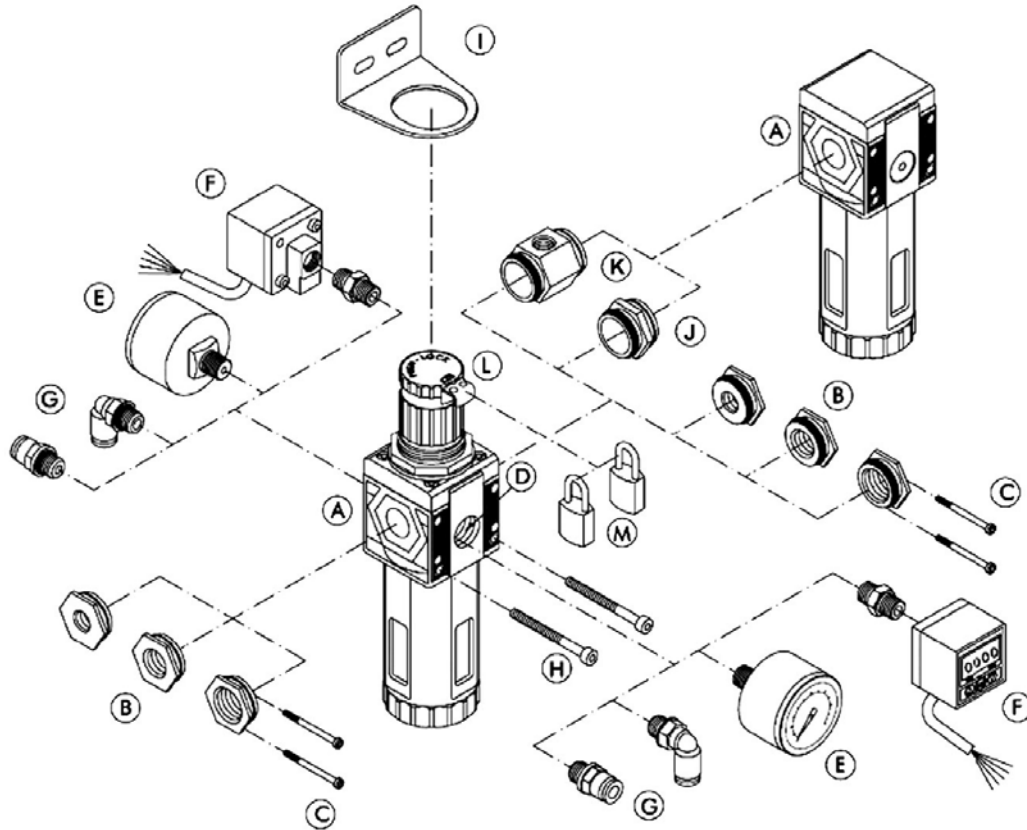


INDUSTRIAL PNEUMATICS - air treatment units

SYNTESI series

SYNTESI provides full modularity and flexibility that SKILLAIR series is known for. The application of threaded metal connections and assembly sets have eliminated such traditional parts as draw bolts and connecting clamps. Therefore the system has become more economical and simple.



Various elements of SYNTESI system can be combined with each other and with pneumatic system using hexagonal nickel brass bushes (B, J, K). The bushes are easy to remove by unscrewing the two front screws (C). At the front and back of every SYNTESI unit there are 1/8" additional connections for e.g. pressure gauges (E), pressure switches (F) or push-in connections (G). The connections enable independent intake of compressed air from any particular element of air preparation unit. The elements of SYNTESI system can be mounted directly to the wall using two M4 screws (H) or indirectly using a mounting bracket (I). A padlockable knob (L) for a manual control shut-off valve, regulating valve and for filter-regulator can be used with one or two padlocks (M) securing from an unintentional change of regulating valve settings or shut-off valve start.

Table of SYNTESI system accessories

description	SY 1			SY 2			
	1/8"	1/4"	3/8"	3/8"	1/2"	3/4"	1"
nickel brass bushes (B) *	MW-9210001	MW-9210002	MW-9210003	MW-9210011	MW-9210012	MW-9210013	MW-9210014
connection set (J,K) **	MW-9210000, MW-5610P100			MW-9210010, MW-5620P100			
steel bracket (I)	MW-9200701			MW-9400701			
padlock (M)				MW-9062401			
gauge adapter 1/4" - 1/8"				MW-9210005			

* - with a connection (1 pc.) and 2 screws

** - with a connector and 4 screws

X - AISI 304 steel version, code example: MW-9210001X, MW-5X20P100

INDUSTRIAL PNEUMATICS - air treatment units

SYNTESI series



Filter FIL

Size: SY1, SY2
Degree of filtration: 5 µm, 20 µm, 50 µm
Inlet pressure: Up to 15 bar
Working temp.: Up to +50°C
Connection: BSP 1/8" ÷ 3/8" female thread for SY1
 BSP 3/8" ÷ 1" female thread for SY2
Condensate drain: Manual/ semiautomatic (RMSA)
 Automatic float type (RA)
Flow rate: 1300 l/min - 1/8"
 1650 l/min - 1/4"
 1750 l/min - 3/8" (SY1)
 4500 l/min - 3/8" (SY2)
 5200 l/min - 1/2", 3/4", 1"
 (input pressure 6 bar and Δp = 1 bar)

FIL	SY1	5	RMSA
element	size	degree of filtration	condensate drop
FIL - filter	SY1 SY2	5 - 5 µm 20 - 20 µm 50 - 50 µm	RMSA - manual/semi-automatic RA - automatic, float type

The elements of SYNTESI system can be easily used to build FRL unit according to customer specifications. The connection set and bushings facilitate assembly.

code	type	connection	degree of filtration [µm]	condensate drop
MW-5610F100	FIL SY1 5 RMSA	without bushing	5	RMSA
MW-5610F200	FIL SY1 20 RMSA		20	
MW-5610F300	FIL SY1 50 RMSA		50	
MW-5610F400	FIL SY1 5 RA		5	RA
MW-5610F500	FIL SY1 20 RA		20	
MW-5610F600	FIL SY1 50 RA		50	
MW-5620F100	FIL SY2 5 RMSA	without bushing	5	RMSA
MW-5620F200	FIL SY2 20 RMSA		20	
MW-5620F300	FIL SY2 50 RMSA		50	
MW-5620F400	FIL SY2 5 RA		5	RA
MW-5620F500	FIL SY2 20 RA		20	
MW-5620F600	FIL SY2 50 RA		50	

INDUSTRIAL PNEUMATICS - air treatment units

SYNTESI series



REG regulator

Size:	SY1, SY2
Outlet press. range:	0÷2, 0÷4, 0÷8, 0÷12 bar
Inlet pressure:	Up to 15 bar
Working temp.:	Up to +50°C
Connection:	BSP 1/8" ÷ 3/8" female thread for SY1 BSP 3/8" ÷ 1" female thread for SY2
Pressure gauge port:	BSP 1/8" female thread for SY1 BSP 1/4" female thread for SY2
Flow rate:	1200 l/min - 1/8" 2800 l/min - 1/4" 3350 l/min - 3/8" (SY1) 5300 l/min - 3/8" (SY2) 7400 l/min - 1/2" 7600 l/min - 3/4", 1" (input pressure 6 bar and $\Delta p = 1$ bar)

Instead of a flat membrane, SYNTESI pressure regulator employs a rolling membrane, which guarantees:

- greater nominal flow rate - a result of increased membrane stroke,
- quicker response to the change of settings - a result of reduced dynamic and static friction,
- greater accuracy in maintaining outlet pressure settings at variable flow rates and supply pressure.

If the outlet pressure rises above the set value, the membrane opens the relief valve and vents the regulator until the pressure drops to the set level. The regulator has a push-lock mechanism which locks the knob in any position when it is pushed down. A blocking plate enables padlock assembly, securing from an unintentional change of outlet pressure setting. Additional 1/8" connections, one at the front and one at the back, can be used for pressure gauges, pressure switches or push-in connections. The air taken in through these elements is appropriately reduced.

REG	SY1	02
element	size	outlet pressure range
REG - regulator	SY1 SY2	02 - 0÷2 bar 04 - 0÷4 bar 08 - 0÷8 bar 012 - 0÷12 bar

The elements of SYNTESI system can be easily used to build FRL unit according to customer specifications. The connection set and bushings facilitate assembly.

code	type	connection	outlet pressure range
MW-5610R100	REG SY1 02	without bushing	0 ÷ 2
MW-5610R120	REG SY1 04		0 ÷ 4
MW-5610R140	REG SY1 08		0 ÷ 8
MW-5610R160	REG SY1 012		0 ÷ 12
MW-5620R100	REG SY2 02	without bushing	0 ÷ 2
MW-5620R120	REG SY2 04		0 ÷ 4
MW-5620R140	REG SY2 08		0 ÷ 8
MW-5620R160	REG SY2 012		0 ÷ 12

X - AISI 304 steel version, code example: MW-5X10F100

INDUSTRIAL PNEUMATICS - air treatment units

SYNTESI series



FR filter - regulator

Size: SY1, SY2
Outlet press. range: 0÷2, 0÷4, 0÷8, 0÷12 bar
Degree of filtration: 5 µm, 20 µm, 50 µm
Inlet press: Up to 15 bar
Working temp.: Up to +50°C
Connection: BSP 1/8" ÷ 3/8" female thread for SY1
 BSP 3/8" ÷ 1" female thread for SY2
Pressure gauge port: BSP 1/8" female thread for SY1
 BSP 1/4" female thread for SY2
Flow rate: 1300 l/min - 1/8"
 2000 l/min - 1/4"
 3000 l/min - 3/8" (SY1)
 5800 l/min - 3/8" (SY2)
 7200 l/min - 1/2"
 7400 l/min - 3/4", 1"
 (input pressure 6 bar and Δp = 1 bar)

Filter-regulator combines the functions of filtration and pressure regulation in a single unit. It is made up of the same elements forming the filter and the regulator so technical parameters are the same.

FR	SY1	5	012	RMSA
element	size	degree of filtration	outlet pressure range	condensate drain
FR filter - regulator	SY1 SY2	5 - 5 µm 20 - 20 µm 50 - 50 µm	02* - 0÷2 bar 04* - 0÷4 bar 08 - 0÷8 bar 012 - 0÷12 bar * - option	RMSA - manual / semi-automatic RA - automatic, float type

The elements of SYNTESI system can be easily used to build FRL unit according to customer specifications. The connection set and bushings facilitate assembly.

code	type	connection	outlet pressure range [bar]	degree of filtration [µm]	condensate drain
MW-5610B140	FR SY1 5 08 RMSA	without bushing	0 ÷ 8	5	RMSA
MW-5610B440	FR SY1 5 08 RA				RA
MW-5610B240	FR SY1 20 08 RMSA			20	RMSA
MW-5610B540	FR SY1 20 08 RA				RA
MW-5610B340	FR SY1 50 08 RMSA			50	RMSA
MW-5610B640	FR SY1 50 08 RA				RA
MW-5610B160	FR SY1 5 012 RMSA		0 ÷ 12	5	RMSA
MW-5610B460	FR SY1 5 012 RA				RA
MW-5610B260	FR SY1 20 012 RMSA			20	RMSA
MW-5610B560	FR SY1 20 012 RA				RA
MW-5610B360	FR SY1 50 012 RMSA			50	RMSA
MW-5610B660	FR SY1 50 012 RA				RA
MW-5620B140	FR SY2 5 08 RMSA	without bushing	0 ÷ 8	5	RMSA
MW-5620B440	FR SY2 5 08 RA				RA
MW-5620B240	FR SY2 20 08 RMSA			20	RMSA
MW-5620B540	FR SY2 20 08 RA				RA
MW-5620B340	FR SY2 50 08 RMSA			50	RMSA
MW-5620B640	FR SY2 50 08 RA				RA
MW-5620B160	FR SY2 5 012 RMSA		0 ÷ 12	5	RMSA
MW-5620B460	FR SY2 5 012 RA				RA
MW-5620B260	FR SY2 20 012 RMSA			20	RMSA
MW-5620B560	FR SY2 20 012 RA				RA
MW-5620B360	FR SY2 50 012 RMSA			50	RMSA
MW-5620B660	FR SY2 50 012 RA				RA

INDUSTRIAL PNEUMATICS - air treatment units

SYNTESI series



LUB lubricator

Size: SY1, SY2
Tank volume: 60 cm³
Input pressure: Up to 15 bar
Working temp.: Up to +50°C
Connection: BSP (1/8" ÷ 3/8") female thread for SY1
 BSP (3/8" ÷ 1") female thread for SY2
Flow rate: 1600 l/min - 1/8"
 3000 l/min - 1/4"
 3650 l/min - 3/8" (SY1, SY2)
 6100 l/min - 1/2", 3/4", 1"
 (input pressure 6 bar and Δp = 1 bar)

LUB	SY1	STD
element	size	oil filling method
LUB - lubricator	SY1 SY2	STD standard version, filling with oil through oil replenishment cap

The elements of SYNTESI system can be easily used to build FRL unit according to customer specifications. The connection set and bushings facilitate assembly.

code	type	connection	oil filling method
MW-5610L100	LUB SY1	without bushing	STD
MW-5620L100	LUB SY2		