

FRL MINI

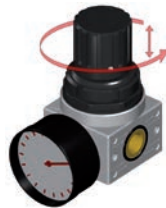
COMPRESSED AIR TREATMENT COMPONENTS UNIT



Mini technical instruction

Generally the assembling of FRL components has to follow this order: Filter, Regulator, Lubricator.

While connecting the components, be sure that the air flows towards the direction of the arrows located on the upper surface of the components.



1. Condensate exhaust

The manual/semiautomatic condensate exhaust is normally in the open position; i.e. it exhausts automatically the condensate when there is no pressure inside the bowl. Pressing the knob it is possible to exhaust the condensate even if it is on pressure, turning the knob in anticlockwise sense the exhaust is in the close position.



2. Insert the oil

To insert the oil into the lubricator unscrew the plug located on the upper surface or disassemble the bowl making sure that there is no pressure in the system. To regulate the oil into the circuit act with a screwdriver on the needle and adjust 1 oil drop every 300/600 NI/min.



3. Disassemble

To disassemble the bowl use a CH3 caliber face spanners. The transparent bowl permits the control of the condensate level in the filter and the oil level in the lubricator.



Assembling

The setting up of the parts has to be done as follows:

- Put the plates in the proper places of the bodies.
- Put the assembling parts together, making sure that the o-ring are in their proper seats.
- Tighten the screws on the plates.

Setting pressure

To regulate the pressure follow these suggestions:

- Raise the knob to the regulating position;
- Fix up the required pressure always upgrade
- Press the knob to the block position.

The manometer has to be assembled manually with the addition of liquid sealant. The mini quick exhaust regulator allows the circuit downstream to exhaust rapidly when upstream pressure is interrupted.

TECHNICAL CHARACTERISTICS

REFERENCE STANDARD	1907/2006 REACH ✓	2011/65/CE RoHS ✓	PED 2014/68/UE	MANOMETER FASTENING	G 1/8
FLUID	Compressed Air			CONDENSATE EXHAUST	Manual Semi Automatic
THREADED	1/8" 1/4"			BOWL CAPACITY	28 cm ³ 17.5 cm ³
MAX PRESSURE	15 bar			REGULATION RANGE	0 ÷ 2 bar 0 ÷ 4 bar 0 ÷ 8 bar STANDARD 0 ÷ 12 bar
TEMPERATURE	-10 °C +50 °C			WALL CLAMPING SCREWS	M3
ASSEMBLY POSITION	Vertical			RECOMMENDED OILS	ISO VG 22A CLASS ISO 3448 NORMA

SERIES FRL MINI - T010 MINI FILTER



Standard code in stock	Size	Thread	Filtration	Flow Rate
T010 002 201 000	FIL 0	1/8	20 µm	800 NI/min
T010 003 201 000	FIL 0	1/4	20 µm	800 NI/min

Code	Size	Thread	Filtration	Condensate exhaust	Flow Rate
T 0 1 0	0	0 3	2	2	0 0 0
		02 = 1/8 03 = 1/4	1 = 5 2 = 20 3 = 50	1 = Semi Automatic Manual	800 NI/min

SERIES FRL MINI - T015 COALESCER FILTER



Standard code in stock	Size	Thread	Filtration	Flow Rate
T015 002 401 000	FC 0	1/8	0.01 µm	450 NI/min
T015 003 401 000	FC 0	1/4	0.01 µm	450 NI/min

Code	Size	Thread	Filtration	Condensate exhaust	Flow Rate
T 0 1 5	0	0 3	4	1	0 0
		02 = 1/8 03 = 1/4	4 = 0,01 µm	1 = Semi Automatic Manual	450 NI/min



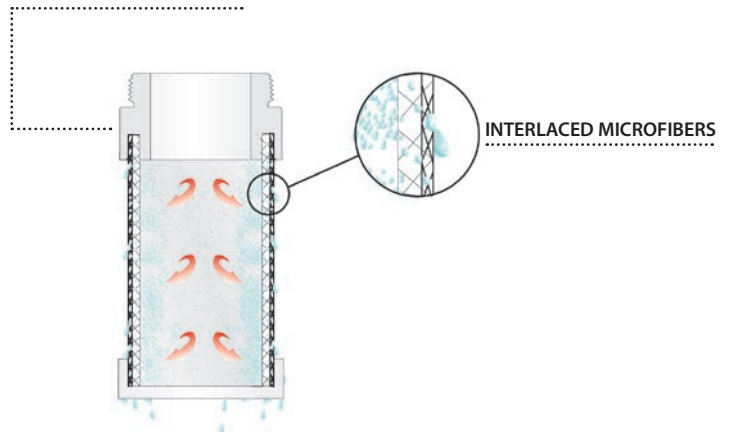
Informations

Coalescer cartridge is made of microfiber layer with external stainless steel structure. Coalescing cartridge uses inertial impact, interception and coalescence to gather liquid particles into drops.

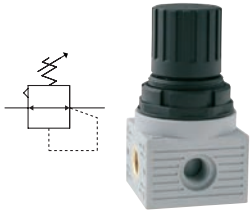
These drops will fall into bowl bottom.

Coalescing Filter is used as Oil Separator which removes oil-vapours from air output. We recommend to install a 5 µm Filter upstream to protect coalescing filter from choking of cartridge.

COALESCER CARTRIDGE



SERIES FRL MINI - T020 REGULATOR



Standard code in stock	Size	Thread	Regulation	Flow Rate
T020 002 030 000	REG 0	1/8	0 ÷ 8 bar	600 NI/min
T020 003 030 000	REG 0	1/4	0 ÷ 8 bar	600 NI/min

Code	Size	Thread	Regulation	Flow Rate
T 0 2 0	0	0 3	0 0 1	0 0 0
		02 = G 1/8 03 = G 1/4	1 = 0÷2 bar 2 = 0÷4 bar 3 = 0÷8 bar 4 = 0÷12 bar	600 NI/min

SERIES FRL MINI - T070 QUICK EXHAUST REGULATOR



Standard code in stock	Size	Thread	Regulation	Flow Rate
T070 002 030 000	REG.S.RAP. 0	1/8	0 ÷ 8 bar	600 NI/min
T070 003 030 000	REG.S.RAP. 0	1/4	0 ÷ 8 bar	600 NI/min

Code	Size	Thread	Regulation	Flow Rate
T 0 7 0	0	0 3	0 3 0	0 0 0
		02 = G 1/8 03 = G 1/4	1 = 0÷2 bar 2 = 0÷4 bar 3 = 0÷8 bar 4 = 0÷12 bar	600 NI/min

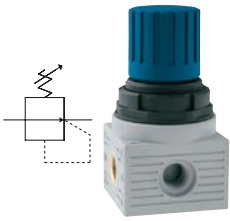
SERIES FRL MINI - T080 WATER REGULATOR



Standard code in stock	Size	Thread	Regulation
T080 002 030 000	WATER REG. 0	1/8	0 ÷ 8 bar
T080 003 030 000	WATER REG. 0	1/4	0 ÷ 8 bar

Code	Size	Thread	Regulation
T 0 8 0	0	0 3	0 0 1
		02 = G 1/8 03 = G 1/4	1 = 0÷2 bar 2 = 0÷4 bar 3 = 0÷8 bar 4 = 0÷12 bar

FRL MINI SERIES - A080 REGULATOR FOR DRINKING WATER



Standard code in stock	Size	Thread	Regulation
A080 002 030 000	REG.WATER 0	1/8	0 ÷ 8 bar
A080 003 030 000	REG.WATER 0	1/4	0 ÷ 8 bar

Code	Size	Thread	Regulation
A 0 8 0	0	0 3	0 0 1
		02 = G 1/8 03 = G 1/4	2 = 0÷8 bar 3 = 0÷8 bar

SERIES FRL MINI - T030 FILTER REGULATOR



Standard code in stock	Size	Thread	Filtration	Regulation	Flow Rate
T030 002 231 000	FR 0	1/8	20 µm	0 ÷ 8 bar	600 NI/min
T030 003 231 000	FR 0	1/4	20 µm	0 ÷ 8 bar	600 NI/min

Code	Size	Thread	Filtration	Regulation	Condensate exhaust	Flow Rate
T 0 3 0	0	0 3	2	3	1	0 0 0
		02 = 1/8 03 = 1/4	1 = 5 µm 2 = 20 µm 3 = 50 µm	1 = 0÷2 bar 2 = 0÷4 bar 3 = 0÷8 bar 4 = 0÷12 bar	1 = Semi Automatic Manual	600 NI/min

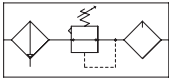
SERIES FRL MINI - T040 LUBRICATOR



Standard code in stock	Size	Thread	Flow Rate
T040 002 000 100	LUB 0	1/8	700 NI/min
T040 003 000 100	LUB 0	1/4	700 NI/min

Code	Size	Thread	Oil loading System	Flow Rate
T 0 4 0	0	0 2	1 0 0	0 0 0
		02 = G 1/8 03 = G 1/4	1 = Manual	600 NI/min

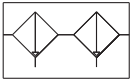
SERIES FRL MINI - T100 - FR + L



Standard code in stock	Size	Thread	Filtration	Regulation	Flow Rate
T100 002 231 100	FR+L 0	1/8	20µm	0-8 bar	260 NI/min
T100 003 231 100	FR+L 0	1/4	20µm	0-8 bar	260 NI/min

Code	Size	Thread	Filtration	Regulation	Condensate exhaust	Oil loading System	Flow Rate
T 1 0 0	0	0 3	2	3	1	1	0 0
		02 = 1/8 03 = 1/4	1 = 5 µm 2 = 20 µm 3 = 50 µm	1 = 0÷2 bar 2 = 0÷4 bar 3 = 0÷8 bar 4 = 0÷12 bar	1 = Semi Automatic Manual	1 = Manual	260 NI/min

SERIES FRL MINI - T400 - F + FC



Standard code in stock	Size	Thread	Filtration	Flow Rate
T400 002 401 000	FIL+FC 0	1/8	5µm + 0.01µm	370 NI/min
T400 003 401 000	FIL+FC 0	1/4	5µm + 0.01µm	370 NI/min

Code	Size	Thread	Filtration	Condensate exhaust	Flow Rate
T 4 0 0	0	0 3	4	0 1	0 0 0
		02 = G 1/8 03 = G 1/4	4 = 0.01 µm	1 = Semi Automatic Manual	370 NI/min



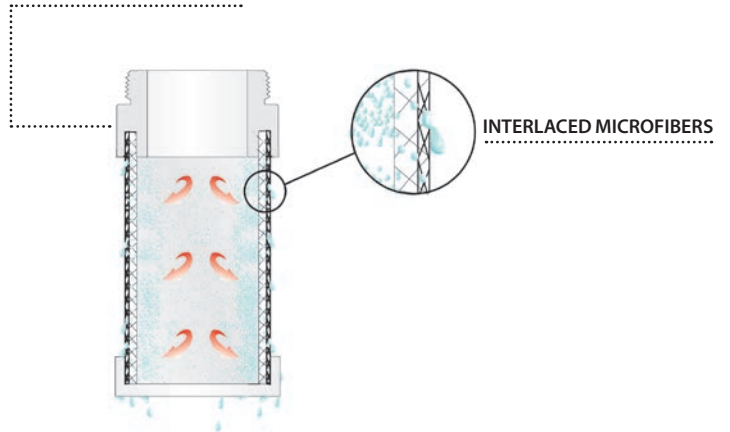
Informations

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These drops will fall into bowl bottom.





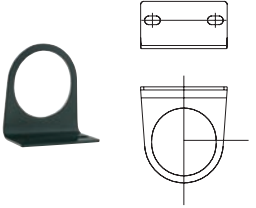
Coalescing Filter is used as Oil Separator which removes oil-vapours from air output. We recommend to install a 5 µm Filter upstream to protect coalescing filter from choking of cartridge.

COALESCER CARTRIDGE



FIXING ELEMENTS AND ACCESSORIES - SERIES FRL MINI

REGISTER SPRING			SINTERED FILTER			CONNECTION PLATE		BOWL FOR FILTER UNIT	
									
Code		bar	Code		μm	Code		Code	
REG06 005 401 SC	FRL 0	0 ÷ 2	FIL04 003 805 SC	FRL 0	5	T500 000 000 000	FRL 0	T520 000 001 000	FRL 0
REG06 005 402 SC	FRL 0	0 ÷ 4	FIL04 003 820 SC	FRL 0	20	-	-	-	-
REG06 005 403 SC	FRL 0	0 ÷ 8	FIL04 003 850 SC	FRL 0	50	-	-	-	-
REG06 005 404 SC	FRL 0	0 ÷ 12	-	-	-	-	-	-	-

BOWL FOR LUBRICATOR UNIT		COALESCER FILTER		AIR DISTRIBUTOR		MEMBRANE UNIT		CLAMP BRACKET	
									
Code		Code		Code		Code		Code	
T530 000 000 100	FRL 0	T545 000 000 000	FRL 0	DIS00 001 100 NE	FRL 0	REG09 001 700 SC	FRL 0	REG16 005 000 NE	FRL 0