

Air service units series K

G1/8, G1/4



Series FK
Filter 12.011

Series RK
Pressure regulator 12.012



Series FRK
Filter/regulator 12.013

Series OK
Lubricator 12.014



Series FROK
Two piece
air service unit 12.015

Series KK
Ball valve 12.016



Series DAK
Soft start valve 12.017

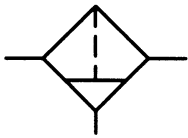
Series VMK
3/2-way inline valve 12.018



Series TK
Distribution block and
pressure switch 12.019

**Accessories for
series K**
12.020





Order code

FK-14-00-5-1201

Series	Size	Pressure range	Filter element	Options
FK* = standard 5 µm	18 = G1/8 14 = G1/4	00 = Standard	5* = 5 µm 3 = 0,3 µm 1 = 0,01 µm A = activated carbon filter	1201* = polycarbonate bowl, semi-automatic drain 1301 = polycarbonate bowl, auto drain 2201 = metal bowl, semi-automatic drain 4201 = polycarbonate bowl, with metal guard, semi-automatic drain
FKA = activated carbon filter				
FKF = fine filter 0,3 µm				
FKM = microfilter 0,01 µm				

* = standard type

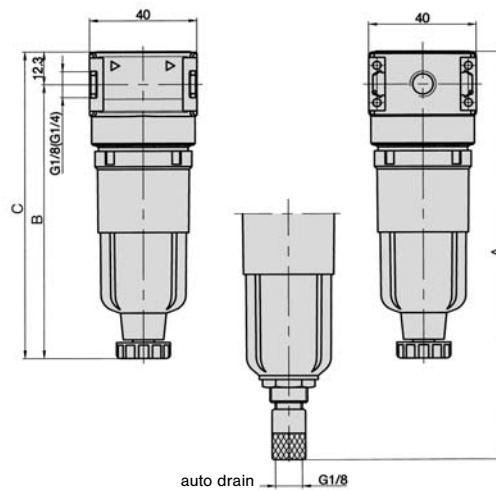
Design and function

The filter operates on the centrifugal force principle with a sintered filter.

The filter should be inspected regularly to avoid the build up of condensate in the filter bowl. Various filter elements can be installed depending on the particular application.

The components of series K can easily be connected by using the coupling kit KPK-00.

For additional accessories see page 12.020.



Order number	FK-18	FK-14	FKA-18	FKA-14	FKF-18	FKF-14	FKM-18	FKM-14
A	153		-	-	153	142.4	153	142.4
B	102.5		95.5	100.5	102.5	125.8 [#]	102.5	125.8 [#]
C	114.8		107.8	122.8	114.8	138.1 [#]	114.8	138.1 [#]

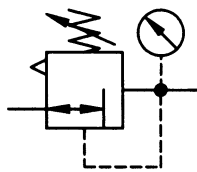
[#] = semi-automatic drain

Order number	FK-18-00-...	FK-14-00-...
Please complete according to order code. The following details are for standard series.		
Connection size	G1/8	G1/4
Flow rate (5 µm filter element)	1150 NI/min (1.168 Cv)	
Mounting	vertically, drain plug at bottom	
Supply pressure	manual drain 0.5 – 16 bar (7 – 232 psi)	
	semi-automatic drain 1.5 – 16 bar (21 – 232 psi)	
	auto drain 1.5 – 10 bar (21 – 145 psi)	
Bowl volume	max. 16 cm ³	
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)	
Weight	0.210 kg (0.463 lb.) for option 1201	

Series K

Pressure regulator, model RK

G1/8, G1/4



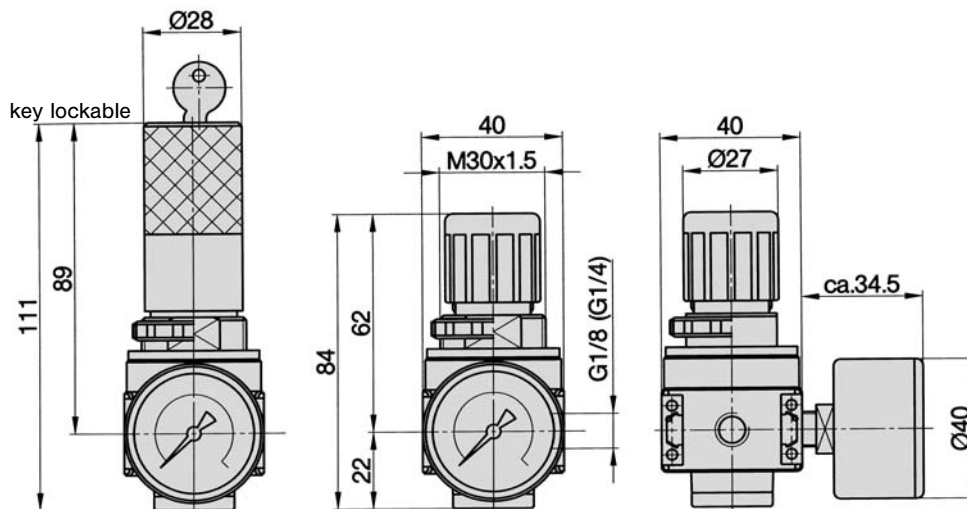
Order code

RK-14-10-0-0021			
Series	Size	Pressure range	Options
	18 = G1/8 14 = G1/4	03 = 0,1 ... 3 bar 06 = 0,2 ... 6 bar 10* = 0,5 ... 10 bar	0001 = without gauge flow from left to right 0011 = without gauge flow from right to left 0021* = with gauge flow from left to right 0031 = with gauge flow from right to left 0002 = key lockable, without gauge flow from left to right 0012 = key lockable, without gauge flow from right to left 0022 = key lockable, with gauge flow from left to right 0032 = key lockable, with gauge flow from right to left

Design and function

Pressure regulator with diaphragm and relieving feature. The outlet pressure of the regulator remains constant regardless of incoming pressure changes.

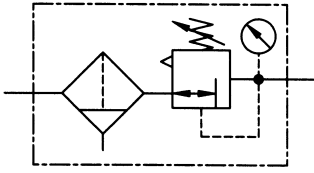
The components of series K can easily be connected by using the coupling kit KPK-00. Assembly nut (see page 12.021) is not part of the scope of delivery. For additional accessories see pages 12.020.



The main body of the regulator has two G1/8 ports for gauge mounting. Either port may be used allowing the user to choose the direction of flow. Note: The second port must be plugged.)

Order number Please complete according to order code.	RK-18-03-...	RK-18-06-...	RK-18-10-...	RK-14-03-...	RK-14-06-...	RK-14-10-...
Connection size	G1/8			G1/4		
Mounting	arbitrary					
Input range	max. 16 bar (max. 232 psi)					
Output range	0.1 ... 3 bar (1.5 ... 43 psi)	0.2 ... 6 bar (3 ... 87 psi)	0.5 ... 10 bar (7 ... 145 psi)	0.1 ... 3 bar (1.5 ... 43 psi)	0.2 ... 6 bar (3 ... 87 psi)	0.5 ... 10 bar (7 ... 145 psi)
Flow rate	1.130 NI/min. (1.148 Cv)					
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)					
Weight without pressure gauge*	0.260 kg (0.573 lb.), with key lockable knob 0.345 kg (0.760 lb.)					

* = standard type



Order code

FRK-14-10-5-1221

Options for digits No. 1 and 2

- 12* = polycarbonate bowl, semi-automatic drain
- 13 = polycarbonate bowl, auto drain
- 22 = metal bowl, semi-automatic drain
- 42 = polycarbonate bowl with metal guard, semi-automatic drain

Options for digit No. 3

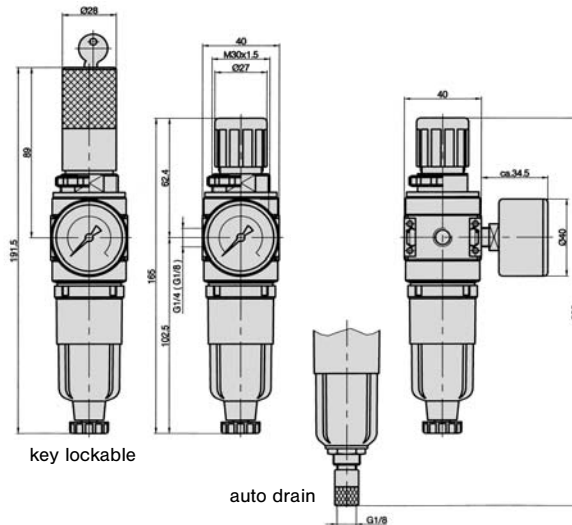
- 0 = without gauge flow from left to right
- 1 = without gauge flow from right to left
- 2* = with gauge flow from left to right
- 3 = with gauge flow from right to left

Options for digit No. 4

- 1 = standard
- 2 = key lockable

Design and function

The filter/regulator is a diaphragm style regulator with relieving function. The filter includes a semi-automatic drain. The outlet pressure of the regulator remains constant regardless of incoming pressure changes. Once the desired pressure is achieved the adjusting knob can be fixed. The filter removes both solid and liquid particles from the incoming air. The bowl can be supplied with a semi-automatic (drains when pressure is shut off) or auto drain. The components of series K can easily be connected by using the coupling kit KPK-00. For additional accessories see pages 12.020.



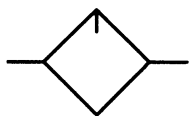
The main body of the regulator has two G1/8 ports for gauge mounting. Either port may be used allowing the user to choose the direction of flow. (Note: The second port must be plugged.)

Order number Please complete according to order code.	FRK-18-03-5-...	FRK-18-06-5-...	FRK-18-10-5-...*	FRK-14-03-5-...	FRK-14-06-5-...	FRK-14-10-5-...*
Connection size	G1/8			G1/4		
Mounting	vertically, drain plug at bottom					
Input range	max. 16 bar (10 bar with auto drain)					
Output range	0.1 ... 3 bar (1.5 ... 43 psi)	0.2 ... 6 bar (3 ... 87 psi)	0.5 ... 10 bar (7 ... 145 psi)	0.1 ... 3 bar (1.5 ... 43 psi)	0.2 ... 6 bar (3 ... 87 psi)	0.5 ... 10 bar (7 ... 145 psi)
Filter element	5 µm					
Flow rate	1130 NI/min. (1.148 Cv)					
Bowl volume	max. 16 cm ³					
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)					
Weight without pressure gauge*	0.280 kg (0.617 lb.), with key lockable knob 0.385 kg (0.849 lb.)					

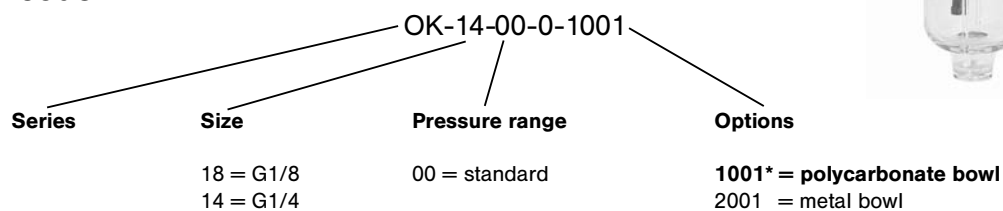
* = standard type

Series K

Lubricator, model OK
G1/8, G1/4

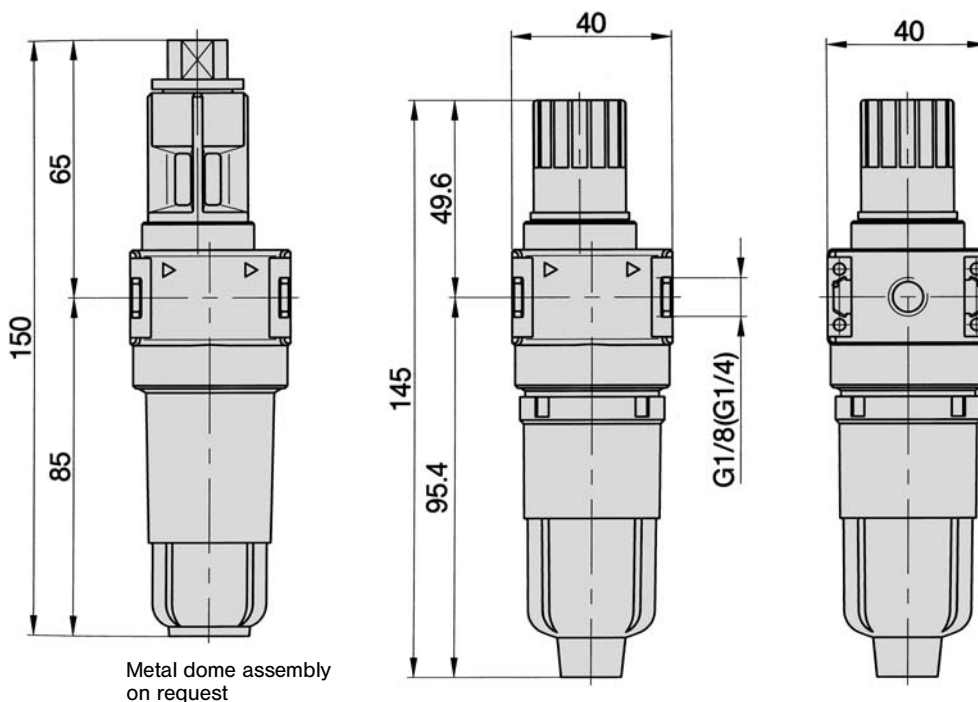


Order code



Design and function

The lubricator has a proportional adjustment screw for adjustment of the oil/air mix. The filter should be inspected regularly to avoid the build up of condensate in the filter bowl. Various filter elements can be installed depending on the particular application. The components of series K can easily be connected by using the coupling kit KPK-00. For additional accessories see page 12.020.

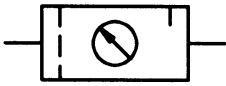


Order number	OK-18-00-0-1001	OK-18-00-0-2001	OK-14-00-0-1001	OK-14-00-0-2001
Connection size	G1/8		G1/4	
Mounting	vertically			
Input range	max. 16 bar (232 psi)	max. 20 bar (290 psi)	max. 16 bar (232 psi)	max. 20 bar (290 psi)
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)			
Bowl volume	35 cm ³			
Type of oil	HL 25 according to DIN 51524 – ISO VG 32			
Weight	0.230 kg (0.507 lb.)			

* = standard type

Series K

Two piece air service unit, model FROK
G1/8, G1/4



Order code

FROK-14-10-5-1221

Options for digits No. 1 and 2

- 12* = polycarbonate bowl, semi-automatic drain
- 13 = polycarbonate bowl, auto drain
- 22 = metal bowl, semi-automatic drain
- 42 = polycarbonate bowl with metal guard, semi-automatic drain

Options for digit No. 3

- 0 = without gauge
flow from left to right
- 1 = without gauge
flow from right to left
- 2* = with gauge
flow from left to right
- 3 = with gauge
flow from right to left

Options for digit No. 4

- 1 = standard
- 2 = key lockable

Design and function

The air service unit includes a filter/regulator, and lubricator.

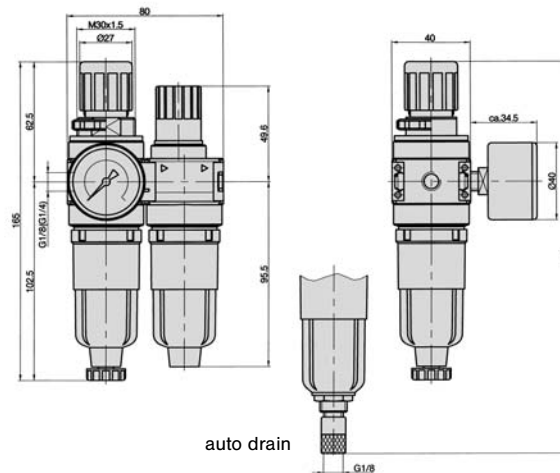
The filter/regulator is a diaphragm style regulator with relieving feature. The filter includes a semi-automatic drain.

The outlet pressure of the regulator remains constant regardless of incoming pressure changes. Once the desired pressure is achieved the adjusting knob can be fixed.

The filter removes both solid and liquid particles from the incoming air. The bowl can be supplied with a semi-automatic (drains when pressure is shut off) or auto drain.

The lubricator has a proportional adjustment screw.

The components of series K can easily be connected by using the coupling kit KPK-00. Assembly nut (see page 12.021) is not part of the scope of delivery. For additional accessories see pages 12.020.



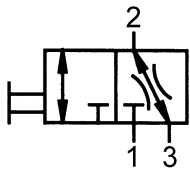
The main body of the regulator has two G1/8 ports for gauge mounting. Either port may be used allowing the user to choose the direction of flow. (Note: The second port must be plugged.)

Order number Please complete according to order code.	FROK-18-03-5-...	FROK-18-06-5-...	FROK-18-10-5-...*	FROK-14-03-5-...	FROK-14-06-5-...	FROK-14-10-5-...*
Connection size	G1/8			G1/4		
Mounting	vertically, drain plug at bottom					
Input range	max. 12 bar (10 bar with auto drain)					
Output range	0.1 ... 3 bar (1.5 ... 43 psi)	0.2 ... 6 bar (3 ... 87 psi)	0.5 ... 10 bar (7 ... 145 psi)	0.1 ... 3 bar (1.5 ... 43 psi)	0.2 ... 6 bar (3 ... 87 psi)	0.5 ... 10 bar (7 ... 145 psi)
Filter element	5 µm					
Flow rate	800 NI/min. (0.813 Cv)					
Bowl volume	max. 16 cm ³ condensation volume, 35 cm ³ oil bowl					
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)					
Type of oil	HL 25 according to DIN 51524 – ISO VG 32					
Weight without pressure gauge*	0.510 kg (1.124 lbs.)					

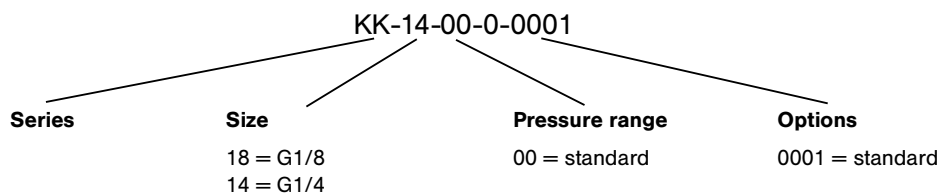
* = standard type

Series K

Ball valve, model KK
G1/8, G1/4



Order code

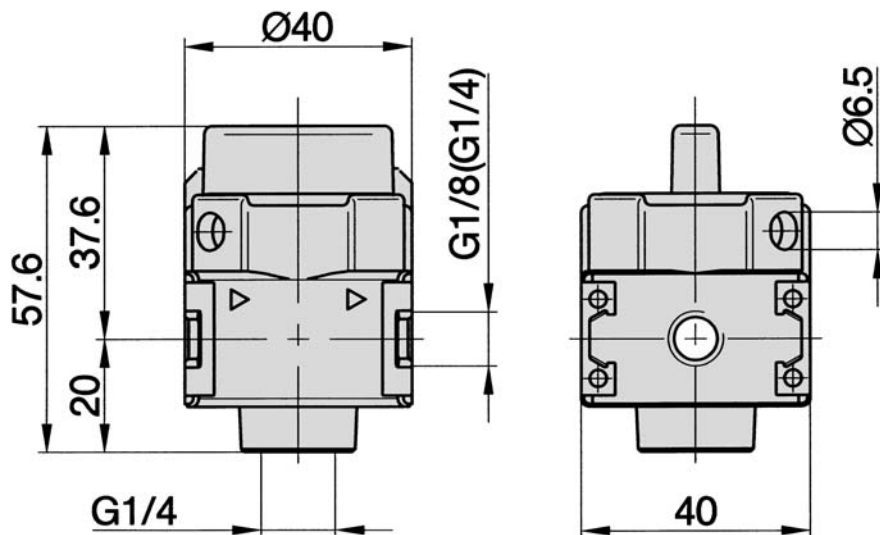


Design and function

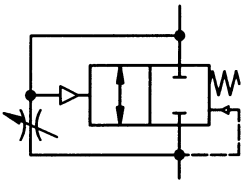
3/2-way ball valve for the shut-off of downstream air.

The components of series K can easily be connected by using the coupling kit KPK-00.

For additional accessories see page 12.020.

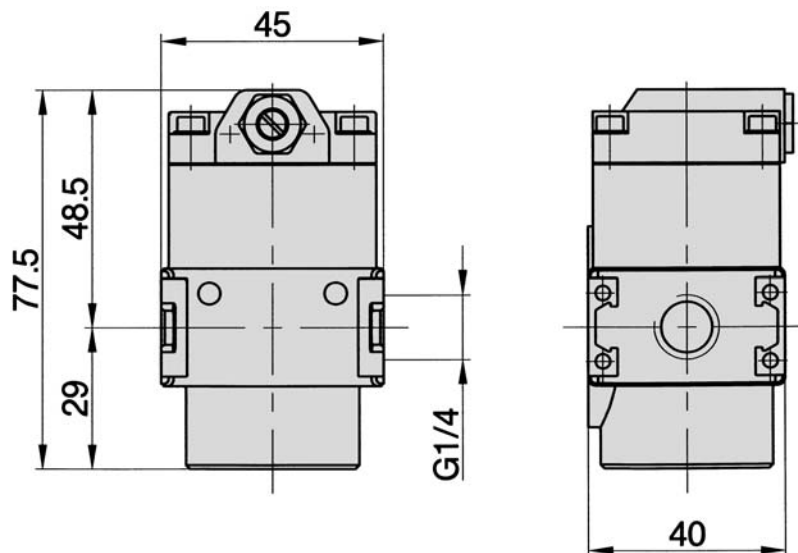


Order number	KK-18-00-0-0001	KK-14-00-0-0001
Connection size	G1/8	G1/4
Mounting	arbitrary	
Input range	max. 16 bar (max. 232 psi)	
Flow rate	1800 NI/min. (1.829 Cv)	
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)	
Weight	0,246 kg (0.542 lb.)	



Design and function

Soft start valve with adjustable filling time. This valve can be used to slowly increase the system pressure through an adjustable throttle. When 50 % of the incoming pressure is achieved the valve opens completely. The components of series K can easily be connected by using the coupling kit KPK-00. For additional accessories see page 12.020.

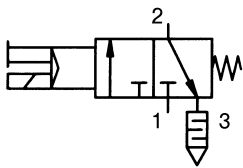


Order number	DAK-14-00-0-0001
Connection size	G1/4
Mounting	arbitrary
Pressure range	2.5 ... 16 bar (36 ... 232 psi)
Flow rate	2200 NI/min (2.235 Cv)
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)
Weight	0.430 kg (0.948 lb.)

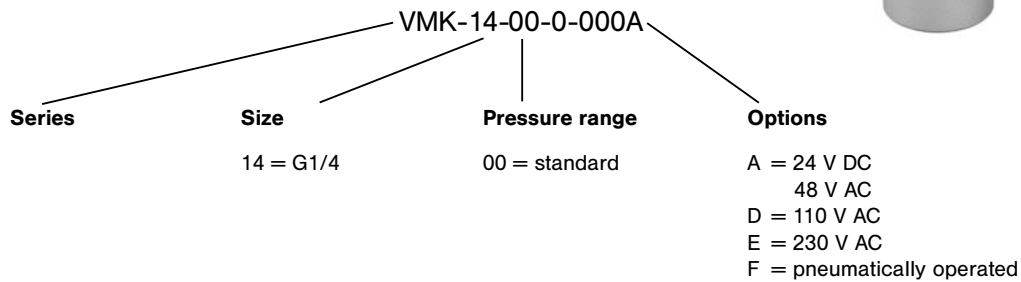
Series K

3/2-way inline valve, model VMK

G1/4

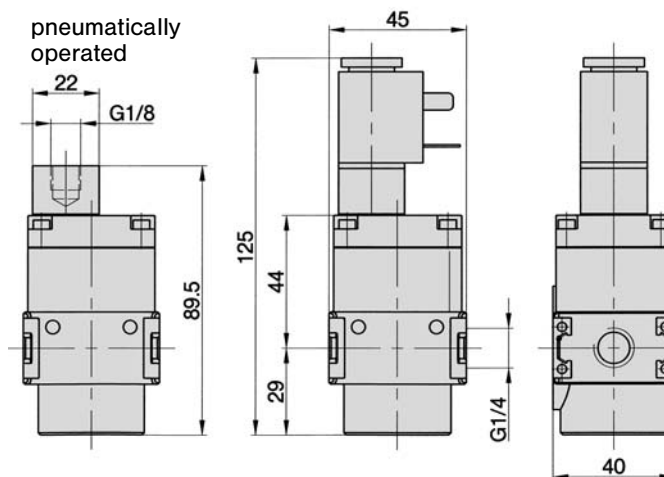


Order code



Design and function

Solenoid or pneumatically operated 3/2-way poppet valve with spring return. The solenoid and plug socket are supplied with the unit. The components of series K can easily be connected by using the coupling kit KPK-00. For additional accessories see page 12.020.

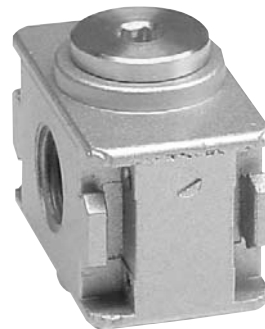


Order number Please complete according to order code.	VMK-14-00-0-...
Connection size	G1/4
Mounting	arbitrary
Pressure range	2 ... 10 bar (29 ... 145 psi)
Duty cycle	100 %
Degree of protection	IP 65 according to EN 60529
Flow rate	2000 NI/min (2.032 Cv)
Temperature range	0 °C ... + 50 °C (+ 32 °F ... + 122 °F)
Weight	0.450 kg (0.992 lb.)

Series K

Distribution block and pressure switch, model TK
G1/4

airtec



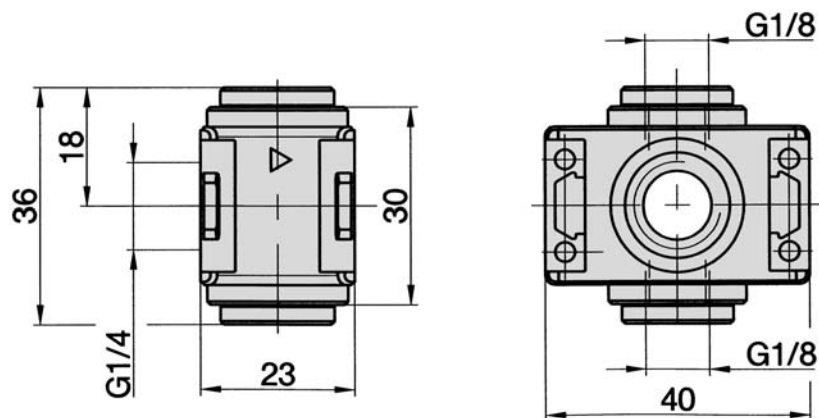
Design and function

Distribution manifold block for additional air supply or other components.

This unit can be combined with pressure switch PE-18-01-40 (see page 8.180) to provide a preset pressure indicating system when combined with the air service units.

The components of series K can easily be connected by using the coupling kit KPK-00.

For additional accessories see page 12.020.



Order number	TK-14-00-0-0001
Connection size	G1/4, two outlets G1/8
Mounting	arbitrary
Pressure range	0 ... 16 bar (0 ... 232 psi)
Flow rate	2700 NI/min for G1/4, 1300 NI/min for G1/8 (2.743 Cv for G1/4, 1.321 Cv for G1/8)
Temperature range	0 °C ... + 60 °C (+ 32 °F ... + 140 °F)
Weight	0.090 kg (0.198 lb.)

Series K

Accessories for air service units
G1/8, G1/4



Technical information

Semi-automatic condensate drain

A semi-automatic condensate drain contains a spring-loaded valve, which opens as soon as the operating pressure falls. In addition, the container is sealed by means of a screw plug. The condensate can be drained manually by opening the screw plug in the pressure-free state, or automatically by shutting off the operating pressure. The screw plug must be removed in automatic mode.

The semi-automatic condensate drain requires a minimum operating pressure of 1.5 bar (21.75 psi), otherwise the air will flow out of the bowl. (Only with screw plug removed).



Fully automatic condensate drain

The fully automatic condensate drain function can be switched to manual. For manual operation, the screw in the container must be turned to the left (counter clockwise).

For automatic operation, the screw must be turned to the right (clockwise) until it stops.

In automatic operation, the drain is always open in the pressure-free state. Under pressure, a float opens the drain valve as soon as a condensate level is reached.

The automatic condensate drain requires a minimum operating pressure of 1.5 bar (21.75 psi), otherwise the air will flow out of the bowl.



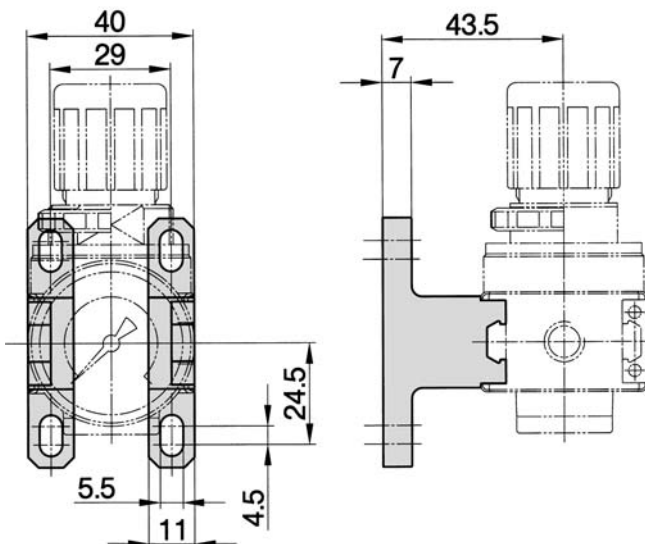
General information

Plastic containers may only be cleaned with water, soap solution or a similar neutral media. Cleaning agents containing trichloroethylene, such as benzene, acetone and any liquids containing plasticisers, may not be used under any circumstances.

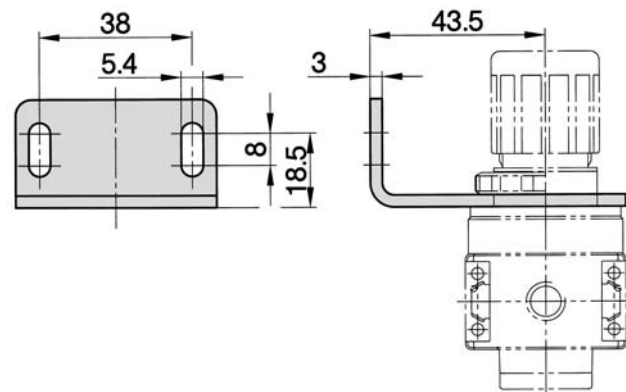
HL 25 oil in accordance with DIN 51524 - ISO VG 32 should be used in conjunction with mist oilers.

Accessories for series K

Mounting bracket WK-00



Mounting bracket WK-30



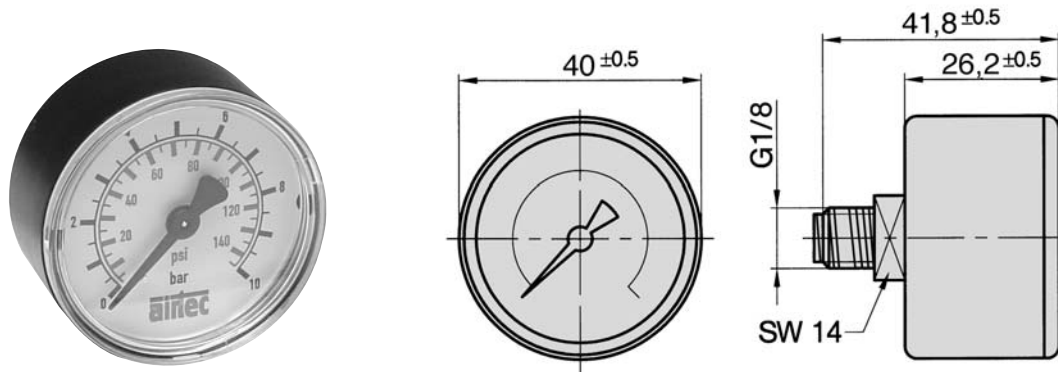
The mounting nut (see page 12.021) has to be ordered separately.

Series K

Accessories for air service units
G1/8, G1/4



Pressure gauge MXA-40



The sealing ring for gauge mounting on series K is supplied with the gauge.

Order number	MXA-40-06-18	MXA-40-10-18	MXA-40-16-18
Ranges	0 ... 6 bar (0 ... 87 psi)	0 ... 10 bar (0 ... 145 psi)	0 ... 16 bar (0 ... 232 psi)
Application	Constant load 3/4 x scale value Alternating load 2/3 x scale value		
Materials	Body : Plastic, highly shock resistant, black (ABS) Window : Plexiglass, convex, clipped-on Dial : Plastic, white with stop pin, scale black or blue Pointer : Plastic, black Movement : CuZn alloy Measuring element: Cu alloy		
Temperature range	- 20 °C ... + 60 °C (- 40 °F ... + 140 °F)		
Accuracy class	2.5 according to EN 837-1		
Temperature drift	0.4 % / 10 K if deviation from normal temperature 20 °C (68 °F).		
Weight	0.065 kg (0.143 lb.)		

Mounting nut RM-30



Order number	RM-30-K	RM-30-M	RM-30-Mv
Materials	plastic	brass	brass (nickel-plated)
Thread	M 30 x 1.5		

Coupling Kit KPK-00

