

Air preparation units

*Series airfit light
G1/8, G1/4*

Overview

Description	Page		
	Characteristics	Dimensions	Order instructions Type overview
Air preparation unit three-piece	8-11	12	16, 17
Air preparation unit two-piece	8-11	12	16, 17
Filter-regulator	8-11	13	16, 17
Filter-water-separator	8-11	13	16, 17
Pressure regulating valve	8-11	14	16, 17
Oil mist lubricator	8-11	14	16, 17
Submicrofilter	8-11	15	16, 17
Activated carbon filter	8-11	15	16, 17
Accessories	-	17-19	17-19



Air preparation units

Series *airfit light*
G1/8, G1/4

Characteristics

Special solutions (e.g. temperature, pressure, medium ...) on request, or see page 155–166 for special units



Pressures quoted as gauge pressure

Characteristics	Symbol	Unit	Air preparation unit three-piece	Air preparation unit two-piece
System			Consisting of filter-water-separator, pressure regulating valve, oil mist lubricator*, gauge, mounting ring, and locating ring	Consisting of filter-regulator, oil mist lubricator*, gauge, mounting ring, and locating ring
Type			MFRLS-08	MKLS-06 MKLS-08
Material				
– Housing			Fiber – reinforced polyamide 66	
– Plastic bowl			Polycarbonate	
– Standard sealings			NBR	NBR
Port size (NPTF version)			G1/4	G1/8 G1/4
Max. condensate capacity		cm ³	12	12 12
Pore size of filter element		µm	30 or 5	30 or 5
Condensate drainage			Manual or semi-automatic (pressure relief)	
Oil/air ratio			Constant oil drip rate independent of air flow	
Max. oil capacity		cm ³	35	35
Oil refilling			Manual	Manual
Installation			Vertical, bowl at the bottom	
Medium and ambient temperatures	T _{min} T _{max}	°C	0 +50 at 10 bar	0 +50 at 10 bar
Weight (mass)		kg	0.40	0.32
Pneumatic characteristics				
Operating pressure range – inlet pressure	p _{1 min} p _{1 max}	bar	0 10	0 10
Operating pressure range – outlet pressure	p _{2 min/max}	bar	0.5 to 8	0.5 to 8
Smallest pressure difference	p ₁ –p ₂			
Hysteresis p ₁ =10/p ₂ =0 p ₁ =10/p ₂ =8				
Maximum flow ¹⁾	Q _{max}	l/min m ³ /h	440 27	400 24 580 35
Degree of moisture separation at recommended flow ²⁾	η	%	> 90	> 90
Residual oil amount		mg/m ³	–	–

¹⁾ at p₁ = 10 bar and p₂ = 6.3 bar, Δp = 1 bar

²⁾ at 6.3 bar and 25 m/s

*) Use only recommended oils with viscosity VG32 to ISO 3448 (32 mm²/s at 40°C) or HOERBIGER special oil, Order No.: KY 8766 (see page 191)

Filter-regulator		Filter-water-separator		Pressure regulating valve		Oil mist lubricator		Submicrofilter		Activated carbon filter	
Cyclone system with filter element, combined with piston-type pressure regulating valve (spring loaded) with secondary pressure relief, locating ring, handwheel lockable		With cyclone system and filter element		Piston-type pressure regulating valve (spring loaded) with secondary pressure relief, locating ring, handwheel lockable		Oil mist lubricator with flow compensation*)					
MKS-06	MKS-08	MFS-06	MFS-08	MRP-06	MRP-08	MLS-06	MLS-08	MFO07-1/8	MFO07-1/4	MC007-1/8	MC007-1/4
Fiber – reinforced polyamide 66				Polycarbonate				Polycarbonate			
NBR		NBR		NBR		NBR		NBR		NBR	
G1/8	G1/4	G1/8	G1/4	G1/8	G1/4	G1/8	G1/4	G1/8	G1/4	G1/8	G1/4
12	12	12	12	–	–	–	–	12	12	–	–
30 or 5		30 or 5									
Polycarbonate or semi-automatic (pressure relief)				–		–		Manual			
								Constant oil drip rate independent of air flow			
–		–		–		35		–		–	
								Manual			
Vertical, bowl at the bottom				In any position				Vertical, bowl at the bottom			
0 +50 at 10 bar		0 +50 at 10 bar		0 +50 at 10 bar		0 +50 at 10 bar		0 +50 at 10 bar		0 +40 at 10 bar	
0.12		0.10		0.11		0.09		0.10		0.10	
0 10		0 10		0 10		0 10		0 10		0 10	
0.5 to 8				0.5 to 8							
0.2		–		0.2		–		–		–	
1.6 0.6				1.6 0.6							
550 33	550 33	1085 65	1830 110	530 32	770 46	865 52	1400 84	350 at 6 bar 21		350 at 6 bar 21	
> 90		> 90		–		–		Over 99.99999%, related to 0.01 µm		–	
–		–		–		–		< 0.01 (input conc. 3 mg/m ³)		0.003% in combination MF-..	

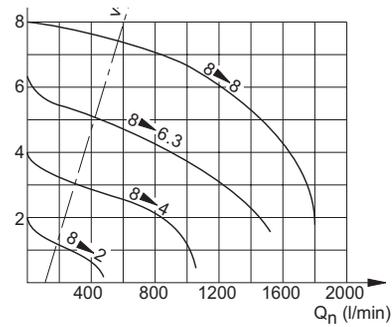
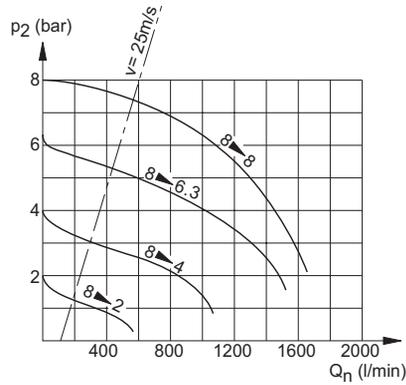
Air preparation units

Series airfit light
G1/8, G1/4

Flow characteristics

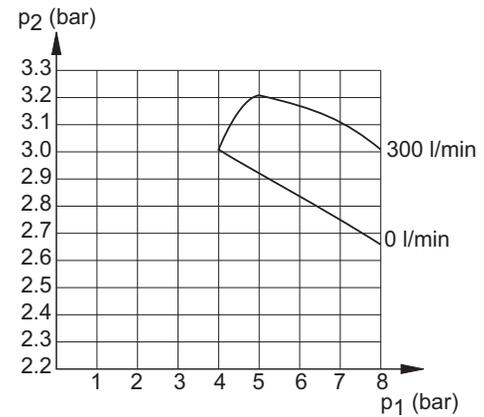
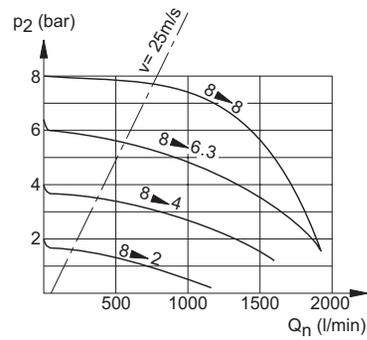
Air preparation units, three-piece, two-piece
Type: MFRLS-08

Type: MKLS-08

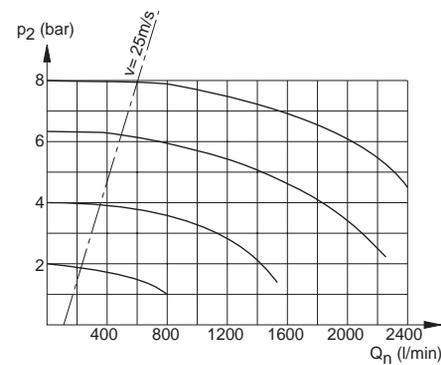


Filter-regulator
Type: MKS-08

Outlet pressure variation with fluctuation inlet pressure
Type: MKS-08



Filter-water-separator
Type: MFS-08

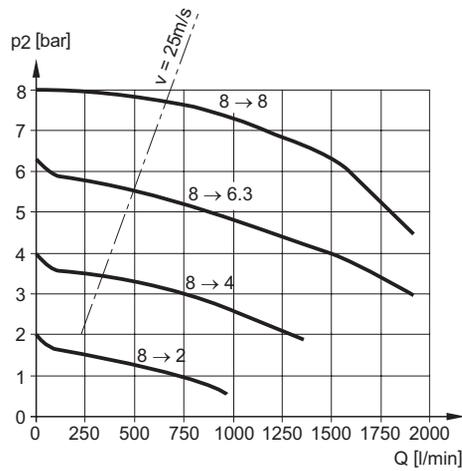


Air preparation units

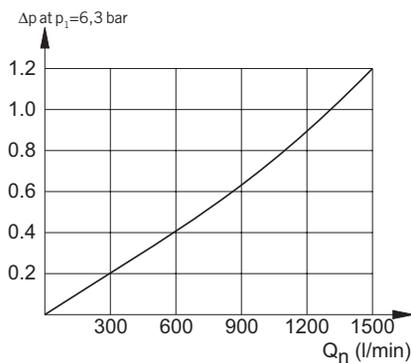
Series airfit light
G1/8, G1/4

Flow characteristics

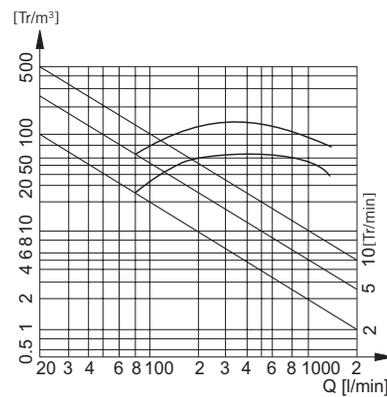
Pressure regulating valve Type: MRP-08



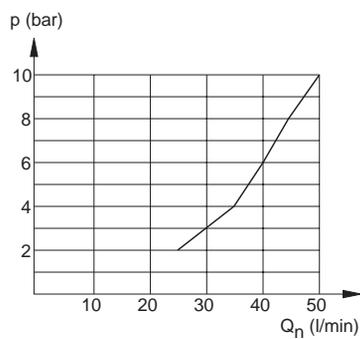
Oil mist lubricator Type: MLS-08



Oil/air ratio Type: MLS-08



Min. operating conditions Type: MLS-08



For order instructions see page 16, 17, for characteristics see page 8-11,
for accessories see page 18, 19

Dimensions in mm



Air preparation units

Series airfit light
G1/8, G1/4

Dimensions

Delivery includes:

Air preparation unit three-piece:

- Filter-water-separator
- Pressure regulating valve
- Oil mist lubricator
- Gauge
- Mounting bracket
- Mounting ring

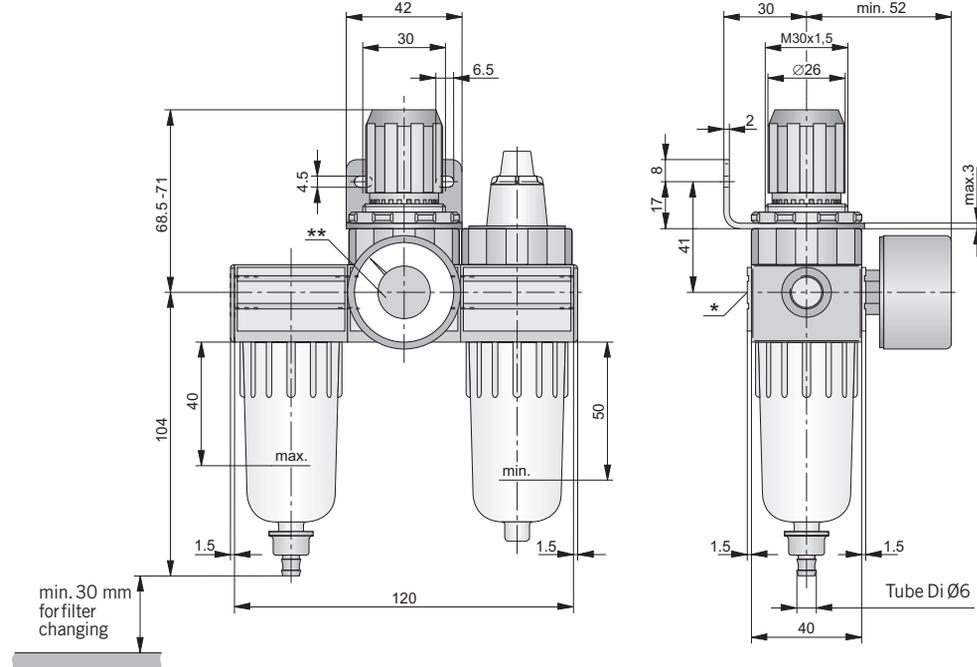
Air preparation unit two-piece:

- Filter-regulator
- Oil mist lubricator
- Gauge
- Mounting bracket
- Mounting ring

Filter-regulator:

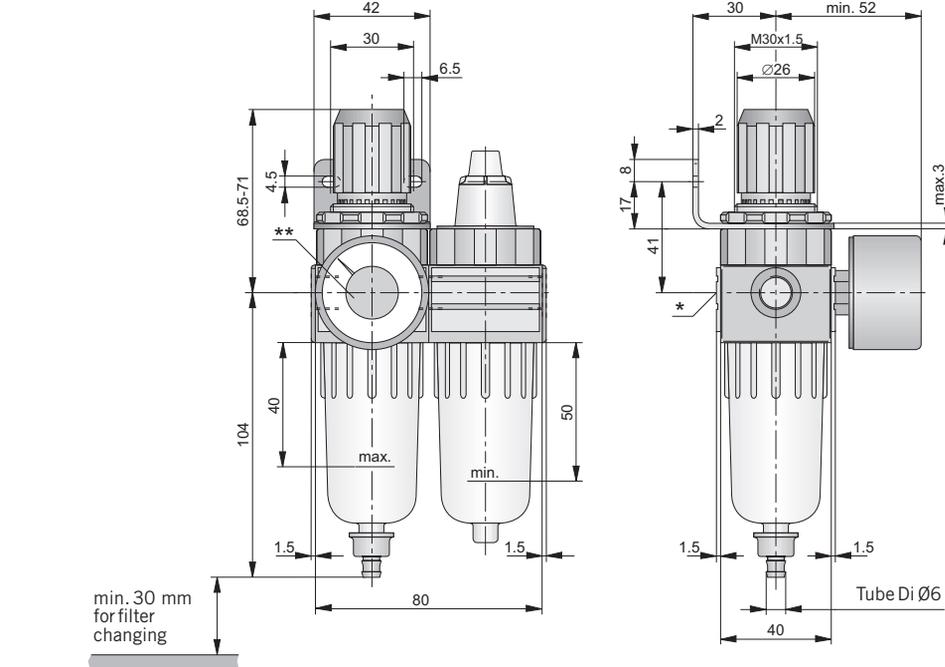
- Mounting ring included
- Pressure regulating valve:
- Mounting ring included

Air preparation unit three-piece – Type: MFRLS-08



- * On delivery the plug screw is not assembled.
- ** Two opposite gauge ports G1/8

Air preparation unit two-piece – Type: MKLS-06, -08



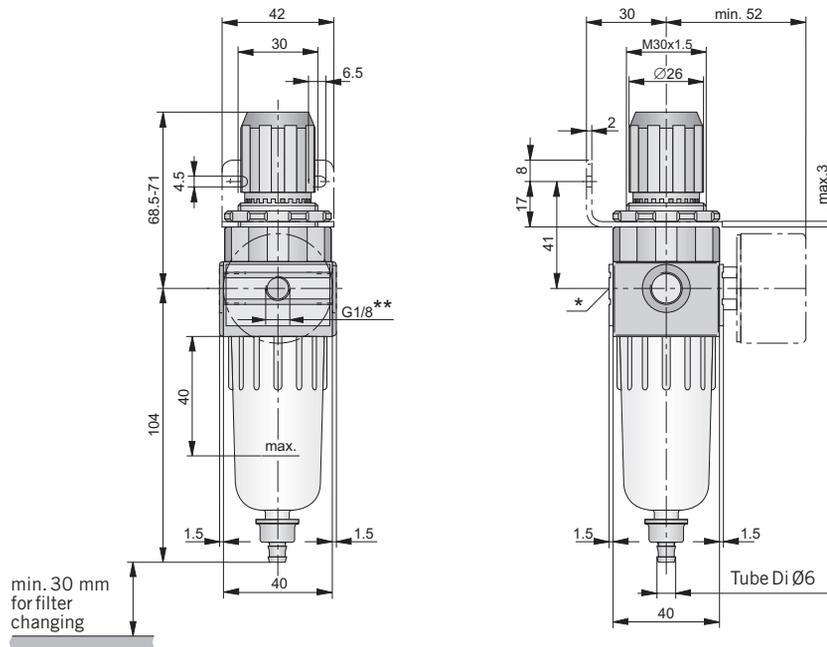
- * On delivery the plug screw is not assembled.
- ** Two opposite gauge ports G1/8

For order instructions see page 16, 17, for characteristics see page 8-11,
for accessories see page 18, 19

Dimensions in mm

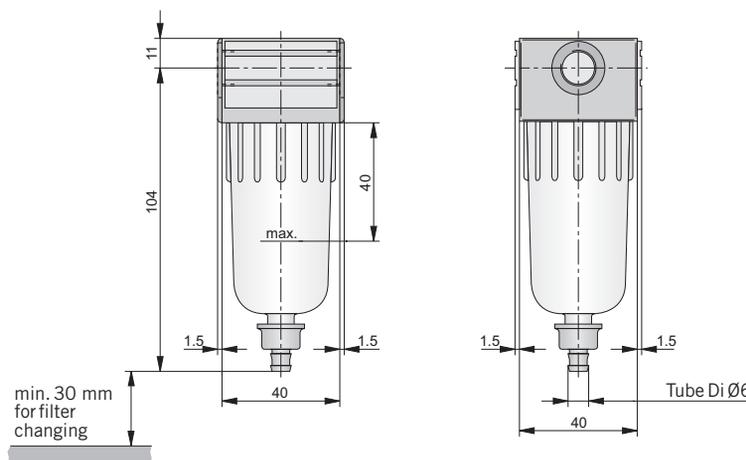


Filter-regulator – Type: MKS-06, -08



- * On delivery the plug screw is not assembled.
- ** Two opposite gauge ports G1/8

Filter-water-separator – Type: MFS-06, -08



Air preparation units

Series airfit light
G1/8, G1/4

Dimensions

For order instructions see page 16, 17, for characteristics see page 8–11, for accessories see page 18, 19

Dimensions in mm

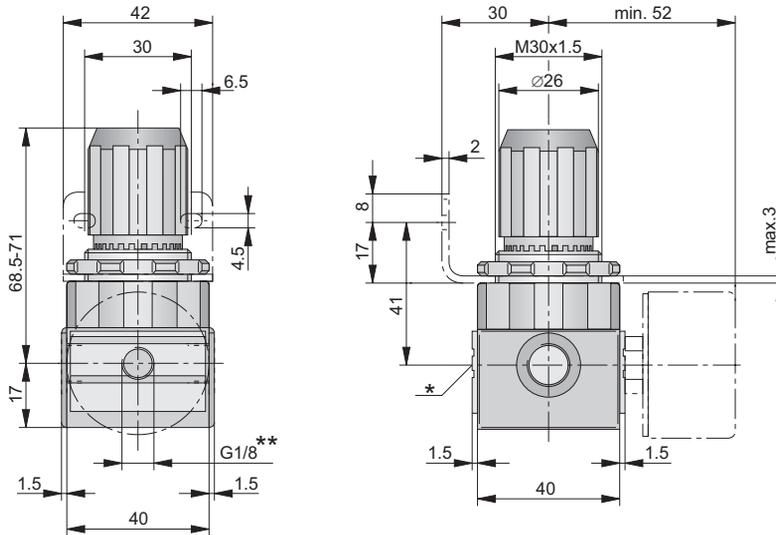


Air preparation units

Pressure regulator – Type: MRP-06, -08

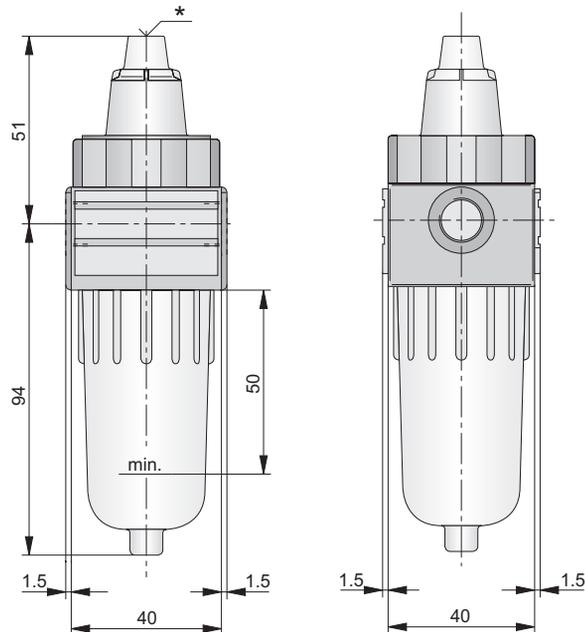
Series airfit light
G1/8, G1/4

Dimensions



* On delivery the plug screw is not assembled.
** Two opposite gauge ports G1/8

Oil mist lubricator – Type: MLS-06, -08



* Oil adjusting screw



For order instructions see page 16, 17, for characteristics see page 8–11,
for accessories see page 18, 19

Dimensions in mm

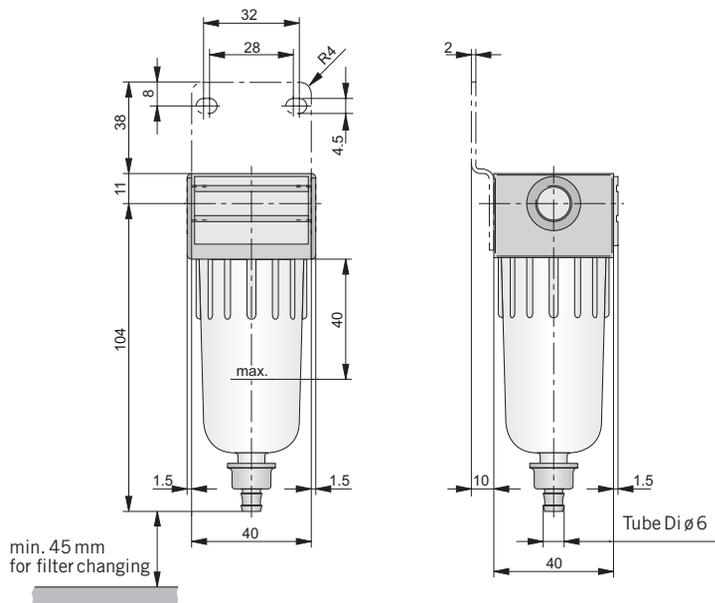
Submicrofilter – Type: MF-06, -08
 Activated carbon filter – Type: MC-06, -08

Air preparation units

Series airfit micro
 G1/8, G1/4

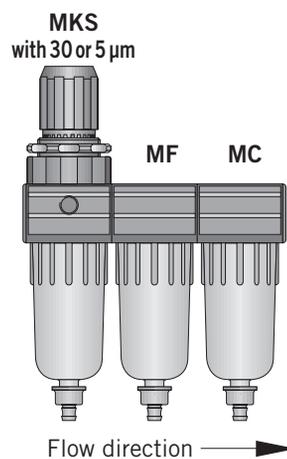
Dimensions

– for series airfit light



Installation procedure

To increase the life span of the filter elements, we recommend the following order.



For order instructions see page 16, 17, for characteristics see page 8–11,
 for accessories see page 18, 19

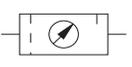
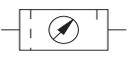
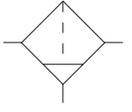
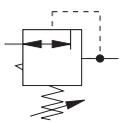
Dimensions in mm

Air preparation units

Series airfit light
G1/8, G1/4

Order instructions

Standard versions

Description	Symbol	Port size	Order instruction	
			Type	Order No.
Air preparation unit three-piece				
– basic model		G1/4	MFRLS-08	PB 40949-100
– with filter element 5 µm		G1/4	MFRLS-08-5	PB 40949-110
– with semi-automatic drainage		G1/4	MFRLS-08-H	PB 40949-104
Air preparation unit two-piece				
– basic model		G1/8	MKLS-06	PB 40449-100
– basic model		G1/4	MKLS-08	PB 40549-100
– with filter element 5 µm		G1/8	MKLS-06-5	PB 40449-109
– with filter element 5 µm		G1/4	MKLS-08-5	PB 40549-109
– with semi-automatic drainage		G1/8	MKLS-06-H	PB 40449-104
– with semi-automatic drainage		G1/4	MKLS-08-H	PB 40549-104
Filter-regulator				
– basic model		G1/8	MKS-06	PB 40049-100
– basic model		G1/4	MKS-08	PB 40149-100
– with filter element 5 µm		G1/8	MKS-06-5	PB 40049-116
– with filter element 5 µm		G1/4	MKS-08-5	PB 40149-116
– with semi-automatic drainage		G1/8	MKS-06-H	PB 40049-101
– with semi-automatic drainage		G1/4	MKS-08-H	PB 40149-101
Filter-water-separator				
– basic model		G1/8	MFS-06	PB 40649-100
– basic model		G1/4	MFS-08	PB 40749-100
– with filter element 5 µm		G1/8	MFS-06-5	PB 40649-116
– with filter element 5 µm		G1/4	MFS-08-5	PB 40749-116
– with semi-automatic drainage		G1/8	MFS-06-H	PB 40649-101
– with semi-automatic drainage		G1/4	MFS-08-H	PB 40749-101
Pressure regulating valve				
– basic model with p ₁ -flow compensation		G1/8	MRP-06	PB 21749-800
– basic model with p ₁ -flow compensation		G1/4	MRP-08	PB 21649-800

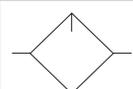
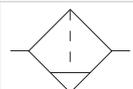
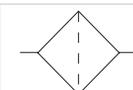


Air preparation units

Series airfit light
G1/8, G1/4

Order instructions

Standard versions

Description	Symbol	Port size	Order instruction	
			Type	Order No.
Oil mist lubricator				
– basic model		G1/8	MLS-06	PB 40249-100
– basic model		G1/4	MLS-08	PB 40349-100
Submicrofilter				
– basic model		G1/8	MF 007-1/8	PB 37349-000
– basic model		G1/4	MF 007-1/4	PB 37449-000
Activated carbon filter				
– basic model		G1/8	MC 007-1/8	PB 37849-000
– basic model		G1/4	MC 007-1/4	PB 37949-000

Accessories

Description	For type	Order No.
Mounting bracket	MKS, MRP, MRS	PL15531
Mounting kit	MFS, MLS	PL16859
Mounting kit for DIN rail mounting	MRP	PL17889
Gauge Ø 40, 0–10 bar, G1/8*	MKS, MRP	KZ8813
Gauge with front ring, Ø 40, 0–10 bar, G1/8*		KZ8822
Coupling kit		PL16030
Porting block		PL16031
Porting block NPTF		PL17766
Bowl guard kit		PL18541-00
Coupling kit for combination types	MKS/MRP+MF+MC	PL16755
Coupling kit for combination types	MF+MC, MFS+MF, MFS+MLS	PL16669
Mounting ring		KG5006

* for more gauges see page 186, 187

For more information see accessories page 18, 19



Coupling kit



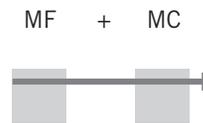
Order No. PL16030

Coupling kit



Order No. PL16755

Coupling kit



Order No. PL16669

Air preparation units

*Series airfit light
G1/8, G1/4*

- Accessories*
- Coupling kits
 - Mounting brackets
 - Gauges

Mounting bracket



Order No. PL15531

Gauge Ø 40, 0–10 bar, G1/8



Order No. KZ8813

