

Air preparation units

*Series airfit A25
G3/4, G1*

Overview

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Air preparation units

Series *airfit A25*
G3/4, G1

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 bracket, locating ring		Consisting of filter-regulator and oil mist lubricator ^{*)} , gauge, mounting bracket, locating ring	
Type			A25FRL-3/4-EMW	A25FRL-1-EMW	A25KL-3/4-EMW	A25KL-1-EMW
Material						
– Housing			Diecast zinc			
– Metal bowl			Diecast aluminum with polypropylene insert			
– Diaphragm			NBR		NBR	
– Standard sealings			NBR			
Port size (NPTF version)			G3/4	G1	G3/4	G1
Max. condensate capacity		cm ³	130	130	130	130
Pore size of filter element		µm	30 or 5		30 or 5	
Condensate drainage			Manual, semi-automatic (pressure relief), or automatic (float type)			
Oil/air ratio			Constant oil drip rate independent of air flow			
Max. oil capacity		cm ³	500		500	
Oil refilling			Manual – also during operation			
Installation			Vertical, bowl at the bottom		Vertical, bowl at the bottom	
Medium and ambient temperatures	T _{min} T _{max}	°C °C	-10 ²⁾ +50 (+60 to 12.5 bar)		-10 ²⁾ +50 (+60 to 12.5 bar)	
Weight (mass)		kg	3.3		2.8	
Pneumatic characteristics						
Operating pressure range – inlet pressure	p _{1 min}	bar	0		0	
	p _{1 max}	bar	17.5		17.5	
Operating pressure range – outlet pressure	p _{2 min/max}	bar	0.5 to 12 On request 0.5 to 17.5		0.5 to 12 On request 0.5 to 17.5	
Maximum flow ¹⁾	Q _{max}	l/min	7900	12580	8600	14650
		m ³ /h	474	755	528	879
Degree of moisture separation at recommended flow	η	%	See diagram		See diagram	

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

²⁾ for dry compressed air, ice formation must be avoided

³⁾ at p₁ = 8 bar and Δp = 1 bar

⁴⁾ recommended pilot pressure regulating valve SR-1/4 (see page 23)

⁵⁾ at 6.3 bar and 25 m/s flow velocity

^{*)} Viscosities of ≤ 32 Cst in line with ISO 3448 (32 mm²/s at 40°C) are recommended to ensure optimum atomization and long oil mist paths.
HOERBIGER-Origa compressed air oil KY8766 (see page 191)

Filter-regulator		Filter-water-separator		Dust filter		Pressure regulating valve		Pressure regulating valve pilot operated	
Cyclone system with filter element, combined with diaphragm-type pressure regulating valve (spring loaded) with secondary pressure relief, inlet pressure and volume compensation, handwheel lockable		With cyclone system and filter element		With cyclone system and dust filter element		Diaphragm-type pressure regulating valve (spring loaded) with secondary pressure relief, inlet pressure and volume compensation, handwheel lockable		Pilot operated piston-type pressure regulator with secondary pressure relief, inlet pressure and volume compensation ⁴⁾	
A25K-3/4E	A25K-1E	A25F-3/4E	A25F-1E	A25FD-3/4E	A25FD-1E	A25R-3/4	A25R-1	A25RV-3/4	A25RV-1
Diecast zinc									
Diecast aluminium with polypropylene									
NBR		-		-		NBR		NBR	
NBR									
G3/4	G1	G3/4	G1	G3/4	G1	G3/4	G1	G3/4	G1
130	130	130	130	130	130				
30 or 5		30 or 5		1		-		-	
Manual, semi-automatic (pressure relief), or automatic (float type)				Manual, semi-automatic (pressure relief)		-		-	
-		-		-		-		-	
-		-		-		-		-	
Vertical, bowl at the bottom		Vertical, bowl at the bottom		Vertical, bowl at the bottom		In any position		In any position	
-10 ²⁾ +50 (+60 to 12.5 bar)		-10 ²⁾ +50 (+60 to 12.5 bar)		-10 ²⁾ +50 (+60 to 12.5 bar)		-10 ²⁾ +60		-10 ²⁾ +60	
1.5		0.9		0.9		1.2		1.2	
0 17.5		0 17.5		0 17.5		0 17.5		0 17.5	
0.5 to 12 On request 0.5 to 17.5		-		-		0.5 to 12 On request 0.5 to 17.5		0.5 to 12 On request 0.5 to 17.5	
13200	19000	10400 ³⁾	11400 ³⁾	10400 ³⁾	11400 ³⁾	14600	> 20000	> 20000	> 20000
792	1140	624	684	624	684	876	> 1200	> 1200	> 1200
> 95		> 95		Only solid particles > 99% related to 1 µm		-		-	

For more characteristics of air preparation units see page 72–73

Air preparation units

Series airfit A25
G3/4, G1

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	Oil mist lubricator		Start-stop valve	
			A25L-3/4-E	A25L-1-E	A25DS-3/4	A25DS-1
System			Oil mist lubricator with flow compensation *)		Start-stop valve pneumatically or electrically actuated	
Type			A25L-3/4-E	A25L-1-E	A25DS-3/4	A25DS-1
Material			Diecast zinc			
– Housing			Diecast aluminum with polypropylene insert			
– Metal bowl			NBR			
– Diaphragm			NBR			
– Standard sealings			NBR			
Port size (NPTF version)			G3/4	G1	G3/4	G1
Max. condensate capacity		cm ³	–		–	
Condensate drainage			–		–	
Oil/air ratio			Constant oil drip rate independent of air flow		–	
Max. oil capacity		cm ³	500		–	
Oil refilling			Manual – also during operation		–	
Installation			Vertical, bowl at the bottom		In any position	
Medium and ambient temperatures	T _{min} T _{max}	°C	-10 ²⁾ +50 (+60 to 12.5 bar)		-10 ²⁾ +50 (+60 to 12.5 bar)	
Weight (mass)		kg	0.8		1.6	
Pneumatic characteristics						
Operating pressure range – inlet pressure	p _{1 min} p _{1 max}	bar	0 17.5		2 17.5 (16 to A25DS-..E)	
Maximum flow ¹⁾	Q _{max}	l/min m ³ /h	16000 960	17700 1062	10500 630	12000 720
Degree of moisture separation at recommended flow ²⁾	η	%	–		–	
Residual oil amount		mg/m ³	–			

¹⁾ at p₁ = 6.3 bar, Δp = 1 bar

²⁾ at 6.3 bar and 25 m/s flow velocity

*) Viscosities of ≤ 32 Cst in line with ISO 3448 (32 mm²/s at 40°C) are recommended to ensure optimum atomization and long oil mist paths.
HOERBIGER-Origa compressed air oil KY8766 (see page 191)



Air preparation units

Series airfit A25
G3/4, G1

Characteristics

Submicrofilter		Activated carbon filter		3/2 Way shut-off valve	
				3/2 Way valve (spool type), direct assembly to any unit from the airfit A25 series, with coupling kit PL18787	
A25MF-230-3/4-E	A25MF-230-1-E	A25MC-230-3/4-E	A25MC-230-1-E	A25DV-3/4	A25DV-1
Diecast zinc		Diecast zinc with polypropylene insert		-	
-		-		-	
NBR		-		-	
G3/4	G1	G3/4	G1	G3/4	G1
130	130	130	130	-	
Manual, semi-automatic (pressure relief), or automatic (float type)		Manual, semi-automatic (pressure relief)		-	
-		-		-	
-		-		-	
-		-		-	
Vertical, bowl at the bottom		Vertical, bowl at the bottom		In any position	
0 +50 (+60 to 12.5 bar)		0 +50 (+60 to 12.5 bar)		-10 ²⁾ +50 (+60 to 12.5 bar)	
1.5		1.5		1.2	
0 17.5		0 17.5		0 17.5	
3850 to 6 bar 230		3850 to 6 bar 230		> 20000 > 1200	
Over 99.99999% related to 0.01µm		-		-	
< 0.01 input conc. 3 mg/m ³		0.003 ‰ in combination MF			

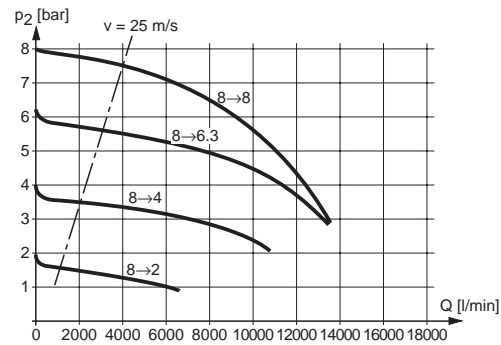


Air preparation units

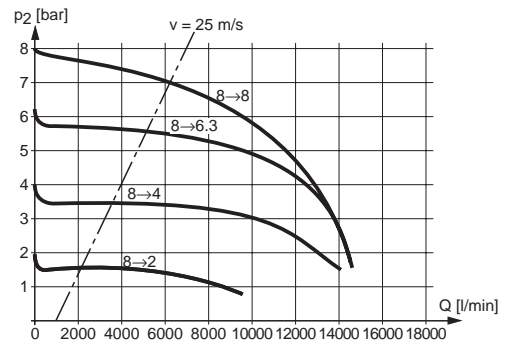
Series airfit A25
G3/4, G1

Flow characteristics

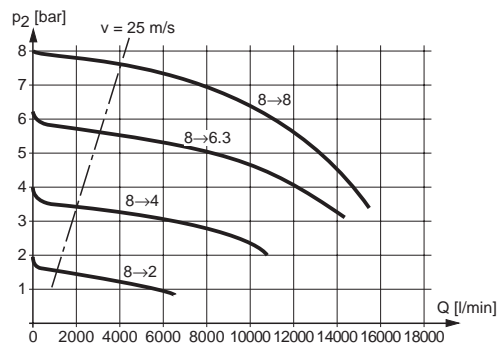
Air preparation unit three-piece
Type: A25FRL-3/4-EMW



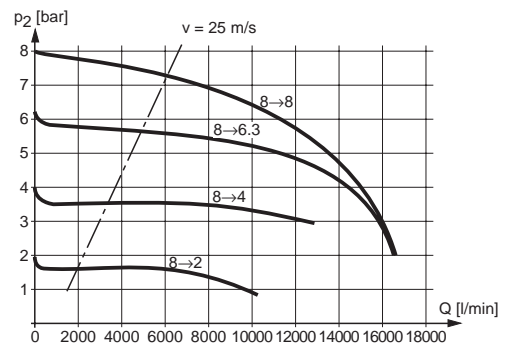
Type: A25FRL-1-EMW



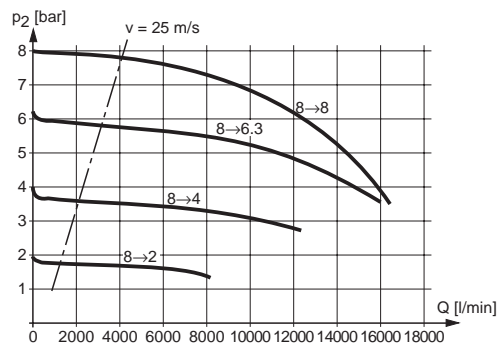
Air preparation unit two-piece
Type: A25KL-3/4-EMW



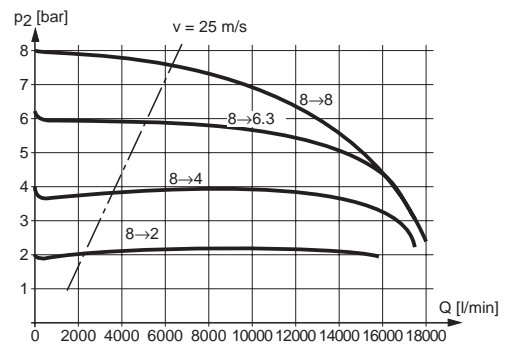
Type: A25KL-1-EMW



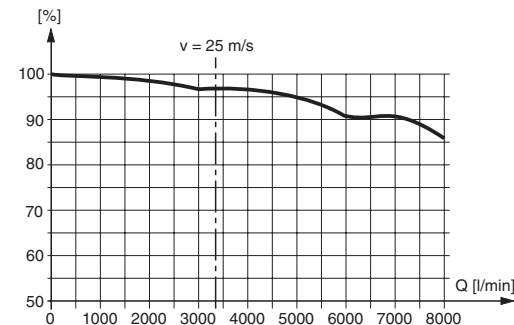
Filter-regulator
Type: A25K-3/4-E



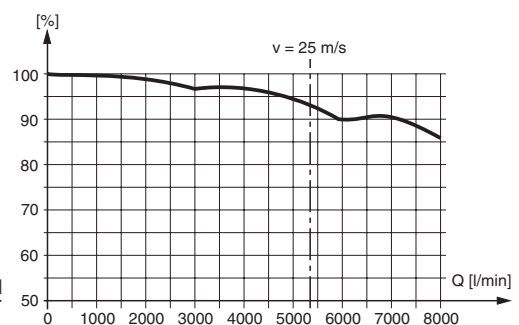
Type: A25K-1-E



Degree of filtration
Type: A25K-3/4-E



Type: A25K-1-E

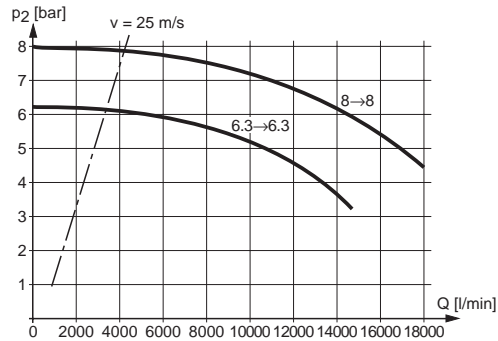


Air preparation units

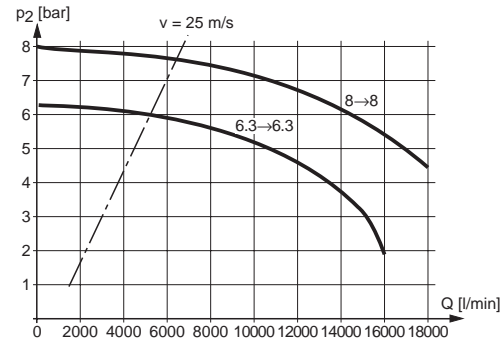
Series airfit A25
G3/4, G1

Flow characteristics

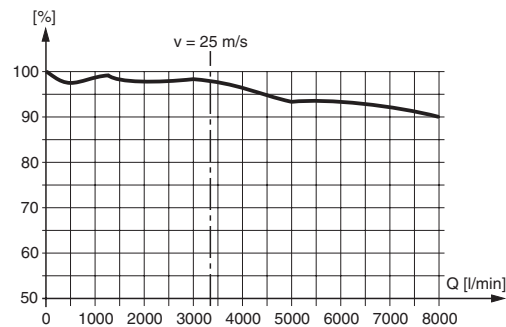
Filter-water-separator
Type: A25F-3/4-E



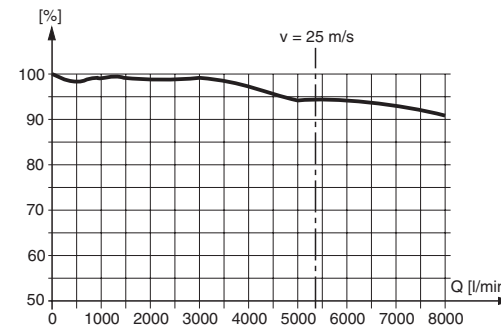
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Degree of filtration
Type: A25F-3/4-E



Type: A25F-1-E

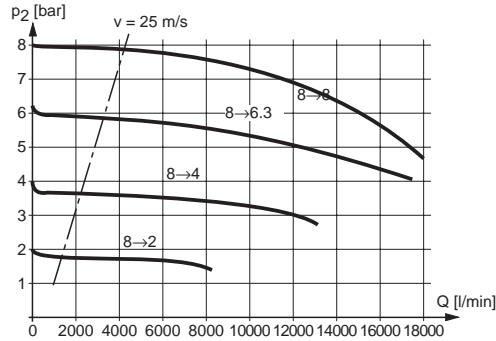


Air preparation units

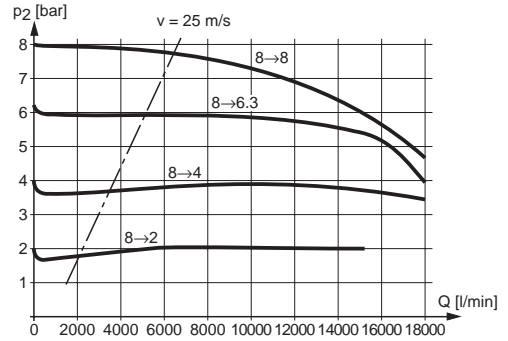
Series airfit A25
G3/4, G1

Flow characteristics

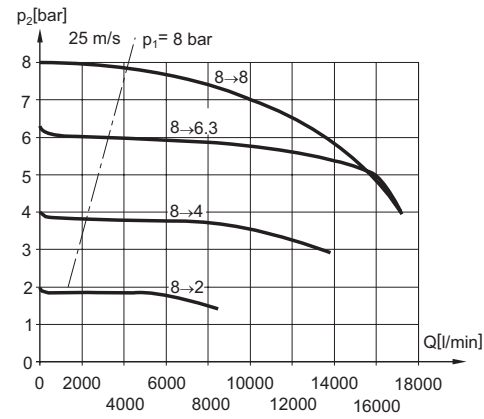
Pressure regulating valve
Type: A25R-3/4



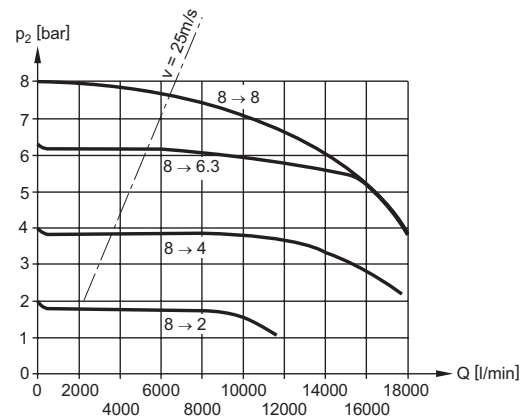
Type: A25R-1



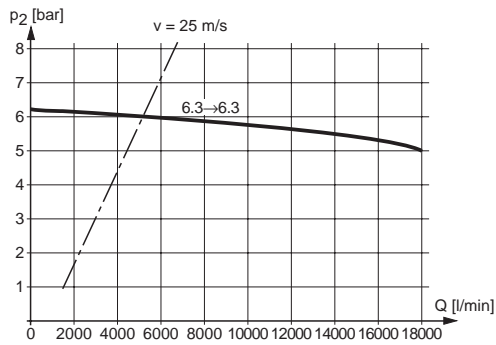
Pressure regulating valve, pilot operated
Type: A25RV-3/4



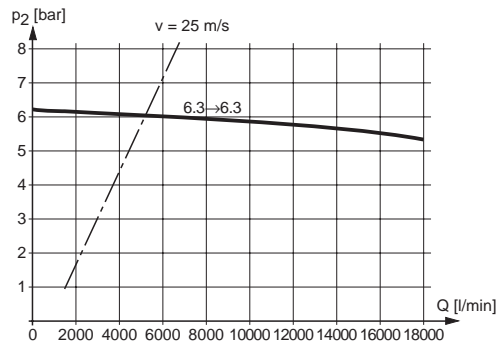
Type: A25RV-1



Oil mist lubricator
Type: A25L-3/4-E



Type: A25L-1-E

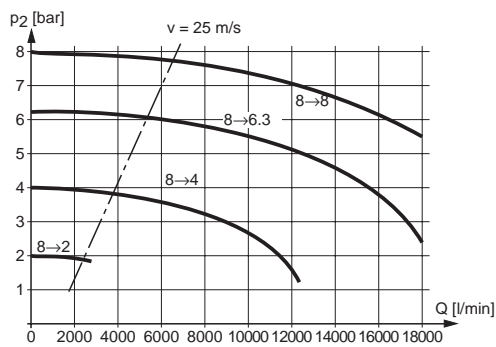


Air preparation units

Series airfit A25
G3/4, G1

Flow characteristics

Start-stop valve
Type: A25DS-3/4, A25DS-1



Air preparation units

Series airfit A25
G3/4, G1

Dimensions

Delivery includes:

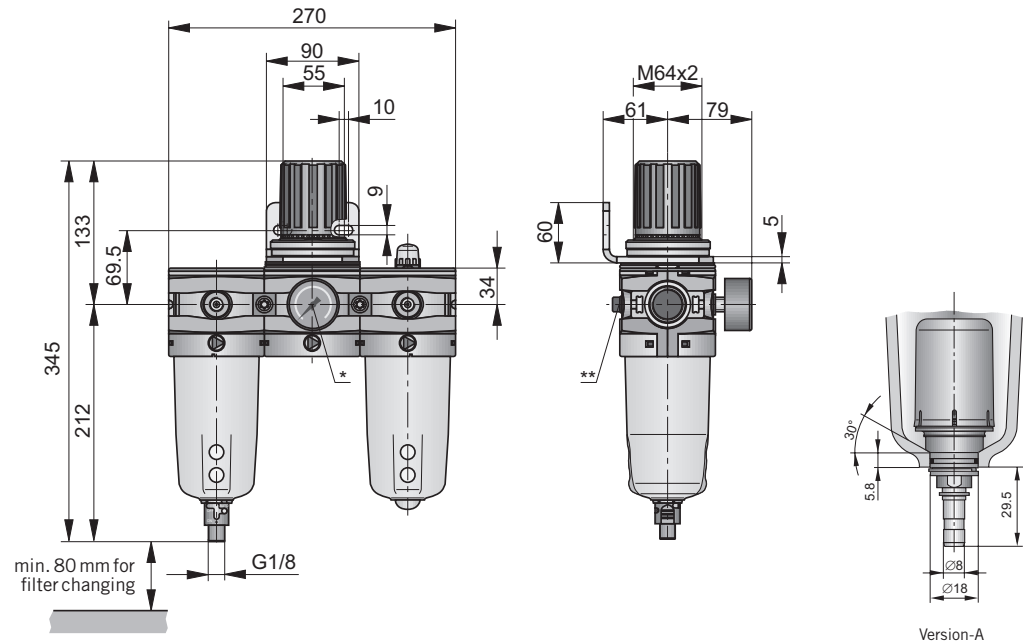
Air preparation unit three-piece:

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

Air preparation unit two-piece:

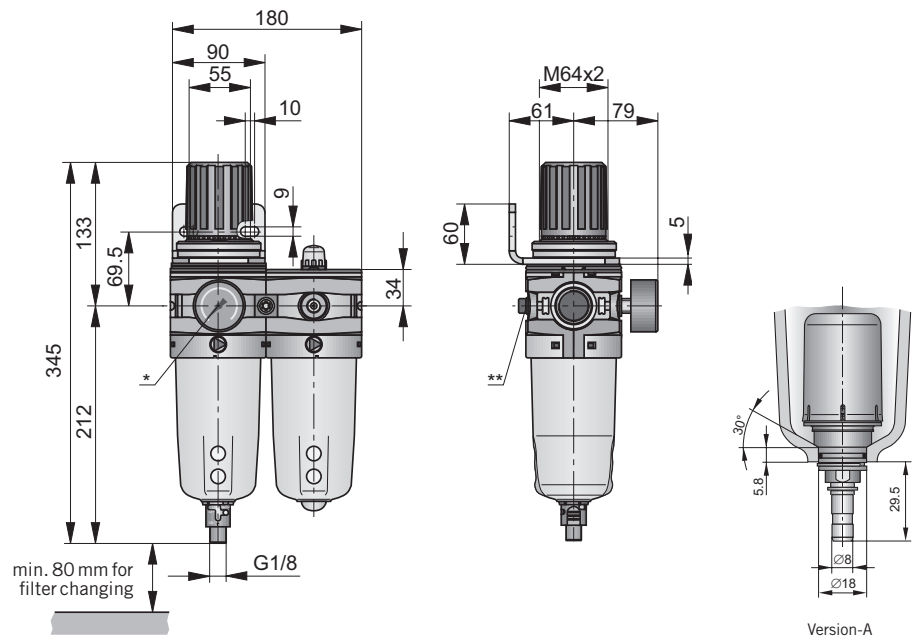
- Filter-regulator
- Oil mist lubricator
- Gauge
- Mounting bracket

Air preparation unit three-piece – Type: A25FRL-3/4, -1



- * Two opposite gauge ports G1/4
- ** On delivery the plug screw is not assembled.

Air preparation unit two-piece – Type: A25KL-3/4, -1



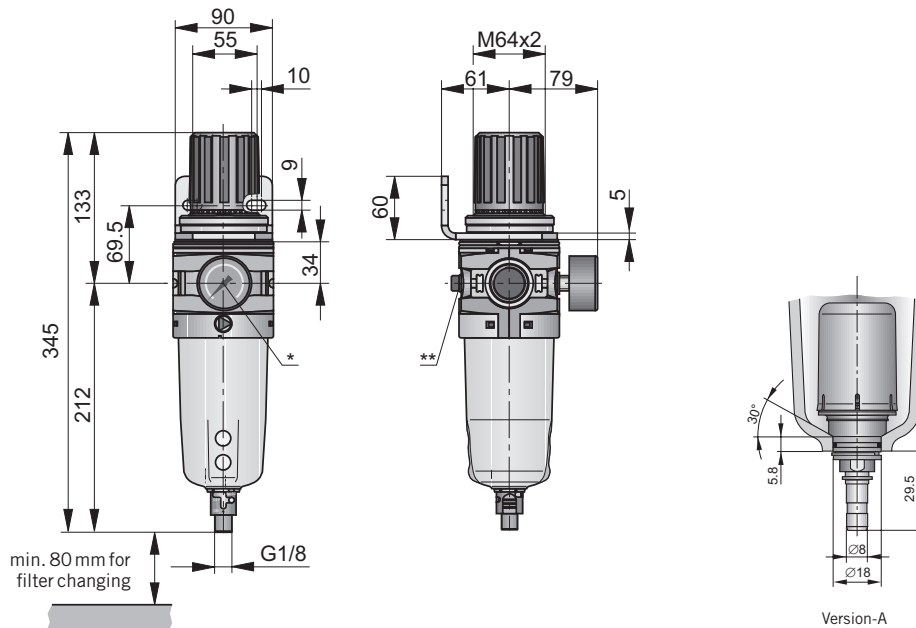
- * Two opposite gauge ports G1/4
- ** On delivery the plug screw is not assembled.



For order instructions see page 85–87, for characteristics see page 70–77, for accessories see page 88, 89

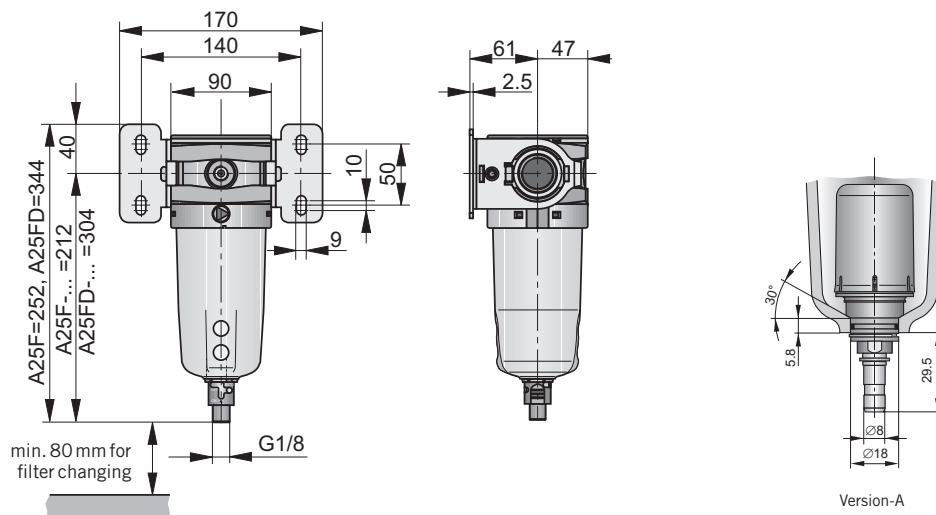
Dimensions in mm

Filter-regulator – Type: A25K-3/4, -1



- * Two opposite gauge ports G1/4
- ** On delivery the plug screw is not assembled.

Filter-water-separator – Type: A25F-3/4, -1 Dust filter – Type: A25FD-3/4, -1 *



- * Dust filter with large filter surface for long service life. For compressed air systems with air dryers.

For order instructions see page 85–87, for characteristics see page 70–77, for accessories see page 88, 89

Dimensions in mm

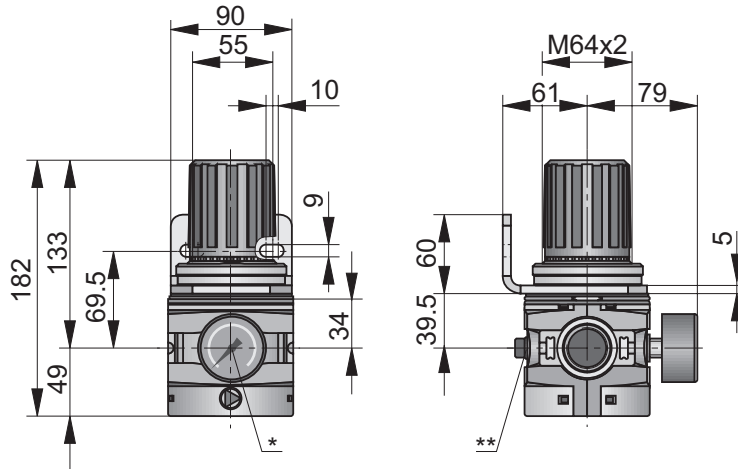


Air preparation units

Series airfit A25
G3/4, G1

Dimensions

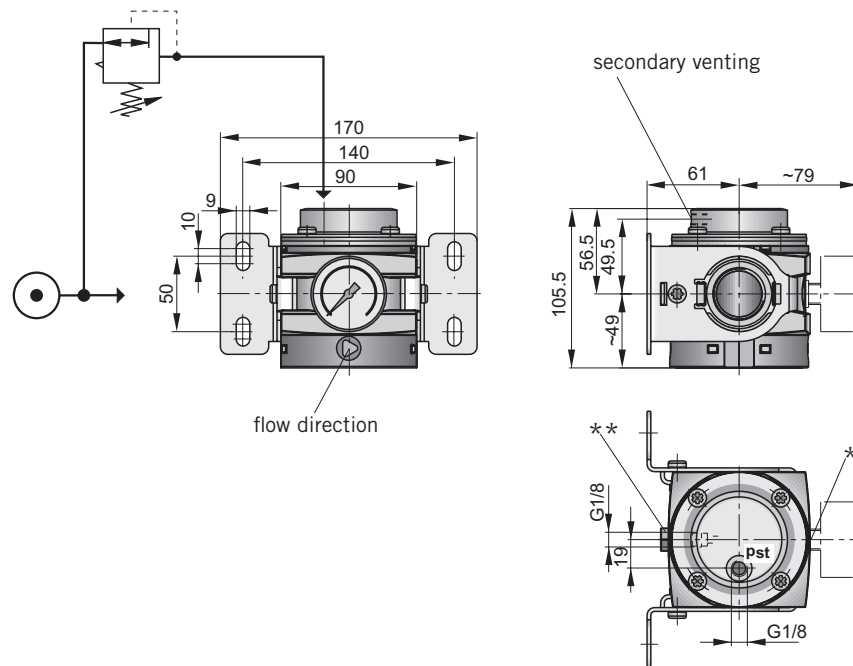
Pressure regulating valve – Type: A25R-3/4, -1



- * Two opposite gauge ports G1/4
- ** On delivery the plug screw is not assembled.

Pressure regulating valve, pilot operated – Type: A25RV-3/4, -1

– Recommended pilot pressure regulating valve, series airfit swing, Type: SR-1/4, PB45449-058



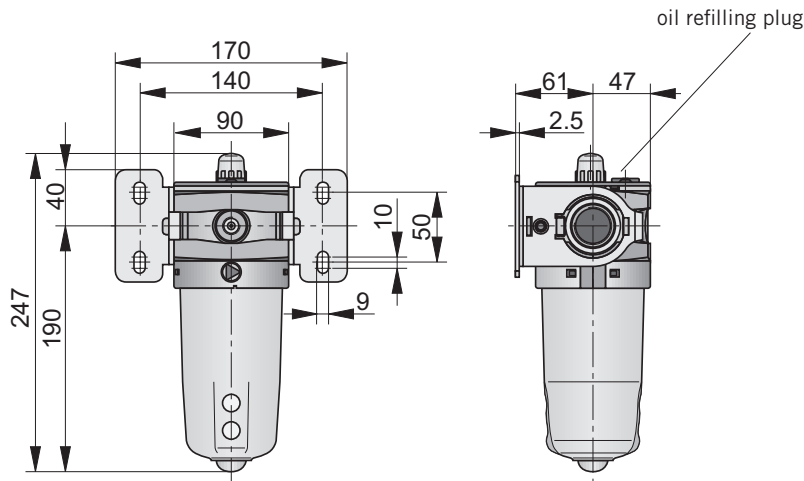
- * Two opposite gauge ports G1/4
- ** On delivery the plug screw is not assembled.



For order instructions see page 85–87, for characteristics see page 70–77, for accessories see page 88, 89

Dimensions in mm

Oil mist lubricator – Type: A25L-3/4, -1

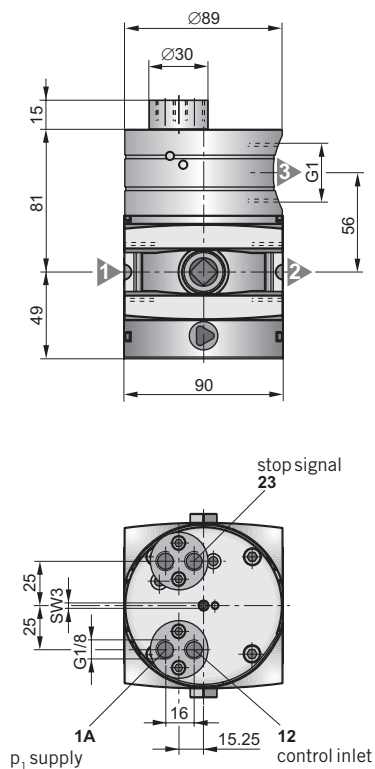


Air preparation units

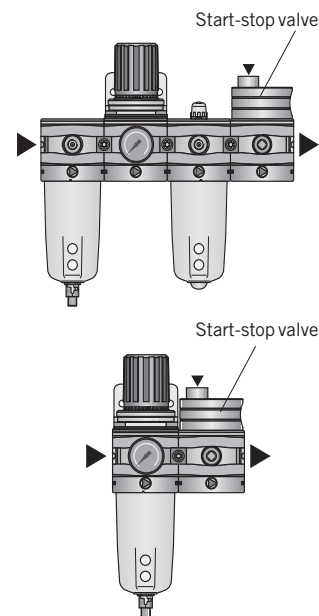
Series airfit A25
G3/4, G1

Dimensions

Start-stop valve, pneumatically actuated
Type: A25DS-3/4 P, -1P



Installation instruction



The start function is designed to facilitate slow pressure build-up and for ventilation in pneumatic systems.

It prevents uncontrolled movements in the pneumatic equipment that can occur when starting the system at full system pressure. A throttle screw is used to set the pressure build-up time. The stop function facilitates rapid ventilation.

For order instructions see page 85–87, for characteristics see page 70–77, for accessories see page 88, 89

Dimensions in mm

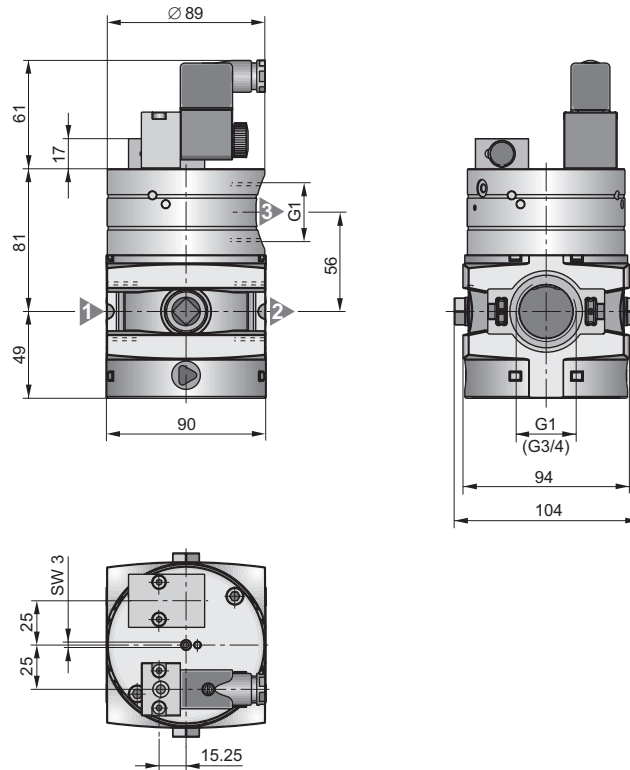


Air preparation units

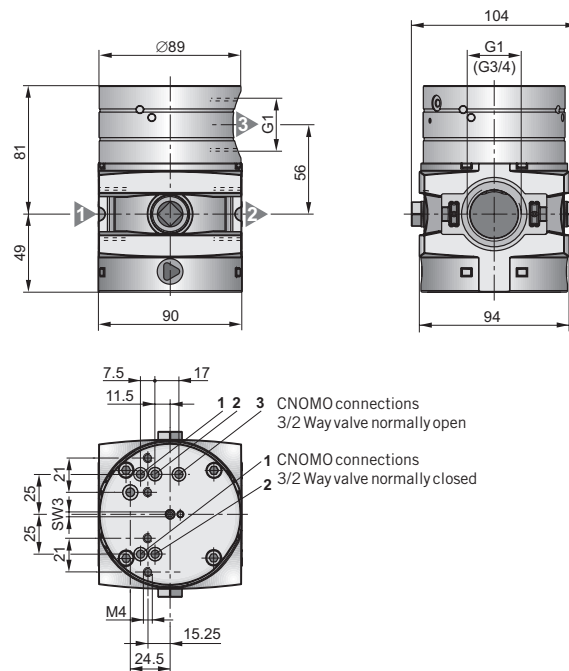
Series airfit A25
G3/4, G1

Dimensions

Start-stop valve, electrically actuated
Type: A25DS-3/4E, -1E



Start-stop valve, CNOMO connections
Type: A25DS-3/4C, -1C

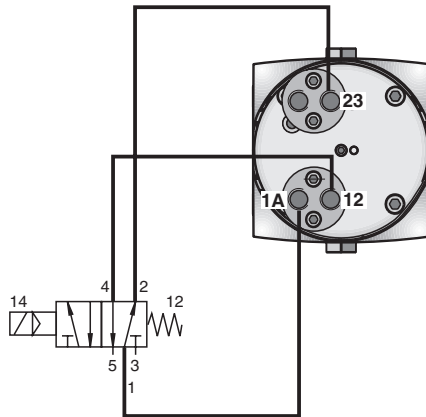


For order instructions see page 85–87, for characteristics see page 70–77,
for accessories see page 88, 89

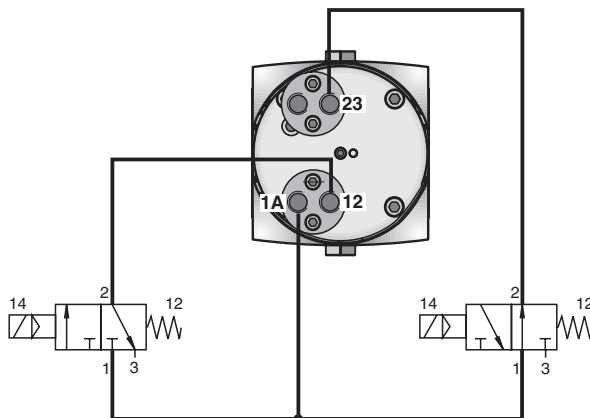
Dimensions in mm

Start-stop valve, pneumatically actuated

Combined start/stop function



Combined start/stop function with acknowledgement



Further control types on request

Air preparation units

*Series airfit A25
G3/4, G1*

Control types



For order instructions see page 85–87, for characteristics see page 70–77, for accessories see page 88, 89

Dimensions in mm

Air preparation units

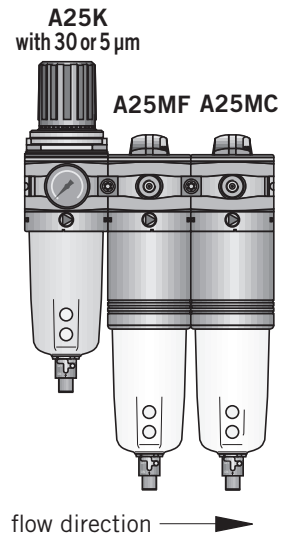
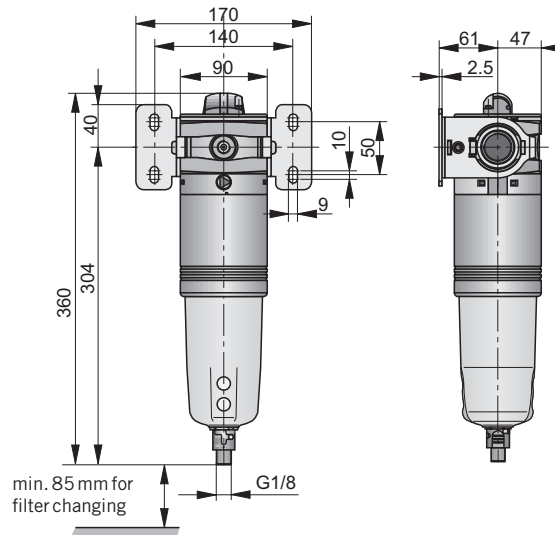
Series airfit A25
G3/4, G1

Dimensions

Submicrofilter – Type: A25MF230-3/4, -1
Activated carbon filter – Type: A25MC230-3/4, -1

Installation instruction

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

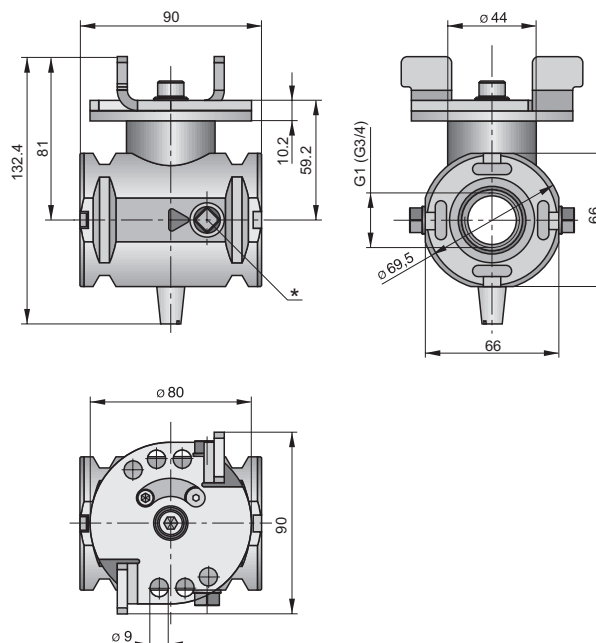


Note:
Activated carbon filter A25MC230-E without contamination indicator

Features:

- Rotary switch can be turned 90°
- Can be shut off in 6 different modes
- Indication of positions
- Flow open, exhaust closed
- Inlet closed, outlet exhausted
- Flow direction shown by arrow

3/2 Way shut-off valve Type: A25DV-3/4, -1



* Two opposite gauge ports G1/8 on request

For order instructions see page 85–87, for characteristics see page 70–77, for accessories see page 88, 89




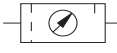

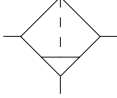
Dimensions in mm

Air preparation units

Series airfit A25
G3/4, G1

Order instructions

Standard versions

Description	Symbol	Port size	Order instruction	
			Type	Order No.
Air preparation unit three-piece				
– Basic version with combined manual and semi-automatic drainage		G3/4	A25FRL-3/4-EMW	PB 63449-000
		G1	A25FRL-1-EMW	PB 63549-000
– with automatic drainage		G3/4	A25FRL-3/4-AEMW	PB 63449-005
		G1	A25FRL-1-AEMW	PB 63549-005
Air preparation unit two-piece				
– Basic version with combined manual and semi-automatic drainage		G3/4	A25KL-3/4-EMW	PB 63649-000
		G1	A25KL-1-EMW	PB 63749-000
– with automatic drainage		G3/4	A25KL-3/4-AEMW	PB 63649-005
		G1	A25KL-1-AEMW	PB 63749-005
Filter-regulator				
– Basic version with combined manual and semi-automatic drainage		G3/4	A25K-3/4-E	PB 62249-000
		G1	A25K-1-E	PB 62349-000
– with filter element 5 µm, with combined manual and semi-automatic drainage		G3/4	A25K-3/4-5E	PB 62249-016
		G1	A25K-1-5E	PB 62349-016
– with automatic drainage		G3/4	A25K-3/4-AE	PB 62249-002
		G1	A25K-1-AE	PB 62349-002
– with adapter for keylock	G3/4	A25K-3/4-EX	PB 62249-010	
	G1	A25K-1-EX	PB 62349-010	
Filter-water-separator				
– Basic version with combined manual and semi-automatic drainage		G3/4	A25F-3/4-E	PB 61649-000
		G1	A25F-1-E	PB 61749-000
– with filter element 5 µm with combined manual and semi-automatic drainage		G3/4	A25F-3/4-5E	PB 61649-016
		G1	A25F-1-5E	PB 61749-016
– with filter element 1 µm (dust filter) with combined manual and semi-automatic drainage		G3/4	A25FD-3/4-E	PB 61649-070
		G1	A25FD-1-E	PB 61749-070
– with automatic drainage		G3/4	A25F-3/4-AE	PB 61649-002
		G1	A25F-1-AE	PB 61749-002



Air preparation units

Series airfit A25
G3/4, G1

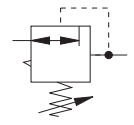
Order instructions



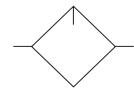
Standard versions

Description	Symbol	Port size	Order instruction	Order No.
			Type	

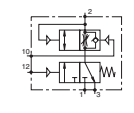
Pressure regulating valve

– Basic version		G3/4	A25R-3/4	PB 61849-000
		G1	A25R-1	PB 61949-000
– with adapter for keylock		G3/4	A25R-3/4-X	PB 61849-006
		G1	A25R-1-X	PB 61949-006
– Pressure regulating valve, pilot operated		G3/4	A25RV-3/4	PB 61849-070
		G1	A25RV-1	PB 61949-070

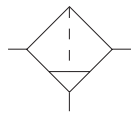
Oil mist lubricator

– Basic version		G3/4	A25L-3/4-E	PB 62049-000
		G1	A25L-1-E	PB 62149-000

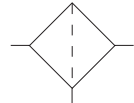
Start-stop valve

– pneumatically actuated		G3/4	A25DS-3/4-P	PB 63049-000
		G1	A25DS-1-P	PB 63149-000
– electrically actuated 230 V/50 Hz		G3/4	A25DS-3/4-E	PB 63049-004
		G1	A25DS-1-E	PB 63149-004
– electrically actuated 24 V DC		G3/4	A25DS-3/4-E	PB 63049-001
		G1	A25DS-1-E	PB 63149-001
– electrically actuated with CNOMO connections	G3/4	A25DS-3/4-C	PB 63049-010	
	G1	A25DS-1-C	PB 63149-010	

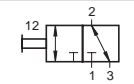
Submicrofilter

– Basic version, with combined manual and semi-automatic drainage		G3/4	A25MF230-3/4-EV	PB 62549-010
		G1	A25MF230-1-EV	PB 62649-010
– additionally with automatic drainage		G3/4	A25MF230-3/4-AEV	PB 62549-012
		G1	A25MF230-1-AEV	PB 62649-012

Activated carbon filter

– Basic version, with combined manual and semi-automatic drainage		G3/4	A25MC230-3/4-E	PB 62849-000
		G1	A25MC230-1-E	PB 62949-000

3/2 Way shut-off valve

– 3/2 Way shut-off valve		G3/4	A25DV-3/4	PB 63249-000
		G1	A25DV-1	PB 63349-000

Accessories

Description	For type	Order No.
Mounting kit (bracket + mounting nut)		PL 18990
Gauge, Ø 50 mm, 0–16 bar, G1/4		KG 8013
Porting block kit		PL 18986
Coupling kit		PL 18987
Keylock for pressure regulating valve	A25R..-X	PL 17127
Solvent resistant sight glass	A25L	PL15717
Adapter plates-kit p ₁ /p ₂ , G1 1/4		PL19199
Adapter plates-kit p ₁ /p ₂ , G1 1/2		PL19200
Special oil for oil mist lubricators 1 l (see page 191)		KY8766

* for more gauges see page 186, 187

For more information see accessories page 88, 89

Air preparation units

*Series airfit A25
G3/4, G1*

Order instructions



Air preparation units

Series airfit A25
G3/4, G1

Accessories – Porting block kit

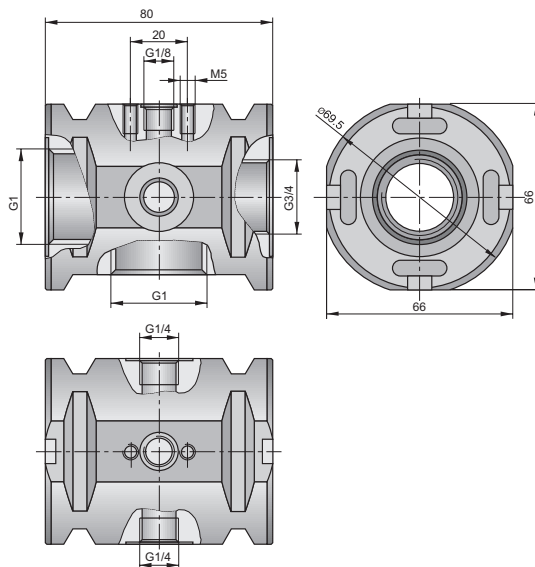
To provide unlubricated air
e.g. for air gun. With pressure
switch connections

Delivery includes:

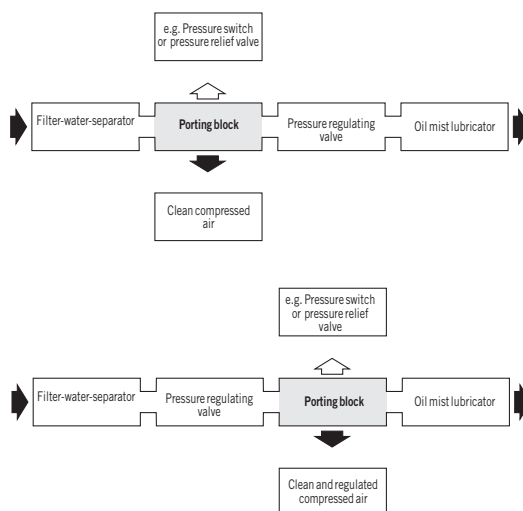
- 1 porting block
- 1 coupling kit
- 3 plug screws

Characteristics	Description
Installation	Between 2 units of the airfit A25 series
Mounting	Directly flange mountable with coupling kit supplied
Material	Aluminum

Dimensions



Installation instructions



Order instructions

Description	Order instruction	
	Type	Order No.
Porting block kit	A25X	PL 18986



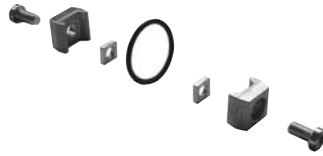
Dimensions in mm

Mounting kit



Order No. PL18990

Coupling kit



Order No. PL18987

**Keylock for pressure
regulator Type: A25R-...X**



Order No. PL17127

Air preparation units

*Series airfit A25
G3/4, G1*

Accessories

**Gauge
Ø50, 0–16 bar, G1/4**



Order No. KG8013

