumatic functions at any point of the circuit.

LINE ON LINE® is ultra-modular - the components can be connected in parallel, in series or combined parallel/series.

All LINE ON LINE® products are available for pipe-pipe connection with two push-in fittings, or for thread-pipe connection with a brass nickel-plated male ISO 228 G (BSP) thread and a push-in fitting.

The body is made of technopolymer, giving a product that is extremely lightweight and compact.

One side of the body is marked with an indelible pneumatic symbol to facilitate identification and indicate the direction of flow.

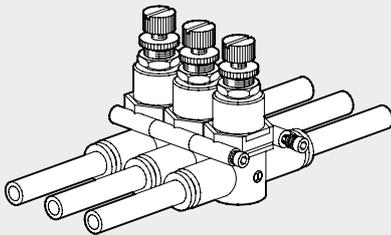
For almost every function it is available $\varnothing 1/4$ and $\varnothing 3/8$ " tube version.

It is also possible to use RU6 fitting to mount LINE ON LINE® on thread UNF or NPT.

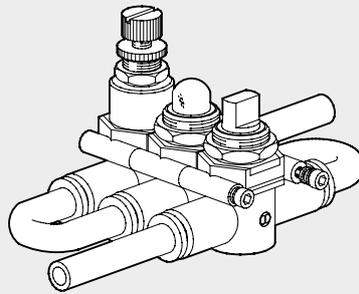


CONNECTION FREE

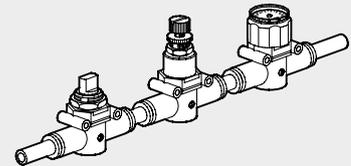
Parallel lines



Serial line parallel fitting



Serial line in-line fitting



FIXING FREE

Wall fixing

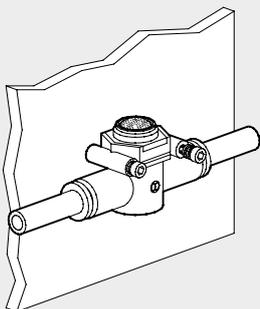
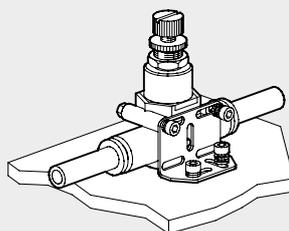
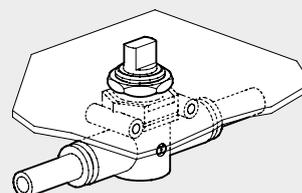


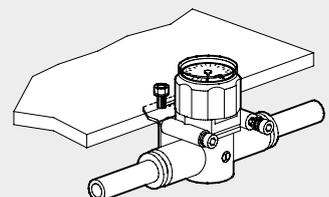
Plate fixing

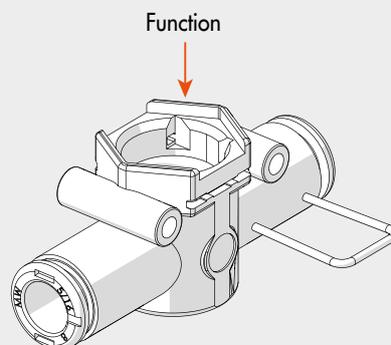


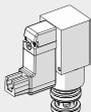
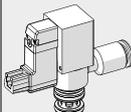
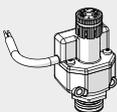
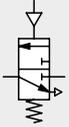
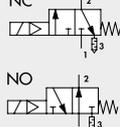
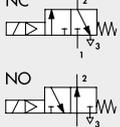
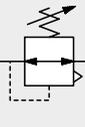
Panel fixing

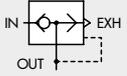
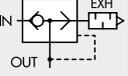
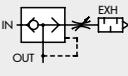
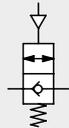


Under wall fixing



ALL THE PNEUMATIC FUNCTIONS WITH THE SAME EXTERNAL DIMENSIONS


PNV	SOV	RML ●▲	MAN ●▲	PRS ●▲	LAM ●	V2V ●▲	V3V ●▲	
								
3-way pneumatic valve	Solenoid valve 3-way with silenced exhaust	Solenoid valve 3-way with conveyed exhaust	Pressure regulator	Pressure gauge	Pressure switch	Pressure indicator	Shut-off valve 2-way	Shut-off valve 3-way
								
See page E1.7	See page E1.10	See page E1.14	See page E1.18	See page E1.20	See page E1.24	See page E1.26	See page E1.26	

RFL ●▲	RFF	VSR ●▲	VSRR	STP	VNR ●▲	FIL ▲			
									
Flow regulator unidirectional	Flow regulator bidirectional	Calibrated choke unidirectional	Calibrated choke bidirectional	Quick-exhaust valve conveyed	Quick-exhaust valve silenced	Quick-exhaust valve regulated	Stop valve	Check valve	Filter
									
See page E1.29	See page E1.34	See page E1.37	See page E1.37	See page E1.39	See page E1.42	See page E1.45	See page E1.47		

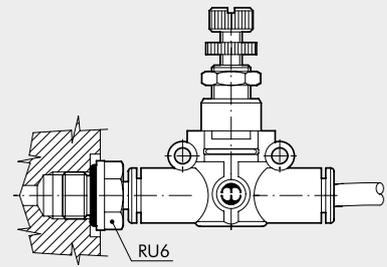
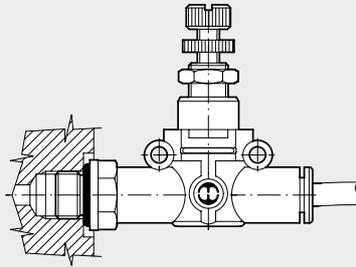
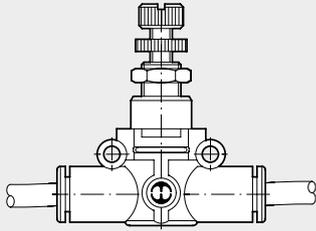
- Available also in tube Ø 1/4" version
- ▲ Available also in tube Ø 3/8" version

PIPE - PIPE

THREAD - PIPE

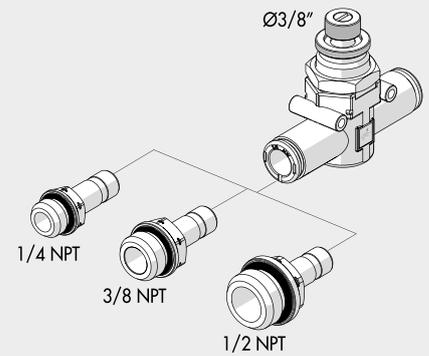
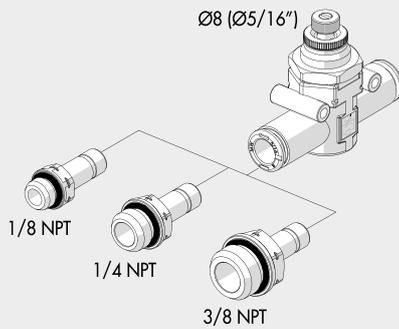
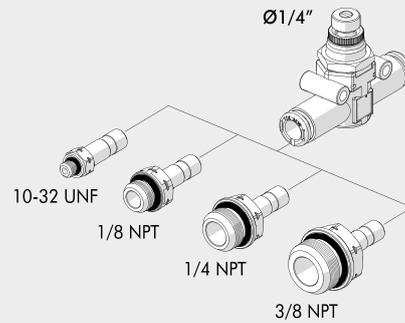
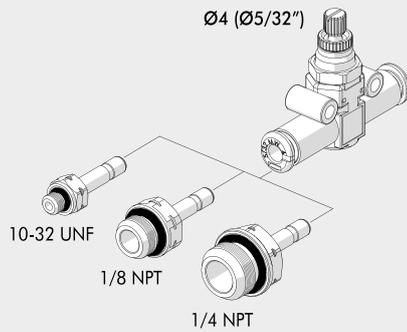
ISO 228 G (BSP) THREAD

UNF or NPT THREAD

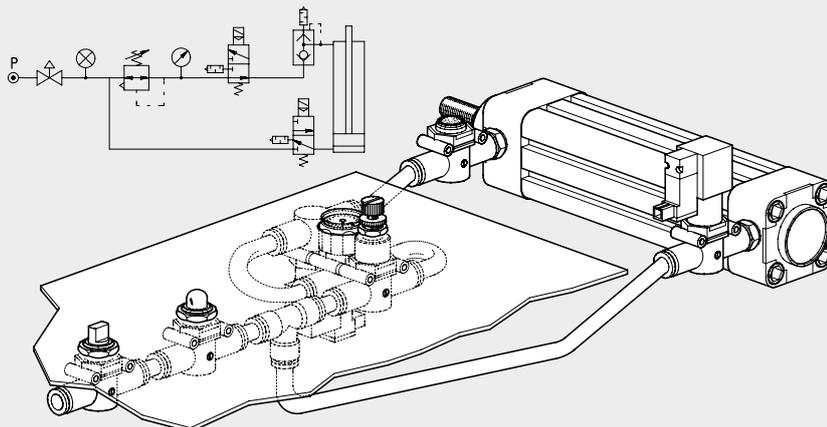


FROM TUBE - TUBE TO UNF or NPT THREAD - TUBE TRANSFORMATION

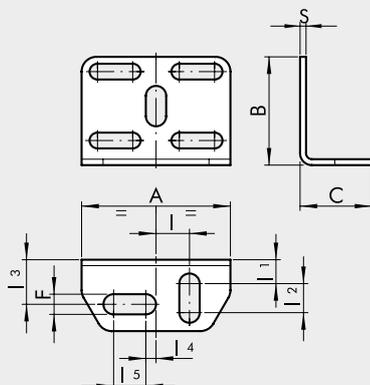
Using the RU6 fitting, it is possible to mount every Line on Line products on to the actuator or the control valve.



APPLICATION EXAMPLE



FIXING SQUARE KIT



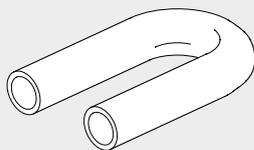
Code	Description	A	B	C	F	I	I1	I2	I3	I4	I5	S
9062110	SQU L	30	22	14.5	4.2	6.8	4.8	5.9	9.1	2	6.5	1.2

NOTE: comes with two M3x16 screws (for L.O.L. $\varnothing 4$ ▲), two M3x25 screws (for L.O.L. $\varnothing 6$ - $\varnothing 1/4$ - $\varnothing 8$ ▲), two M3 hexagonal nuts, 2 groovers, 4 washers.

NOT COMPATIBLE WITH $\varnothing 3/8$ AND $\varnothing 10$

▲ $\varnothing 4 = \varnothing 5/32"$; $\varnothing 8 = \varnothing 5/16"$

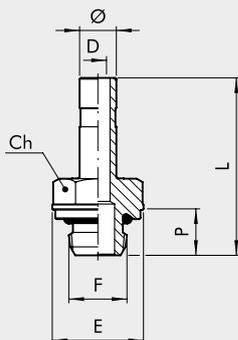
U-BOLT



Code	Description
9062216	TUB L $\varnothing 6$ - $\varnothing 6$
9062216U	TUB L $\varnothing 1/4$ - $\varnothing 1/4$
9062224	TUB L $\varnothing 8$ - $\varnothing 8$ ▲

▲ $\varnothing 8 = \varnothing 5/16"$

RU6 - STEM ADAPTORS UNF or NPT



Code	Ref.	\varnothing	F	Ch			L	D	E
				Inc	mm	P			
2U06001	RU6	5/32	10-32 UNF	5/16	8	4	25.2	2	9
2U06002	RU6	5/32	1/8 NPT	0.472	12	6	27.7	2.5	13
2U06003	RU6	5/32	1/4 NPT	0.551	14	8	30.2	2.5	16.4
2U06000	RU6	1/4	10-32 UNF	5/16	8	4	25.7	2	9
2U06007	RU6	1/4	1/8 NPT	0.472	12	6	28.2	4	13
2U06008	RU6	1/4	1/4 NPT	0.551	14	8	30.5	4	16.4
2U06020	RU6	1/4	3/8 NPT	0.669	17	9	33.3	4	20
2U06009	RU6	5/16	1/8 NPT	0.472	12	6	29.2	5.5	13
2U06010	RU6	5/16	1/4 NPT	0.551	14	8	31.5	6	16.4
2U06011	RU6	5/16	3/8 NPT	0.669	17	9	34.3	6	20
2U06012	RU6	3/8	1/4 NPT	0.551	14	8	34.8	7.3	16.4
2U06013	RU6	3/8	3/8 NPT	0.669	17	9	37.6	7.3	20
2U06022	RU6	3/8	1/2 NPT	0.748	19	11	41.2	7.3	24.5