

# SERIES AS AIR PREPARATION UNITS AS2, AS3 AND AS5

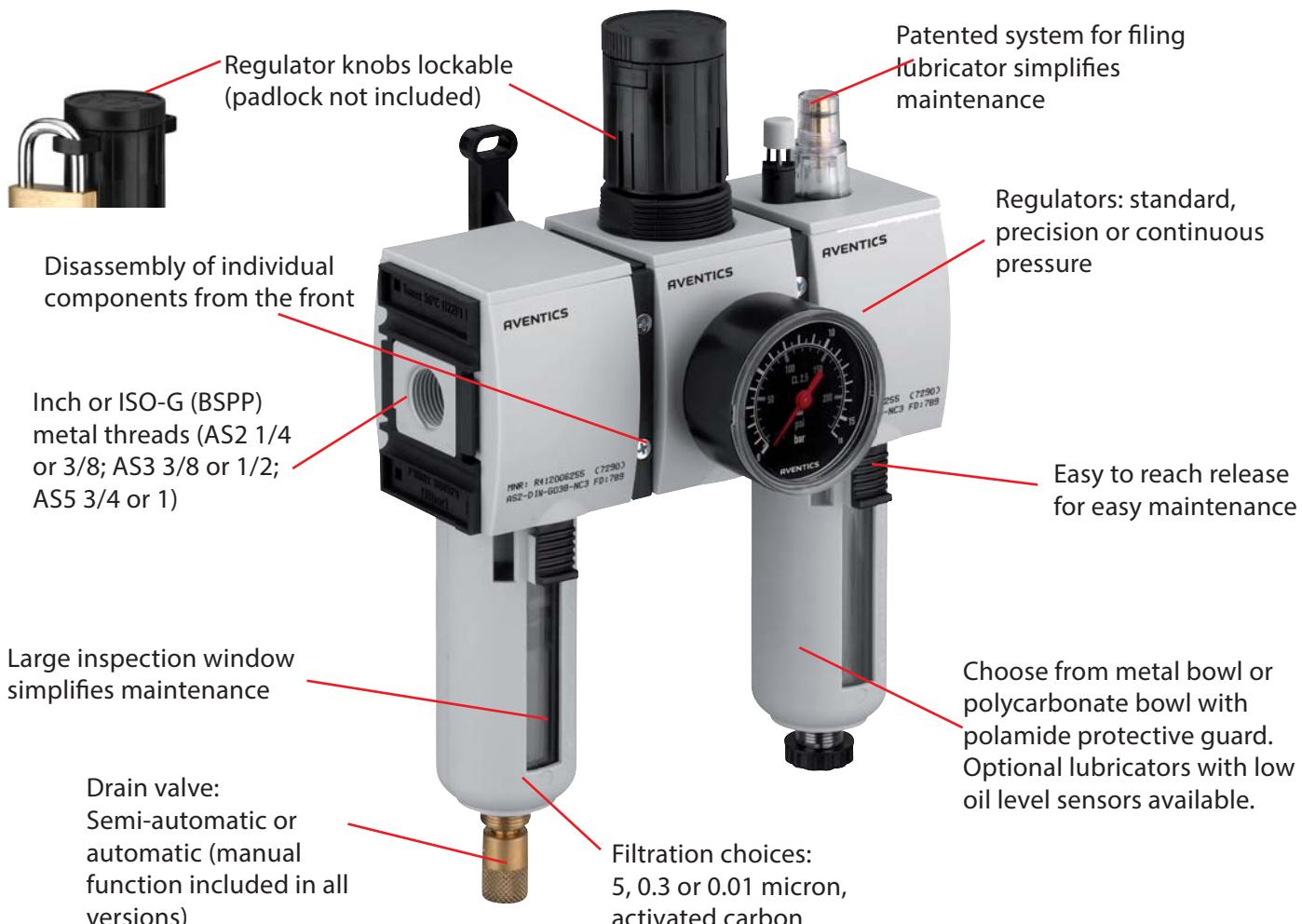
**Pneumatics**  
It's that easy



# Series AS Air Preparation Units

## Series AS2, AS3 and AS5 feature a smooth, light-weight polymer design

The Series AS air prep family includes individual filters, regulators and lubricators plus many other components which are modular in design, allowing both standard and custom combinations. The smooth surfaces are important in applications like food and packaging. Available with inch or ISO-G (BSPP) ports, the AS line is very versatile and has functionality that corresponds to current industry demands.



Focused  
Delivery  
Program

Many versions of THE SERIES AS FRL are available on our Quick Ship Focused delivery program, visit: [www.aventics.com/us/QuickShipAS](http://www.aventics.com/us/QuickShipAS)

# Compressed air maintenance unit, series AS2, AS3, AS5

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# Compressed air maintenance unit, series AS2, AS3, AS5

Model codes and descriptions



<u>Size</u>	AS2	Air Service unit, 1/4" and 3/8"
	AS3	Air Service unit, 3/8" and 1/2"
	AS5	Air Service unit, 3/4" and 1"
<u>Ports</u>	N014	1/4" NPT
	N038	3/8" NPT
	N012	1/2" NPT
	N034	3/4" NPT
	N100	1" NPT
	G014	G 1/4
	G038	G 3/8
	G012	G 1/2
	G034	G 3/4
	G100	G 1
	X000	Independent of port size
<u>Drain</u>	AC	Float drain (N.C.), stays closed without pressure
	AO	Float drain (N.O.), drains without pressure
	HO	Semi automatic drain (N.O.)
	NON	No drain (hex drain plug)
<u>Filtration</u>	40.00	40 micron filtration (FLS)
	25.00	25 micron filtration (FLS)
	5.00	5 micron filtration (FLS)
	0.30	0.3 micron filtration (standard for Pre-filter)
	0.01	0.01 micron filtration (standard for Coalescing filter)
<u>Gauge</u>	GAN	without Gauge
	GAU	with Gauge
<u>Mounts</u>	MBR-...-W01	Mounting bracket, metal
	MBR-...-W03	Mounting strap (also serves as joiner)
	MBR-...-W04	Block assembly (joiner) kit
	MBR-...-W05	Mounting flange kit with threaded ports
	MBR-...-W06	Control panel nut
<u>Bowl</u>	PBP	Polycarbonate bowl with Polyamide bowl guard
	SSS	Short Metal Bowl with sight glass
	SSN	Short Metal Bowl without sight glass
<u>Operators</u>	024	24V DC Pilot Valve Type DO16
	110	110V AC Pilot Valve Type DO16
	230	230V AC Pilot Valve Type DO16
	PNE	Pneumatically Operated Pilot Valve
	PVN	No Pilot Valve (Prepared for pilot valve type DO16)
	PVC	No Pilot Valve (Prepared for CNOMO pilot valve)
<u>Part Specific</u>	FIA	Adjustable filling rate (types SSU and SSV only)
	LA	Lubricator auto fill (type LBS only)
	MN	Ready for level sensor (type LBS only)
	NC2, NC3 or NC4	2-way, 3-way or 4-way (type DIS only)
	1	No locking mechanism (type BAV only)
	4-ST	Metal locking mechanism (type BAV only)
	RL	Version for air flow right to left
	ICI	Pressure drop indicator (types FLP and FLC only)
<u>Type</u>	<u>Function</u>	<u>Model Code Example</u>
ACD	Combination FRL, piggyback FR+L	AS2-ACD-N038-GAU-080-PBP-AO-05
ACT	Combination FRL, F+R+L	AS2-ACT-N014-GAU-080-SSS-HO-05
BAV	Manual valve (lockout option)	AS2-BAV-N038-MAN
CBS	Spare Lubricator Bowl (for LBS)	AS2-CBS-X000-PBP-LA
CLA	Spare Carbon filter Bowl (for FLA)	AS2-CLA-X000-PBP-NON
CLS	Spare Filter Bowl (for FLS, FLP and FLC)	AS2-CLA-X000-SSS-HO
DIS	Distributor block	AS2-DIS-N014-NC3
FLA	Filter, active carbon	AS2-FLA-N038-PBP
FLC	Coalescing filter, 0.01 micron	AS2-FLC-N014-SSS-AC-00.01
FLP	Prefilter, 0.3 micron	AS2-FLP-N014-SSS-HO-00.30
FLS	Standard Filter, 5 micron	AS2-FLS-N038-PBP-HO-05.00
FRE	Filter Regulator, piggyback	AS2-FRE-N014-GAU-080-SSS-AC-05
LBS	Lubricator, oil drop, with push-button filling	AS2-LBS-N038-PBP-LA
RGP	Precision Regulator	AS2-RGP-N014-GAU-080
RGP...DS	Precision Reg., manifold w/common supply	AS2-RGP-N038-GAN-080-DS
RGS	Standard Regulator	AS2-RGS-N014-GAU-080
RGS...DS	Standard Reg., manifold w/common supply	AS2-RGS-N038-GAN-080-DS
SOV	3/2 dump valve	AS2-SOV-N014-110
SSU	Soft start unit (3/2 dump valve plus soft start)	AS2-SSU-N038-230
SSV	Soft start valve	AS2-SSV-N038-FIA

# Compressed air maintenance unit, series AS2-Inch

AS2 Inch (1/4" and 3/8" NPT) version index



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# Compressed air maintenance unit, series AS2-Inch

FR+L Maintenance unit AS2-ACD, 2-in-1, 1/4 NPT - 3/8 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Filter Pressure regulator	Filter element replaceable Diaphragm-type pressure regulator with relief opening and reverse flow capability Regulator knob lockable
	Lubricator	Standard oil-drop lubricator with semi-automatic oil filling Fill level – sight glass with slotted screw adjustment for oil metering.
		Can be filled with oil during operation
Supply pressure	Condensate drain	semi-automatic: 7 - 232 psi fully automatic : 21 - 232 psi 116 psi (max.) See table
Secondary pressure		
Nominal flow qn		
Secondary pressure = 91 psi and $\Delta p = 15$ psi		
Temperature range		-10 °C to +50 °C (14 °F to +122 °F) *
Medium		Compressed air
Weight		See table
Installation position		Vertical
Materials	Body Thread insert Reservoir Bowl guard Cover Filter element	Polyamide, seals Buna-N(NBR) Die-cast zinc Polycarbonate or die cast zinc, with bayonet catch Polyamide (polycarbonate bowls only) ABS Polyethylene
Reservoir capacity	Filter Lubricator	28 cm³ (0.95 U.S. Fl.oz.) 40 cm³ (1.69 U.S. Fl.oz.)
Filter porosity		5 µm
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Oil type: HL 68 (DIN 51 524 - ISO VG 68)

Standard values for oil metering: 1-2 drops / min at a nominal flow rate of qn = 35 CFM

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

► - semi and fully automatic condensate drain \*

\*either opened without pressure (NO) or closed without pressure (NC)

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Supply pressure [psi]	Options	Weight [lbs]	Part no. with pressure gauge (Poly./Metal)
	1/4 NPT	64	7 ... 232	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	1.4	R432000692/R432000695
	1/4 NPT	64	21 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	1.49	R432000693/R432000696
	1/4 NPT	64	0 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	1.49	R432000694/R432000697
	3/8 NPT	71	7 ... 232	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	1.4	R432000698/R432000701
	3/8 NPT	71	21 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	1.49	R432000699/R432000702
	3/8 NPT	71	0 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	1.49	R432000700/R432000703

## ▲ Accessories (to be ordered separately)

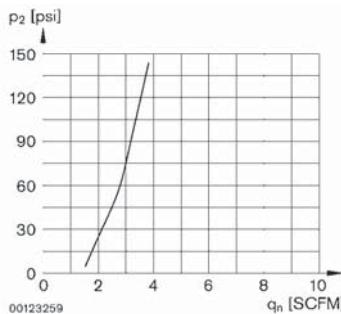
Accessory	Part no.
Spare parts kit: see filter pressure regulator valve AS2-FRE and oil-drop lubricator AS2-LBS	
Mounting plate AS2-MBR-....-W01	R432031071
Mounting strap AS2-MBR-....-W03	R412006370
Block assembly kit AS2-MBR-....-W04	R412006371

# Compressed air maintenance unit, series AS2-Inch

FR+L Maintenance unit AS2-ACD, 2-in-1, 1/4 NPT - 3/8 NPT, ATEX approved

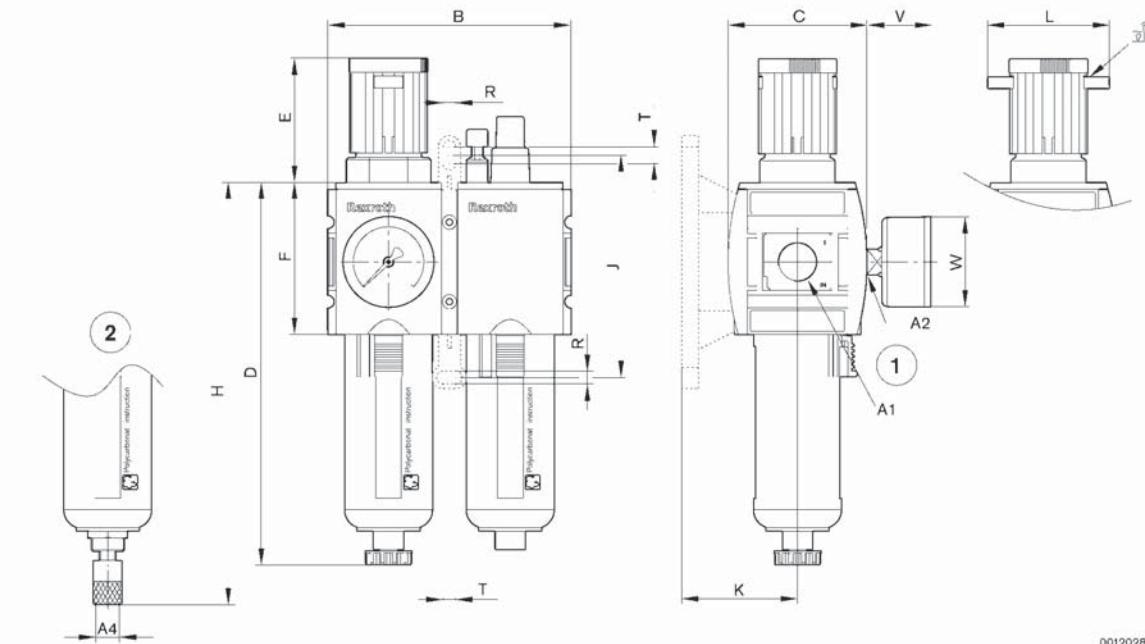
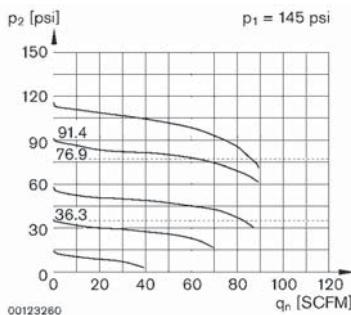
**AVVENTICS**

## Lubrication activation margin



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow

## Flow rate characteristic (setting range $p_2$ : 0.5 to 8 bar) (7 to 116 psi)



00120286

- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	R	T	V	W
1/4 NPT	1/4 NPT	G 1/8	4.094	2.323	6.437	2.094	2.559	7.106	3.740	1.945	2.047	0.213	0.287	1.378	2
3/8 NPT		G 1/8	4.094	2.323	6.437	2.094	2.559	7.106	3.740	1.945	2.047	0.213	0.287	1.378	2

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

FRL Maintenance unit AS2-ACT, 3-in-1, 1/4 NPT - 3/8 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Filter Pressure regulator	Filter element replaceable Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob
	Lubricator	Standard oil-drop lubricator with semi-automatic oil filling Fill level – sight glass with slotted screw adjustment for oil metering Can be filled with oil during operation
Supply pressure	Condensate drain	semi-automatic: 7 - 232 psi fully automatic : 21 - 232 psi 116 psi (max.) See table
Secondary pressure		-10 °C to +50 °C (14 °F to +122 °F) *
Nominal flow qn		Compressed air
Secondary pressure = 91 psi and Δp = 15 psi		See table
Temperature range		Vertical
Medium		
Weight		
Installation position		
Materials	Body Thread insert Reservoir Bowl guard Cover Filter element	Polyamide, seals Buna-N(NBR) Die-cast zinc Polycarbonate or die cast zinc, with bayonet catch Polyamide (polycarbonate bowl only) ABS Polyethylene
Reservoir capacity	Filter Lubricator	28 cm³ (0.95 U.S. Fl.oz.) 40 cm³ (1.69 U.S. Fl.oz.)
Filter porosity		5 µm
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Oil type: HL 68 (DIN 51 524 - ISO VG 68)

Standard values for oil metering: 1-2 drops / min at a nominal flow rate of qn = 35 CFM

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

► - semi and fully automatic condensate drain\*

\* either opened without pressure (NO) or closed without pressure (NC)

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Supply pressure [psi]	Options	Weight [lbs]	Part no. with pressure gauge (Poly/Metal)
	1/4 NPT	49	7 ... 232	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	1.72	R432000704/R432000707
	1/4 NPT	49	21 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	1.82	R432000705/R432000708
	1/4 NPT	49	0 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	1.82	R432000706/R432000709
	3/8 NPT	56	7 ... 232	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	1.72	R432000710/R432000713
	3/8 NPT	56	21 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	1.82	R432000711/R432000714
	3/8 NPT	56	0 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	1.82	R432000712/R432000715

## ▲ Accessories (to be ordered separately)

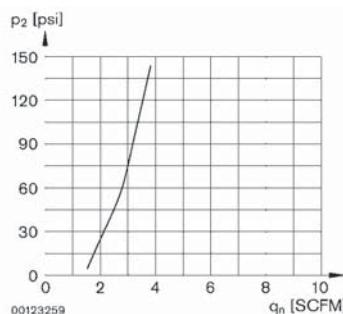
Accessory	Part no.
Spare parts kit: see filter pressure regulator valve AS2-FRE and oil drop lubricator AS2-LBS Mounting plate AS2-MBR-....-W01	R432031071
Mounting strap AS2-MBR-....-W03	R412006370
Block assembly kit AS2-MBR-....-W04	R412006371

# Compressed air maintenance unit, series AS2-Inch

FRL Maintenance unit AS2-ACT, 3-in-1, 1/4 NPT - 3/8 NPT, ATEX approved

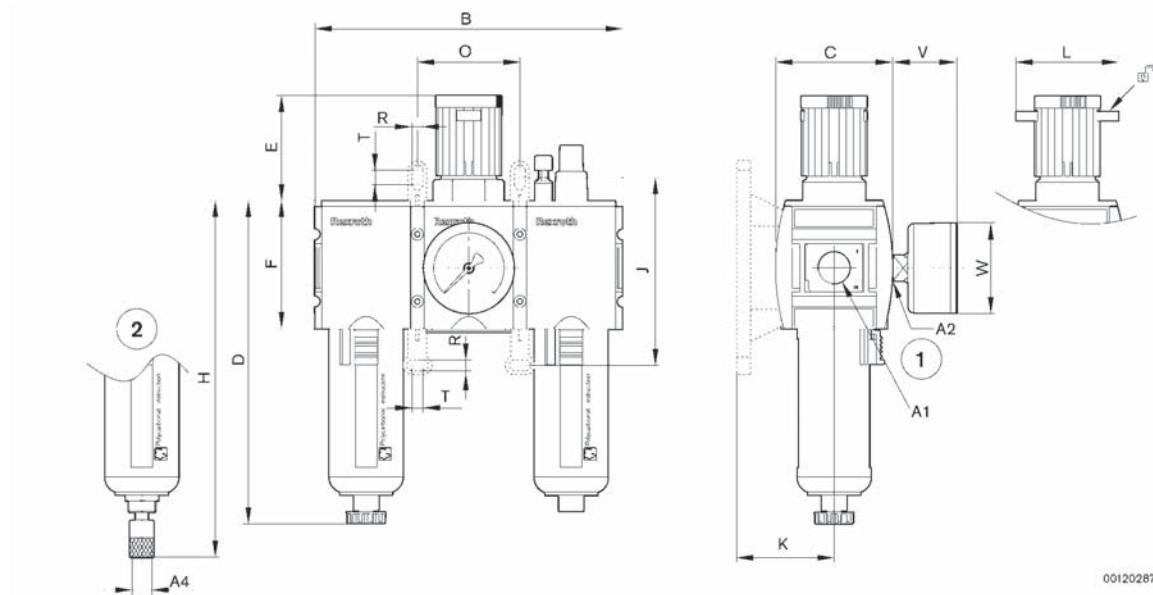
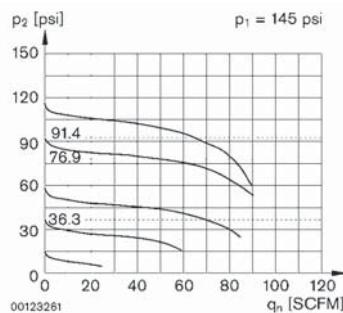
**AVVENTICS**

## Lubrication activation margin



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow

## Flow rate characteristic (setting range p2: 0.5 to 8 bar) (7 to 145 psi)



- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	I	J	K	L	O	R	T	V	W
1/4 NPT	1/4 NPT	G 1/8	6.142	2.323	6.437	2.094	2.559	7.106	0.220	3.740	1.945	2.047	2.047	0.213	0.287	1.378	2
3/8 NPT	1/4 NPT	G 1/8	6.142	2.323	6.437	2.094	2.559	7.106	0.220	3.740	1.945	2.047	2.047	0.213	0.287	1.378	2

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

Pressure regulator AS2-RGS, 1/4 NPT - 3/8 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Regulator Knob lockable
Supply pressure	232 psi (max.)
Secondary pressure	See table
Nominal flow qn	See table
Secondary pressure = 91 psi and $\Delta p = 15$ psi	
Temperature range	-10 °C to +50 °C (14 °F to +122 °F) *
Medium	Compressed air
Weight	See table
Installation position	any
Materials	Body Thread insert Polyamide, seals Buna-N(NBR) Die-cast zinc
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)



\* with dried air

## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Secondary pressure [psi]	Weight [lbs]	Part no. with pressure gauge
	1/4 NPT	78	1 ... 14	0.71	R432000561
	1/4 NPT	78	1 ... 29	0.71	R432000563
	1/4 NPT	78	2 ... 58	0.71	R432000565
	1/4 NPT	78	7 ... 116	0.71	R432000567
	1/4 NPT	78	7 ... 145	0.71	R432000569
	1/4 NPT	78	7 ... 232	0.71	R432000571
	3/8 NPT	95	1 ... 14	0.71	R432000573
	3/8 NPT	95	1 ... 29	0.71	R432000575
	3/8 NPT	95	2 ... 58	0.71	R432000577
	3/8 NPT	95	7 ... 116	0.71	R432000579
	3/8 NPT	95	7 ... 145	0.71	R432000581
	3/8 NPT	95	7 ... 232	0.71	R432000583

## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Secondary pressure [psi]	Weight [lbs]	Part no. without pressure gauge
	1/4 NPT	78	1 ... 14	0.55	R432000560
	1/4 NPT	78	1 ... 29	0.55	R432000562
	1/4 NPT	78	2 ... 58	0.55	R432000564
	1/4 NPT	78	7 ... 116	0.55	R432000566
	1/4 NPT	78	7 ... 145	0.55	R432000568
	1/4 NPT	78	7 ... 232	0.55	R432000570
	3/8 NPT	95	1 ... 14	0.55	R432000572
	3/8 NPT	95	1 ... 29	0.55	R432000574
	3/8 NPT	95	2 ... 58	0.55	R432000576
	3/8 NPT	95	7 ... 116	0.55	R432000578
	3/8 NPT	95	7 ... 145	0.55	R432000580
	3/8 NPT	95	7 ... 232	0.55	R432000582

## Accessories (to be ordered separately)

Accessory	Part no.
Pressure regulator valve seal kit	R961400030
Mounting plate AS2-MBR-...-W01 (incl. 2 bolts)	R432031071
Mounting strap AS2-MBR-...-W03	R412006370
Block assembly kit AS2-MBR-...-W04	R412006371

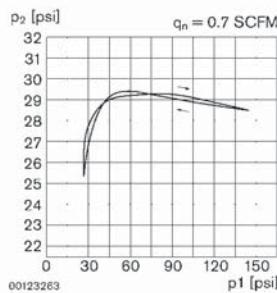
See accessories section for pressure gauges

# Compressed air maintenance unit, series AS2-Inch

Pressure regulator AS2-RGS, 1/4 NPT - 3/8 NPT, ATEX approved

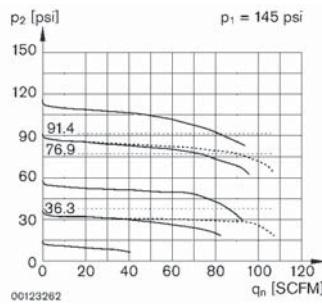
**AVVENTICS**

## Pressure characteristics curve

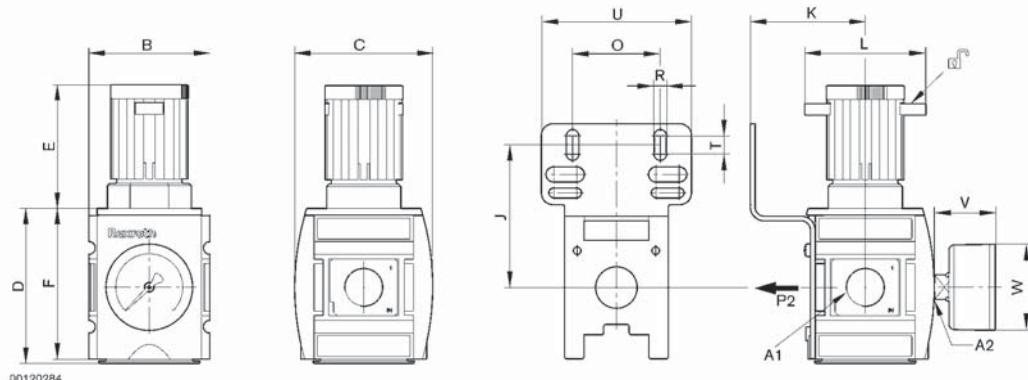


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 7 to 116 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



(mounting bracket not included, order separately)

A1	A2	B	C	D	E	F	J	K	L	O	R	T	U	V	W
1/4 NPT	1/4 NPT	2.047	2.323	2.630	2.275	2.559	2.433	1.945	2.047	1.496	0.213	0.394	2.559	1.378	2
3/8 NPT	1/4 NPT	2.047	2.323	2.630	2.275	2.559	2.433	1.945	2.047	1.496	0.213	0.394	2.559	1.378	2

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

Pressure regulator AS2-RGS-...-DS, with continuous pressure supply,  
1/4 NPT - 3/8 NPT, ATEX approved

**AVVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob	
Supply pressure	232 psi (max.)	
Secondary pressure	See table	
Nominal flow qn	See table	
Secondary pressure = 91 psi and $\Delta p = 15$ psi		
Temperature range	-10 °C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	Any	
Materials	Body Thread insert Cover	Polyamide, seals Buna-N(NBR) Die-cast zinc ABS
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	

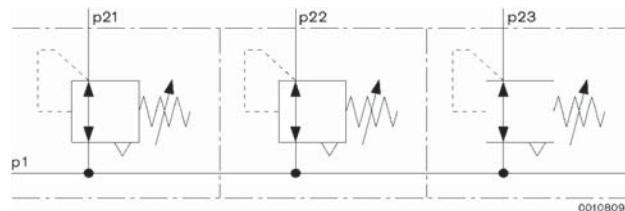


\* with dried air

Possible to assemble multiple regulators providing continuous inlet pressure and individual regulated pressure outlets.

In the case of block assembly, only gauge with  $\varnothing \leq 2$  inch can be used

## Example of application



## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Secondary pressure [psi]	Weight [lbs]	Part no. without pressure gauge
	1/4 NPT	78	1 ... 14	0.55	R432000584
	1/4 NPT	78	1 ... 29	0.55	R432000585
	1/4 NPT	78	2 ... 58	0.55	R432000586
	1/4 NPT	78	7 ... 116	0.55	R432000587
	1/4 NPT	78	7 ... 145	0.55	R432000588
	1/4 NPT	78	7 ... 232	0.55	R432000589
	3/8 NPT	95	1 ... 14	0.55	R432000590
	3/8 NPT	95	1 ... 29	0.55	R432000591
	3/8 NPT	95	2 ... 58	0.55	R432000592
	3/8 NPT	95	7 ... 116	0.55	R432000593
	3/8 NPT	95	7 ... 145	0.55	R432000594
	3/8 NPT	95	7 ... 232	0.55	R432000595

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Pressure regulator valve seal kit	R961400030
Mounting plate AS2-MBR-...-W01 (incl. 2 bolts)	R432031071
Mounting strap AS2-MBR-...-W03	R412006370
Block assembly kit AS2-MBR-...-W04	R412006371

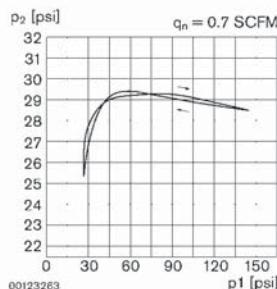
See accessories section for pressure gauges

# Compressed air maintenance unit, series AS2-Inch

Pressure regulator AS2-RGS-...-DS, with continuous pressure supply,  
1/4 NPT - 3/8 NPT, ATEX approved

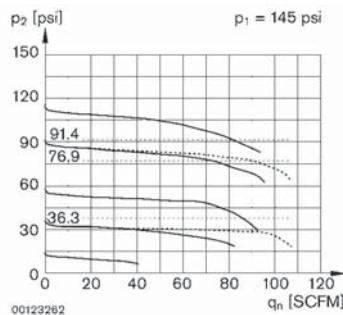
AVVENTICS 

## Pressure characteristics curve

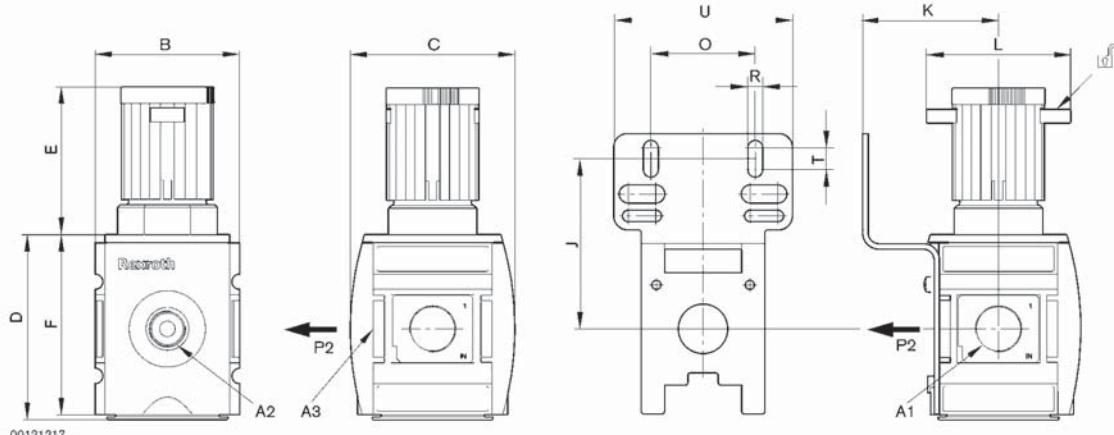


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 7 to 145 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Flow rate



(mounting bracket not included, order separately)

$p_2$  = Secondary pressure

A1	A2	A3	B	C	D	E	F	J	K	L	O	R	T	U
1/4 NPT	1/4 NPT	1/4 NPT	2.047	2.323	2.630	2.275	2.559	2.433	1.945	2.047	1.496	0.213	0.394	2.559
3/8 NPT	1/4 NPT	1/4 NPT	2.047	2.323	2.630	2.275	2.559	2.433	1.945	2.047	1.496	0.213	0.394	2.559

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

Precision pressure regulator AS2-RGP, 1/4 NPT - 3/8 NPT,  
ATEX approved

**AVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob	
Supply pressure	232 psi (max.)	
Secondary pressure	See table	
Nominal flow qn	See table	
Secondary pressure = 91 psi and $\Delta p = 15$ psi		
Temperature range	-10 °C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	Any	
Materials	Body Thread insert Cover	Polyamide, seals Buna-N(NBR) Die-cast zinc ABS
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air  
Continuous air consumption qn = 0.09 CFM, depends on secondary pressure p2 = 87 psi

## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Secondary pressure [psi]	Weight [lbs]	Part no. with pressure gauge
	1/4 NPT	78	1 ... 14	0.71	R432000597
	1/4 NPT	78	1 ... 29	0.71	R432000599
	1/4 NPT	78	2 ... 58	0.71	R432000601
	1/4 NPT	78	7 ... 116	0.71	R432000603
	1/4 NPT	78	7 ... 145	0.71	R432000605
	3/8 NPT	95	1 ... 14	0.71	R432000607
	3/8 NPT	95	1 ... 29	0.71	R432000609
	3/8 NPT	95	2 ... 58	0.71	R432000611
	3/8 NPT	95	7 ... 116	0.71	R432000613
	3/8 NPT	95	7 ... 145	0.71	R432000615

## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Secondary pressure [psi]	Weight [lbs]	Part no. without pressure gauge
	1/4 NPT	78	1 ... 14	0.55	R432000596
	1/4 NPT	78	1 ... 29	0.55	R432000598
	1/4 NPT	78	2 ... 58	0.55	R432000600
	1/4 NPT	78	7 ... 116	0.55	R432000602
	1/4 NPT	78	7 ... 145	0.55	R432000604
	3/8 NPT	95	1 ... 14	0.55	R432000606
	3/8 NPT	95	1 ... 29	0.55	R432000608
	3/8 NPT	95	2 ... 58	0.55	R432000610
	3/8 NPT	95	7 ... 116	0.55	R432000612
	3/8 NPT	95	7 ... 145	0.55	R432000614

## Accessories (to be ordered separately)

Accessory	Part no.
Pressure regulator valve seal kit	R961400031
Mounting plate AS2-MBR-...-W01	R432031071
Mounting strap AS2-MBR-...-W03	R412006370
Block assembly kit AS2-MBR-...-W04	R412006371

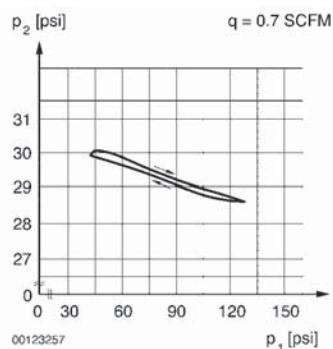
See accessories section for pressure gauges

# Compressed air maintenance unit, series AS2-Inch

Precision pressure regulator AS2-RGP, 1/4 NPT - 3/8 NPT,  
ATEX approved

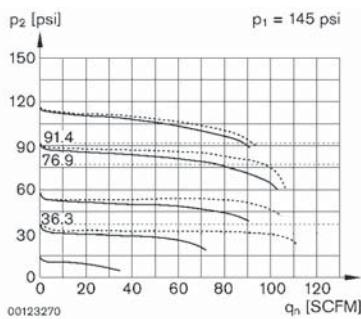
**AVVENTICS**

## Pressure characteristics curve

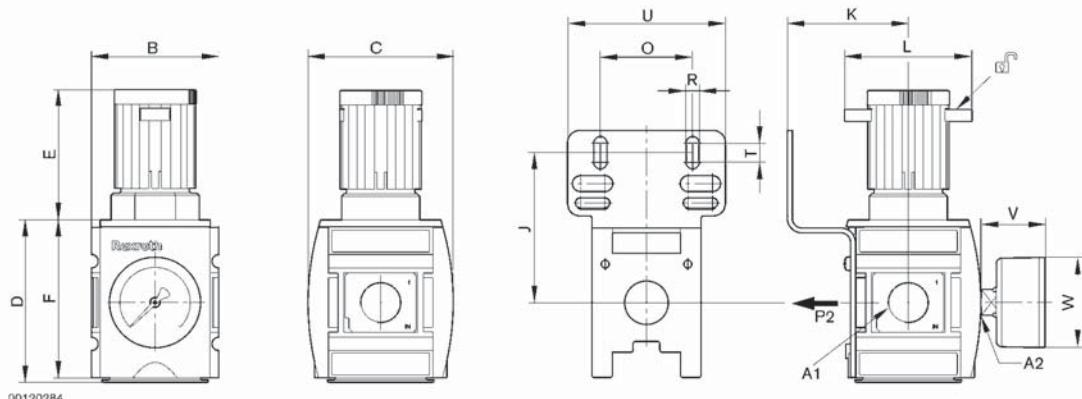


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 7 to 116 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



(mounting bracket not included, order separately)

A1	A2	B	C	D	E	F	J	K	L	O	R	T	U	V	W
1/4 NPT	1/4 NPT	2.047	2.323	2.630	2.094	2.559	2.433	1.945	2.047	1.496	0.213	0.394	2.559	1.378	2
3/8 NPT	1/4 NPT	2.047	2.323	2.630	2.094	2.559	2.433	1.945	2.047	1.496	0.213	0.394	2.559	1.378	2

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

Precision pressure regulator AS2-RGP-...-DS, with continuous pressure supply, 1/4 NPT - 3/8 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob	
Supply pressure	232 psi (max.)	
Secondary pressure	See table	
Nominal flow qn	See table	
Secondary pressure = 91 psi and $\Delta p = 15$ psi		
Temperature range	-10 °C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	Any	
Materials	Body Thread insert Cover	Polyamide, seals Buna-N(NBR) Die-cast zinc ABS
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



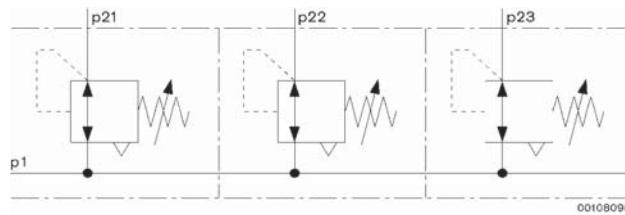
\* with dried air

Continuous air consumption = 0.09 CFM, depends on secondary pressure  $p_2 = 87$  psi

Possible to assemble multiple regulators providing continuous inlet pressure and individual regulated pressure outlets.

In the case of block assembly, only gauge with  $\varnothing \leq 2$  inch can be used

## Example of application



## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Secondary pressure [psi]	Weight [lbs]	Part no. without pressure gauge
	1/4 NPT	78	1 ... 14	0.55	R432000616
	1/4 NPT	78	1 ... 29	0.55	R432000617
	1/4 NPT	78	2 ... 58	0.55	R432000618
	1/4 NPT	78	7 ... 116	0.55	R432000619
	1/4 NPT	78	7 ... 145	0.55	R432000620
	3/8 NPT	95	1 ... 14	0.55	R432000621
	3/8 NPT	95	1 ... 29	0.55	R432000622
	3/8 NPT	95	2 ... 58	0.55	R432000623
	3/8 NPT	95	7 ... 116	0.55	R432000624
	3/8 NPT	95	7 ... 145	0.55	R432000625

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Pressure regulator valve seal kit	R961400031
Mounting plate AS2-MBR-...-W01	R432031071
Mounting strap AS2-MBR-...-W03	R412006370
Block assembly kit AS2-MBR-...-W04	R412006371

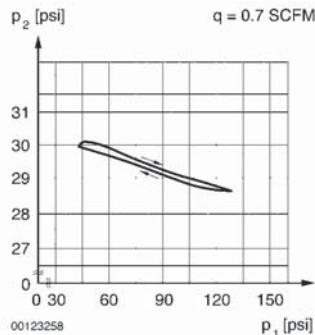
See accessories section for pressure gauges

# Compressed air maintenance unit, series AS2-Inch

Precision pressure regulator AS2-RGP-...-DS, with continuous pressure supply, 1/4 NPT - 3/8 NPT, ATEX approved

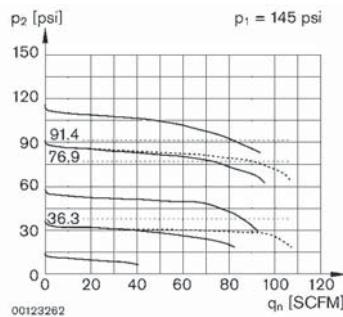
**AVENTICS** 

## Pressure characteristics curve

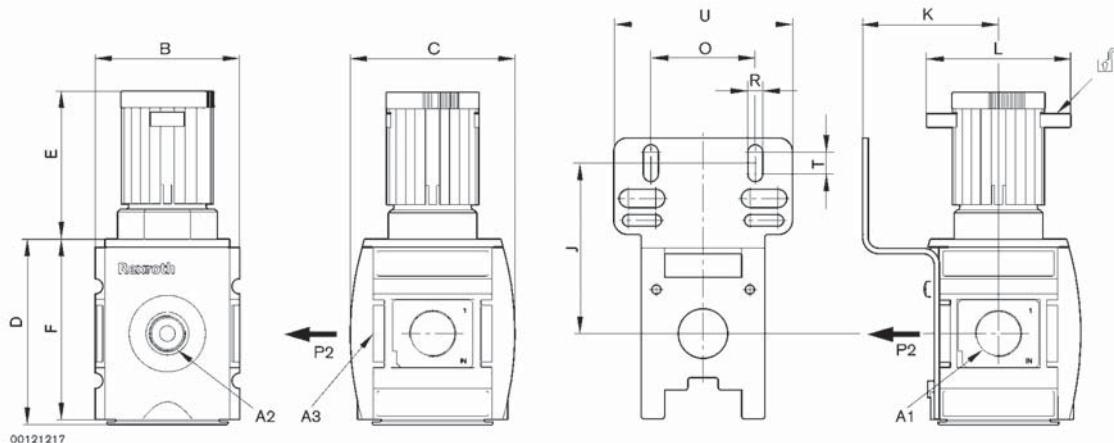


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 7 to 116 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



(mounting bracket not included, order separately)

$p_2$  = Secondary pressure

A1	A2	A3	B	C	D	E	F	J	K	L	O	R	T	U
1/4" NPT	1/4" NPT	1/4" NPT	2.047	2.323	2.630	2.094	2.559	2.433	1.945	2.047	1.496	0.213	0.394	2.559
3/8" NPT	1/4" NPT	1/4" NPT	2.047	2.323	2.63	2.094	2.559	2.433	1.945	2.047	1.496	0.213	0.394	2.559

Dimensions in inches.

# Compressed air maintenance unit, series AS2-Inch

Filter regulator AS2-FRE, 1/4 NPT - 3/8 NPT, ATEX approved

**AVVENTICS**



## Technical Data

Type	Filter Pressure regulator	Filter insert replaceable Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob
Supply pressure	Condensate drain	semi-automatic: 7 - 232 psi fully automatic : 21 - 232 psi
Secondary pressure		See table
Nominal flow qn		See table
Secondary pressure = 91 psi and $\Delta p = 15$ psi		-10 °C to +50 °C (14 °F to +122 °F) *
Ambient temperature		Compressed air
Medium		See table
Weight		Vertical
Installation position		
Materials	Body Thread insert Reservoir Bowl guard Cover Filter element	Polyamide, seals Buna-N(NBR) Die-cast zinc Polycarbonate or die cast zinc, with bayonet catch Polyamide (polycarbonate bowl only) ABS Polyethylene
Reservoir capacity		28 cm³ (0.95 U.S. Fl. oz.) (with semi-automatic drain)
Filter porosity		5 µm
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Secondary pressure [psi]	Options	Weight [lbs]	Part no. with pressure gauge (Poly./Metal)
	1/4 NPT	71	116	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0.87	R432000638/R432000641
	1/4 NPT	71	116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0.96	R432000639/R432000642
	1/4 NPT	71	116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0.96	R432000640/R432000643
	3/8 NPT	92	116	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0.96	R432000644/R432000647
	3/8 NPT	92	116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0.96	R432000645/R432000648
	3/8 NPT	92	116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0.96	R432000646/R432000649

## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Secondary pressure [psi]	Options	Weight [lbs]	Part no. without pressure gauge (Poly./Metal)
	1/4 NPT	71	116	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0.67	R432000626/R432000629
	1/4 NPT	71	116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0.77	R432000627/R432000630
	1/4 NPT	71	116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0.77	R432000628/R432000631
	3/8 NPT	92	116	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0.77	R432000632/R432000635
	3/8 NPT	92	116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0.77	R432000633/R432000636
	3/8 NPT	92	116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0.77	R432000634/R432000637

Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 1$  bar)

# Compressed air maintenance unit, series AS2-Inch

Filter regulator AS2-FRE, 1/4 NPT - 3/8 NPT, ATEX approved

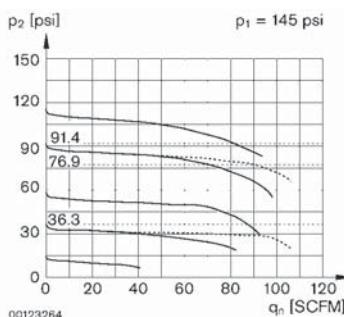
**AVVENTICS**

## ▲ Accessories (to be ordered separately)

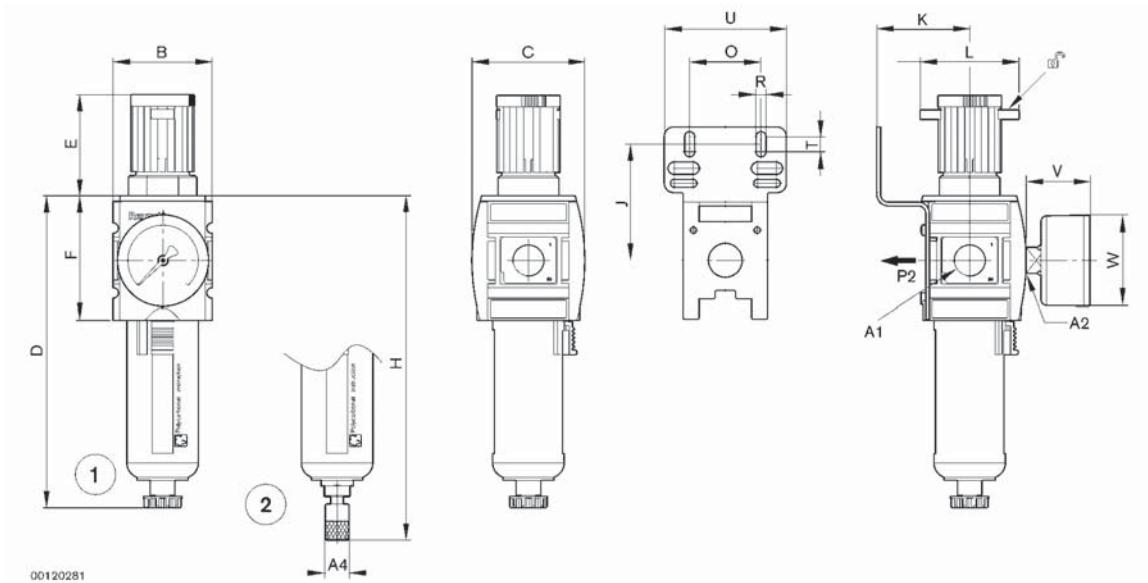
Accessory	Part no.
Filter insert, 5 µm	1829207061
Pressure regulator valve seal kit	R961400030
Compression spring	R961400036
Mounting plate AS2-MBR-...-W01	R432031071
Mounting strap AS2-MBR-...-W03	R412006370
Block assembly kit AS2-MBR-...-W04	R412006371

See accessories section for filter reservoirs

## Pressure characteristics curve



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



(mounting bracket not included, order separately)

- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	O	R	T	U	V	W
1/4 NPT	1/4 NPT	G 1/8	2.047	2.323	6.437	2.094	2.559	7.106	2.433	1.945	2.047	1.496	0.213	0.394	2.559	1.378	2
3/8 NPT	1/4 NPT	G 1/8	2.047	2.323	6.437	2.094	2.559	7.106	2.433	1.945	2.047	1.496	0.213	0.394	2.559	1.378	2

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

Standard filter AS2-FLS, 5 micron, 1/4 NPT - 3/8 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Filter element replaceable	
Supply pressure	See table	
Ambient temperature	-10 °C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Cover: ABS Filter element: Polyethylene	
Reservoir capacity	28 cm³ (0.95 U.S. Fl. oz.)	
Filter porosity	5 µm	
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Optionally with a semi or fully automatic condensate drain

Condensate drain opened without pressure or closed without pressure.

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Supply pressure [psi]	Options	Weight [lbs]	Part no. (Poly./Metal)
	1/4 NPT	78	7 ... 232	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0.47	R432000500/R432000503
	1/4 NPT	78	21 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0.56	R432000501/R432000504
	1/4 NPT	78	0 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0.56	R432000502/R432000505
	3/8 NPT	85	7 ... 232	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0.47	R432000506/R432000509
	3/8 NPT	85	21 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0.56	R432000507/R432000510
	3/8 NPT	85	0 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0.56	R432000508/R432000511

Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 1$  bar)

## Accessories (to be ordered separately)

	Accessory	Part no.
		1829207061
		R432031071
	Filter element, 5 µm	R412006370
	Mounting plate AS2-MBR-....-W01	R412006371
	Mounting strap AS2-MBR-....-W03	
	Block assembly kit AS2-MBR-....-W04	

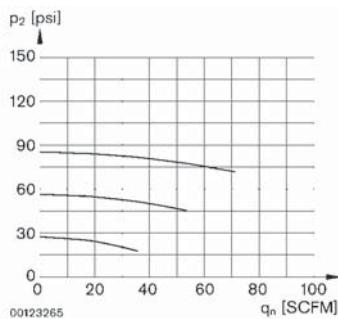
See accessories for filter reservoirs

# Compressed air maintenance unit, series AS2-Inch

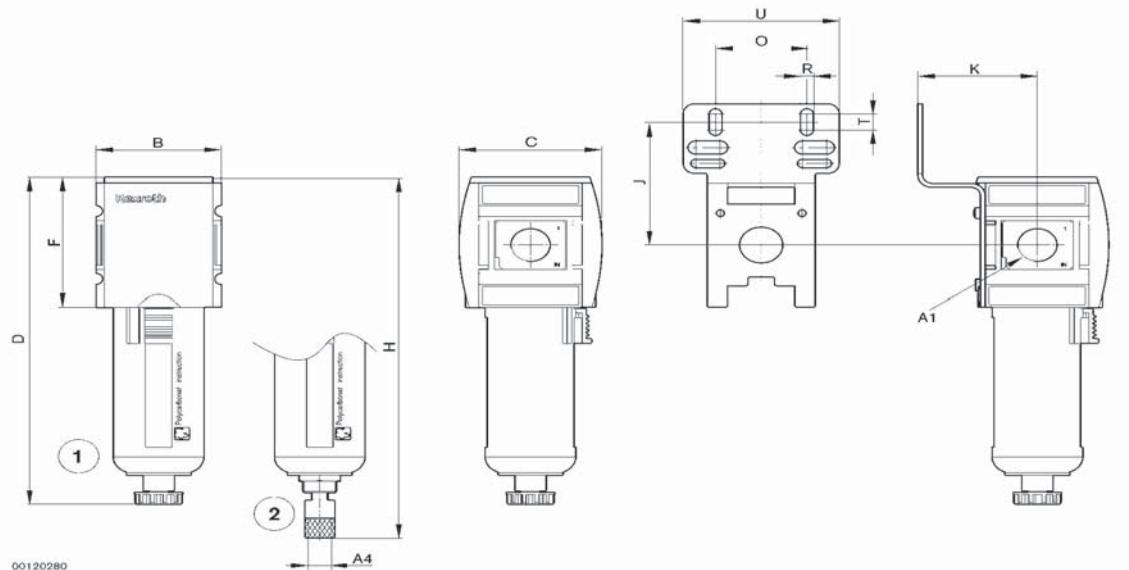
Standard filter AS2-FLS, 5 micron, 1/4 NPT - 3/8 NPT, ATEX approved

AVVENTICS<sup>A</sup>

## Flow rate characteristic



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



(mounting bracket not included, order separately)

- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U
1/4 NPT	G 1/8	2.047	2.323	6.437	2.559	7.106	2.433	1.945	1.496	0.213	0.394	2.559
3/8 NPT	G 1/8	2.047	2.323	6.437	2.559	7.106	2.433	1.945	1.496	0.213	0.394	2.559

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

Pre-filter AS2-FLP, 0.3 micron, 1/4 NPT - 3/8 NPT, ATEX approved

**AVVENTICS**



## Technical Data

Type	Pre-filter element replaceable	
Supply pressure	See table	
Temperature range	-10 °C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Cover: ABS Filter element: Polymer impregnated paper	
Reservoir capacity	12 cm³ (0.4 U.S. Fl. oz.) (with semi-automatic)	
Filter porosity	0.3 µm	
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Pre-filter for separating solid impurities up to 0.3 µm from compressed air and gases

The filter element should be exchanged if there is an increase of  $\Delta p$  by max. 5 psi or once a year.

Dust separation = 99.99 %

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 2

- Humidity - water content: class 8

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Supply pressure [psi]	Options	Weight [lbs]	Part no. (Poly./Metal)
	1/4 NPT	14	7 ... 232	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0.49	R432000512/R432000515
	1/4 NPT	14	21 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0.58	R432000513/R432000516
	1/4 NPT	14	0 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0.58	R432000514/R432000517
	3/8 NPT	14	7 ... 232	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0.58	R432000518/R432000521
	3/8 NPT	14	21 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0.58	R432000519/R432000522
	3/8 NPT	14	0 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0.58	R432000520/R432000523

Nominal flow at inlet pressure 91 psi and 1.5 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 0.1$  bar)

Q = qn x f (f = Correction factor for various supply pressures p1)																
p1 [psi]	14	29	43	58	72	87	101	116	130	145	159	174	188	203	217	232
f	0.25	0.38	0.5	0.65	0.75	0.88	1	1.13	1.25	1.38	1.5	1.63	1.75	1.88	2	2.13

## ▲ Accessories (to be ordered separately)

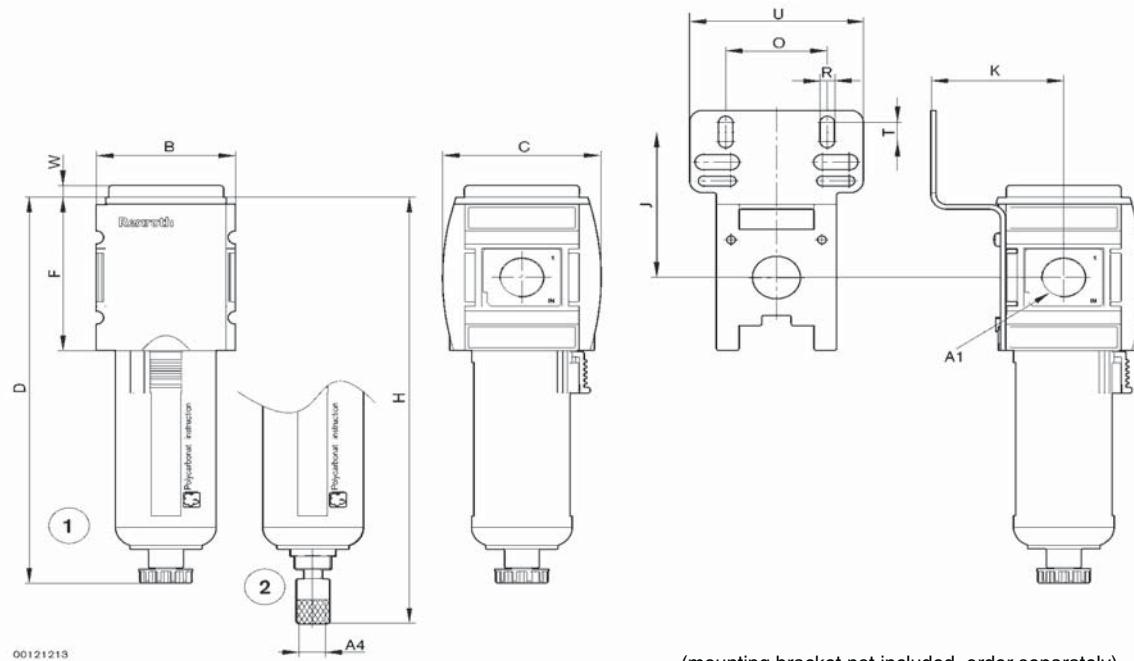
	Accessory	Part no.
	Filter element for automatic operation	1829207047
	Filter element for semi-automatic operation	R961400025
	Mounting plate AS2-MBR-...-W01	R432031071
	Mounting strap AS2-MBR-...-W03	R412006370
	Block assembly kit AS2-MBR-...-W04	R412006371

See accessories for pre-filter reservoirs

# Compressed air maintenance unit, series AS2-Inch

Pre-filter AS2-FLP, 0.3 micron, 1/4 NPT - 3/8 NPT, ATEX approved

**AVENTICS**



(mounting bracket not included, order separately)

- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U	W
1/4 NPT	G 1/8	2.047	2.323	6.437	2.559	7.106	2.433	1.945	1.496	0.213	0.394	2.559	0.197
3/8 NPT	G 1/8	2.047	2.323	6.437	2.559	7.106	2.433	1.945	1.496	0.213	0.394	2.559	0.197

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

Coalescing filter AS2-FLC, 0.01 micron, 1/4 NPT - 3/8 NPT, ATEX approved

**AVVENTICS**



## Technical Data

Type	Micro-filter element replaceable	
Supply pressure	See table	
Temperature range	-10 °C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Cover: ABS Filter element: Borsilicate glass fibre	
Reservoir capacity	12 cm³ (0.4 U.S. Fl. Oz.)	
Filter porosity	0.01 µm	
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	

Standard	NFE 49004
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\* with dried air

Working pressure

15 – 145 psi

Micro filter for the separation of oil, water and solid impurities of up to 0.01 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 1

- Oil content: class 1

The filter element must be replaced after a pressure rise  $\Delta p$  of max. 5 psi or once a year.

Filter is resistant to mineral oils and synthetic oils

Oil separation, residual oil content < 0.01 mg/m³ at t = 68 °F (+20 °C) and p1 = 101 psi

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Supply pressure [psi]	Options	Weight [lbs]	Part no. (Poly./Metal) (*w/contam.display)
	1/4 NPT	11	7 ... 232	Polycarbonate w/guard or metal bowl, with or w/o contamination display, semi-automatic, w/o pressure: open	0.49	R432000524/R432000527 R432000536*/R432000539*
	1/4 NPT	11	21 ... 232	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: open	0.58	R432000525/R432000528 R432000537*/R432000540*
	1/4 NPT	11	0 ... 232	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: closed	0.58	R432000526/R432000529 R432000538*/R432000541*
	3/8 NPT	11	7 ... 232	Polycarbonate w/guard or metal bowl, with or w/o contamination display, semi-automatic, w/o pressure: open	0.49	R432000530/R432000533 R432000542*/R432000545*
	3/8 NPT	11	21 ... 232	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: open	0.58	R432000531/R432000534 R432000543*/R432000546*
	3/8 NPT	11	0 ... 232	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: closed	0.58	R432000532/R432000535 R432000544*/R432000547*

Nominal flow at inlet pressure 91 psi and 1.5 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 0.1$  bar)

Q = qn x f (f = Correction factor for various supply pressures p1)																
p1 [psi]	14	29	43	58	72	87	101	116	130	145	159	174	188	203	217	232
f	0.25	0.38	0.5	0.65	0.75	0.88	1	1.13	1.25	1.38	1.5	1.63	1.75	1.88	2	2.13

Flush mounted cylinder switches



# Compressed air maintenance unit, series AS2-Inch

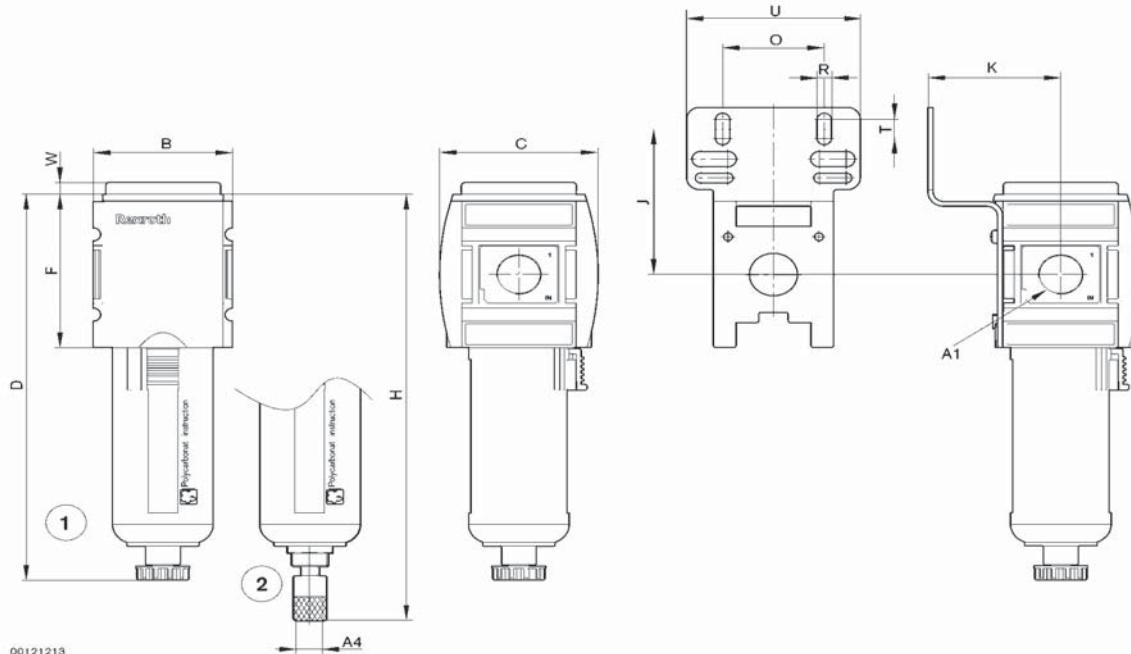
Coalescing filter AS2-FLC, 0.01 micron, 1/4 NPT - 3/8 NPT, ATEX approved

**AVVENTICS**

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Filter element for fully automatic operation	R961400026
Filter element for semi-automatic operation	R961400027
Mounting plate AS2-MBR-....-W01	R432031071
Mounting strap AS2-MBR-....-W03	R412006370
Block assembly kit AS2-MBR-....-W04	R412006371

See accessories for microfilter reservoir



(mounting bracket not included, order separately)

- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U	W
1/4 NPT	G 1/8	2.047	2.323	6.437	2.559	7.106	2.433	1.945	1.496	0.213	0.394	2.559	0.197
3/8 NPT	G 1/8	2.047	2.323	6.437	2.559	7.106	2.433	1.945	1.496	0.213	0.394	2.559	0.197

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

Active carbon filter AS2-FLA, 1/4 NPT - 3/8 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Filter element replaceable	
Supply pressure	See table	
Temperature range	-10 °C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Filter element: Active carbon Cover: ABS	
Reservoir capacity	12 cm³ (0.4 U.S. Fl. Oz.)	
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Active carbon filter for absorption of oil vapor in compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3
- Humidity - water content: class 8
- Oil content: class 1

Oil separation, residual oil content < 0.005 mg/m³ at t = 68 °F (+20 °C) and p1 = 101 psi

A micro filter must be connected upstream as a prefilter

## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Supply pressure [psi]	Weight [lbs]	Part no. (Poly./Metal)
	1/4 NPT	23	0 ... 232	0.49	R432000548/R432000549
	3/8 NPT	24	0 ... 232	0.49	R432000550/R432000551

Q = qn x f (f = Correction factor for various supply pressures p1)																
p1 [psi]	14	29	43	58	72	87	101	116	130	145	159	174	188	203	217	232
f	0.25	0.38	0.5	0.65	0.75	0.88	1	1.13	1.25	1.38	1.5	1.65	1.75	1.88	2	2.13

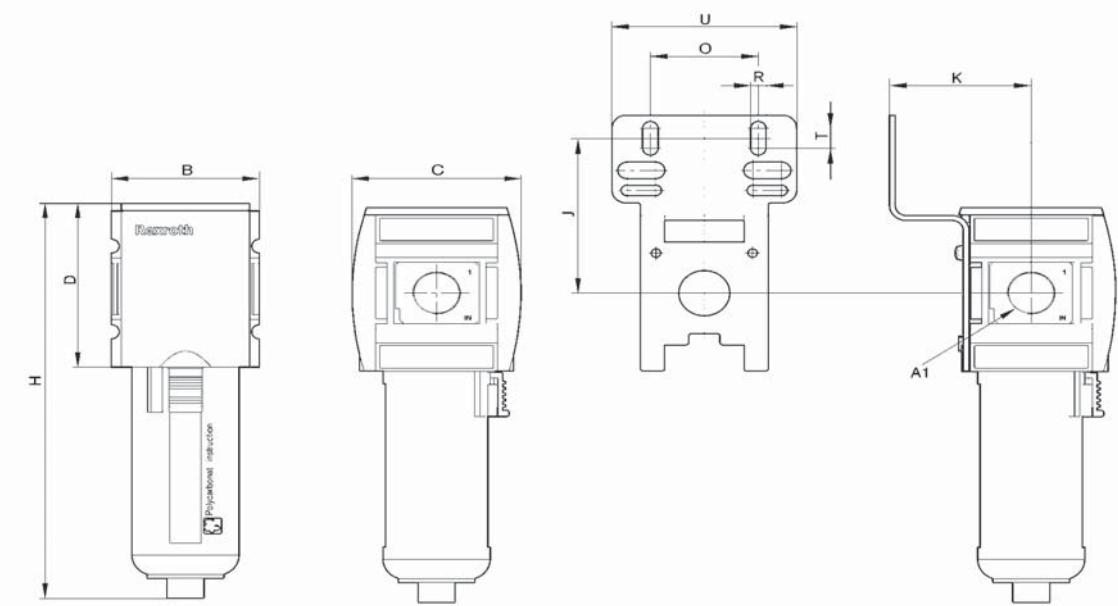
Nominal flow at inlet pressure 91 psi and 1.5 psi drop (P<sub>1</sub> = 6.3 bar, ΔP = 0.1 bar)

▲ Accessories (to be ordered separately)	Accessory	Part no.
	Active carbon filter reservoir AS2-CLA, metal (no glass) Active carbon filter reservoir AS2-CLA, polycarbonate Active carbon filter element	R412006349 R412006347 1829207044
	Mounting plate AS2-MBR-...-W01 Mounting strap AS2-MBR-...-W03 Block assembly kit AS2-MBR-...-W04	R432031071 R412006370 R412006371

# Compressed air maintenance unit, series AS2-Inch

Active carbon filter AS2-FLA, 1/4 NPT - 3/8 NPT, ATEX approved

AVVENTICS<sup>®</sup>



00121210

(mounting bracket not included, order separately)

A1	B	C	D	H	J	K	O	R	T	U
1/4 NPT	2.047	2.323	2.559	6.181	2.433	1.949	1.496	0.213	0.394	2.559
3/8 NPT	2.047	2.323	2.559	6.181	2.433	1.949	1.496	0.213	0.394	2.559

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

Lubricator, oil-drop AS2-LBS, with semi-automatic oil filling, 1/4 NPT - 3/8 NPT,  
ATEX approved

**AVENTICS**



## Technical Data

Type	Inspection glass with slotted screw for oil metering Can be filled with oil during operation See table		
Supply pressure	Medium		
Temperature range	-10 °C to +50 °C (14 °F to +122 °F) *		
Medium	Compressed air		
Weight	See table		
Installation position	vertical		
Materials	Body	Polyamide, seals Buna-N(NBR)	
	Thread insert	Die-cast zinc	
	Reservoir	Polycarbonate or die cast zinc, with bayonet catch	
	Bowl guard	Polyamide (polycarbonate bowls only)	
	Seal	ABS	
Reservoir capacity	40 cm³ (1.69 U.S. Fl. Oz.)		
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)		



\* with dried air

Oil type: HL 68 (DIN 51 524 - ISO VG 68)

Standard values for oil metering: 1-2 drops / min at a nominal flow rate of  $q_n = 35$  CFM

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

The unit is equipped with a semi-automatic oil filling mechanism (standard). A threaded connector located in the lower section of the container can be used to connect a hose to the oil tank.

Pressing the top button opens a Venturi nozzle that provides a vacuum in the upper section of the container. This draws the oil into the container.

## Part no.

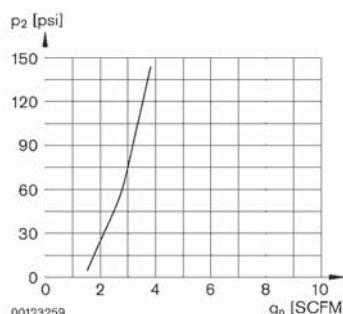
Symbol	Threaded ports	Nominal flow $q_n$ [CFM]	Supply pressure [psi]	Options	Weight [lbs]	Part no. (Poly./Metal)
	1/4 NPT	99	7 ... 232	Polycarbonate w/guard or metal bowl, Ready for level sensor** (non ATEX)	0.5	R432000650/R432000652 R432000651/R432000653
	3/8 NPT	109	7 ... 232	Polycarbonate w/guard or metal bowl, Ready for level sensor** (non ATEX)	0.5	R432000654/R432000656 R432000655/R432000657

## Accessories (to be ordered separately)

	Accessory	Part no.
	Lubricator reservoir AS2-CBS, metal (w/sight glass) Lubricator reservoir AS2-CBS, polycarbonate Lubricator metering set, polycarbonate	R412006358 R412006352 R961400032
	Mounting plate AS2-MBR-....-W01 Mounting strap AS2-MBR-....-W03 Block assembly kit AS2-MBR-....-W04	R432031071 R412006370 R412006371

\*\*For low oil level sensor options, see Accessories Section

## Lubrication activation margin



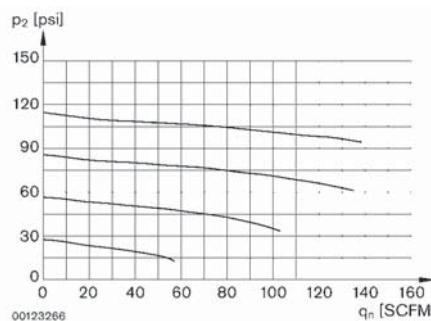
$p_2$  = Secondary pressure;  $q_n$  = nominal flow

# Compressed air maintenance unit, series AS2-Inch

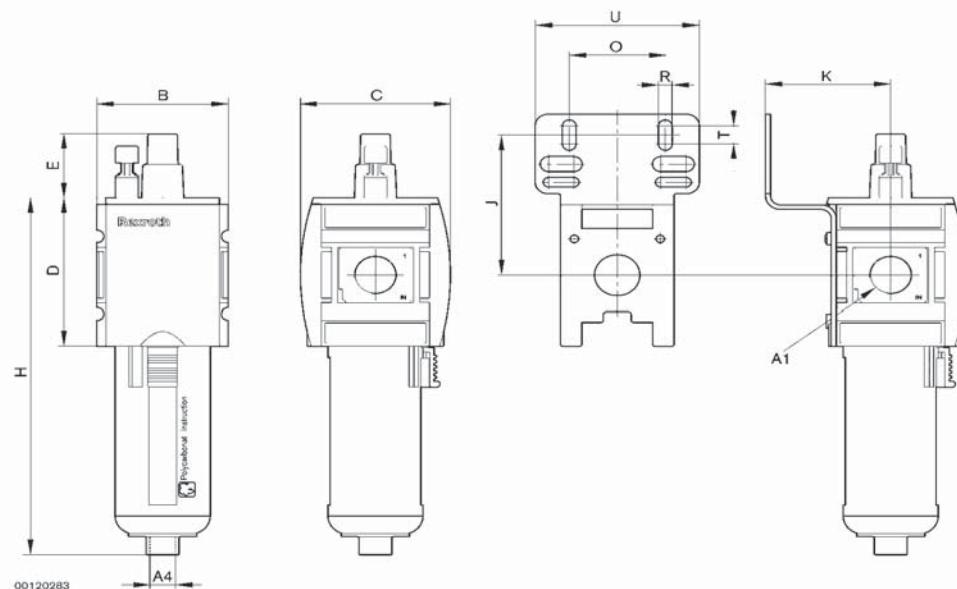
Lubricator, oil-drop AS2-LBS, with semi-automatic oil filling, 1/4 NPT - 3/8 NPT,  
ATEX approved

**AVENTICS**

## Flow rate characteristic



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



(mounting bracket not included, order separately)

A1	A4	B	C	D	E	H	J	K	O	R	T	U
1/4 NPT	G 1/8	2.047	2.323	2.559	1.110	6.181	2.433	1.945	1.496	0.213	0.394	2.559
3/8 NPT	G 1/8	2.047	2.323	2.559	1.110	6.181	2.433	1.945	1.496	0.213	0.394	2.559

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

3/2 directional-control valve AS2-SOV, electrically operated,  
1/4 NPT - 3/8 NPT

**AVENTICS**



## Technical Data

Type	Poppet valve
Working pressure	36 ... 145 psi
Nominal flow $q_n$	see table
Secondary pressure	91 psi and $\Delta p = 15$ psi
Ambient temperature	-10 °C to +50 °C (14 °F to +122 °F) *
Medium	Compressed air
Weight	see table
Pickup power with AC 50 Hz	2.2 VA
Holding power with AC 50 Hz	1.6 VA
Power consumption with DC	2 W
Relative switch-on duration	100 %
Protection class (DIN 40 050)	IP 65 (NEMA4)
with electrical connector	any
Installation position:	
Materials (body)	Polyamide, seals Buna-N(NBR)
Thread bushing	Die-cast zinc
Cover	ABS

\* with dried air



## ► Version:

Cut-off and sequencing valve with unrestricted cross-section.  
Two switch positions: a) Basic position: input closed, output ventilated; b) Operated: input and output connected, exhaust closed.  
Connection via electrical connector shape C, DIN 43 650.  
Please observe note regarding compressed air preparation!

	Thread connection NPT	Operational voltage	Qn CFM	Operating pressure [psi]	Weight [lbs]	Notes	Part No.
	1/4"	-				1	R432000668
	1/4"	-				2	R432000871
	1/4"	24VDC ±10%	64	36 ... 145	0.48	3	R432000669
	1/4"	110VAC 50/60Hz				3	R432000670
	1/4"	240VAC 50/60Hz				3	R432000671
	3/8"	-				1	R432000672
	3/8"	-				2	R432000872
	3/8"	24VDC ±10%	71	36 ... 145	0.48	3	R432000673
	3/8"	110VAC 50/60Hz				3	R432000674
	3/8"	240VAC 50/60Hz				3	R432000675

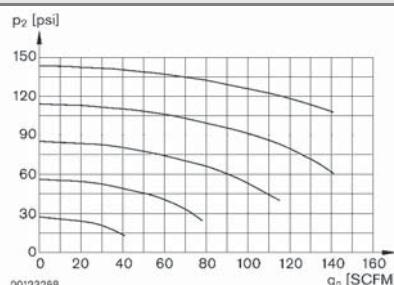
1) without DO16 pilot valve 2) with CNOMO interface, without pilot valve 3) with DO16 pilot valve

## ▲ Accessories (to be ordered separately)

	<b>Accessory</b> Silencer: sintered bronze (short)	<b>Part no.</b> <b>R432031044</b>
	Connector, shape C, DIN 43 650 (for all except CNOMO)	1834484187
	Connector, shape C, with LED and protective circuit** (for all except CNOMO)	1834484XXX
	Mounting strap AS2-MBR-...-W03	<b>R412006370</b>
	Mounting plate AS2-MBR-...-W01	<b>R432031071</b>
	Block assembly kit AS2-MBR-...-W04	<b>R412006371</b>

\*\*See online catalog, series CN1

## Flow rate characteristic



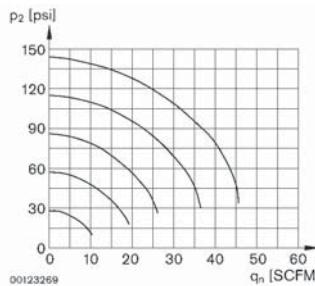
$p_2$  = secondary pressure  
 $q_n$  = nominal flow

# Compressed air maintenance unit, series AS2-Inch

3/2 directional-control valve AS2-SOV, electrically operated,  
1/4 NPT - 3/8 NPT

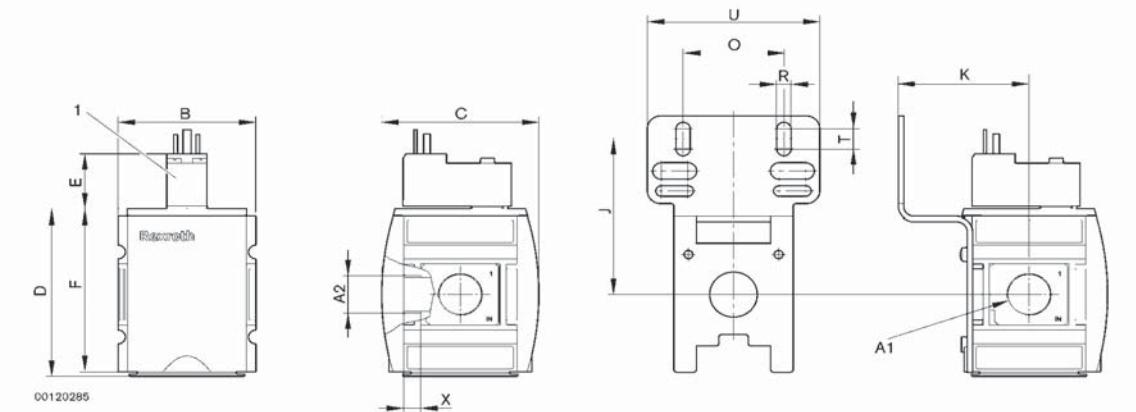
AVVENTICS 

## Rear exhaust



$p_2$  = secondary pressure  
 $q_n$  = nominal flow

## Drawing



A1	A2 *	B	C	D	E	F	J	K	O	R	T	U	X
1/4 NPT	G 1/4	2.047	2.323	2.630	0.862	2.559	2.433	1.945	1.496	0.213	0.394	2.559	0.394
3/8 NPT	G 1/4	2.047	2.323	2.630	0.862	2.559	2.433	1.945	1.496	0.213	0.394	2.559	0.394

\* Exhaust  
Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

3/2 directional-control valve AS2-SOV, pneumatically operated,  
1/4 NPT - 3/8 NPT, ATEX approved

AVVENTICS 



## Technical Data

Type	Poppet valve
Working pressure	36 ... 145 psi
Nominal flow $q_n$	see table
Secondary pressure	91 psi and $\Delta p = 15$ psi
Ambient temperature	-10 °C to +50 °C (14 °F to +122 °F) *
Medium	Compressed air
Weight	see table
Installation position	any

Materials (body)	Polyamide, seals Buna-N(NBR)
Thread bushing	Die-cast zinc
Cover	ABS

ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)
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\* with dried air



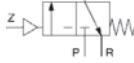
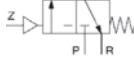
## ► Version:

Cut-off and sequencing valve with unrestricted cross-section.

Two switch positions: a) Basic position: input closed, output ventilated; b) Operated: input and output connected, exhaust closed.

Please observe note regarding compressed air preparation!

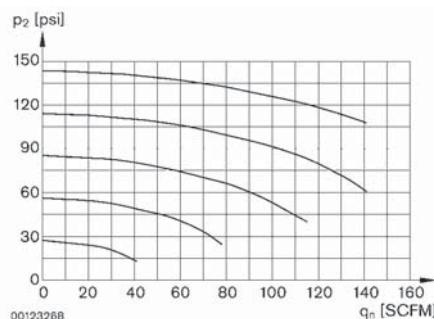
## ► Part no.

Symbol	Threaded ports	Nominal flow $q_n$ [CFM]	With options	Weight [lbs]	Part no.
	1/4 NPT	64	Change-over valve / shut-off valve pneumatically operated	0.48	R432000666
	3/8 NPT	71	Change-over valve / shut-off valve pneumatically operated	0.48	R432000667

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Silencer: sintered bronze (short)	R432031044
Mounting strap AS2-MBR-...-W03	R412006370
Mounting plate AS2-MBR-...-W01	R432031071
Block assembly kit AS2-MBR-...-W04	R412006371

## Flow rate characteristic



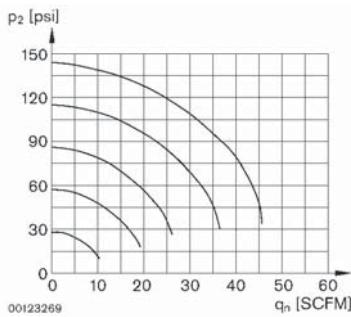
$p_2$  = secondary pressure  
 $q_n$  = nominal flow

# Compressed air maintenance unit, series AS2-Inch

3/2 directional-control valve AS2-SOV, pneumatically operated,  
1/4 NPT - 3/8 NPT, ATEX approved

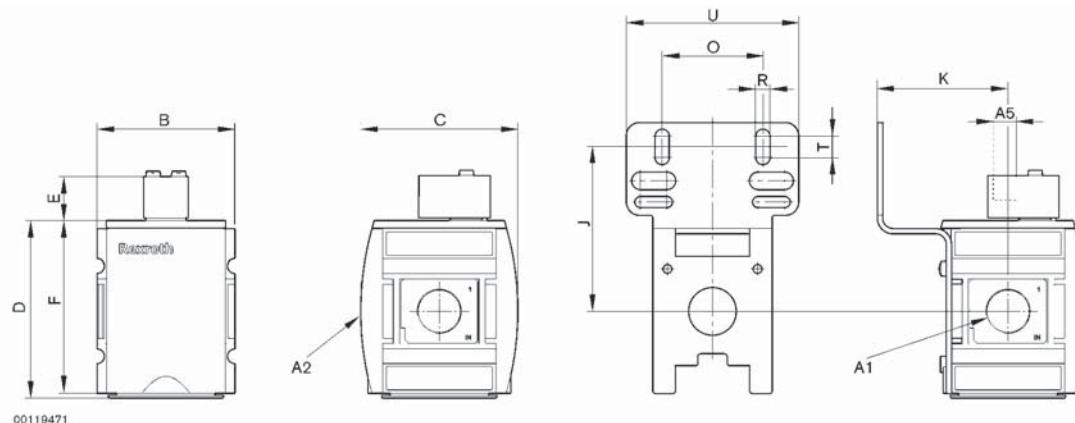
AVVENTICS 

## Rear exhaust



p<sub>2</sub> = secondary pressure  
q<sub>n</sub> = nominal flow

## Drawing



(mounting bracket not included, order separately)

A1	A2 *	A5	B	C	D	E	F	J	K	O	R	T	U	X
1/4 NPT	1/4 NPT	G 1/8	2.047	2.323	2.630	0.669	2.559	2.433	1.945	1.496	0.213	0.394	2.559	0.394
3/8 NPT	1/4 NPT	G 1/8	2.047	2.323	2.630	0.669	2.559	2.433	1.945	1.496	0.213	0.394	2.559	0.394

\* Exhaust

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

3/2-way shut-off valve (ball valve) AS2-BAV, mechanically operated, lockable option, 1/4 NPT - 3/8 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	3/2 directional-control valve, operated by a knob, 3-fold lockable See table		
Nominal flow qn	Secondary pressure = 91 psi and $\Delta p = 15$ psi		
Ambient temperature	–10 °C to +50 °C (14 °F to +122 °F) *		
Medium	Compressed air		
Weight	See table		
Installation position	any		
Materials	Body	Polyamide, seals Buna-N(NBR)	
	Thread bushing	Die-cast zinc	
	Cover	ABS	
	Lockable slide plate	Zinc plated steel	
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)		



\* with dried air

Knob, can be turned 90° (Open-Closed) and can be locked in the closed position with a padlock

Knob with switch position display: crosswise: inlet closed, outlet to exhaust; lengthways: inlet and outlet connected, air exhaust closed

Exhaust air can be collected (1/4" NPT )

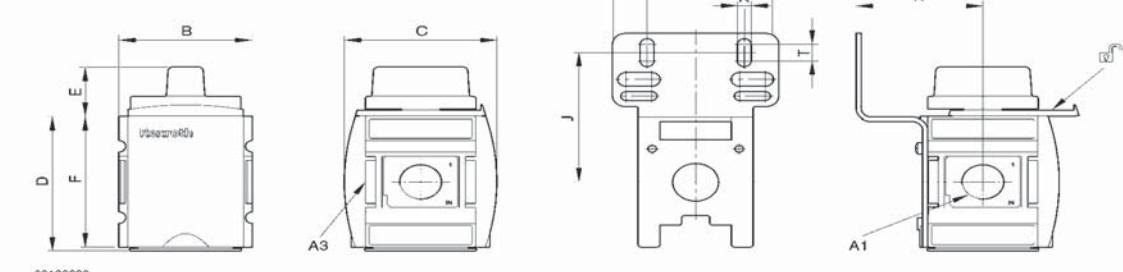
Air exhaust from connection A to R: nominal size 1.5mm

## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Weight [lbs]	Part no.
	1/4 NPT	106	0.45	R432002358 (lockable)
	3/8 NPT	106	0.45	R432002359 (lockable)

## ▲ Accessories (to be ordered separately)

Accessories	Part no.
Pneumatic silencer (short)	R432031044
Mounting plate AS2-MBR-...-W01	R432031071
Block assembly kit AS2-MBR-...-W04	R412006371
Mounting strap AS2-MBR-...-W03	R412006370



(mounting bracket not included, order separately)

<b>A1</b>	<b>A3</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>J</b>	<b>K</b>	<b>O</b>	<b>R</b>	<b>T</b>	<b>U</b>
1/4 NPTF	1/4 NPT	2.047	2.323	2.512	0.925	2.441	2.433	1.945	1.496	0.213	0.394	2.559
3/8 NPTF	1/4 NPT	2.047	2.323	2.512	0.925	2.441	2.433	1.945	1.496	0.213	0.394	2.559

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

Filling valve (soft start) AS2-SSV, 1/4 NPT - 3/8 NPT, ATEX approved

AVVENTICS 



## Technical Data

Type	Poppet valve
Operating pressure	36 ... 232 psi
Nominal flow qn	see table
Secondary pressure	91 psi and $\Delta p = 15$ psi
Ambient temperature	-10 °C to +50 °C (14 °F to +122 °F) *
Medium	Compressed air
Weight	see table
Installation position	any
Materials (body)	Polyamide, seals Buna-N(NBR)
Threaded bushing	Die-cast zinc
Cover	ABS
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)

\* with dried air



## ► Version:

Opening pressure: approx. 50% of input pressure

Actuating method: via secondary pressure

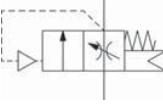
Only for closed systems

Please observe note regarding compressed air preparation!

Additional technical data: see 3/2 directional-control valve AS 2 and filling valve AS 2

Slowly builds up the pressure in pneumatic installations, i.e. prevents sudden pressure build-up after a restart following mains pressure failure or EMERGENCY OFF, thus preventing dangerous, sudden cylinder movements.

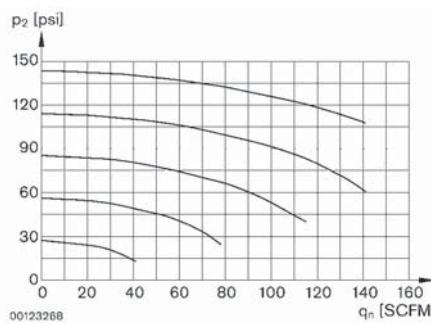
## ► Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	With options	Weight [lbs]	Part no.
	1/4 NPT	81	Filling adjustable	0.45	R432000676
	3/8 NPT	81	Filling adjustable	0.45	R432000677

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Mounting plate AS2-MBR-....-W01	R432031071
Mounting strap AS2-MBR-....-W03	R412006370
Block assembly kit AS2-MBR-....-W04	R412006371

## Flow rate characteristic



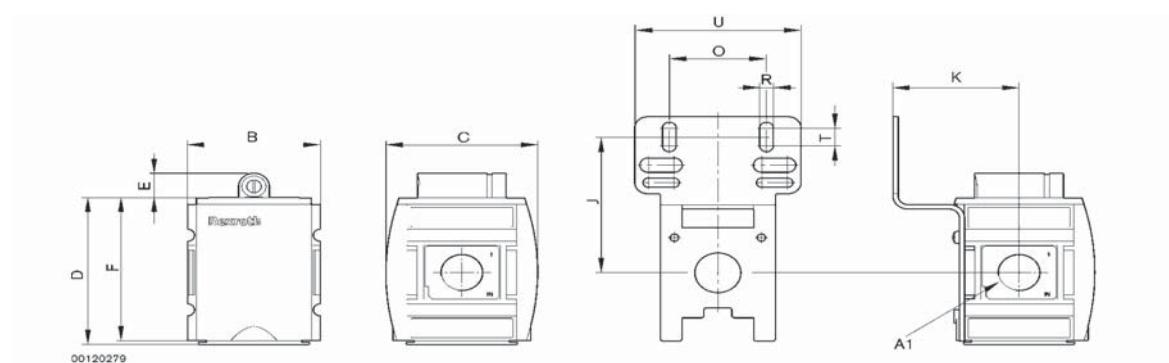
p<sub>2</sub> = secondary pressure

q<sub>n</sub> = nominal flow

# Compressed air maintenance unit, series AS2-Inch

Filling valve (soft start) AS2-SSV, 1/4 NPT - 3/8 NPT, ATEX approved

AVVENTICS<sup>A</sup>



(mounting bracket not included, order separately)

A1	B	C	D	E	F	J	K	O	R	T	U
1/4 NPT	2.047	2.323	2.630	0.441	2.559	2.433	1.945	1.496	0.213	0.394	2.559
3/8 NPT	2.047	2.323	2.630	0.441	2.559	2.433	1.945	1.496	0.213	0.394	2.559

Dimensions in inches

# Compressed air maintenance unit, series AS2-Inch

Distributor block AS2-DIS, 3-way, 1/4 NPT - 3/8 NPT, ATEX approved

**AVVENTICS**



## Technical Data

Nominal flow qn Secondary pressure = 91 psi and $\Delta p = 15$ psi	See table
Ambient temperature range	-10 °C to +50 °C (14 °F to 122 °F) *
Medium	Compressed air
Weight	See table
Installation position	any
Materials	Body Polyamide, seals Buna-N(NBR) Threaded insert Die cast Zinc Cover ABS
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)



Suitable for flange assembly of a mechanical vacuum/pressure switch

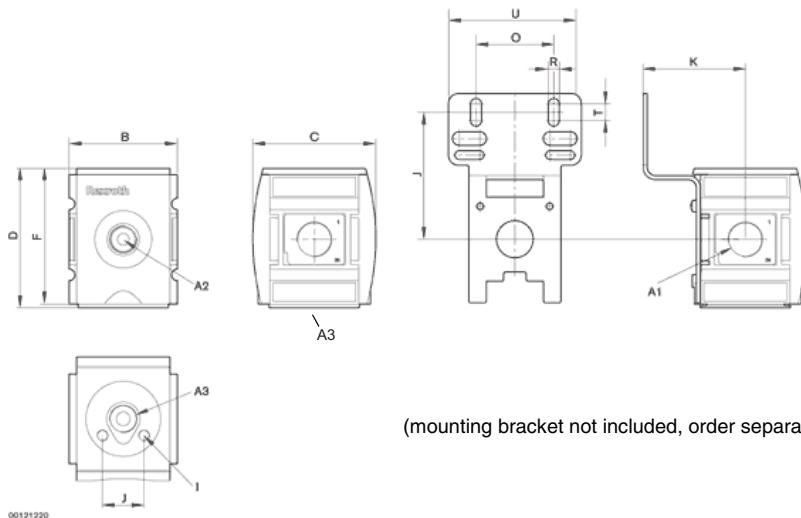
## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Weight [lbs]	Part no.
	1/4 NPT	95 (1->2) <sup>1)</sup>	0.55	R432000658
	3/8 NPT	127 (1->2) <sup>1)</sup>	0.55	R432000659

1) top (1->5) = 70 CFM; front (1->4) = 31 CFM; below (1->3) = 70 CFM

## Accessories (to be ordered separately)

Accessory	Part no.
Mechanical vacuum switch, pabs = -13 ... 0 psi	0821100020
Mechanical pressure switch, p1 = 2 ... 43 psi	0821100021
Mechanical pressure switch, p1 = 15 ... 232 psi	0821100023
Block assembly kit AS2-MBR-...-W04	R412006371
Mounting strap AS2-MBR-...-W03	R412006370
Mounting plate AS2-MBR-...-W01	R432031071



A1	A2	A3	B	C	D	F	I	J	K	O	R	T	U
1/4 NPT	1/4 NPT	1/4 NPT	2.047	2.323	2.630	2.559	M5 (10-32)	0.787	1.945	1.496	0.213	0.394	2.559
3/8 NPT	1/4 NPT	1/4 NPT	2.047	2.323	2.630	2.559	M5 (10-32)	0.787	1.945	1.496	0.213	0.394	2.559

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

AS3 Inch (3/8" and 1/2" NPT) version index



	Page
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AS3-RGS Pressure regulator, NPT .....	41
AS3-RGS-DS Pressure regulator, manifold version, NPT .....	43
AS3-RGP Precision pressure regulator, NPT .....	45
AS3-RGP-DS Precision pressure reg., manifold version, NPT ....	47
AS3-FRE Filter regulator, NPT .....	49
AS3-FLS Standard filter (5 micron), NPT .....	52
AS3-FLP Pre-filter (0.3 micron), NPT.....	54
AS3-FLC Coalescing filter (0.01 micron), NPT .....	56
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# Compressed air maintenance unit, series AS3-Inch

FR+L Maintenance unit AS3-ACD, 2-in-1, 3/8 NPT - 1/2 NPT, ATEX approved

**AVVENTICS**



## Technical Data

Type	Filter Pressure regulator	Filter element replaceable Diaphragm-type pressure regulator with relief opening and reverse flow capability Regulator knob lockable
	Lubricator	Standard oil-drop lubricator with automatic oil filling Fill level – sight glass with slotted screw adjustment for oil metering
		Can be filled with oil during operation
Supply pressure	Condensate drain	semi-automatic: 7 ... 232 psi fully automatic: 21 ... 232 psi
Secondary pressure Nominal flow Qn (CFM)		See table
Secondary pressure = 91 psi and $\Delta p = 15 \text{ psi}$		See table
Temperature range		-10° to +50 °C (14 °F ... +122 °F) *
Medium		Compressed air
Weight		See table
Installation position		Vertical
Materials	Body Thread insert Reservoir Bowl guard Cover Filter element	Polyamide, seals Buna-N(NBR) Die-cast zinc Polycarbonate or die cast zinc, with bayonet catch Polyamide (polycarbonate bowls only) ABS Polyethylene
Reservoir capacity	Filter Lubricator	49 cm³ (1.6 U.S. Fl. oz.) (semi-automatic) 80 cm³ (2.7 U.S. Fl. oz.)
Filter porosity		5 µm
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Oil type: HL 68 (DIN 51 524 - ISO VG 68)

Standard values for oil metering: 1-2 drops / min at a nominal flow rate of Qn = 35.30 CFM

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

► - semi and fully automatic condensate drain \*

\* either opened without pressure (NO) or closed without pressure (NC)

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow Qn (CFM)	Secondary pressure [psi]	Options	Weight [lbs.]	Part no. with pressure gauge (Poly./Metal)
	3/8 NPT	123	7 ... 116	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	2.24	R432002005/R432002216
	3/8 NPT	123	21 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	2.35	R432002006/R432002217
	3/8 NPT	123	0 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	2.35	R432002007/R432002218
	1/2 NPT	123	7 ... 116	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	2.24	R432002008/R432002222
	1/2 NPT	123	21 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	2.35	R432002009/R432002223
	1/2 NPT	123	0 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	2.35	R432002010/R432002224

Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3 \text{ bar}$ ,  $\Delta P = 1 \text{ bar}$ )

## Accessories (to be ordered separately)

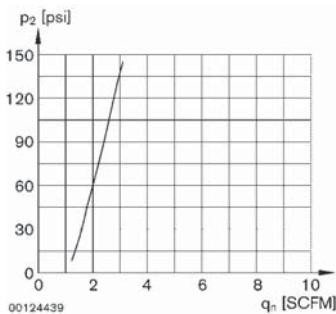
Accessory	Part no.
Spare parts kit: see filter pressure regulator valve AS3-FRE and oil drop lubricator AS3-CBS	
Mounting plate AS3-MBR-....-W01	R432031072
Mounting strap AS3-MBR-....-W03	R412007370
Block assembly kit AS3-MBR-....-W04	R412007371
Mounting flange kit (3/8 inch) AS3-MBR-N038...-W05	R432002017
Mounting flange kit (1/2 inch) AS3-MBR-N012...-W05	R432002018

# Compressed air maintenance unit, series AS3-Inch

FR+L Maintenance unit AS3-ACD, 2-in-1, 3/8 NPT - 1/2 NPT, ATEX approved

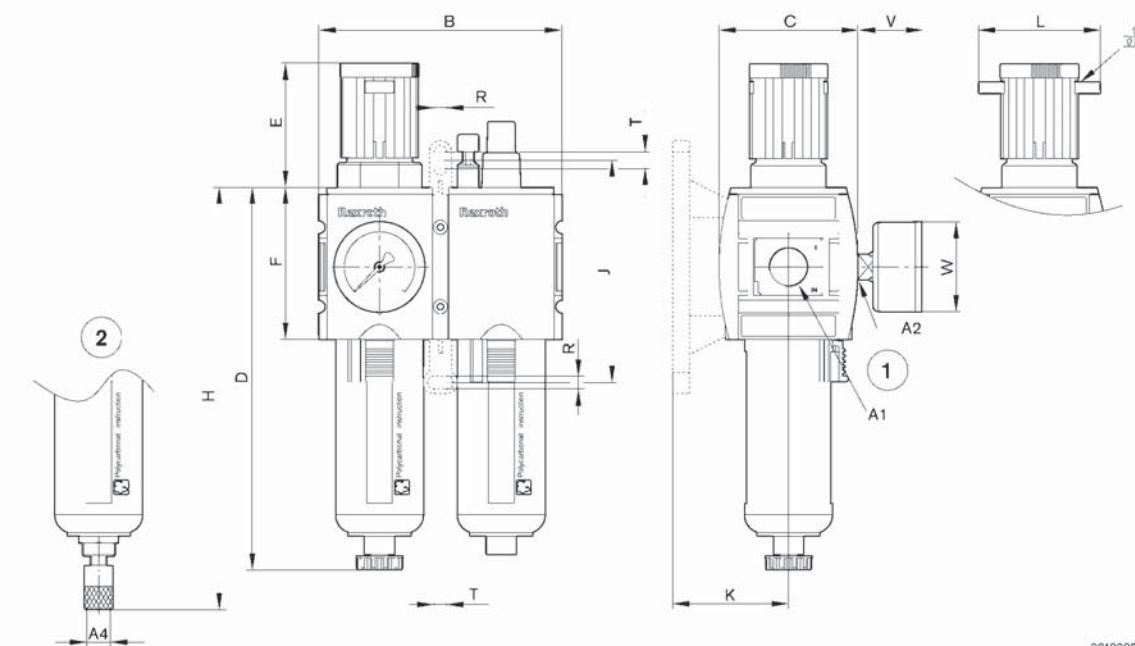
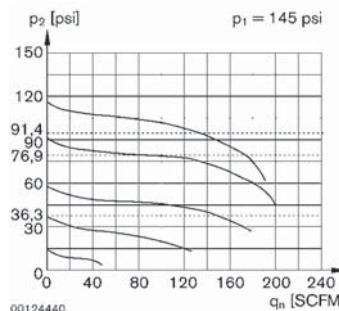
**AVENTICS**

### Lubrication activation margin



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow

#### **Flow rate characteristic (setting range p2: 7 to 116 psi)**



00120286

- 1) Semi-automatic condensate drain
  - 2) Fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	R	T	V	W
3/8 NPT	1/4 NPT	G 1/8	4.961	2.913	7.461	2.500	3.150	8.110	4.094	2.795	2.323	0.252	0.315	1.260	1.969
1/2 NPT	1/4 NPT	G 1/8	4.961	2.913	7.461	2.500	3.150	8.110	4.094	2.795	2.323	0.252	0.315	1.260	1.969

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

FRL Maintenance unit AS3-ACT, 3-in-1, 3/8 NPT - 1/2 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Filter Pressure regulator Lubricator	Filter element replaceable Diaphragm-type pressure regulator with relief opening, reverse flow capability, and lockable regulator knob Standard oil-drop lubricator with semi-automatic oil filling Fill level – sight glass with slotted screw adjustment for oil metering Can be filled with oil during operation
Supply pressure	Condensate drain	semi-automatic: 7 ... 232 psi fully automatic: 21 ... 232 psi See table See table
Secondary pressure Nominal flow Qn Secondary pressure = 91 psi and $\Delta p = 15 \text{ psi}$		
Temperature range Medium Weight Installation position		-10° to +50 °C (14 °F ... 122 °F) * Compressed air See table Vertical
Materials	Body Thread insert Reservoir Bowl guard Cover Filter element	Polyamide, seals Buna-N(NBR) Die-cast zinc Polycarbonate or die cast zinc, with bayonet catch Polyamide (polycarbonate bowls only) ABS Polyethylene
Reservoir capacity	Filter Lubricator	49 cm³ (1.6 U.S. fl oz) (semi-automatic) 80 cm³ (2.7 U.S. fl oz)
Filter porosity		5 µm
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Oil type: HL 68 (DIN 51 524 - ISO VG 68)

Standard values for oil metering: 1-2 drops / min at a nominal flow rate of Qn = 35.30 CFM

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

► - semi and fully automatic condensate drain\*

\* either opened without pressure (NO) or closed without pressure (NC)

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Secondary pressure [psi]	Options	Weight [lbs.]	Part no. with pressure gauge (Poly./Metal)
	3/8 NPT	123	7 ... 116	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	2.98	R43200211/R432002230
	3/8 NPT	123	21 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	3.09	R43200212/R432002231
	3/8 NPT	123	0 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	3.09	R43200213/R432002232
	1/2 NPT	123	7 ... 116	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	2.98	R43200214/R432002236
	1/2 NPT	123	21 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	3.09	R43200215/R432002237
	1/2 NPT	123	0 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	3.09	R43200216/R432002238

Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3 \text{ bar}$ ,  $\Delta P = 1 \text{ bar}$ )

## ▲ Accessories (to be ordered separately)

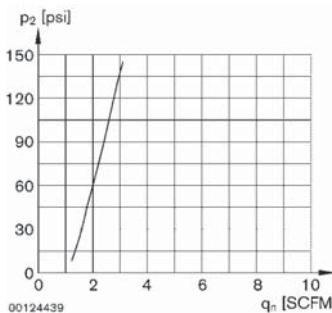
Accessory	Part no.
Spare parts kit: see filter pressure regulator valve AS3-FRE and oil-drop lubricator AS3-CBS	
Mounting plate AS3-MBR-....-W01	R432031072
Mounting strap AS3-MBR-....-W03	R412007370
Block assembly kit AS3-MBR-....-W04	R412007371
Mounting flange kit (3/8 inch) AS3-MBR-N038...-W05	R432002017
Mounting flange kit (1/2 inch) AS3-MBR-N012...-W05	R432002018

# Compressed air maintenance unit, series AS3-Inch

FRL Maintenance unit AS3-ACT, 3-in-1, 3/8 NPT - 1/2 NPT, ATEX approved

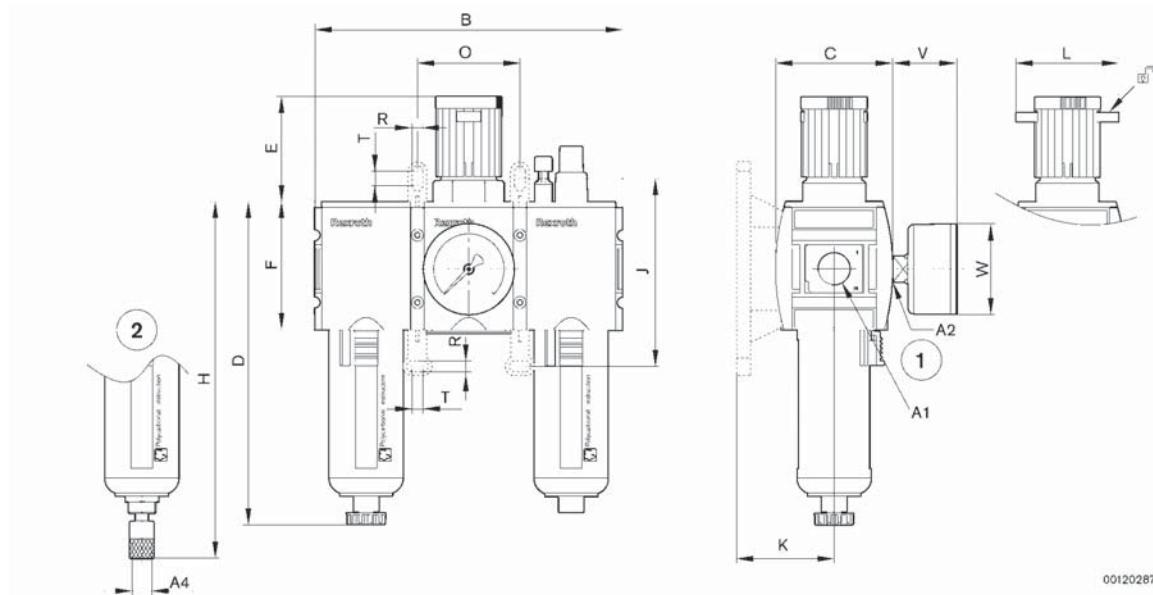
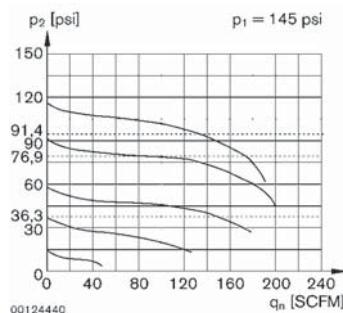
**AVVENTICS**

## Lubrication activation margin



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow

## Flow rate characteristic (setting range $p_2$ : 7 to 116 psi)



- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	O	R	T	V	W
3/8 NPT	1/4 NPT	G 1/8	7.441	2.913	7.461	2.500	3.150	8.110	4.094	2.795	2.323	2.480	0.252	0.315	1.260	1.969
1/2 NPT	1/4 NPT	G 1/8	7.441	2.913	7.461	2.500	3.150	8.110	4.094	2.795	2.323	2.480	0.252	0.315	1.260	1.969

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

Pressure regulator AS3-RGS, 3/8 NPT - 1/2 NPT, ATEX approved

**AVVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability
Supply pressure	232 psi
Secondary pressure	See table
Nominal flow Qn	See table
Secondary pressure = 91 psi and $\Delta p = 15$ psi	
Temperature range	-10 to +50 °C (14 °F ... 122 °F)
Medium	Compressed air
Weight	See table
Installation position	any
Materials	Body Thread insert Polyamide, seals Buna-N(NBR) Die-cast zinc
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)



\* with dried air

## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Secondary pressure [psi]	Weight [lbs.]	Part no. with pressure gauge
	3/8 NPT	58	1 ... 14	1.323	R432001933
	3/8 NPT	162	1 ... 29	1.323	R432001935
	3/8 NPT	176	2 ... 58	1.323	R432001937
	3/8 NPT	151	7 ... 116	1.323	R432001939
	3/8 NPT	151	7 ... 145	1.323	R432001941
	3/8 NPT	123	7 ... 232	1.323	R432001943
	1/2 NPT	58	1 ... 14	1.323	R432001945
	1/2 NPT	162	1 ... 29	1.323	R432001947
	1/2 NPT	176	2 ... 58	1.323	R432001949
	1/2 NPT	183	7 ... 116	1.323	R432001951
	1/2 NPT	183	7 ... 145	1.323	R432001953
	1/2 NPT	141	7 ... 232	1.323	R432001955

## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Secondary pressure [psi]	Weight [lbs.]	Part no. without pressure gauge
	3/8 NPT	58	1 ... 14	1.164	R432001932
	3/8 NPT	162	1 ... 29	1.164	R432001934
	3/8 NPT	178	2 ... 58	1.164	R432001936
	3/8 NPT	151	7 ... 116	1.164	R432001938
	3/8 NPT	151	7 ... 145	1.164	R432001940
	3/8 NPT	123	7 ... 232	1.164	R432001942
	1/2 NPT	58	1 ... 14	1.164	R432001944
	1/2 NPT	162	1 ... 29	1.164	R432001946
	1/2 NPT	176	2 ... 58	1.164	R432001948
	1/2 NPT	183	7 ... 116	1.164	R432001950
	1/2 NPT	183	7 ... 145	1.164	R432001952
	1/2 NPT	141	7 ... 232	1.164	R432001954

## Accessories (to be ordered separately)

Accessory	Part no.
Pressure regulator valve seal kit	R961400144
Mounting plate AS3-MBR-...-W01 (incl. 2 bolts)	R432031072
Mounting strap AS3-MBR-...-W03	R412007370
Block assembly kit AS3-MBR-...-W04	R412007371
Mounting flange kit (3/8 inch) AS3-MBR-N038...-W05	R432002017
Mounting flange kit (1/2 inch) AS3-MBR-N012...-W05	R432002018
Control panel nut AS3-MBR-...-W06	R412007372

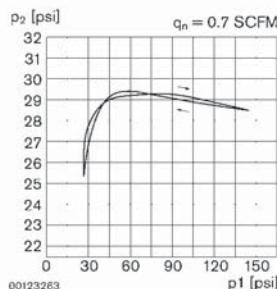
See accessories for pressure gauges

# Compressed air maintenance unit, series AS3-Inch

Pressure regulator AS3-RGS, 3/8 NPT - 1/2 NPT, ATEX approved

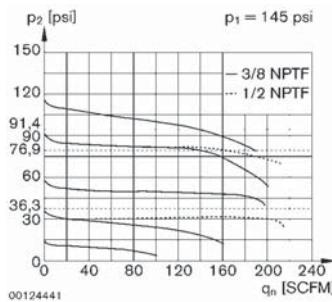
AVVENTICS 

## Pressure characteristics curve

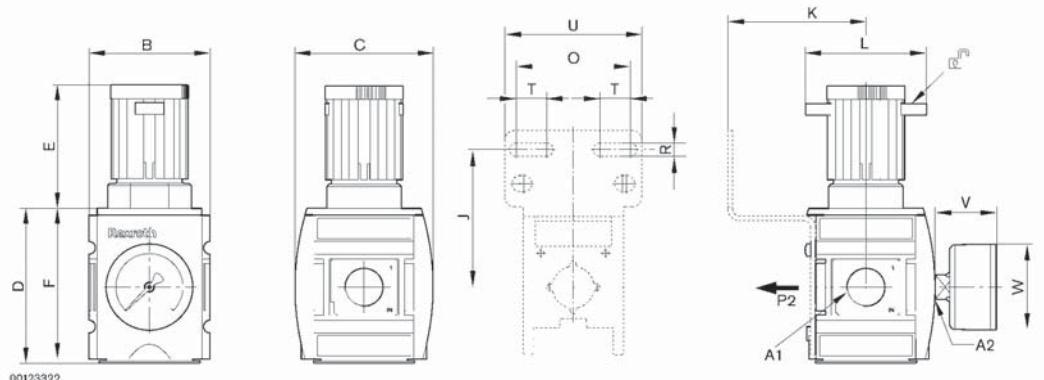


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 7 ... 116 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



A1	A2	B	C	D	E	F	J	K	L	O	R	T	U	V	W
3/8 NPT	1/4 NPT	2.480	2.913	3.228	2.500	3.150	2.854	2.795	2.323	2.362	0.276	0.630	2.835	1.378	1.969
1/2 NPT	1/4 NPT	2.480	2.913	3.228	2.500	3.150	2.854	2.795	2.323	2.362	0.276	0.630	2.835	1.378	1.969

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

Pressure regulator AS3-RGS...DS, with continuous pressure supply,  
3/8 NPT - 1/2 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob	
Supply pressure	232 psi	
Secondary pressure	See table	
Nominal flow Qn	See table	
Secondary pressure = 91 psi and $\Delta p = 15 \text{ psi}$		
Temperature range	-10 to +50 °C (14 °F ... 122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	Any	
Materials	Body Thread insert Cover	Polyamide, seals Buna-N(NBR) Die-cast zinc ABS
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	

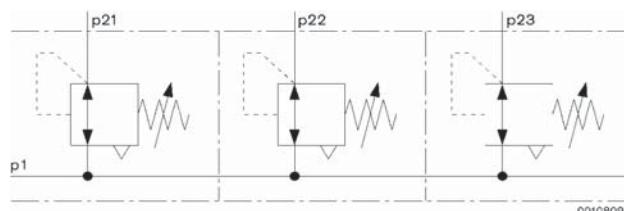


\* with dried air

The p1 working pressure can be supplied from the left or the right in the device combination. With high nominal flows, a supply on both sides is recommended!

In the case of block assembly, only pressure gauge with  $\varnothing \leq 2$  inch can be used

## Example of application



0010809c

## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Secondary pressure [psi]	Weight [lbs.]	Part no. without pressure gauge
	3/8 NPT	58	1 ... 14	1.164	R432002088
	3/8 NPT	162	1 ... 29	1.164	R432002089
	3/8 NPT	176	2 ... 58	1.164	R432002090
	3/8 NPT	151	7 ... 116	1.164	R432002091
	3/8 NPT	151	7 ... 145	1.164	R432002092
	3/8 NPT	123	7 ... 232	1.164	R432002093
	1/2 NPT	58	1 ... 14	1.164	R432002094
	1/2 NPT	162	1 ... 29	1.164	R432002095
	1/2 NPT	176	2 ... 58	1.164	R432002096
	1/2 NPT	183	7 ... 116	1.164	R432002097
	1/2 NPT	183	7 ... 145	1.164	R432002098
	1/2 NPT	141	7 ... 232	1.164	R432002099

## Accessories (to be ordered separately)

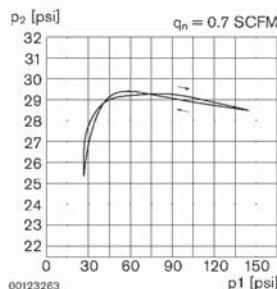
Accessory	Part no.
Pressure regulator valve seal kit	R961400144
Mounting plate AS3-MBR-...-W01 (incl. 2 bolts)	R432031072
Mounting strap AS3-MBR-...-W03	R412007370
Block assembly kit AS3-MBR-...-W04	R412007371
Mounting flange kit (3/8 inch) AS3-MBR-N038...-W05	R432002017
Mounting flange kit (1/2 inch) AS3-MBR-N012...-W05	R432002018
Control panel nut AS3-MBR-...-W06	R412007372

# Compressed air maintenance unit, series AS3-Inch

Pressure regulator AS3-RGS...DS, with continuous pressure supply,  
3/8 NPT - 1/2 NPT, ATEX approved

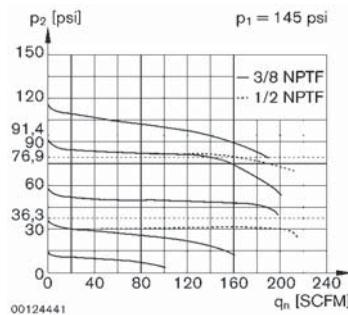
AVVENTICS 

## Pressure characteristics curve

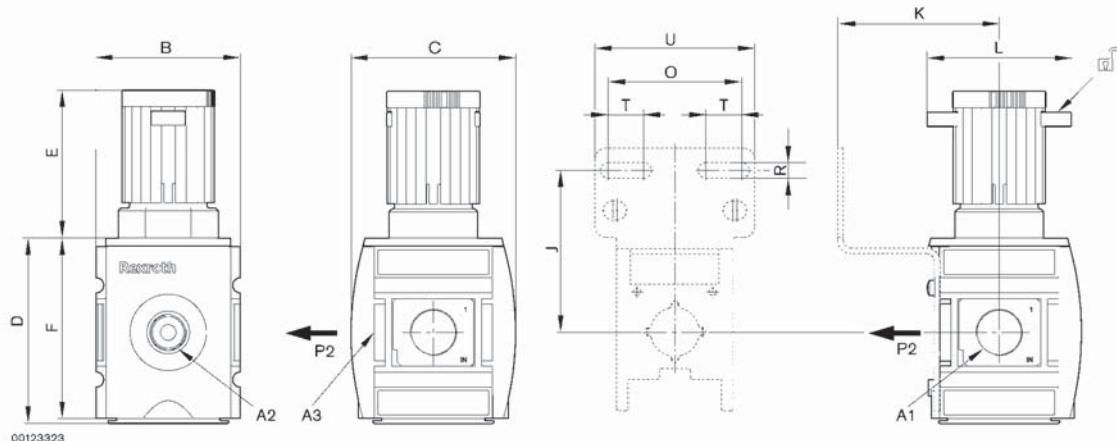


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 7 ... 116 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



$p_2$  = Secondary pressure

A1	A2	A3	B	C	D	E	F	J	K	L	O	R	T	U
3/8 NPT	1/4 NPT	3/8 NPTF	2.480	2.913	3.228	2.500	3.150	2.854	2.795	2.323	2.362	0.276	0.630	2.835
1/2 NPT	1/4 NPT	3/8 NPTF	2.480	2.913	3.228	2.500	3.150	2.854	2.795	2.323	2.362	0.276	0.630	2.835

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

Precision pressure regulator AS3-RGP, 3/8 NPT - 1/2 NPT,  
ATEX approved

**AVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob	
Supply pressure	232 psi	
Secondary pressure	See table	
Nominal flow Qn	See table	
Secondary pressure = 91 psi and $\Delta p = 15 \text{ psi}$		
Temperature range	-10 to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	Any	
Materials	Body Thread insert Cover	Polyamide, seals Buna-N(NBR) Die-cast zinc ABS

\* with dried air  
Continuous air consumption = 0.09 CFM, depending on secondary pressure p2 = 87 psi



ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)
------	--

## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Secondary pressure [psi]	Weight [lbs.]	Part no. with pressure gauge
	3/8 NPT	58	1 ... 14	1.323	R432001957
	3/8 NPT	162	1 ... 29	1.323	R432001959
	3/8 NPT	178	2 ... 58	1.323	R432001961
	3/8 NPT	151	7 ... 116	1.323	R432001963
	3/8 NPT	151	7 ... 145	1.323	R432001965
	1/2 NPT	58	1 ... 14	1.323	R432001967
	1/2 NPT	162	1 ... 29	1.323	R432001969
	1/2 NPT	176	2 ... 58	1.323	R432001971
	1/2 NPT	183	7 ... 116	1.323	R432001973
	1/2 NPT	183	7 ... 145	1.323	R432001975

## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Secondary pressure [psi]	Weight [lbs.]	Part no. without pressure gauge
	3/8 NPT	58	1 ... 14	1.164	R432001956
	3/8 NPT	162	1 ... 29	1.164	R432001958
	3/8 NPT	178	2 ... 58	1.164	R432001960
	3/8 NPT	151	7 ... 116	1.164	R432001962
	3/8 NPT	151	7 ... 145	1.164	R432001964
	1/2 NPT	58	1 ... 14	1.164	R432001966
	1/2 NPT	162	1 ... 29	1.164	R432001968
	1/2 NPT	176	2 ... 58	1.164	R432001970
	1/2 NPT	183	7 ... 116	1.164	R432001972
	1/2 NPT	183	7 ... 145	1.164	R432001974

## Accessories (to be ordered separately)

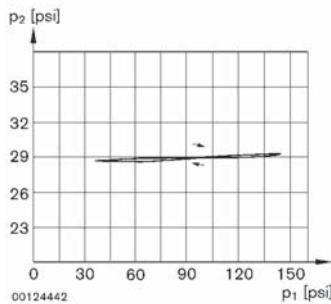
Accessory	Part no.
Pressure regulator valve seal kit	R961400145
Mounting plate AS3-MBR-...-W01	R432031072
Mounting strap AS3-MBR-...-W03	R412007370
Block assembly kit AS3-MBR-...-W04	R412007371
Mounting flange kit (3/8 inch) AS3-MBR-N038...-W05	R432002017
Mounting flange kit (1/2 inch) AS3-MBR-N012...-W05	R432002018
Control panel nut AS3-MBR-...-W06	R412007372

# Compressed air maintenance unit, series AS3-Inch

Precision pressure regulator AS3-RGP, 3/8 NPT - 1/2 NPT,  
ATEX approved

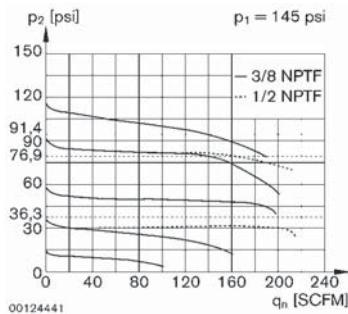
AVVENTICS 

## Pressure characteristics curve

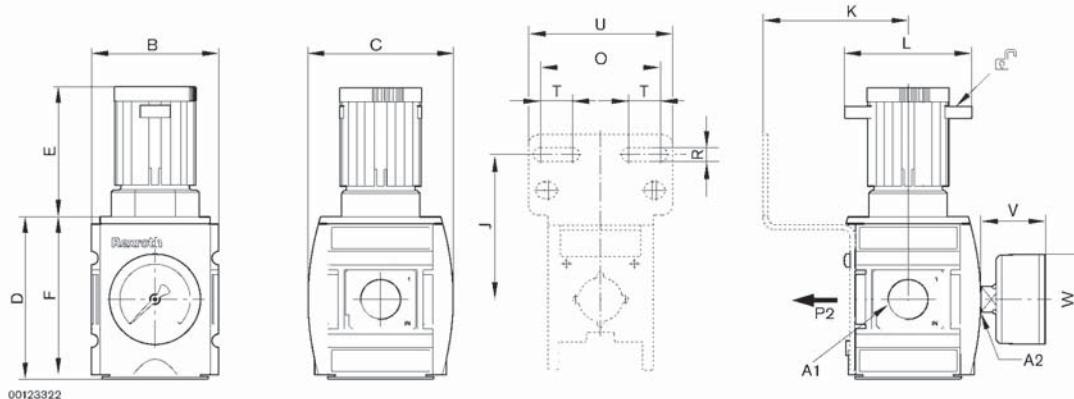


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 7 ... 116 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



A1	A2	B	C	D	E	F	J	K	L	O	R	T	U	V	W
3/8 NPT	1/4 NPT	2.480	2.913	3.228	2.500	3.150	2.854	2.795	2.323	2.362	0.276	0.630	2.835	1.378	1.969
1/2 NPT	1/4 NPT	2.480	2.913	3.228	2.500	3.150	2.854	2.795	2.323	2.362	0.276	0.630	2.835	1.378	1.969

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

Precision pressure regulator AS3-RGP-...-DS, with continuous pressure supply, 3/8 NPT - 1/2 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob	
Supply pressure	232 psi	
Secondary pressure	See table	
Nominal flow Qn	See table	
Secondary pressure = 91 psi and $\Delta p = 15$ psi		
Temperature range	-10° to +50 °C (14 °F ... 122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	Any	
Materials	Body Thread insert Cover	Polyamide, seals Buna-N(NBR) Die-cast zinc ABS
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	

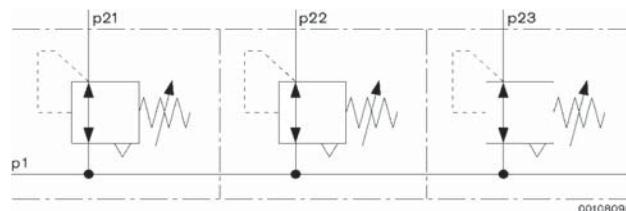


\* with dried air

Continuous air consumption = 0.09 CFM, depending on secondary pressure  $p_2 = 87$  psi

The  $p_1$  working pressure can be supplied from the left or the right in the device combination. With high nominal flows, a supply on both sides is recommended!  
In the case of block assembly, only pressure gauge with  $\varnothing \leq 2$  inch can be used

## Example of application



0010809C

## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Secondary pressure [psi]	Weight [lbs.]	Part no. without pressure gauge
	3/8 NPTF	58	1 ... 14	1.164	R432002104
	3/8 NPTF	162	1 ... 29	1.164	R432002105
	3/8 NPTF	176	2 ... 58	1.164	R432002106
	3/8 NPTF	151	7 ... 116	1.164	R432002107
	3/8 NPTF	151	7 ... 145	1.164	R432002108
	1/2 NPTF	58	1 ... 14	1.164	R432002110
	1/2 NPTF	162	1 ... 29	1.164	R432002111
	1/2 NPTF	176	2 ... 58	1.164	R432002112
	1/2 NPTF	183	7 ... 116	1.164	R432002113
	1/2 NPTF	183	7 ... 145	1.164	R432002114

## ▲ Accessories (to be ordered separately)

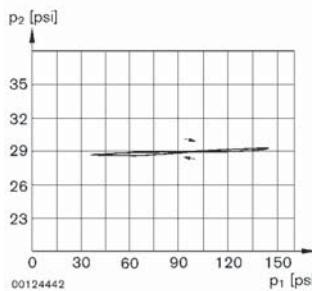
Accessory	Part no.
Pressure regulator valve seal kit	R961400145
Mounting plate AS3-MBR-...-W01	R432031072
Mounting strap AS3-MBR-...-W03	R412007370
Block assembly kit AS3-MBR-...-W04	R412007371
Mounting flange kit (3/8 inch) AS3-MBR-N038...-W05	R432002017
Mounting flange kit (1/2 inch) AS3-MBR-N012...-W05	R432002018
Control panel nut AS3-MBR-...-W06	R412007372

# Compressed air maintenance unit, series AS3-Inch

Precision pressure regulator AS3-RGP-...-DS, with continuous pressure supply, 3/8 NPT - 1/2 NPT, ATEX approved

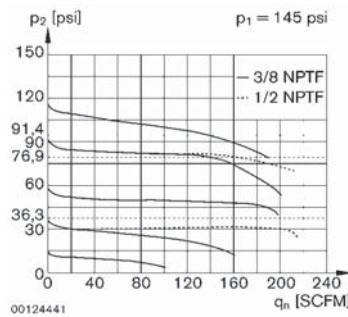
**AVENTICS**

## Pressure characteristics curve

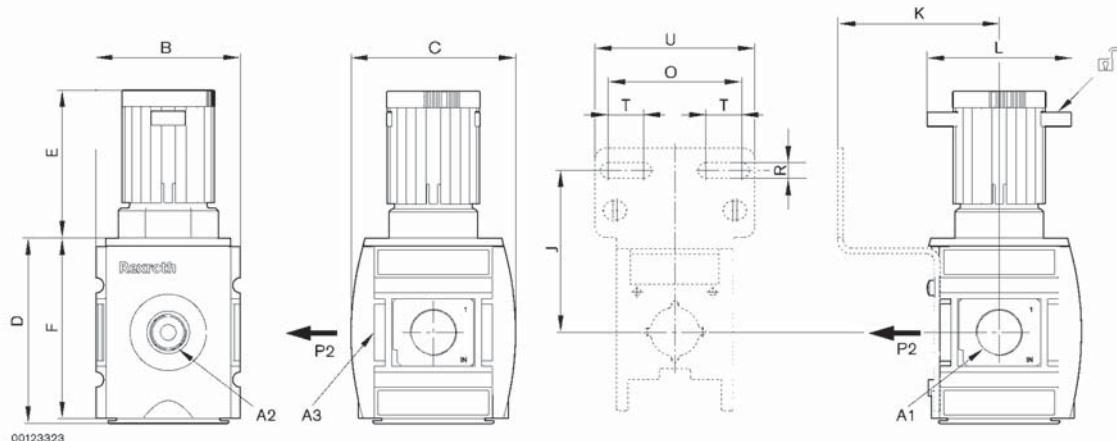


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 7 ... 116 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



$p_2$  = Secondary pressure

A1	A2	A3	B	C	D	E	F	J	K	L	O	R	T	U
3/8 NPT	1/4 NPT	3/8 NPT	2.480	2.913	3.228	2.480	3.150	2.854	2.795	2.323	2.362	0.276	0.630	2.835
1/2 NPT	1/4 NPT	3/8 NPT	2.480	2.913	3.228	2.480	3.150	2.854	2.795	2.323	2.362	0.276	0.630	2.835

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

Filter regulator AS3-FRE, 3/8 NPT - 1/2 NPT, ATEX approved

**AVVENTICS**



## Technical Data

Type	Filter Pressure regulator	Filter element replaceable Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob
Supply pressure	Condensate drain	semi-automatic: 7 ... 232 psi fully automatic: 21 ... 232 psi
Secondary pressure		See table
Nominal flow Qn		See table
Secondary pressure = 91 psi and $\Delta p = 15$ psi		
Ambient temperature		-10° to +50 °C (14 °F ... 122 °F) *
Medium		Compressed air
Weight		See table
Installation position		Vertical
Materials	Body Thread insert Reservoir Bowl guard Cover Filter element	Polyamide, seals Buna-N(NBR) Die-cast zinc Polycarbonate or die cast zinc, with bayonet catch Polyamide (polycarbonate bowls only) ABS Polyethylene
Reservoir capacity		49 cm³ (1.6 US Fl oz) (semi-automatic)
Filter porosity		5 µm
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	

\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.



## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Secondary pressure [psi]	Options	Weight [lbs.]	Part no. with pressure gauge (Poly./Metal)
	3/8 NPT	151	7 ... 116	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	1.451	R432001988/R432002135
	3/8 NPT	151	21 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	1.559	R432001989/R432002136
	3/8 NPT	151	0 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	1.559	R432001990/R432002137
	1/2 NPT	183	7 ... 116	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	1.451	R432001991/R432002141
	1/2 NPT	183	21 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	1.559	R432001992/R432002142
	1/2 NPT	183	0 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	1.559	R432001993/R432002143

## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Secondary pressure [psi]	Options	Weight [lbs.]	Part no. without pressure gauge (Poly./Metal)
	3/8 NPT	151	7 ... 116	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	1.292	R432001976/R432002122
	3/8 NPT	151	21 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	1.400	R432001977/R432002123
	3/8 NPT	151	0 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	1.400	R432001978/R432002124
	1/2 NPT	183	7 ... 116	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	1.292	R432001979/R432002128
	1/2 NPT	183	21 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	1.400	R432001980/R432002129
	1/2 NPT	183	0 ... 116	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	1.400	R432001981/R432002130

Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 1$  bar)

# Compressed air maintenance unit, series AS3-Inch

Filter regulator AS3-FRE, 3/8 NPT - 1/2 NPT, ATEX approved

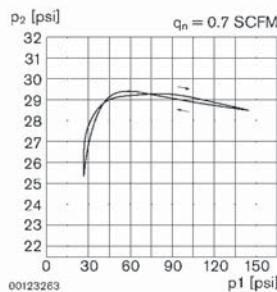
**AVENTICS** 

## ▲ Accessories (to be ordered separately)

	Accessory	Part no.
	Filter element, 5 µm	1829207068
	Pressure regulator valve seal kit	R961400144
	Mounting plate AS3-MBR-...-W01	R432031072
	Mounting strap AS3-MBR-...-W03	R412007370
	Block assembly kit AS3-MBR-...-W04	R412007371
	Mounting flange kit (3/8 inch) AS3-MBR-N038...-W05	R432002017
	Mounting flange kit (1/2 inch) AS3-MBR-N012...-W05	R432002018
	Control panel nut AS3-MBR-...-W06	R412007372

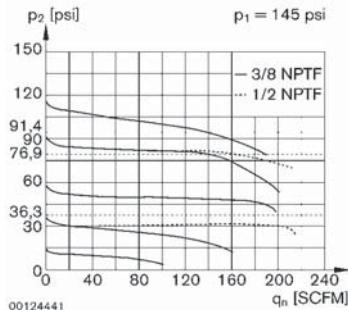
See accessories for filter reservoirs

## Pressure characteristics curve



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 7 ... 116 psi)

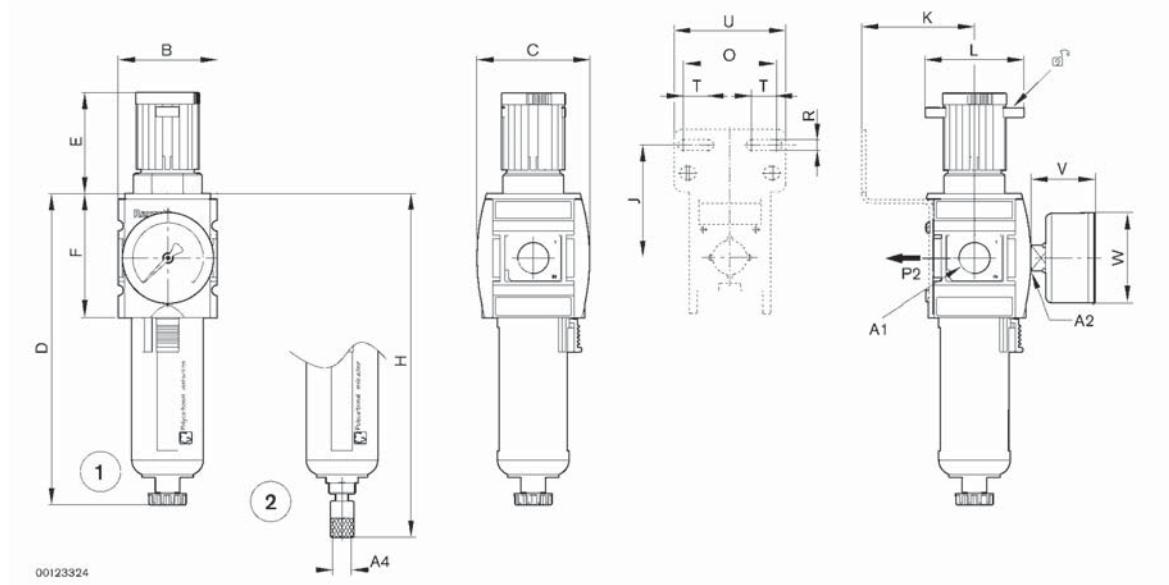


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow;  $q$  = Flow rate

# Compressed air maintenance unit, series AS3-Inch

Filter regulator AS3-FRE, 3/8 NPT - 1/2 NPT, ATEX approved

**AVVENTICS**



- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	O	R	T	U	V	W
3/8 NPT	1/4 NPT	G 1/8	2.480	2.913	7.461	2.500	3.150	8.110	2.854	2.795	2.323	2.362	0.276	0.630	2.835	1.378	1.969

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

Standard filter AS3-FLS, 5 micron, 3/8 NPT - 1/2 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Filter element replaceable	
Supply pressure	See table	
Ambient temperature	-10° to +50 °C (14 °F ... 122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Cover: ABS Filter element: Polyethylene	
Reservoir capacity	49 cm³ (1.6 US Fl oz) (semi-automatic)	
Filter porosity	5 µm	
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Optionally with a semi or fully automatic condensate drain

Condensate drain opened without pressure or closed without pressure.

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Supply pressure [psi]	Options	Weight [lbs.]	Part no. (Poly./Metal)
	3/8 NPT	123	7 ... 232	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0.796	R432001900/R432002020
	3/8 NPT	123	21 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0.904	R432001901/R432002021
	3/8 NPT	123	0 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0.904	R432001902/R432002022
	1/2 NPT	123	7 ... 232	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0.796	R432001906/R432002023
	1/2 NPT	123	21 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0.904	R432001907/R432002024
	1/2 NPT	123	0 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0.904	R432001908/R432002025

## Accessories (to be ordered separately)

	Accessory	Part no.
	Filter element, 5 µm	1829207068
	Mounting plate AS3-MBR-...-W01	R432031072
	Mounting strap AS3-MBR-...-W03	R412007370
	Block assembly kit AS3-MBR-...-W04	R412007371
	Mounting flange kit (3/8 inch) AS3-MBR-N038...-W05	R432002017
	Mounting flange kit (1/2 inch) AS3-MBR-N012...-W05	R432002018

See accessories for filter reservoirs

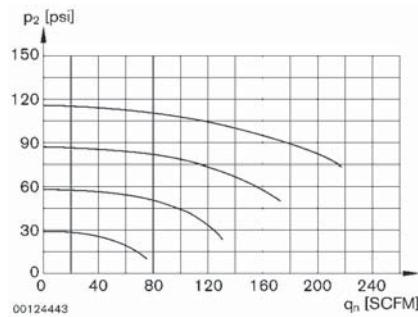
Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 1$  bar)

# Compressed air maintenance unit, series AS3-Inch

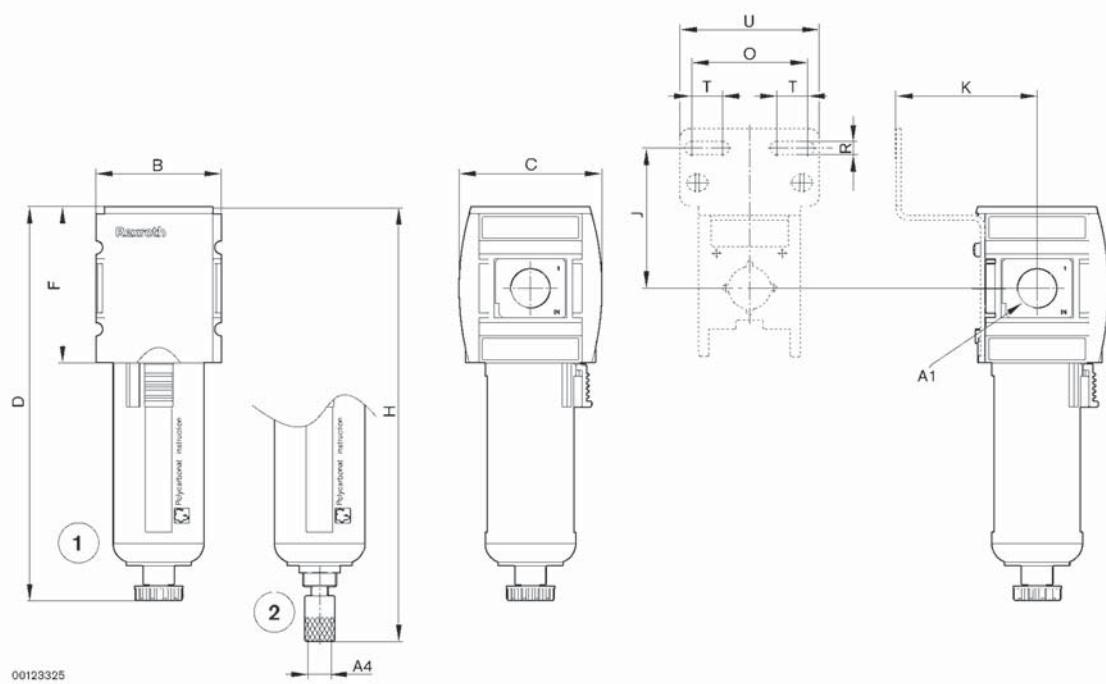
Standard filter AS3-FLS, 5 micron, 3/8 NPT - 1/2 NPT, ATEX approved

**AVENTICS**

## Flow rate characteristic



p<sub>1</sub> = Supply pressure; p<sub>2</sub> = Secondary pressure; q<sub>n</sub> = Nominal flow



- 1) Semi-automatic condensate drain  
2) Fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U
3/8 NPT	G 1/8	2.480	2.913	7.461	3.150	8.110	2.854	2.795	2.362	0.276	0.630	2.835
1/2 NPT	G 1/8	2.480	2.913	7.461	3.150	8.110	2.854	2.795	2.362	0.276	0.630	2.835

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

Pre-filter AS3-FLP, 0.3 micron, 3/8 NPT - 1/2 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Pre-filter element replaceable			
Supply pressure	See table			
Temperature range	-10° to +50 °C (14 °F ... 122 °F) *			
Medium	Compressed air			
Weight	See table			
Installation position	vertical			
Materials	Body	Polyamide, seals Buna-N(NBR)		
	Thread insert	Die-cast zinc		
	Reservoir	Polycarbonate or die cast zinc, with bayonet catch		
	Bowl guard	Polyamide (polycarbonate bowls only)		
	Cover	ABS		
	Filter element	Polymer-impregnated paper		
Reservoir capacity	49 cm³ (1.6 US Fl oz) (semi-automatic)			
Filter porosity	0.3 µm			
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)			



\* with dried air

Pre-filter for separating solid impurities up to 0.3 µm from compressed air and gases

The filter element should be exchanged if there is an increase of Δp by max. 5 psi or once a year.

Dust separation = 99.99 %

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 2

- Humidity - water content: class 8

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM] 1) 2)	Supply pressure [psi]	Options	Weight [lbs.]	Part no. (Poly./Metal)
	3/8 NPT	20	7 ... 232	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0.796	R432001912/R432002029
	3/8 NPT	20	21 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0.904	R432001913/R432002030
	3/8 NPT	20	0 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0.904	R432001914/R432002031
	1/2 NPT	22	7 ... 232	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0.796	R432001915/R432002035
	1/2 NPT	22	21 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0.904	R432001916/R432002036
	1/2 NPT	22	0 ... 232	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0.904	R432001917/R432002037

Nominal flow at inlet pressure 91 psi and 1.5 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 0.1$  bar)

$$Q = qv \times f \quad (f = \text{Correction factor for various supply pressures } p_1)$$

p1

[psi]	14	29	43	58	72	87	101	116	130	145	159	174	188	203	217	232
f	0.25	0.38	0.5	0.65	0.75	0.88	1	1.13	1.25	1.38	1.5	1.63	1.75	1.88	2	2.13

## Accessories (to be ordered separately)

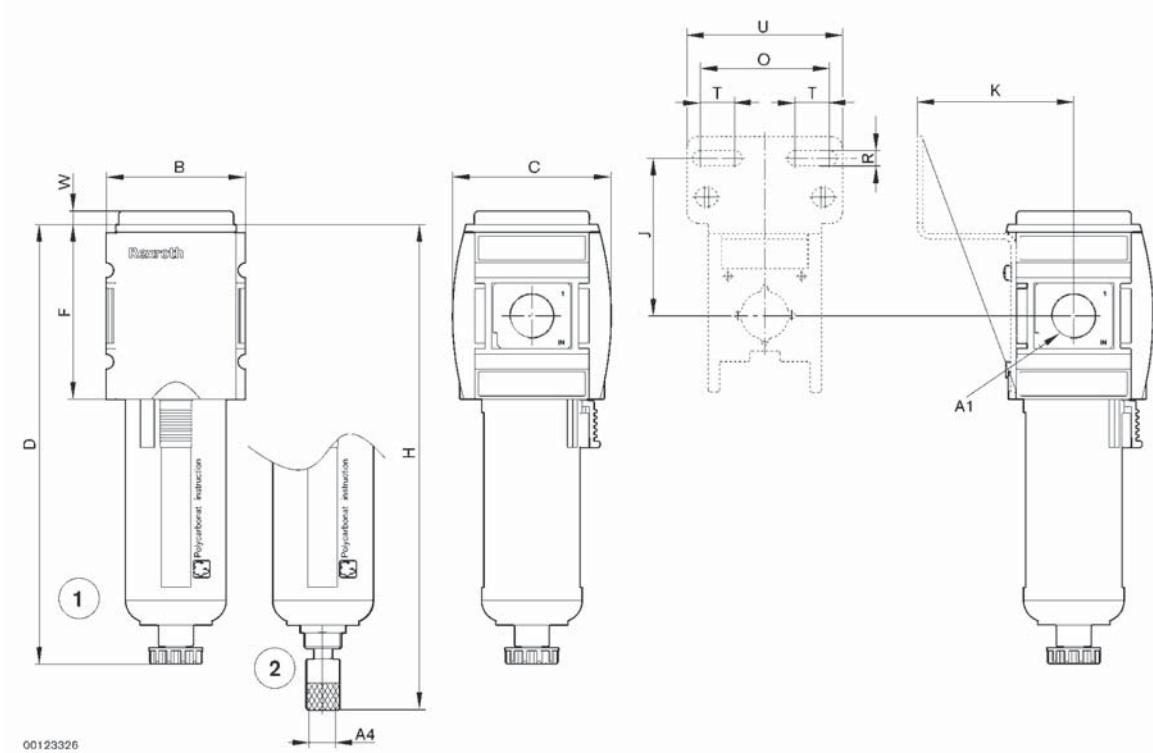
	Accessory	Part no.
	Filter element	R961400140
	Mounting plate AS3-MBR-....W01	R432031072
	Mounting strap AS3-MBR-....W03	R412007370
	Block assembly kit AS3-MBR-....W04	R412007371
	Mounting flange kit (3/8 inch) AS3-MBR-N038-..W05	R432002017
	Mounting flange kit (1/2 inch) AS3-MBR-N012-..W05	R432002018

See accessories for pre-filter reservoirs

# Compressed air maintenance unit, series AS3-Inch

Pre-filter AS3-FLP, 0.3 micron, 3/8 NPT - 1/2 NPT, ATEX approved

**AVENTICS** 



- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U	W
3/8 NPT	G 1/8	2.480	2.913	7.461	3.150	8.110	2.854	2.795	2.362	0.276	0.630	2.835	0.197
1/2 NPT	G 1/8	2.480	2.913	7.461	3.150	8.110	2.854	2.795	2.362	0.276	0.630	2.835	0.197

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

Coalescing filter AS3-FLC, 0.01 micron, 3/8 NPT - 1/2 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Micro-filter element replaceable	
Supply pressure	See table	
Temperature range	-10° to +50 °C (14 °F ... 122 °F) *	
Medium	Compressed air	
Weight	see table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Cover: ABS Filter element: Borsilicate glass fibre	
Reservoir capacity	49 cm³ (1.6 US Fl oz) (semi-automatic)	
Filter porosity	0.01 µm	
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	

Standard	NFE 49004
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\* with dried air

Micro filter for the separation of oil, water and solid impurities of up to 0.01 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 1

- Oil content: class 1

The filter element must be replaced after a pressure rise  $\Delta p$  of max. 5 psi or once a year.

Filter is resistant to mineral oils and synthetic oils

Oil separation, residual oil content < 0.01 mg/m³ at t = 20 °C (68 °F) and p1 = 102 psi

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.



## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Supply pressure [psi]	Options	Weight [lbs.]	Part no. (Poly./Metal) (*w/contam. display)
	3/8 NPT	25	7 ... 232	Polycarbonate w/guard or metal bowl, with or w/o contamination display, semi-automatic, w/o pressure: open	0.796	R432001918/R432002041 R432001924*/R432002053*
	3/8 NPT	25	21 ... 232	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: open	0.904	R432001919/R432002042 R432001925*/R432002054*
	3/8 NPT	25	0 ... 232	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: closed	0.904	R432001920/R432002043 R432001926*/R432002055*
	1/2 NPT	25	0 ... 232	Polycarbonate w/guard or metal bowl, with or w/o contamination display, semi-automatic, w/o pressure: open	0.796	R432001921/R432002047 R432001927*/R432002059*
	1/2 NPT	25	21 ... 232	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: open	0.904	R432001922/R432002048 R432001928*/R432002060*
	1/2 NPT	25	0 ... 232	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: closed	0.904	R432001923/R432002049 R432001929*/R432002061*

Nominal flow at inlet pressure 91 psi and 1.5 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 0.1$  bar)

Q = qv x f (f = Correction factor for various supply pressures p1)																
p1																
[psi]	14	29	43	58	72	87	101	116	130	145	159	174	188	203	217	232
f	0.25	0.38	0.5	0.65	0.75	0.88	1	1.13	1.25	1.38	1.5	1.63	1.75	1.88	2	2.13

# Compressed air maintenance unit, series AS3-Inch

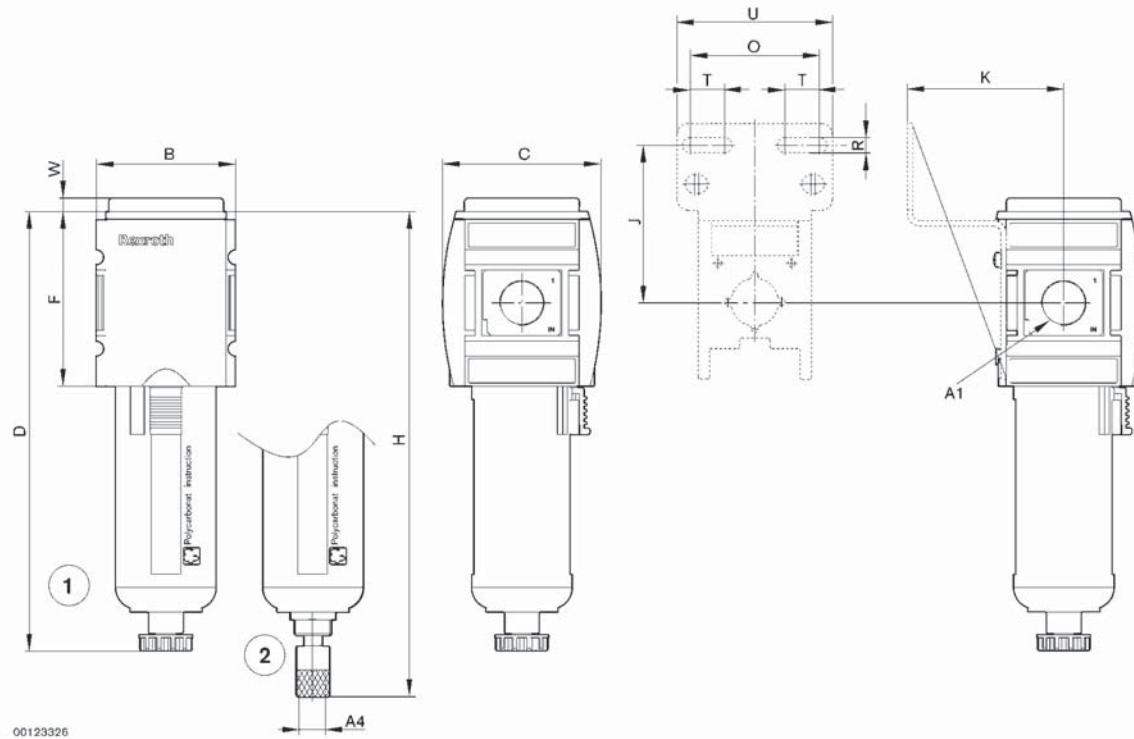
Coalescing filter AS3-FLC, 0.01 micron, 3/8 NPT - 1/2 NPT, ATEX approved

**AVVENTICS**

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Contamination display AS Filter element	R412006363 R961400141
Mounting plate AS3-MBR-...-W01	R432031072
Mounting strap AS3-MBR-...-W03	R412007370
Block assembly kit AS3-MBR-...-W04	R412007371
Mounting flange kit (3/8 inch) AS3-MBR-N038...-W05	R432002017
Mounting flange kit (1/2 inch) AS3-MBR-N012...-W05	R432002018

See accessories for microfilter reservoirs



A1	A4	B	C	D	F	H	J	K	O	R	T	U	W
3/8 NPT	G 1/8	2.480	2.913	7.461	3.150	8.110	2.854	2.795	2.362	0.276	0.630	2.835	0.197
1/2 NPT	G 1/8	2.480	2.913	7.461	3.150	8.110	2.854	2.795	2.362	0.276	0.630	2.835	0.197

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

Active carbon filter AS3-FLA, 3/8 NPT - 1/2 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Filter element replaceable	
Supply pressure	See table	
Temperature range	-10° to +50 °C (14 °F ... 122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Filter element: Active carbon Cover: ABS	
Reservoir capacity	49 cm³ (1.6 US Fl oz)	
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Active carbon filter for absorption of oil vapor in compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3
- Humidity - water content: class 8
- Oil content: class 1

Oil separation, residual oil content < 0.005 mg/m³ at t = 20 °C (68 °F) and p1 = 102 psi

A micro filter must be connected upstream as a prefilter

## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Supply pressure [psi]	Weight [lbs.]	Part no. (Poly./Metal)
	3/8 NPT	35	0 ... 232	0.8	R432001930/R432002063
	1/2 NPT	35	0 ... 232	0.8	R432001931/R432002065

Nominal flow at inlet pressure 91 psi and 1.5 psi drop (P<sub>1</sub> = 6.3 bar, ΔP = 0.1 bar)

$$Q = qv \times f \quad (f = \text{Correction factor for various supply pressures } p_1)$$

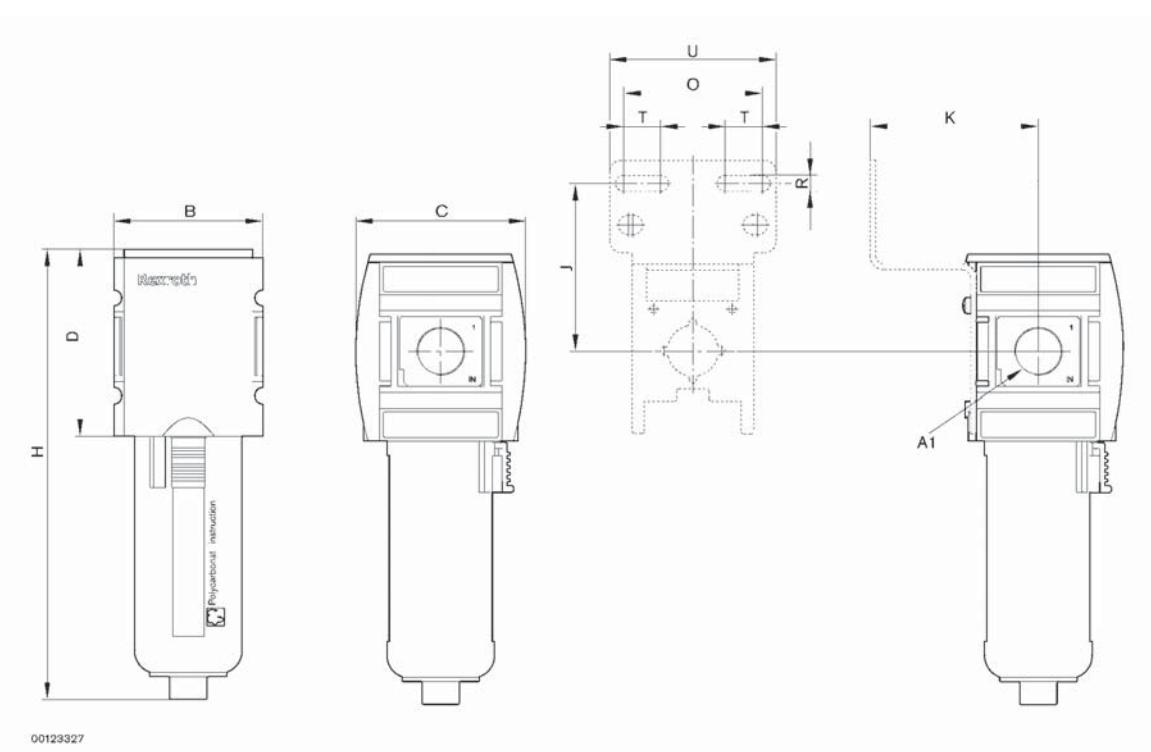
[psi]	14	29	43	58	72	87	101	106	130	145	159	174	188	203	217	232	p <sub>1</sub>
f	0.25	0.38	0.5	0.65	0.75	0.88	1	1.13	1.25	1.38	1.5	1.63	1.75	1.88	2	2.13	

▲ Accessories (to be ordered separately)	Accessory	Part no.
	Active carbon filter reservoir AS3-CLA, metal (no glass) Active carbon filter reservoir AS3-CLA (polycarbonate) Active carbon filter element	R412007349 R412007347 R961400143
	Mounting plate AS3-MBR-...-W01 Mounting strap AS3-MBR-...-W03 Block assembly kit AS3-MBR-...-W04 Mounting flange kit (3/8 inch) AS3-MBR-N038...-W05 Mounting flange kit (1/2 inch) AS3-MBR-N012...-W05	R432031072 R412007370 R412007371 R432002017 R432002018

# Compressed air maintenance unit, series AS3-Inch

Active carbon filter AS3-FLA, 3/8 NPT - 1/2 NPT, ATEX approved

AVVENTICS<sup>A</sup>



00123327

A1	B	C	D	H	J	K	O	R	T	U
3/8 NPT	2.480	2.913	3.150	7.205	2.854	2.795	2.362	0.276	0.630	2.835
1/2 NPT	2.480	2.913	3.150	7.205	2.854	2.795	2.362	0.276	0.630	2.835

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

Lubricator, oil-drop AS3-LBS, with semi-automatic oil filling, 3/8 NPT - 1/2 NPT, ATEX approved

**AVENTICS**



## Technical Data

Type	Inspection glass with slotted screw for oil metering Can be filled with oil during operation See table		
Supply pressure	See table		
Temperature range	-10° to +50 °C (14 °F ... 122 °F) *		
Medium	Compressed air		
Weight	See table		
Installation position	vertical		
Materials	Body	Polyamide, seals Buna-N(NBR)	
	Thread insert	Die-cast zinc	
	Reservoir	Polycarbonate or die cast zinc, with bayonet catch	
	Bowl guard	Polyamide (polycarbonate bowls only)	
	Seal	ABS	
Reservoir capacity	80 cm <sup>3</sup> (2.7 US Fl oz)		
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)		



\* with dried air

Oil type: HL 68 (DIN 51 524 - ISO VG 68)

Standard values for oil metering: 1-2 drops / min at a nominal flow rate of Qn = 35.30 CFM

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

The unit is equipped with a semi-automatic oil filling mechanism (standard). A threaded connector located in the lower section of the container can be used to connect a hose to the oil tank.

Pressing the top button opens a Venturi nozzle that provides a vacuum in the upper section of the container. This draws the oil into the container.

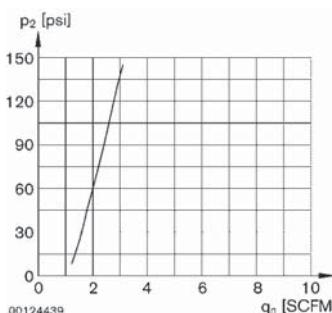
## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Supply pressure [psi]	Options	Weight [lbs.]	Part no. (Poly./Metal)
	3/8 NPT	282	7 ... 232	Polycarbonate w/guard or metal bowl **Ready for level sensor (non ATEX)	0.756	R432002000 / R432002147 R432002001 / R432002148
	1/2 NPT	282	7 ... 232	Polycarbonate w/guard or metal bowl **Ready for level sensor (non ATEX)	0.756	R432002002 / R432002152 R432002149 / R432002153

Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 1$  bar)

▲ Accessories (to be ordered separately)	Accessory	Part no.
	Lubricator reservoir AS3-CBS, metal (w/sight glass) Lubricator reservoir AS3-CBS (polymer) Lubricator metering set, polycarbonate	R412007358 R412007352 R961400032
	Mounting plate AS3-MBR-...-W01 Mounting strap AS3-MBR-...-W03 Block assembly kit AS3-MBR-...-W04 Mounting flange kit (3/8 inch) AS3-MBR-N038...-W05 Mounting flange kit (1/2 inch) AS3-MBR-N012...-W05 ** For low oil level sensor options, see Accessories Section	R432031072 R412007370 R412007371 R432002017 R432002018

## Lubrication activation margin



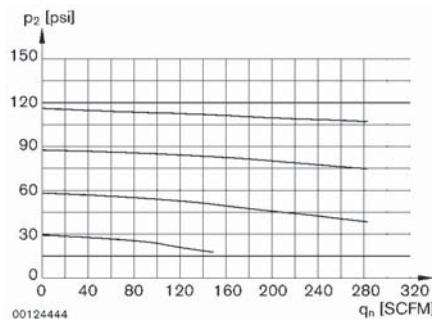
$p_2$  = Secondary pressure;  $q_{n \min.}$  = Min. nominal flow

# Compressed air maintenance unit, series AS3-Inch

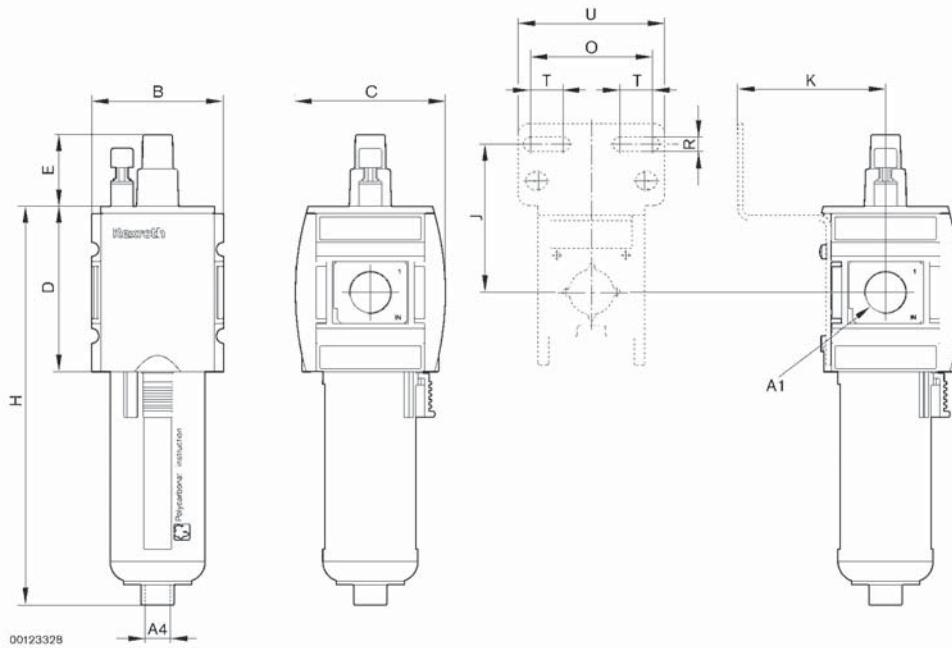
Lubricator, oil-drop AS3-LBS, with semi-automatic oil filling, 3/8 NPT - 1/2 NPT,  
ATEX approved

AVVENTICS 

## Flow rate characteristic



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



A1	A4	B	C	D	E	H	J	K	O	R	T	U
3/8 NPT	G 1/8	2.480	2.913	3.150	1.024	7.205	2.854	2.795	2.362	0.276	0.630	2.835
1/2 NPT	G 1/8	2.480	2.913	3.150	1.024	7.205	2.854	2.795	2.362	0.276	0.630	2.835

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

3/2 directional-control dump valve AS3-SOV, electrically operated,  
3/8 NPT - 1/2 NPT

**AVENTICS**



## Technical Data

Type	Poppet valve
Working pressure	36 - 145 psi
Nominal flow qn	see table
Secondary pressure	91 psi and $\Delta p = 15$ psi
Ambient temperature	-10 °C to +50 °C (14 °F to +122 °F) *
Medium	Compressed air
Weight	see table
Pickup power with AC 50 Hz	2.2 VA
Holding power with AC 50 Hz	1.6 VA
Power consumption with DC	2 W
Relative switch-on duration	100 %
Protection class (DIN 40 050)	IP 65 (NEMA4)
with electrical connector	any
Installation position:	
Materials (body)	Polyamide, seals Buna-N(NBR)
Thread bushing	Die-cast zinc
Cover	ABS

\* with dried air



## ► Version:

Cut-off and sequencing valve with unrestricted cross-section.

Two switch positions: a) Basic position: input closed, output ventilated; b) Operated: input and output connected, exhaust closed.

Connection via electrical connector shape C, DIN 43 650 (see Online catalog, series CN1).

Please observe note regarding compressed air preparation!

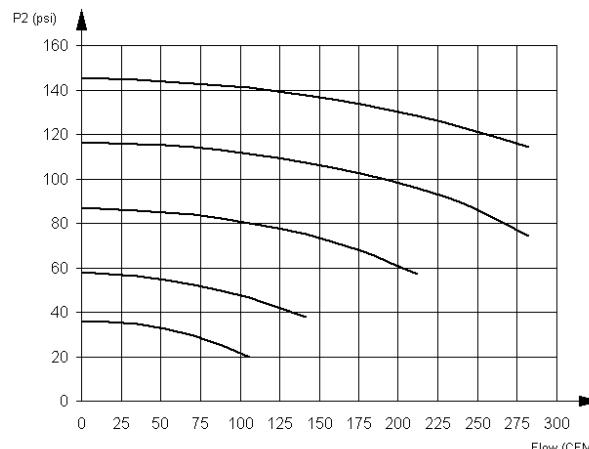
	Thread connection NPT	Operational voltage	Qn CFM	Operating pressure [psi]	Weight [lbs]	Notes	Part No. (Air flow direction)	
							Standard	(right to left)
	3/8"	-	-	-	-	1	R432002179	R432031480
	3/8"	-	-	-	-	2	R432002173	R432031479
	3/8"	24VDC ±10%	159	36 ... 145	1.01	-	R432002180	R432031475
	3/8"	110VAC 50/60Hz	-	-	-	-	R432002181	R432031476
	3/8"	230VAC 50/60Hz	-	-	-	-	R432002182	R432031477
	1/2"	-	-	-	-	1	R432002183	R432031474
	1/2"	-	-	-	-	2	R432002174	R432031473
	1/2"	24VDC ±10%	159	36 ... 145	1.01	-	R432002184	R432031469
	1/2"	110VAC 50/60Hz	-	-	-	-	R432002185	R432031470
	1/2"	230VAC 50/60Hz	-	-	-	-	R432002186	R432031471

1) without DO16 pilot valve

2) with CNOMO interface, without pilot valve

Silencer, sintered bronze (conical) R432031045

## Flow rate characteristic



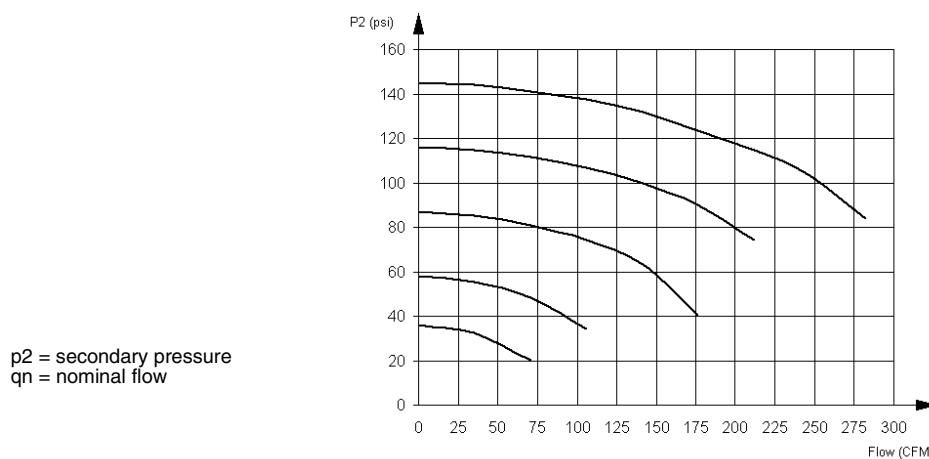
p2 = secondary pressure  
qn = nominal flow

# Compressed air maintenance unit, series AS3-Inch

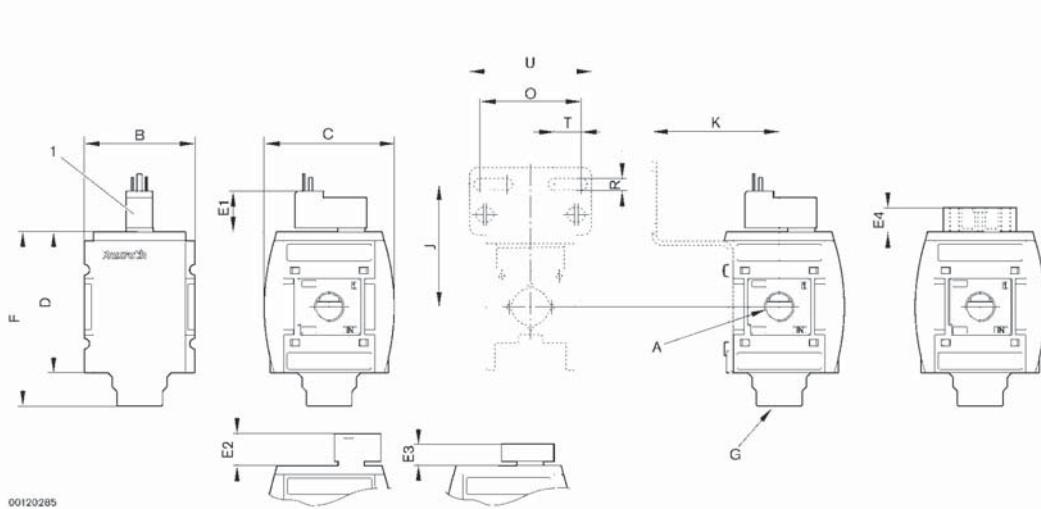
3/2 directional-control dump valve AS3-SOV, electrically operated,  
3/8 NPT - 1/2 NPT

**AVVENTICS**

## Rear exhaust



## Drawing



(mounting bracket not included, order separately)

A	G	B	C	D	E1	E2	E3	E4	F	J	K	O	R	T	U
3/8" NPT	3/8" NPT	2.480	2.913	3.150	0.913	0.728	0.484	0.394	3.898	2.854	2.598	2.362	0.276	0.630	2.835
1/2" NPT	3/8" NPT	2.480	2.913	3.150	0.913	0.728	0.484	0.394	3.898	2.854	2.598	2.362	0.276	0.630	2.835

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

3/2 directional-control dump valve AS3-SOV, pneumatically operated,  
3/8 NPT - 1/2 NPT, ATEX approved

**AVENTICS** 



## Technical Data

Type	Poppet valve
Working pressure	36 - 145 psi
Nominal flow qn	see table
Secondary pressure	91 psi and $\Delta p = 15$ psi
Ambient temperature	-10 °C to +50 °C (14 °F to +122 °F) *
Medium	Compressed air
Weight	see table
Installation position	any

Materials (body)	Polyamide, seals Buna-N(NBR)
Thread bushing	Die-cast zinc
Cover	ABS

ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)
-------	--

\* with dried air



## ► Version:

Cut-off and sequencing valve with unrestricted cross-section.

Two switch positions: a) Basic position: input closed, output ventilated; b) Operated: input and output connected, exhaust closed.

Please observe note regarding compressed air preparation!

## ► Part no.

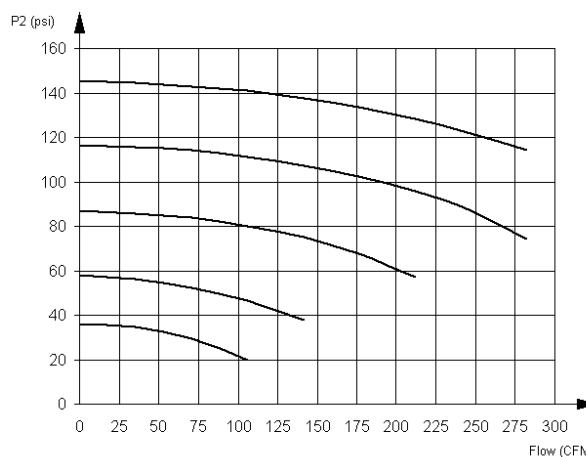
Symbol	Threaded ports	Nominal flow qn [CFM]	With options	Weight [lbs]	Part no.
	3/8 NPT	159	Change-over valve / shut-off valve pneumatically operated	1.01	R432002177 R432031478*
	1/2 NPT	159	Change-over valve / shut-off valve pneumatically operated	1.01	R432002178 R432031472*

\*Version for air flow from right to left.

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Silencer: sintered bronze (conical)	R432031045
Mounting strap AS3-MBR-...-W03	R412007370
Mounting plate AS3-MBR-...-W01	R432031072
Block assembly kit AS3-MBR-...-W04	R412007371

## Flow rate characteristic



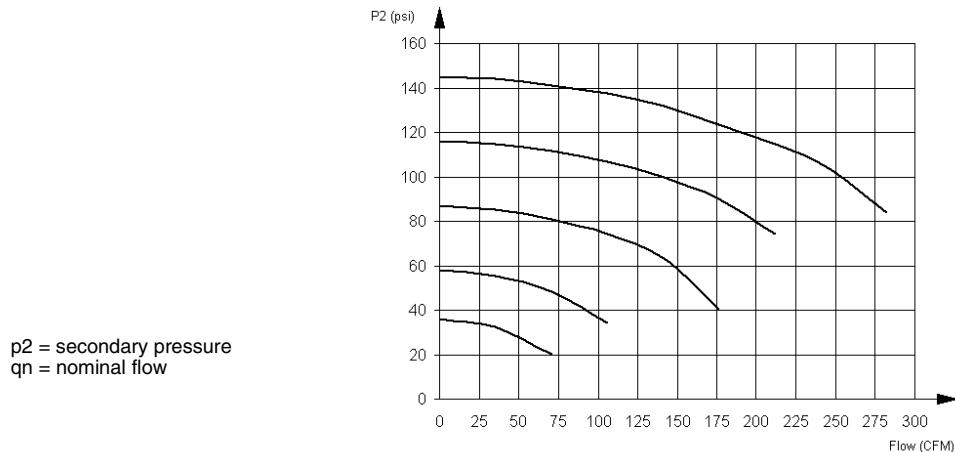
p2 = secondary pressure  
qn = nominal flow

# Compressed air maintenance unit, series AS3-Inch

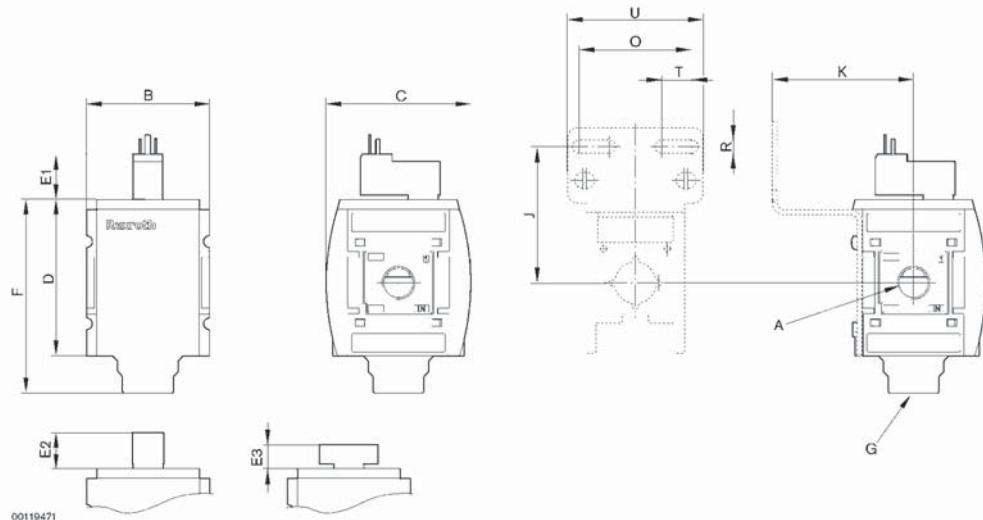
3/2 directional-control dump valve AS3-SOV, pneumatically operated,  
3/8 NPT - 1/2 NPT, ATEX approved

AVVENTICS 

## Rear exhaust



## Drawing



(mounting bracket not included, order separately)

A	G	B	C	D	E1	E2	E3	F	J	K	O	R	T	U
3/8" NPT	3/8" NPT	2.480	2.913	3.150	0.913	0.728	0.484	3.898	2.854	2.598	2.362	0.276	0.630	2.835
1/2" NPT	3/8" NPT	2.480	2.913	3.150	0.913	0.728	0.484	3.898	2.854	2.598	2.362	0.276	0.630	2.835

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

3/2-way shut-off valve (ball valve) AS3-BAV, mechanically operated, lockable,  
3/8 NPT - 1/2 NPT, ATEX approved

**AVVENTICS**



## Technical Data

Type	3/2 directional-control valve, operated by a knob, 3-fold lockable See table	
Nominal flow qn	Secondary pressure = 91 psi and $\Delta p = 15$ psi	
Ambient temperature	–10 °C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	any	
Materials	Body	Polyamide, seals Buna-N(NBR)
	Thread bushing	Die-cast zinc
	Cover	ABS
	Lockable slide plate	Zinc plated steel
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Knob, can be turned 90° (Open-Closed) and can be locked in the closed position with a padlock

Knob with switch position display: crosswise: inlet closed, outlet to exhaust; lengthways: inlet and outlet connected, air exhaust closed

Exhaust air can be collected (G1/2 )

Air exhaust from connection A to R: nominal size 1.5 (internally throttled)

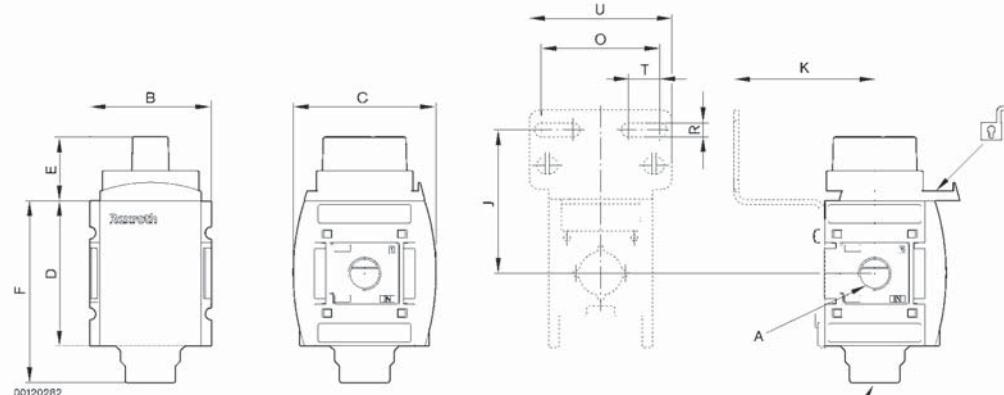
## Part no.

Symbol	Threaded ports	Nominal flow qn [CFM]	Weight [lbs]	Part no.
	3/8 NPT	159	0.983	R432002175 R432031468*
	1/2 NPT	159	0.983	R432002176 R432030552*

\*Version for air flow from right to left.

## Accessories (to be ordered separately)

Accessories	Part no.
Silencer, sintered bronze (conical)	R432031045
Mounting plate AS2-MBR-...-W01	R432031072
Block assembly kit AS2-MBR-...-W04	R412007371
Mounting strap AS2-MBR-...-W03	R412007370



A	G	B	C	D	E	F	J	K	O	R	T	U
3/8" NPT	3/8" NPT	2.480	2.913	3.150	1.102	3.898	2.854	2.598	2.362	0.276	0.630	2.835
1/2" NPT	3/8" NPT	2.480	2.913	3.150	1.102	3.898	2.854	2.598	2.362	0.276	0.630	2.835

Dimensions in inches

# Compressed air maintenance unit, series AS3-Inch

Filling valve (soft start) AS3-SSV, 3/8 NPT - 1/2 NPT, ATEX approved

**AVVENTICS**



## Technical Data

Type	Poppet valve
Operating pressure	36 ... 232 psi
Nominal flow qn	see table
Secondary pressure	91 psi and $\Delta p = 15$ psi
Ambient temperature	-10 °C to +50 °C (14 °F to +122 °F) *
Medium	Compressed air
Weight	see table
Installation position	any
Materials (body)	Polamide, seals Buna-N(NBR)
Threaded bushing	Die-cast zinc
Cover	ABS
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)

\* with dried air



## ► Version:

Opening pressure: approx. 50% of input pressure

Actuating method: via secondary pressure

Only for closed systems

Please observe note regarding compressed air preparation!

Slowly builds up the pressure in pneumatic installations, i.e. prevents sudden pressure build-up after a restart following mains pressure failure or EMERGENCY OFF, thus preventing dangerous, sudden cylinder movements.

## ► Part no.

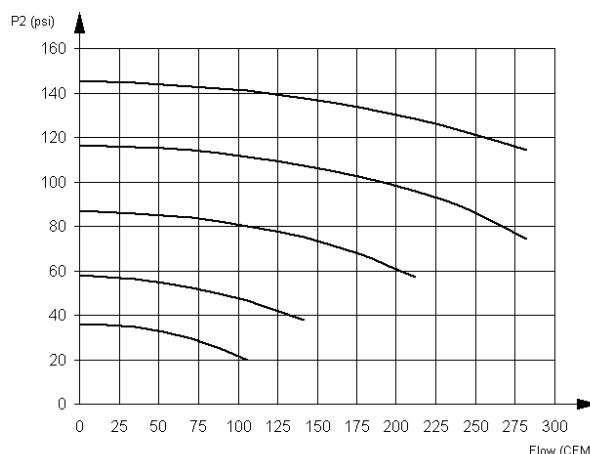
Symbol	Threaded ports	Nominal flow qn [CFM]	With options	Weight [lbs]	Part no.
	3/8 NPT	159	Filling adjustable	0.95	R432002187 R432031481*
	1/2 NPT	159	Filling adjustable	0.95	R432002188 R432003281*

\*Version for air flow from right to left.

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Mounting plate AS3-MBR-....-W01	R42031072
Mounting strap AS3-MBR-....-W03 Block assembly kit AS3-MBR-....-W04	R412007370 R412007371

## Flow rate characteristic

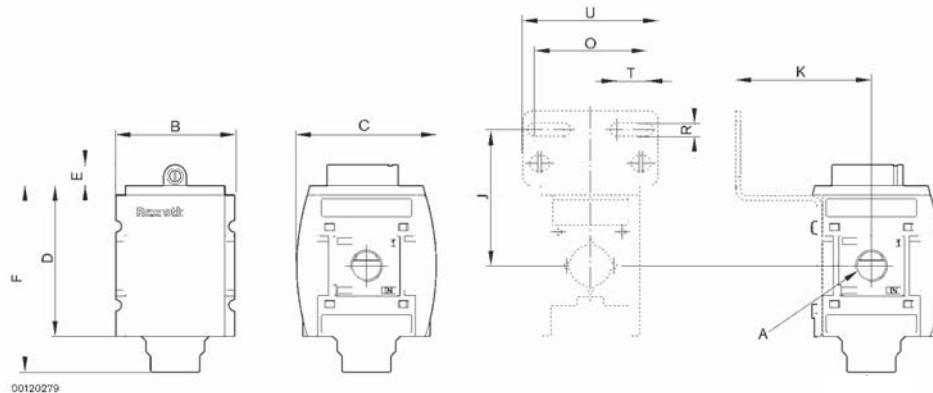


p2 = secondary pressure  
qn = nominal flow

# Compressed air maintenance unit, series AS3-Inch

Filling valve (soft start) AS3-SSV, 3/8 NPT - 1/2 NPT, ATEX approved

AVVENTICS<sup>A</sup>



(mounting bracket not included, order separately)

	A	B	C	D	E	F	J	K	O	R	T	U
3/8" NPT	2.480	2.913	3.150	0.433	3.898	2.854	2.598	2.362	0.276	0.630	2.835	
1/2" NPT	2.480	2.913	3.150	0.433	3.898	2.854	2.598	2.362	0.276	0.630	2.835	

Dimensions in inches.

# Compressed air maintenance unit, series AS3-Inch

Distributor block AS3-DIS, 4-way, 3/8 NPT - 1/2 NPT, ATEX approved

**AVVENTICS**



## Technical Data

Nominal flow Qn	See table	
Operating pressure	0 ... 232 psi	
$\Delta p = 15$ psi		
Ambient temperature range	-10 °C to + 50 °C [14 °F ... 122 °F] *	
Medium	Compressed air	
Weight	See table	
Installation position	any	
Materials	Body Threaded insert Cover	Polyamide, seals Buna-N(NBR) Zn-die cast ABS
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



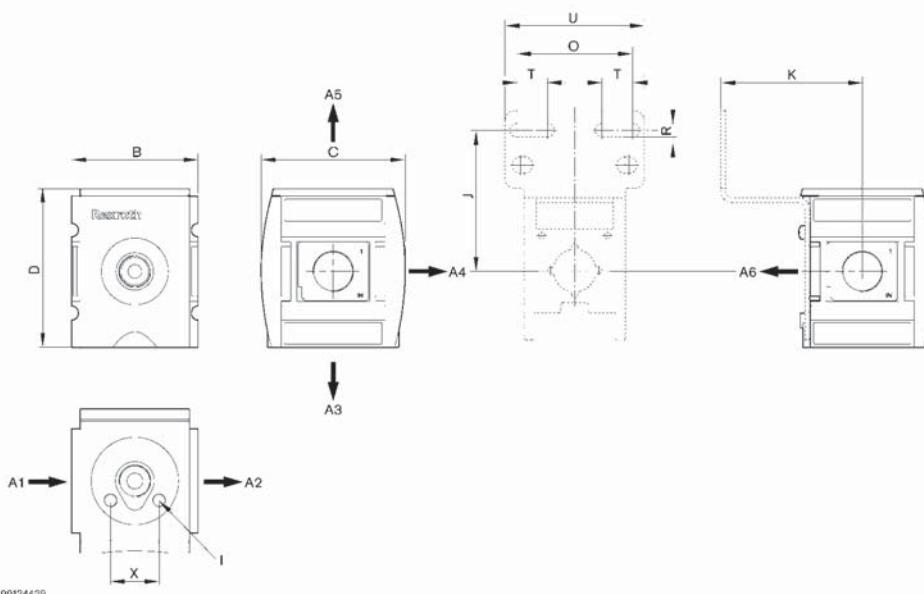
Suitable for flange assembly of a mechanical vacuum/pressure switch

## Part no.

Symbol	Threaded ports	Nominal flow Qn [CFM]	Weight [lbs.]	Part no.
	3/8 NPT	256 (A1-A2) 194 (A1-A3) 79 (A1-A4) 79 (A1-A5) 79 (A1-A6)	0.705	R432002003
	1/2 NPT	256 (A1-A2) 194 (A1-A3) 79 (A1-A4) 79 (A1-A5) 79 (A1-A6)	0.705	R432002004

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Mechanical pressure switch, pabs = -13 ... 0 psi	0821100020
Mechanical pressure switch, p1 = 2 ... 43 psi	0821100021
Mechanical pressure switch, p1 = 15 ... 232 psi	0821100023
Mounting plate AS3-MBR-....-W01	R432031072
Mounting strap AS3-MBR-....-W03	R412007370
Block assembly kit AS3-MBR-....-W04	R412007371
Mounting flange kit (3/8 inch) AS3-MBR-N038...-W05	R432002017
Mounting flange kit (1/2 inch) AS3-MBR-N012...-W05	R432002018
Spare seal for pressure switch	R961400021



A1 A2	A3	A4 A6	A5	B	C	D	I	J	K	O	R	T	U	X
3/8 NPT	1/2 NPT	3/8 NPT	1/4 NPT	2.480	2.913	3.169	M5(10-32)	2.854	2.795	2.362	0.276	0.630	2.835	0.787
1/2 NPT	1/2 NPT	3/8 NPT	1/4 NPT	2.480	2.913	3.169	M5(10-32)	2.854	2.795	2.362	0.276	0.630	2.835	0.787

Dimensions in inches

# Compressed air maintenance unit, series AS5-Inch

AS5 Inch (3/4" and 1" NPT) version index



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# Compressed air maintenance unit, series AS5-Inch

FR+L Maintenance unit AS5-ACD, 2-in-1 with gauge, 5 micron, 3/4" - 1" NPT

**AVENTICS**



00119785

Regulator version

Diaphragm-type pressure regulator  
relieving\*

Filter version

lockable regulator knob

Filter porosity / size

Particle filter

Filter reservoir volume

Filter insert replaceable

Lubricator version

5  $\mu$ m

Oil type

87 cm<sup>3</sup> [2.94 fl.oz.]

Lubricator reservoir volume

Semi-automatic oil filling during operation

Ambient temperature min./max.

HL 68 (DIN 51 524 - ISO VG 68)

Medium

181 cm<sup>3</sup> [6.12 fl.oz.]

Materials:

vertical

Cover

-10 °C / +50 °C [14 °F / 122 °F]

Filter insert

compressed air to ISO 8573-1:2001

Housing

Polyamide

Threaded bushing

Die-cast zinc

	Thread connection NPT	Qn CFM	Operating pressure [psi]	Adjust. range [psi]	Condensate drain	Part No. (Reservoir material)	
						Polycarbonate	Metal
	3/4"		0 ... 232	7 ... 116	fully automatic, closed w/o pressure	R432002700	R432003079
	1"		0 ... 232		fully automatic, closed w/o pressure	R432002706	R432003082
	3/4"	434	22 ... 232		fully automatic, open w/o pressure	R432002701	R432003078
	1"		22 ... 232		fully automatic, open w/o pressure	R432002707	R432003081
	3/4"		7 ... 116		semi-automatic, opened w/o pressure	R432002702	R432003077
	1"		7 ... 116		semi-automatic, opened w/o pressure	R432002708	R432003080
Part No.	Reservoir	Protective guard		Weight [lbs]	Ambient temperature min./max.		
Polycarb.	Metal						
R432002700	R432003079	Polycarbonate/ Die cast zinc	Polyamide/ None	4.14/6.52			
R432002706	R432003082			4.14/6.52			
R432002701	R432003078	Polycarbonate/ Die cast zinc	Polyamide/ None	4.14/6.52			
R432002707	R432003081			4.14/6.52			
R432002702	R432003077			4.03/6.40			
R432002708	R432003080			4.03/6.40			

Nominal flow Qn at 6.3 bar [91 psi] and  $\Delta p = 1$  bar [15 psi]

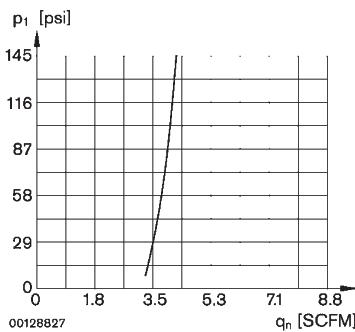
\* For AS5 regulators only, improved regulation is achieved by the use of an internal precision regulator. The piloting regulator consumes a maximum of 1.5 l/min at an inlet pressure of 87 psi (6 bar).

# Compressed air maintenance unit, series AS5-Inch

FR+L Maintenance unit AS5-ACD, 2-in-1 with gauge, 5 micron, 3/4" - 1" NPT

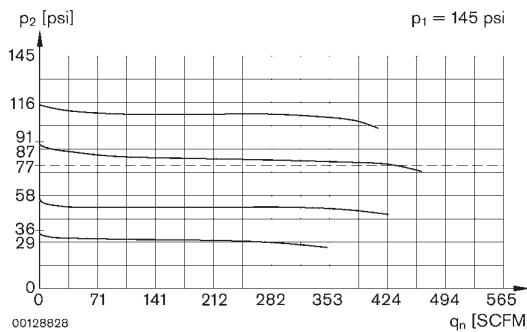
**AVVENTICS**

## Lubricator activation margin



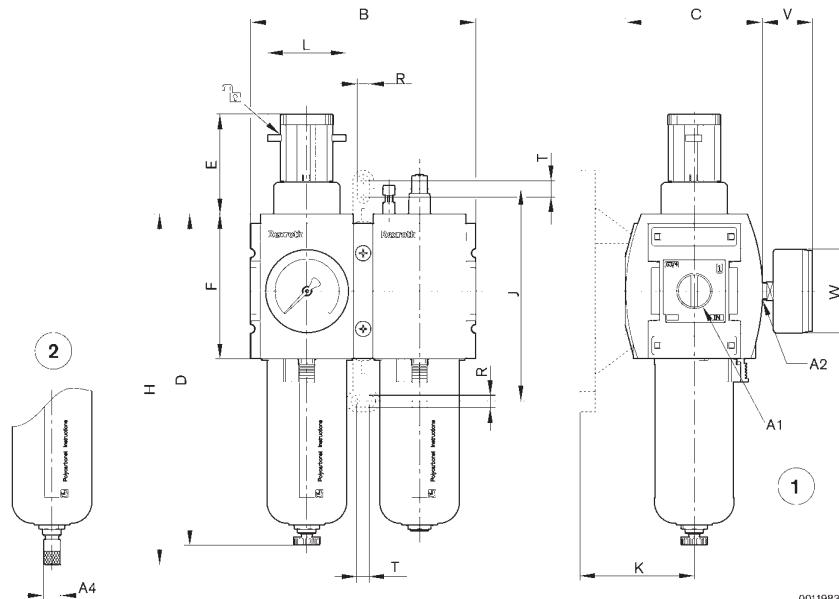
$p_1$  = operating pressure;  $q_n$  = nominal flow

## Flow rate characteristic (setting range $p_2$ : 0.5 - 8 bar [7 ... 116 psi])



$p_2$  = secondary pressure;  $q_n$  = nominal flow

## Dimensioned drawing



- 1) semi-automatic condensate drain
- 2) fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	R	T	V	W
3/4 NPT	1/4 NPT	G 1/8	6.693	4.055	9.843	2.953	4.291	10.472	5.512	3.406	2.325	0.335	0.394	1.497	2.48
1 NPT	1/4 NPT	G 1/8	6.693	4.055	9.843	2.953	4.291	10.472	5.512	3.406	2.325	0.335	0.394	1.497	2.48

# Compressed air maintenance unit, series AS5-Inch

F+R+L Maintenance unit AS5-ACT, 3-in-1 with gauge, 5 micron, 3/4" - 1" NPT

**AVENTICS**



00119786

Regulator version

Filter version

Filter porosity / size

Filter reservoir volume

Lubricator version

Oil type

Lubricator reservoir volume

Installation orientation

Ambient temperature min./max.

Medium

Materials:

Cover

Filter insert

Housing

Threaded bushing

Diaphragm-type pressure regulator  
relieving\*

lockable regulator knob

Particle filter

Filter insert replaceable

5 µm

87 cm<sup>3</sup> [2.94 fl.oz.]

Semi-automatic oil filling during operation

HL 68 (DIN 51 524 - ISO VG 68)

181 cm<sup>3</sup> [6.12 fl.oz.]

vertical

-10°C / +50°C [14 °F / 122 °F]

compressed air to ISO 8573-1:2001

Acrylonitrile Butadiene Styrene (ABS)

Polyethylene

Polyamide

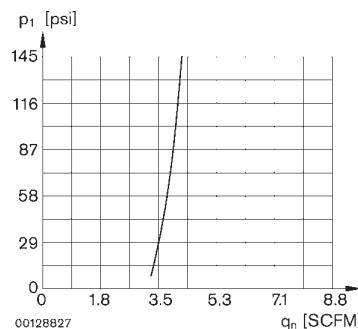
Die-cast zinc

	Thread connection NPT	Qn CFM	Operating pressure [psi]	Adjust. range [psi]	Condensate drain	Part No. (Reservoir material)	
						Polycarbonate	Metal
	3/4"	434	0 ... 232	7 ... 116	fully automatic, closed w/o pressure	R432002712	R432003085
	1"		0 ... 232		fully automatic, closed w/o pressure	R432002718	R432003088
	3/4"		22 ... 232		fully automatic, open w/o pressure	R432002713	R432003084
	1"		22 ... 232		fully automatic, open w/o pressure	R432002719	R432003087
	3/4"		7 ... 116		semi-automatic, opened w/o pressure	R432002714	R432003083
	1"		7 ... 116		semi-automatic, opened w/o pressure	R432002720	R432003086
Part No.	Reservoir	Protective guard			Weight [lbs]	Ambient temperature min./max.	
Polycarb.	Metal						
R432002712	R432003085				5.91/8.28		
R432002718	R432003088				5.91/8.28		
R432002713	R432003084				5.91/8.28	14°/122°F	
R432002719	R432003087				5.91/8.28		
R432002714	R432003083				5.80/8.17		
R432002720	R432003086				5.80/8.17		

Nominal flow Qn at 6.3 bar [91 psi] and  $\Delta p = 1$  bar [15 psi]

\* For AS5 regulators only, improved regulation is achieved by the use of an internal precision regulator. The piloting regulator consumes a maximum of 1.5 l/min at an inlet pressure of 87 psi (6 bar).

#### Lubricator activation margin



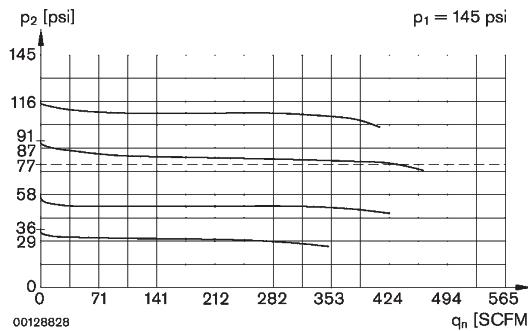
p<sub>1</sub> = operating pressure; q<sub>n</sub> = nominal flow

# Compressed air maintenance unit, series AS5-Inch

F+R+L Maintenance unit AS5-ACT, 3-in-1 with gauge, 5 micron, 3/4" - 1" NPT

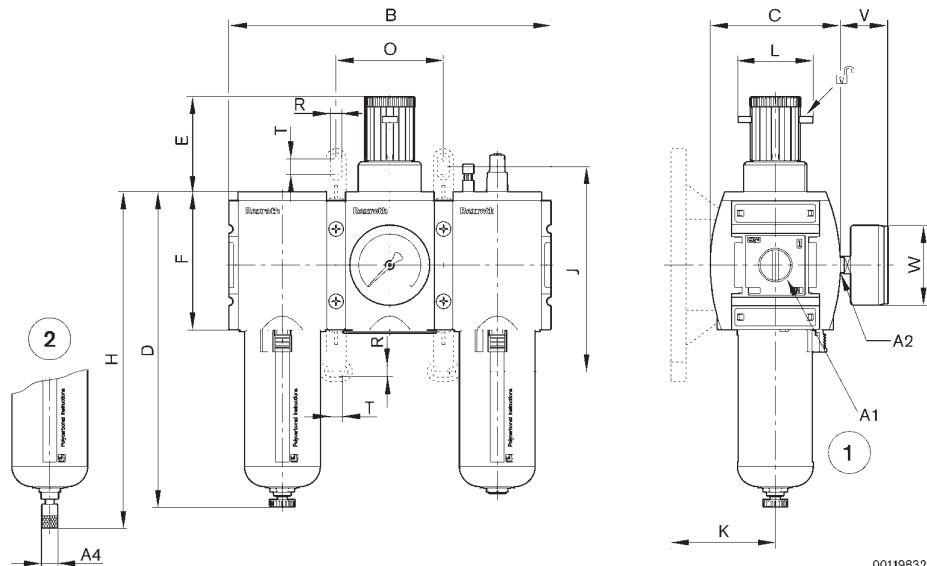
**AVENTICS**

## Flow rate characteristic (setting range p2: 0.5 - 8 bar [7 ... 116 psi])



$p_1$  = working pressure;  $p_2$  = secondary pressure;  $q_n$  = nominal flow

## Dimensioned drawing



- <sup>1)</sup> semi-automatic condensate drain  
<sup>2)</sup> fully automatic condensate drain

00119832

A1	A2	A4	B	C	D	E	F	H	J	K	L	O	R	T
3/4 NPT	1/4 NPT	G 1/8	10.039	4.055	9.843	2.953	4.291	10.472	5.512	3.406	2.325	3.346	0.335	0.394
1 NPT	1/4 NPT	G 1/8	10.039	4.055	9.843	2.953	4.291	10.472	5.512	3.406	2.325	3.346	0.335	0.394
A1	V	W												
3/4 NPT	1.497	2.48												
1 NPT	1.497	2.48												

# Compressed air maintenance unit, series AS5-Inch

Pressure regulator AS5-RGS, with or without gauge, 3/4" - 1" NPT

**AVENTICS**



## Version

Installation orientation  
Working pressure min./max.  
Ambient temperature min./max.  
Medium

Diaphragm-type pressure regulator  
relieving\*

lockable regulator knob

any

- / 16 bar [- / 232 psi]

-10 °C / +50 °C [14 / 122 °F]

compressed air to ISO 8573-1: 2001  
dry air

class 6-4-3

Materials:  
Housing  
Threaded bushing  
Cover

Polyamide

Diecast zinc

Acrylonitrile Butadiene Styrene (ABS)

	Port	Qn [CFM]	Adjustment range [psi]	Pressure gauge	Weight [lbs]	Part No.
	3/4 NPT	511	1 ... 1	with gauge	2.198	R432002861
	3/4 NPT		1 ... 29			R432002862
	3/4 NPT		3 ... 58			R432002863
	3/4 NPT		7 ... 116			R432002864
	3/4 NPT		7 ... 145			R432002865
	3/4 NPT		7 ... 232			R432002866
	1 NPT		1 ... 15			R432002879
	1 NPT		1 ... 29			R432002880
	1 NPT		3 ... 58			R432002881
	1 NPT		7 ... 116			R432002882
	1 NPT		7 ... 145			R432002883
	1 NPT		7 ... 232			R432002884
	3/4 NPT	511	1 ... 15	without gauge	1.995	R432002849
	3/4 NPT		1 ... 29			R432002851
	3/4 NPT		3 ... 58			R432002853
	3/4 NPT		7 ... 116			R432002855
	3/4 NPT		7 ... 145			R432002857
	3/4 NPT		7 ... 232			R432002859
	1 NPT		1 ... 15			R432002867
	1 NPT		1 ... 29			R432002869
	1 NPF		3 ... 58			R432002871
	1 NPT		7 ... 116			R432002873
	1 NPT		7 ... 145			R432002875
	1 NPT		7 ... 232			R432002877

Nominal flow Qn at 6.3 bar [91 psi] and  $\Delta p = 1$  bar [15 psi].

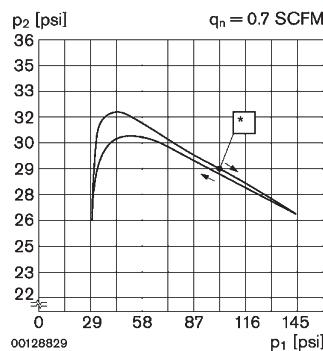
\* For AS5 regulators only, improved regulation is achieved by the use of an internal precision regulator. The piloting regulator consumes a maximum of 1.5 l/min at an inlet pressure of 87 psi (6 bar).

# Compressed air maintenance unit, series AS5-Inch

Pressure regulator AS5-RGS, with or without gauge, 3/4" - 1" NPT

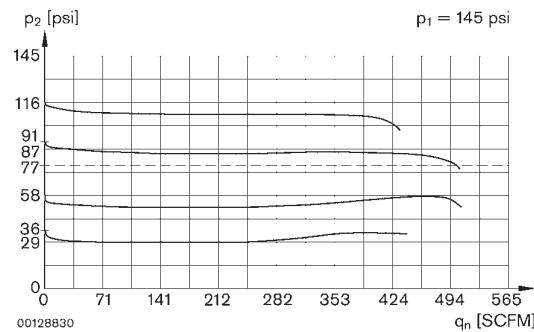
**AVVENTICS**

## Pressure characteristics curve

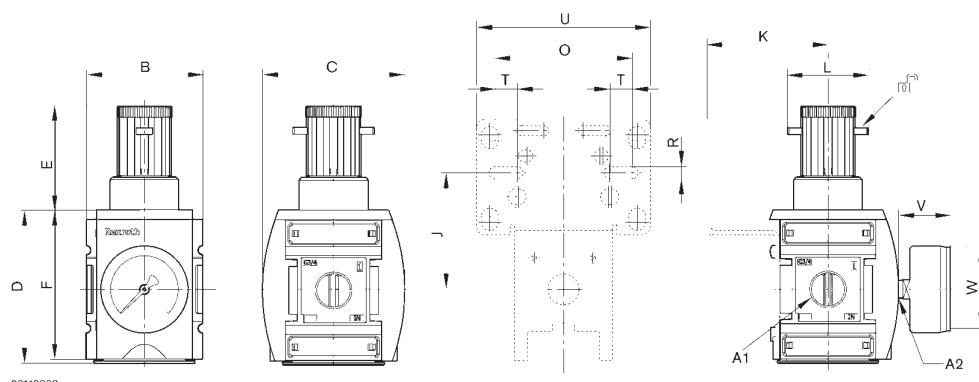


$p_1$  = working pressure;  $p_2$  = secondary pressure;  $q$  = flow rate  
\* starting point

## Flow rate characteristic (setting range $p_2$ : 0.5 - 8 bar [7 ... 116 psi])



$p_1$  = working pressure;  $p_2$  = secondary pressure;  $q_n$  = nominal flow



A1	A2	B	C	D	E	F	J	K	L	O	R	T	U	V	W
3/4 NPT	1/4 NPT	3.346	4.055	4.409	2.953	4.291	3.268	3.425	2.325	3.858	0.276	0.63	4.882	1.497	2.48
1 NPT	1/4 NPT	3.346	4.055	4.409	2.953	4.291	3.268	3.425	2.325	3.858	0.276	0.63	4.882	1.497	2.48

# Compressed air maintenance unit, series AS5-Inch

Filter regulator AS5-FRE, with or w/out gauge, 5 or 40 micron, 3/4" - 1" NPT

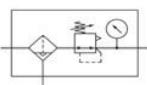
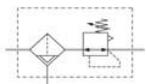
**AVVENTICS**



00119795

Regulator version	Diaphragm-type pressure regulator
Installation orientation	vertical
Ambient temperature min./max.	-10°C / +50°C [14 °F / 122 °F]
Regulator version	relieving*
Filter version	lockable regulator knob
Filter reservoir volume	Particle filter
Medium	Filter insert replaceable
Materials:	87 cm³ [2.94 fl.oz.]
Housing	compressed air to ISO 8573-1:2001
Threaded bushing	Polyamide
Cover	Die-cast zinc
Filter insert	Acrylonitrile Butadiene Styrene (ABS)
Protective guard	Polyethylene
	Polyamide

\* For AS5 regulators only, improved regulation is achieved by the use of an internal precision regulator. The piloting regulator consumes a maximum of 1.5 l/min at an inlet pressure of 87 psi (6 bar).

	Thread connection NPT	Filter (µm)	Oper. press. [psi]	Adjust. range [psi]	Gauge	Condensate drain	Part No. (Reservoir material)	
							Polycarb.	Metal
	3/4"	5	7 ... 232			semi-auto., opened w/o pressure	R432002786	R432003067
	3/4"	5	22 ... 232			fully automatic, open w/o pressure	R432002785	R432003068
	3/4"	5	0 ... 232	7 ... 116	with gauge	fully auto., closed w/o pressure	R432002784	R432003069
	1"	5	7 ... 232			semi-auto., opened w/o pressure	R432002805	R432003070
	1"	5	22 ... 232			fully automatic, open w/o pressure	R432002804	R432003071
	1"	5	0 ... 232			fully auto., closed w/o pressure	R432002805	R432003072
	3/4"	5	7 ... 232			semi-auto., opened w/o pressure	R432002773	R432003061
	3/4"	5	22 ... 232			fully automatic, open w/o pressure	R432002772	R432003062
	3/4"	5	0 ... 232	7 ... 116	w/o gauge	fully auto., closed w/o pressure	R432002771	R432003063
	1"	5	7 ... 232			semi-auto., opened w/o pressure	R432002792	R432003064
	1"	5	22 ... 232			fully automatic, open w/o pressure	R432002791	R432003065
	1"	5	0 ... 232			fully auto., closed w/o pressure	R432002790	R432003066
	3/4"	5	7 ... 232			semi-auto., opened w/o pressure	R432002782	
	3/4"	5	22 ... 232			fully automatic, open w/o pressure	R432002780	
	3/4"	5	0 ... 232	7 ... 145	w/o gauge	fully auto., closed w/o pressure	R432002778	
	1"	5	7 ... 232			semi-auto., opened w/o pressure	R432002801	
	1"	5	22 ... 232			fully automatic, open w/o pressure	R432002799	
	1"	5	0 ... 232			fully auto., closed w/o pressure	R432002797	
	3/4"	40	7 ... 232			semi-auto., opened w/o pressure	R432002783	
	3/4"	40	22 ... 232			fully automatic, open w/o pressure	R432002781	
	3/4"	40	0 ... 232	7 ... 145	w/o gauge	fully auto., closed w/o pressure	R432002779	
	1"	40	7 ... 232			semi-auto., opened w/o pressure	R432002802	
	1"	40	22 ... 232			fully automatic, open w/o pressure	R432002800	
	1"	40	0 ... 232			fully auto., closed w/o pressure	R432002798	
Part No. Polycarb.	Part No. Metal	Flow rate [CFM]	Reservoir	Protective guard	Weight [lbs]			
R432002786	R432003067				2.385/3.573			
R432002785	R432003068				2.498/3.686			
R432002784	R432003069	458	Polycarbonate/ Die cast zinc	Polyamide/ None	2.498/3.686			
R432002805	R432003070				2.385/3.573			
R432002804	R432003071				2.498/3.686			
R432002805	R432003072				2.498/3.686			

# Compressed air maintenance unit, series AS5-Inch

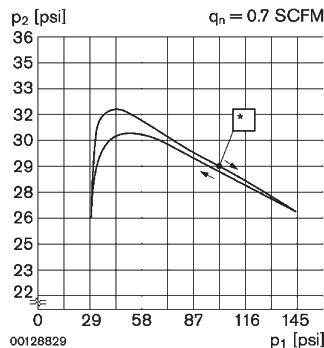
Filter regulator AS5-FRE, with or w/out gauge, 5 or 40 micron, 3/4" - 1" NPT

**AVVENTICS**

Part No.	Flow rate [CFM]	Reservoir	Protective guard	Weight [lbs]
Polycarb.	Metal			
R432002773	R432003061			2.183/3.373
R432002772	R432003062			2.295/3.485
R432002771	R432003063	458	Polycarbonate/ Die cast zinc	2.295/3.485
R432002792	R432003064		Polyamide/ None	2.183/3.373
R432002791	R432003065			2.295/3.485
R432002790	R432003066			2.295/3.485
R432002782				2.183/ --
R432002780				2.295/ --
R432002778		458	Polycarbonate	2.295/ --
R432002801			Polyamide	2.183/ --
R432002799				2.295/ --
R432002797				2.295/ --
R432002783				2.183/ --
R432002781				2.295/ --
R432002779		458	Polycarbonate	2.295/ --
R432002802			Polyamide	2.183/ --
R432002800				2.295/ --
R432002798				2.295/ --

Nominal flow Qn at 6.3 bar [91 psi] and  $\Delta p = 1$  bar [15 psi]

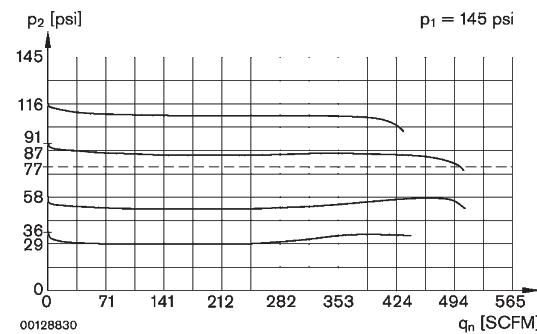
## Pressure characteristics curve



p<sub>1</sub> = working pressure; p<sub>2</sub> = secondary pressure; q<sub>n</sub> = flow rate

\* starting point

## Flow rate characteristic (setting range p2: 0.5 - 8 bar [7 ... 116 psi])

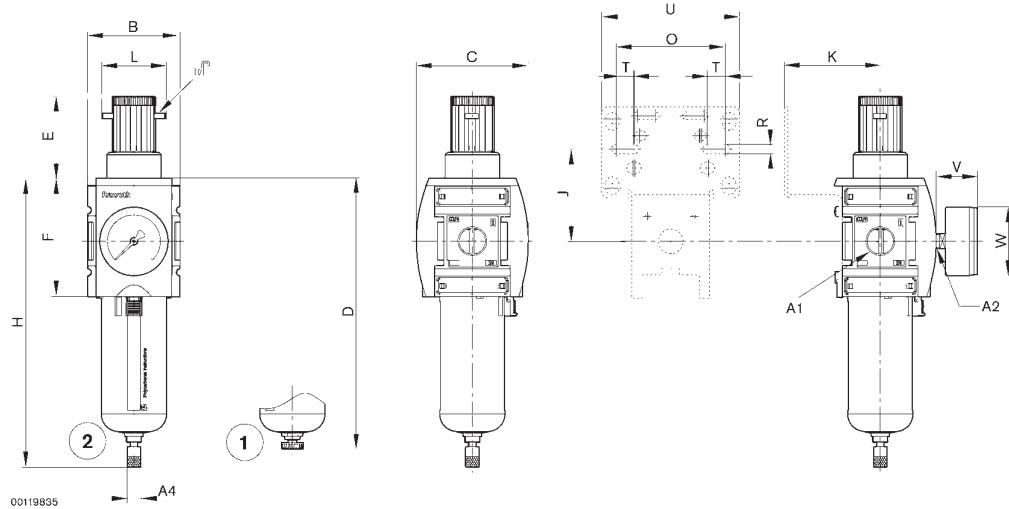


p<sub>1</sub> = working pressure; p<sub>2</sub> = secondary pressure; q<sub>n</sub> = nominal flow

# Compressed air maintenance unit, series AS5-Inch

Filter regulator AS5-FRE, with or w/out gauge, 5 or 40 micron, 3/4" - 1" NPT

**AVENTICS**



- 1) semi-automatic condensate drain
- 2) fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	O	R	T
3/4 NPT	1/4 NPT	G 1/8	2.48	4.055	9.843	2.953	4.291	10.472	3.268	3.425	2.325	3.858	0.276	0.63
1 NPT	1/4 NPT	G 1/8	2.48	4.055	9.843	2.953	4.291	10.472	3.268	3.425	2.325	3.858	0.276	0.63
A1	U	V	W											
3/4 NPT	4.882	1.497	2.48											
1 NPT	4.882	1.497	2.48											

# Compressed air maintenance unit, series AS5-Inch

Standard filter AS5-FLS, 5 or 40 micron, 3/4" - 1" NPT

**AVENTICS**



00119796

Ambient temperature min./max.	-10°C / +50°C [14 °F / 122 °F]
Installation orientation	vertical
Version	Replaceable filter element
Filter reservoir volume	87 cm³ [2.94 fl.oz.]
Medium	compressed air to ISO8573-1:2001
Materials:	
Housing	Polyamide
Threaded bushing	Die-cast zinc
Cover	Acrylonitrile Butadiene Styrene (ABS)
Filter insert	Polyethylene

	Thread connection NPT	Filter (µm)	Oper. press. [psi]	Flow rate [CFM]	Condensate drain	Part No. (Reservoir material)	
						Polycarb.	Metal
	3/4"	5	7 ... 232	275	semi-auto., opened w/o pressure	R432002755	R432003035
	3/4"	5	22 ... 232		fully automatic, open w/o pressure	R432002753	R432003036
	3/4"	5	0 ... 232		fully auto., closed w/o pressure	R432002751	R432003037
	3/4"	40	7 ... 232		semi-auto., opened w/o pressure	R432002756	
	3/4"	40	22 ... 232		fully automatic, open w/o pressure	R432002754	
	3/4"	40	0 ... 232		fully auto., closed w/o pressure	R432002752	
	1"	5	7 ... 232	275	semi-auto., opened w/o pressure	R432002765	R432003038
	1"	5	22 ... 232		fully automatic, open w/o pressure	R432002763	R432003039
	1"	5	0 ... 232		fully auto., closed w/o pressure	R432002761	R432003040
	1"	40	7 ... 232		semi-auto., opened w/o pressure	R432002766	
	1"	40	22 ... 232		fully automatic, open w/o pressure	R432002764	
	1"	40	0 ... 232		fully auto., closed w/o pressure	R432002762	
Part No.		Reservoir		Protective guard		Weight [lbs]	
Polycarb.	Metal						
R432002755	R432003035	Polycarbonate/ Die Cast Zinc		Polyamide/ None		1.583/2.773	
R432002753	R432003036					1.695/2.885	
R432002751	R432003037					1.695/2.885	
R432002756						1.583/ --	
R432002754						1.695/ --	
R432002752						1.695/ --	
R432002765	R432003038	Polycarbonate/ Die Cast Zinc		Polyamide/ None		1.583/2.773	
R432002763	R432003039					1.695/2.885	
R432002761	R432003040					1.695/2.885	
R432002766						1.583/ --	
R432002764						1.695/ --	
R432002762						1.695/ --	

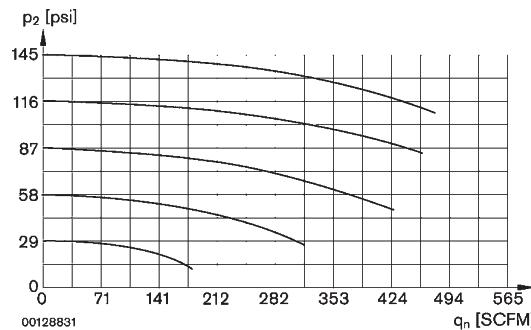
Nominal flow Qn at 6.3 bar [91 psi] and  $\Delta p = 1$  bar [15 psi]

# Compressed air maintenance unit, series AS5-Inch

Standard filter AS5-FLS, 5 or 40 micron, 3/4" - 1" NPT

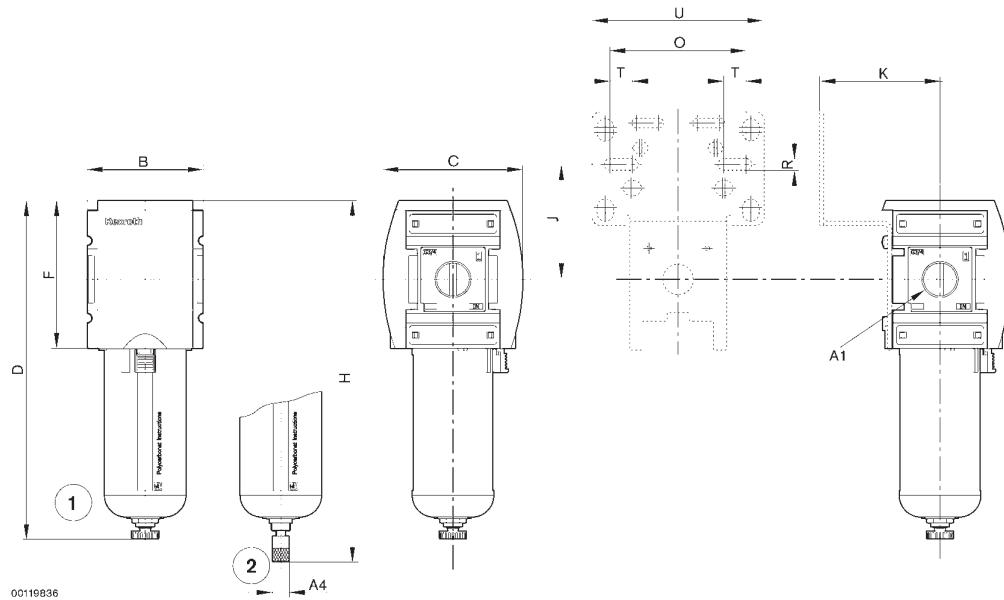
**AVENTICS** 

## Flow rate characteristic



p2 = secondary pressure; qn = nominal flow

## Dimensioned drawing



- 1) semi-automatic condensate drain  
2) fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U
3/4 NPT	G 1/8	3.346	4.055	9.843	4.291	10.472	3.268	3.425	3.858	0.276	0.63	4.882
1 NPT	G 1/8	3.346	4.055	9.843	4.291	10.472	3.268	3.425	3.858	0.276	0.63	4.882

# Compressed air maintenance unit, series AS5-Inch

Pre-filter, series AS5-FLP, 0.3 micron, 3/4" - 1" NPT

**AVENTICS**



Ambient temperature min./max.

-10°C / +50°C (+14°F /+122°F) with dried air

Installation orientation

vertical

Filter reservoir volume

2.9 fl oz (87 cm<sup>3</sup>)

Medium

compressed air

materials:

Housing

Polyamide, seals Buna-N (NBR)

Threaded bushing

Diecast zinc

Cover

acrylonitrile butadiene styrene (ABS)

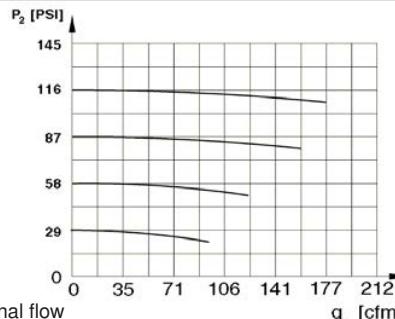
Filter insert

Polymer-Impregnated paper

	Thread conn. NPT	Oper. press [psi]	Flow rate [CFM]	Condensate drain		with contam. display	Part No. (Reservoir material)	
				Polycarb.	Metal		R432002911	R432003041
	3/4"	232	78	semi-auto., opened w/o pressure		no	R432002911	R432003041
	3/4"	232		semi-auto., opened w/o pressure		yes	R432002912	
	3/4"	232		fully automatic, open w/o pressure		no	R432002745	R432003042
	3/4"	232		fully automatic, open w/o pressure		yes	R432002746	
	3/4"	232		fully auto., closed w/o pressure		no	R432002743	R432003043
	3/4"	232		fully auto., closed w/o pressure		yes	R432002744	
	1"	232	78	semi-auto., opened w/o pressure		no	R432002913	R432003044
	1"	232		semi-auto., opened w/o pressure		yes	R432002914	
	1"	232		fully automatic, open w/o pressure		no	R432002749	R432003045
	1"	232		fully automatic, open w/o pressure		yes	R432002750	
	1"	232		fully auto., closed w/o pressure		no	R432002747	R432003046
	1"	232		fully auto., closed w/o pressure		yes	R432002748	
Part No.	Polycarb.	Metal	Filter (μm)	Reservoir		Protective guard	Weight [lbs]	
R432002911	R432003041		0.3				1.6/2.8	
R432002912			0.3				1.7/2.9	
R432002745	R432003042		0.3	Polycarbonate/ Die Cast Zinc		Polyamide/ None	1.7/2.9	
R432002746			0.3				1.6/2.8	
R432002743	R432003043		0.3				1.7/2.9	
R432002744			0.3				1.7/2.9	
R432002913	R432003044		0.3				1.6/2.8	
R432002914			0.3				1.7/2.9	
R432002749	R432003045		0.3	Polycarbonate/ Die Cast Zinc		Polyamide/ None	1.7/2.9	
R432002750			0.3				1.6/2.8	
R432002747	R432003046		0.3				1.7/2.9	
R432002748			0.3				1.7/2.9	

Nominal flow at inlet pressure 91 psi with 1.5 psi pressure drop [6.3 bar at  $\Delta p = 0.1$  bar]

#### flow rate characteristic



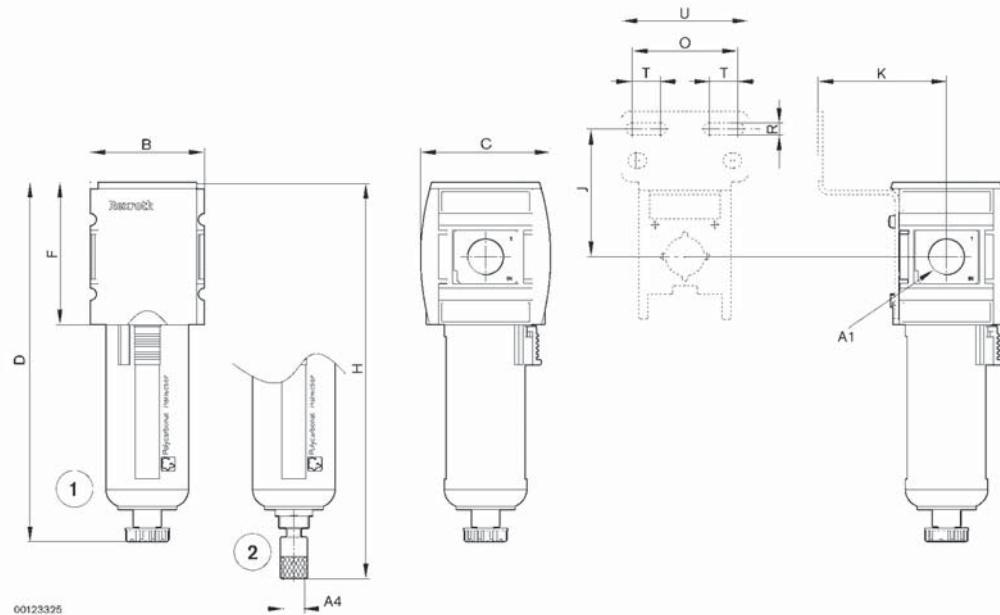
p1 = working pressure; p2 = secondary pressure; qn = nominal flow

# Compressed air maintenance unit, series AS5-Inch

Pre-filter, series AS5-FLP, 0.3 micron, 3/4" - 1" NPT

AVVENTICS<sup>®</sup>

## dimensioned drawing



- 1) semi-automatic condensate drain
- 2) fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	U	X
3/4" NPT	G1/8	3.35	4.06	9.84	4.29	10.46	2.85	2.80	2.36	0.28	0.63	2.83
1" NPT	G1/8	3.35	4.06	9.84	4.29	10.46	2.85	2.80	2.36	0.28	0.63	2.83

Dimensions in inches.

# Compressed air maintenance unit, series AS5-Inch

Coalescing filter AS5-FLC, 0.01 micron, 3/4" - 1" NPT

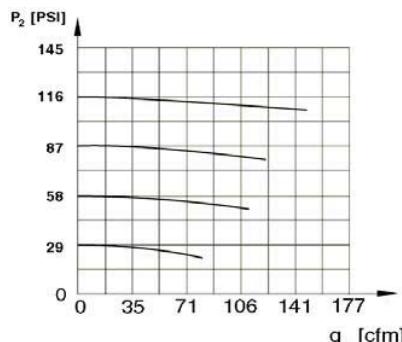
**AVVENTICS**



Ambient temperature min./max.	-10°C / +50°C (+14°F / +122°F) with dried air
Installation orientation	vertical
Filter reservoir volume	2.9 fl oz / 87 cm <sup>3</sup>
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3
ATEX	II 2G2D -10 °C ≤ Ta ≤ 50 °C
materials:	
Body / seals	Polyamide / Buna-N (NBR)
Threaded bushing	Diecast zinc
Cover	acrylonitrile butadiene styrene plastic

	Thread conn. NPT	Oper. press. [psi]	Flow rate [CFM]	Condensate drain	with contam. display	Part No. (Reservoir material)	
						Polycarb.	Metal
	3/4"	7 ... 232	77.7	semi-auto., opened w/o pressure	no	R432002737	R432003047
	3/4"	7 ... 232		semi-auto., opened w/o pressure	yes	R432002915	R432003053
	3/4"	22 ... 232		fully automatic, open w/o pressure	no	R432002735	R432003048
	3/4"	22 ... 232		fully automatic, open w/o pressure	yes	R432002916	R432003054
	3/4"	0 ... 232		fully auto., closed w/o pressure	no	R432002733	R432003044
	3/4"	0 ... 232		fully auto., closed w/o pressure	yes	R432002917	R432003055
	1"	7 ... 232	77.7	semi-auto., opened w/o pressure	no	R432002742	R432003050
	1"	7 ... 232		semi-auto., opened w/o pressure	yes	R432002918	R432003056
	1"	22 ... 232		fully automatic, open w/o pressure	no	R432002740	R432003051
	1"	22 ... 232		fully automatic, open w/o pressure	yes	R432002919	R432003057
	1"	0 ... 232		fully auto., closed w/o pressure	no	R432002738	R432003052
	1"	0 ... 232		fully auto., closed w/o pressure	yes	R432002920	R432003058
Part No.	Polycarb.	Metal	Filter porosity (µm)	Reservoir	Protective guard	Weight [lbs]	
R432002737	R432003047		0.01	Polycarbonate/ Die Cast Zinc	Polyamide/ None	1.6/2.8	
R432002915	R432003053		0.01			1.7/2.9	
R432002735	R432003048		0.01			1.7/2.9	
R432002916	R432003054		0.01			1.6/2.8	
R432002733	R432003044		0.01			1.7/2.9	
R432002917	R432003055		0.01			1.7/2.9	
R432002742	R432003050		0.01	Polycarbonate/ Die Cast Zinc	Polyamide/ None	1.6/2.8	
R432002918	R432003056		0.01			1.7/2.9	
R432002740	R432003051		0.01			1.7/2.9	
R432002919	R432003057		0.01			1.6/2.8	
R432002738	R432003052		0.01			1.7/2.9	
R432002920	R432003058		0.01			1.7/2.9	

Nominal flow at inlet pressure 91 psi with 1.5 psi pressure drop [6.3 bar at  $\Delta p = 0.1$  bar]



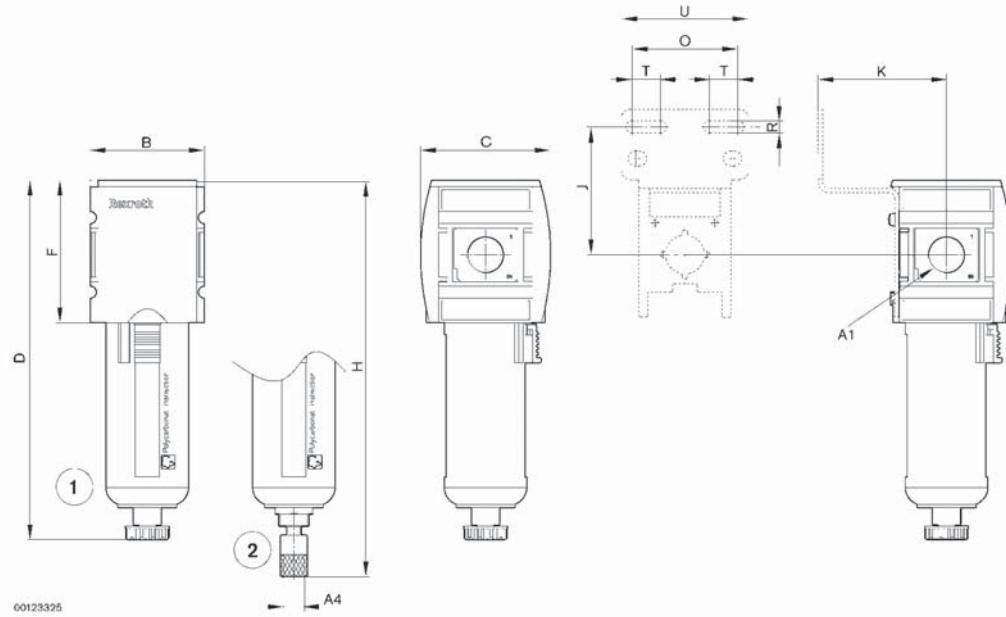
p1 = working pressure; p2 = secondary pressure; qn = nominal flow

# Compressed air maintenance unit, series AS5-Inch

Coalescing filter AS5-FLC, 0.01 micron, 3/4" - 1" NPT

AVVENTICS<sup>®</sup>

## dimensioned drawing



- 1) semi-automatic condensate drain  
2) fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U		
3/4 NPT	G 1/8		2.5	2.9	7.45	3.1	8.1	2.85	2.8	2.4	0.3	0.63	2.8	
1 NPT	G 1/8													

Dimensions in inches.

# Compressed air maintenance unit, series AS5-Inch

Active carbon filter AS5-FLA, 3/4" - 1" NPT

For odor/vapor removal

**AVVENTICS**



00119385

Ambient temperature min./max.	-10°C / +50° C (+14°F /+122°F) with dried air
Installation orientation	vertical
Filter reservoir volume	2.9 fl oz - 87 cm <sup>3</sup>
Medium	compressed air acc. to ISO 8573-1: 2001 dry air
Compressed air class	class 6-4-3
materials:	
Housing	Polyamide, seals Buna-N (NBR)
Threaded bushing	Die cast zinc
Cover	acrylonitrile butadiene styrene plastic

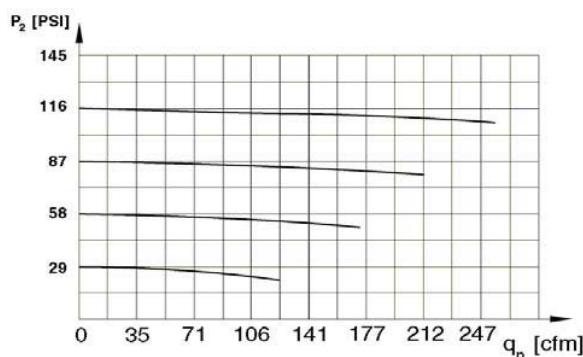
	Thread conn. NPT	Oper. press. [psi]	Flow rate [CFM]	Protective guard	Weight [lb]	Part No. (Reservoir material)	
						Polycarb.	Metal
	3/4"	0 ... 232	60	Polyamide/none	0.825/2.015	R432002921	R432003059
	1"	0 ... 232	60	Polyamide/none	0.825/2.015	R432002922	R432003060

Reservoir materials: Polycarbonate or die-cast zinc

Bosch Rexroth recommends that filter types FLP and FLC be used upstream as prefilters

Nominal flow at inlet pressure 91 psi with 1.5 psi pressure drop [6.3 bar at  $\Delta p = 0.1$  bar]

## flow rate characteristic



p<sub>1</sub> = working pressure; p<sub>2</sub> = secondary pressure; q<sub>n</sub> = nominal flow

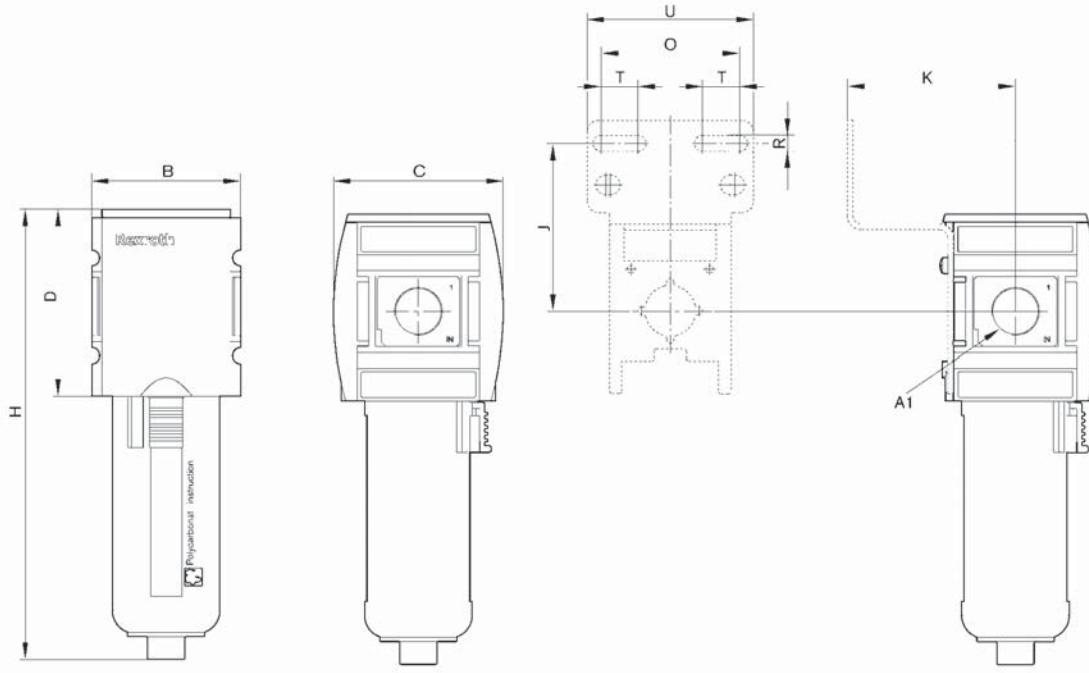
# Compressed air maintenance unit, series AS5-Inch

Active carbon filter AS5-FLA, 3/4" - 1" NPT

For odor/vapor removal

AVVENTICS 

dimensioned drawing



A1	B	C	D	H	J	K	O	R	T	U
3/4 NPT	2.5	2.9	7.45	8.1	2.85	2.8	2.4	0.3	0.63	2.8
1 NPT										

Dimensions in Inches

# Compressed air maintenance unit, series AS5-Inch

Lubricator, oil-drop AS5-LBS, with semi-automatic oil filling, 3/4" - 1" NPT

**AVVENTICS**



Ambient temperature min./max.	-10°C / +50°C [14 °F / 122 °F]
Medium	Compressed air to ISO8573-1:2001
Type of filling	Semi-automatic oil filling during operation
Installation orientation	vertical
Reservoir volume	181 cm³ [6.12 fl.oz.]
Oil type	HL 68 (DIN 51 524 - ISO VG 68)
Materials:	
Housing	Polyamide, seals Buna-N (NBR)
Threaded bushing	Die-cast zinc
Cover	Acrylonitrile Butadiene Styrene (ABS)

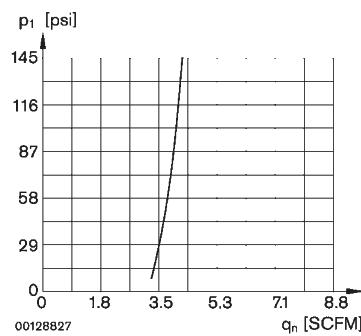
00119800

	Thread conn. NPT	Oper. press. [psi]	Flow rate [CFM]	Protective guard	Weight [lb]	Ready for oil level sensor	Part No. (Reservoir material)	
							Polycarb.	Metal
	3/4"	7 ... 232	557	Polyamide/none	1.68/2.87	no	R432002809	R432003073
	3/4"	7 ... 232	557	Polyamide/none	1.68/2.87	yes	R432002810	R432003074
	1"	7 ... 232	557	Polyamide/none	1.68/2.87	no	R432002813	R432003075
	1"	7 ... 232	557	Polyamide/none	1.68/2.87	yes	R432002814	R432003076

Reservoir materials: Polycarbonate or die-cast zinc

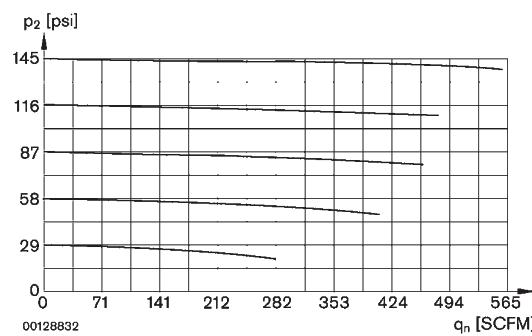
Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 1$  bar)

## Lubricator activation margin



$p_1$  = secondary pressure;  $q_n$  = nominal flow

## Flow rate characteristic



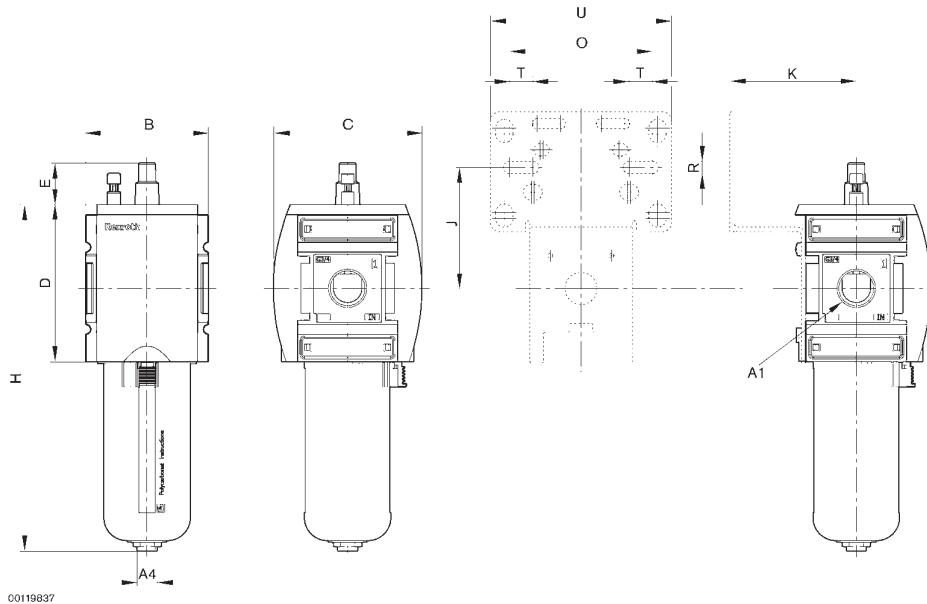
$p_2$  = secondary pressure;  $q_n$  = nominal flow

# Compressed air maintenance unit, series AS5-Inch

Lubricator AS5-LBS, with semi-automatic oil filling, 3/4" - 1" NPT

AVVENTICS<sup>®</sup>

## Dimensioned drawing



A1	A4	B	C	D	E	H	J	K	O	R	T	U
3/4 NPT	G 1/8	3.346	4.055	4.291	1.143	9.409	3.268	3.425	3.858	0.276	0.63	4.882
1 NPT	G 1/8	3.346	4.055	4.291	1.143	9.409	3.268	3.425	3.858	0.276	0.63	4.882

# Compressed air maintenance unit, series AS5-Inch

3/2 directional control valve AS5-SOV, electrically operated, 3/4" - 1" NPT

**AVENTICS**



00119378

Ambient temperature min./max.	-10°C / +50° C (+14°F /+122°F) with dried air
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3
materials:	
Housing	polyamide, seals Buna-N (NBR)
Cover	acrylonitrile butadiene styrene (ABS)
Threaded bushing	Die cast zinc
Protection class (DIN 40 050) with electrical connector	IP 65 (NEMA 4)

Power consumption at 24 V DC		Switch-on power at 230V 50 Hz AC		Holding power at 230V 50 Hz AC	
W	VA	VA	VA		
2		2.2		1.6	

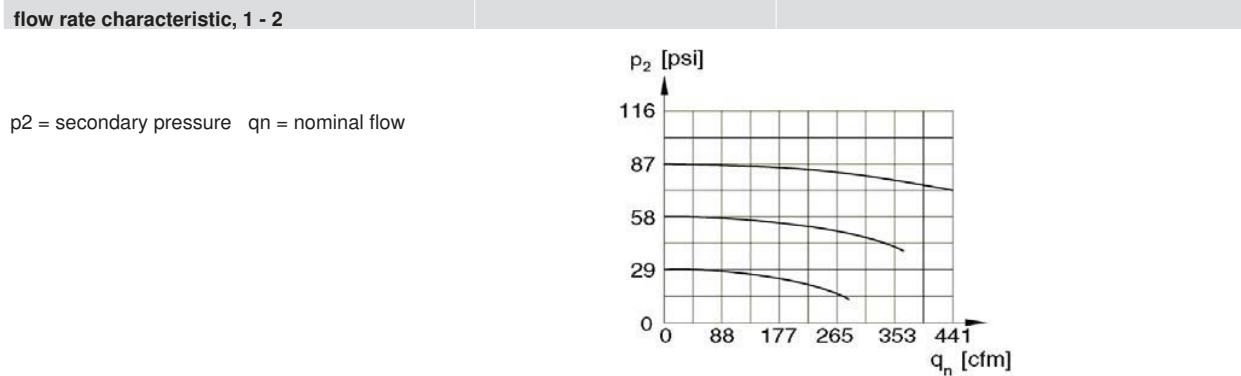
	Thread connection NPT	Operational voltage	Qn CFM	Operating pressure [psi]	Weight [lbs]	Notes	Part No.
	3/4"	-			1.413	1	R432002890
	3/4"	-			1.367	2	R432002889
	3/4"	24VDC ±10%	441	36 ... 145	1.493	3	R432002885
	3/4"	50/60Hz			1.493	3	R432002886
	3/4"	50/60Hz			1.493	3	R432002887
	1"	-			1.413	1	R432002896
	1"	-			1.367	2	R432002895
	1"	24VDC ±10%	441	36 ... 145	1.493	3	R432002891
	1"	50/60Hz			1.493	3	R432002892
	1"	50/60Hz			1.493	3	R432002893

1) without DO16 pilot valve 2) with CNOMO interface, without pilot valve

3) with DO16 pilot valve (use electrical connector DIN Form C, series CN1)

Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 1$  bar)

Silencer, sintered bronze (conical) R432031045

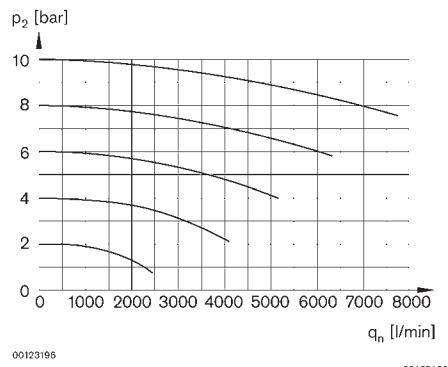


# Compressed air maintenance unit, series AS5-Inch

3/2 directional control valve AS5-SOV, electrically operated, 3/4" - 1" NPT

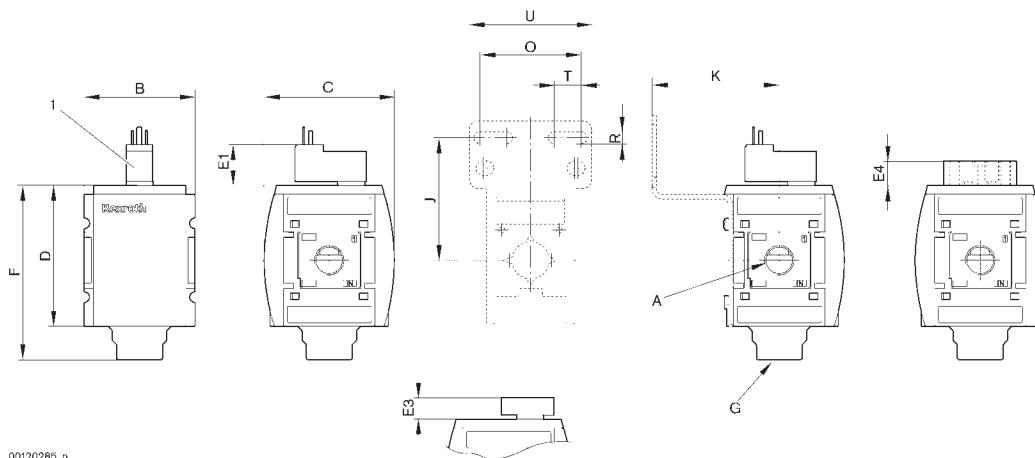
**AVENTICS** 

rear exhaust, 2 - 3



$p_2$  = secondary pressure    $q_n$  = nominal flow

dimensioned drawing



1) pilot valve

A	G	B	C	D	E1	E3	F	J	K	O	R	T	U		
3/4" NPT 1" NPT	3/8" NPT	2.5	3.0	3.1	0.91	0.48	3.9	2.85	2.6	2.4	0.3	0.63	2.8		

Dimensions in inches.

# Compressed air maintenance unit, series AS5-Inch

3/2 directional control valve AS5-SOV, pneumatically operated, 3/4" - 1" NPT

**AVENTICS** 



00119377

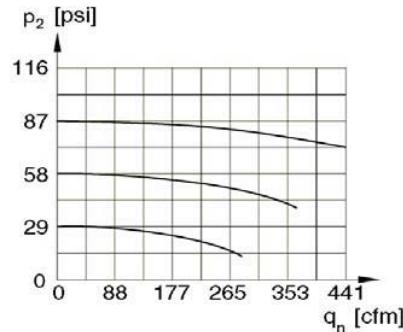
Ambient temperature min./max.	-10°C / +50° C (+14°F /+122°F) with dried air
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3
ATEX	II 2G2D -10 °C ≤ Ta ≤ 50 °C
materials:	Polyamide, seals Buna-N (NBR)
Housing	Acrylonitrile butadiene styrene (ABS)
Cover	Die cast zinc
Thread connection	

	Working pressure min/max [psi]	Port	Weight [lb]	Part No.
	36 / 145	3/4 NPT 1 NPT	1.01	R432002888 R432002894

Nominal flow Qn at 91 psi with 15 psi pressure drop (6.3 bar and  $\Delta p = 1$  bar.)

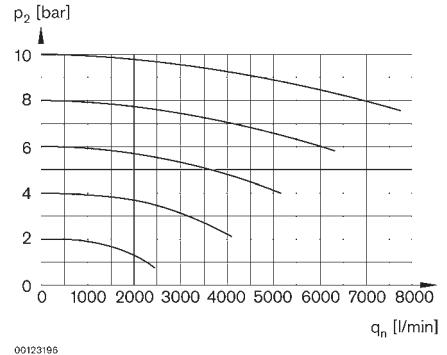
Silencer, sintered bronze (conical) R432031045

## flow rate characteristic, 1 - 2



p2 = secondary pressure qn = nominal flow

## rear exhaust, 2 - 3



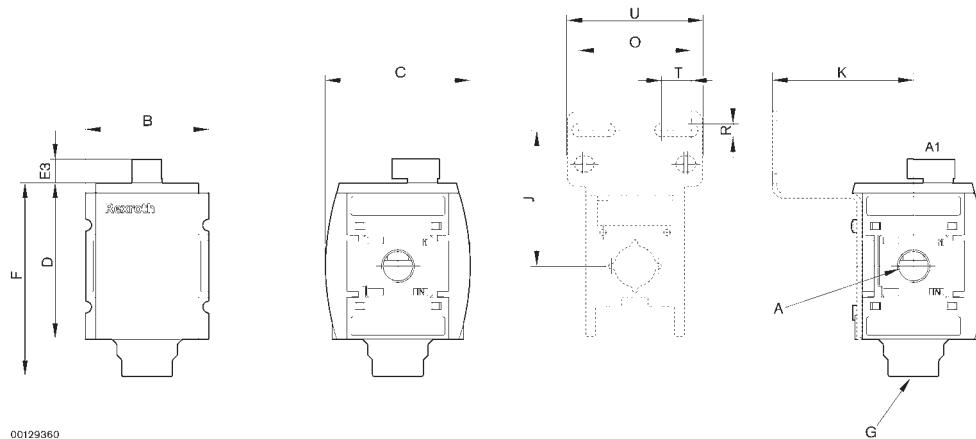
p2 = secondary pressure qn = nominal flow

# Compressed air maintenance unit, series AS5-Inch

3/2 directional control valve AS5-SOV, pneumatically operated, 3/4" - 1" NPT

AVVENTICS 

## dimensioned drawing



A	A1	B	C	D	E3	F	G	J	K	O	R	T	U
3/4" NPT	G1/8	2.5	2.9	3.1	0.48	3.9	3/8" NPT	2.85	2.6	2.4	0.3	0.63	2.8
1" NPT	G1/8	2.5	2.9	3.1	0.48	3.9	3/8" NPT	2.85	2.6	2.4	0.3	0.63	2.8

Dimensions in inches.

# Compressed air maintenance unit, series AS5-Inch

3/2-way shut-off valve (ball valve), AS5-BAV, lockable, 3/4" - 1" NPT

**AVVENTICS**



00119805

Ambient temperature min./max.

-10°C / +50°C [14 °F / 122 °F]

Medium

Compressed air to ISO8573-1:2001

Materials:

Housing

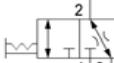
PA MXD6

Threaded bushing

Die-cast zinc

Cover

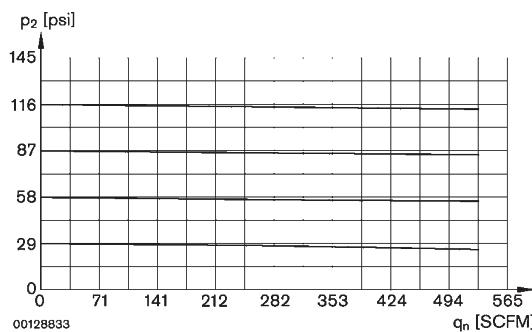
Acrylonitrile Butadiene Styrene (ABS)

	Port	Qn [CFM]	Weight [lbs]	Part No.
	3/4 NPT 1 NPT	511	1.819	R432002726
				R432002727

Nominal flow Qn at 6.3 bar [91 psi] and  $\Delta p = 1$  bar [15 psi].  
Lockable via padlock (not included)

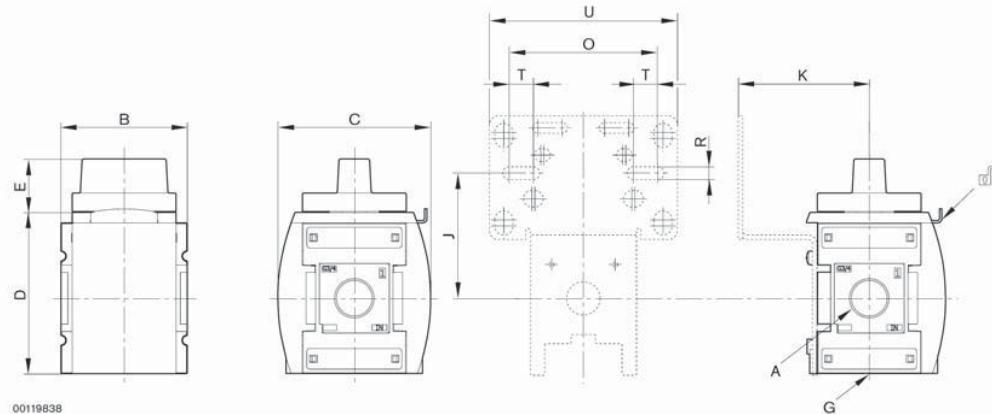
Silencer, sintered bronze (conical) R432031046

## Flow rate characteristic



p2 = secondary pressure; qn = nominal flow

## Dimensioned drawing



A	B	C	D	E	G	J	K	O	R	T	U
3/4 NPT	3.346	4.055	4.291	1.418	3/4 NPT	3.268	3.425	3.858	0.276	0.63	4.882
1 NPT	3.346	4.055	4.291	1.418	3/4 NPT	3.268	3.425	3.858	0.276	0.63	4.882

# Compressed air maintenance unit, series AS5-Inch

Filling valve (soft start) AS5-SSV, 3/4" - 1" NPT

**AVVENTICS**



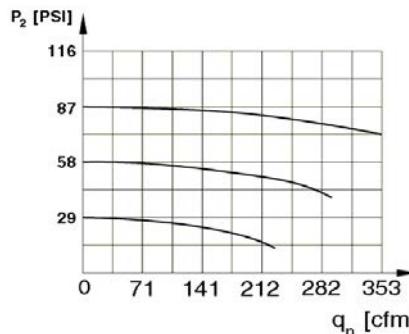
00119380

Working pressure min/max	36 / 232 PSI (2.5 / 16 bar)
Ambient temperature min./max.	+14°F /+122°F (-10°C / +50° C) with dried air
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3
materials:	
Housing	Polyamide, seals Buna-N (NBR)
Threaded bushing	Die cast zinc
Cover	Acrylonitrile butadiene styrene (ABS)

	Thread connection	Flow [CFM]	Weight [lb]	Part No.
	3/4 NPT	353	0.95	R432002909
	1 NPT			R432002910

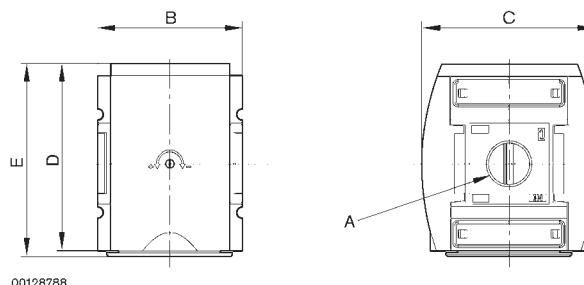
Nominal flow with supply pressure 91 PSI and 15 PSI pressure drop (6.3 bar at  $\Delta p = 1$  bar)

## flow rate characteristic



p2 = secondary pressure  
qn = nominal flow

## dimensioned drawing



00128788

A	B	C	D	E
3/4" or 1" NPT	3.35	4.06	4.29	4.41

Dimensions in inches.

# Compressed air maintenance unit, series AS5-Inch

Distributor block AS5-DIS, 2-way, 3/4" - 1" NPT

**AVVENTICS**



00119807

Ambient temperature min./max.

-10°C / +50°C [14 °F / 122 °F]

Medium

Compressed air to ISO8573-1:2001

Materials:

PA MXD6

Housing

Diecast zinc

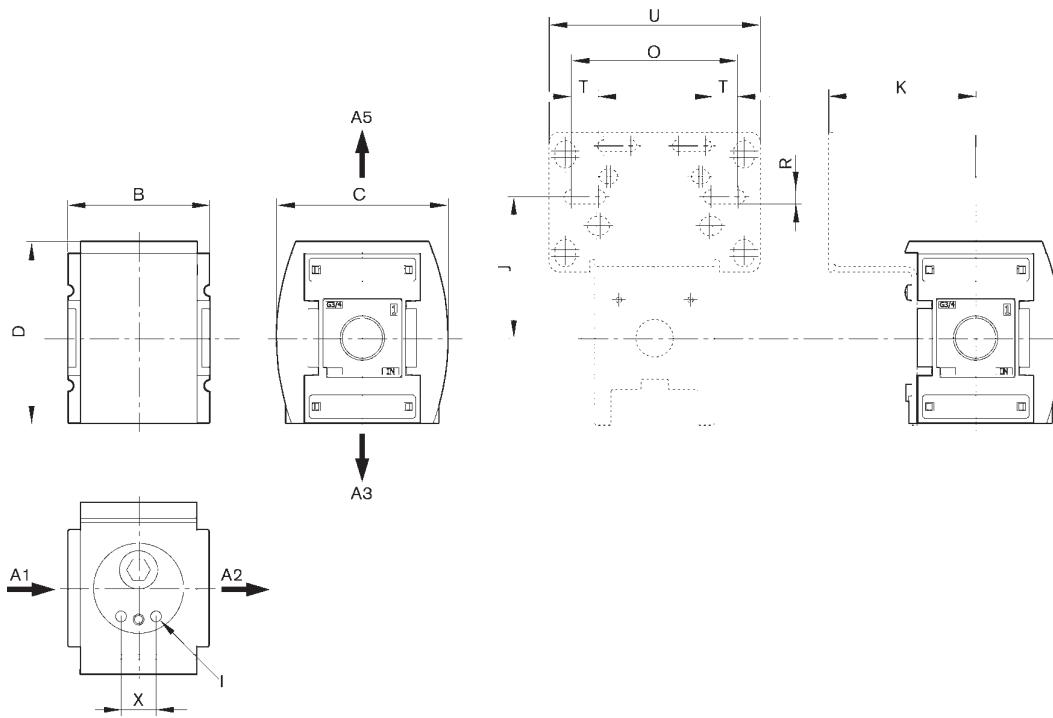
Threaded bushing

Acrylonitrile Butadiene Styrene (ABS)

Cover

	Port	Qn [CFM]	Weight [lbs]	Part No.
	3/4 NPT 1 NPT	423	1.429	R432002729
				R432002730

## Dimensioned drawing



00119839

00119839

A1	A2	A3	A5	B	C	D	I	J	K	O	R	T	U	X
3/4 NPT	3/4 NPT	3/4 NPT	3/4 NPT	3.346	4.055	4.291	M5 [0.197]	3.268	3.425	3.858	0.276	0.63	4.882	0.787
1 NPT	3/4 NPT	3/4 NPT	3/4 NPT	3.346	4.055	4.291	M5 [0.197]	3.268	3.425	3.858	0.276	0.63	4.882	0.787

# Compressed air maintenance unit, series AS2-Metric

AS2 Metric (G1/4 and G3/8) version index

**AVENTICS** 



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# Compressed air maintenance unit, series AS2-Metric

FR+L Maintenance unit AS2-ACD, 2-in-1, G 1/4 - G 3/8, ATEX approved



## Technical Data

Type	Filter Pressure regulator	Filter element replaceable Diaphragm-type pressure regulator with relief opening and reverse flow capability Regulator knob lockable
	Lubricator	Standard oil-drop lubricator with semi-automatic oil filling Fill level – sight glass with slotted screw adjustment for oil metering
		Can be filled with oil during operation
Supply pressure	Condensate drain	semi-automatic: 0.5 - 16 bar (7 - 232 psi) fully automatic : 1.5 - 16 bar (21 - 232 psi)
Secondary pressure		See table
Nominal flow $Q_n$		See table
Secondary pressure = 6,3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)		
Temperature range		-10° to +50 °C (14 °F to +122 °F) *
Medium		Compressed air
Weight		See table
Installation position		Vertical
Materials	Body Thread insert Reservoir Bowl guard Cover Filter element	Polyamide, seals Buna-N(NBR) Die-cast zinc Polycarbonate or die cast zinc, with bayonet catch Polyamide (polycarbonate bowls only) ABS Polyethylene
Reservoir capacity	Filter Lubricator	28 cm³ (0.95 U.S. Fl.oz.) (semi-automatic) 40 cm³ (1.69 U.S. Fl.oz.)
Filter porosity		5 µm
ATEX:		In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)



\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Oil type: HL 68 (DIN 51 524 - ISO VG 68)

Standard values for oil metering: 1-2 drops / min at a nominal flow rate of  $Q_n = 1000$  l / min (35.30 CFM)

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

► - semi and fully automatic condensate drain \*

\*either opened without pressure (NO) or closed without pressure (NC)

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min] (CFM)	Secondary pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. with pressure gauge (Poly./Metal)
	G 1/4	1800 (64)	0,5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	0,633 (1.4)	R412006298/R412006304
	G 1/4	1800 (64)	1,5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	0,676 (1.49)	R412006299/R412006305
	G 1/4	1800 (64)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	0,676 (1.49)	R412006300/R412006306
	G 3/8	2000 (71)	0,5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	0,633 (1.4)	R412006307/R412006313
	G 3/8	2000 (71)	1,5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	0,676 (1.49)	R412006308/R412006314
	G 3/8	2000 (71)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	0,676 (1.49)	R412006309/R412006315

## ▲ Accessories (to be ordered separately)

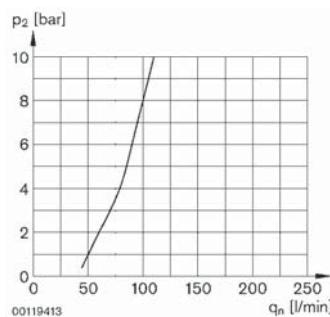
Accessory	Part no.
Spare parts kit: see filter pressure regulator valve AS2-FRE and oil-drop lubricator AS2-CBS	
Mounting plate AS2-MBR----W01	R432031071
Mounting strap AS2-MBR----W03	R412006370
Block assembly kit AS2-MBR----W04	R412006371

# Compressed air maintenance unit, series AS2-Metric

FR+L Maintenance unit AS2-ACD, 2-in-1, G 1/4 - G 3/8, ATEX approved

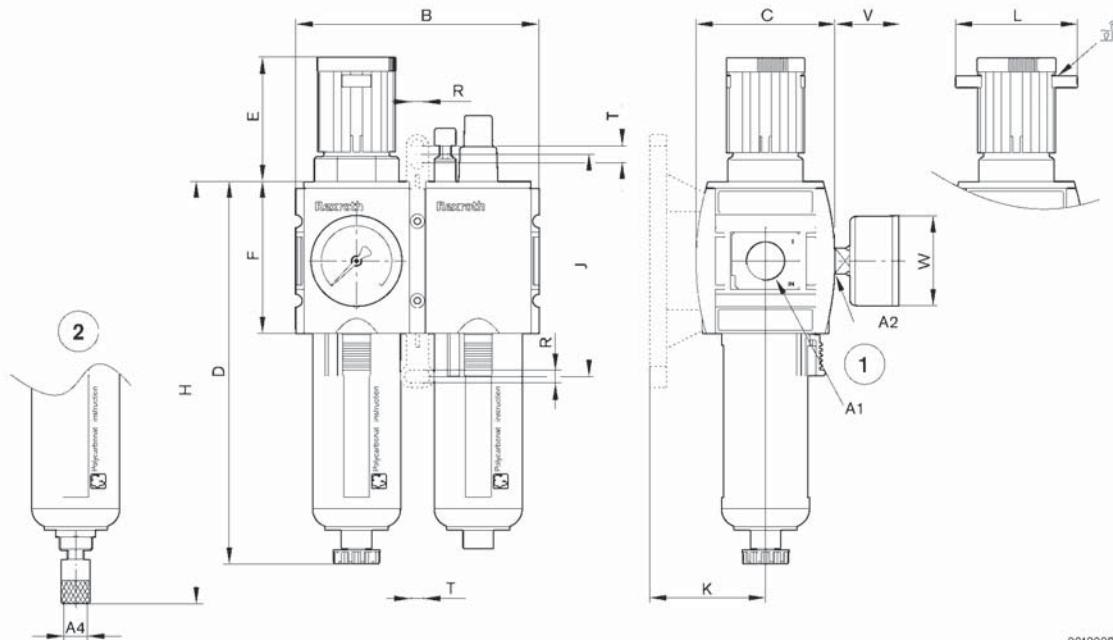
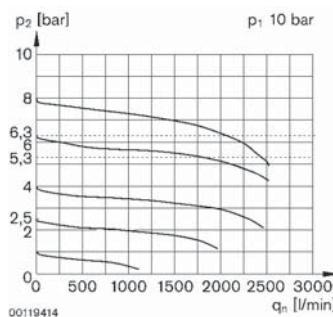
**AVVENTICS**

## Lubrication activation margin



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow;  
 $q_{n\ min.}$  = Min. nominal flow

## Flow rate characteristic (setting range $p_2$ : 0.5 to 8 bar) (7 to 145 psi)



- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	R	T	V	W
G 1/4	G 1/4	G 1/8	104	59	163,5	53,2	65	180,5	95	49,4	52	5,4	7,3	35	50
G 3/8	G 1/4	G 1/8	104	59	163,5	53,2	65	180,5	95	49,4	52	5,4	7,3	35	50

# Compressed air maintenance unit, series AS2-Metric

FR+L Maintenance unit AS2-ACT, 3-in-1, G 1/4 - G 3/8, ATEX approved

**AVENTICS**



## Technical Data

Type	Filter Pressure regulator	Filter element replaceable Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob
	Lubricator	Standard oil-drop lubricator with semi-automatic oil filling Fill level – sight glass with slotted screw adjustment for oil metering
Supply pressure	Condensate drain	Can be filled with oil during operation semi-automatic: 0.5 - 16 bar (7 - 232 psi) fully automatic : 1.5 - 16 bar (21 - 232 psi)
Secondary pressure Nominal flow $Q_n$	Secondary pressure = 6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)	See table See table
Temperature range Medium Weight Installation position		-10° to +50 °C (14 °F to +122 °F) * Compressed air See table Vertical
Materials	Body Thread insert Reservoir Bowl guard Cover Filter element	Polyamide, seals Buna-N(NBR) Die-cast zinc Polycarbonate or die cast zinc, with bayonet catch Polyamide (polycarbonate bowls only) ABS Polyethylene
Reservoir capacity	Filter Lubricator	28 cm³ (0.95 U.S. Fl.oz.) 40 cm³ (1.69 U.S. Fl.oz.)
Filter porosity		5 µm
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Oil type: HL 68 (DIN 51 524 - ISO VG 68)

Standard values for oil metering: 1-2 drops / min at a nominal flow rate of  $Q_n = 1000$  l / min

(35.30 CFM)

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

► - semi and fully automatic condensate drain\*

\* either opened without pressure (NO) or closed without pressure (NC)

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min] (CFM)	Secondary pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. with pressure gauge (Poly./Metal)
	G 1/4	1400 (49)	0,5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	0,780 (1.72)	R412006318/R412006324
	G 1/4	1400 (49)	1,5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	0,825 (1.92)	R412006319/R412006325
	G 1/4	1400 (49)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	0,825 (1.92)	R412006320/R412006326
	G 3/8	1600 (56)	0,5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	0,780 (1.72)	R412006327/R412006333
	G 3/8	1600 (56)	1,5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	0,825 (1.92)	R412006328/R412006334
	G 3/8	1600 (56)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	0,825 (1.92)	R412006329/R412006335

## ▲ Accessories (to be ordered separately)

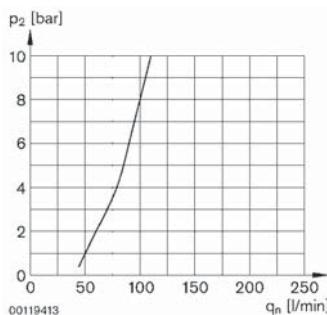
Accessory	Part no.
Spare parts kit: see filter pressure regulator valve AS2-FRE and oil-drop lubricator AS2-CBS	
Mounting plate AS2-MBR-....W01	R432031071
Mounting strap AS2-MBR-....W03	R412006370
Block assembly kit AS2-MBR-....W04	R412006371

# Compressed air maintenance unit, series AS2-Metric

FR+L Maintenance unit AS2-ACT, 3-in-1, G 1/4 - G 3/8, ATEX approved

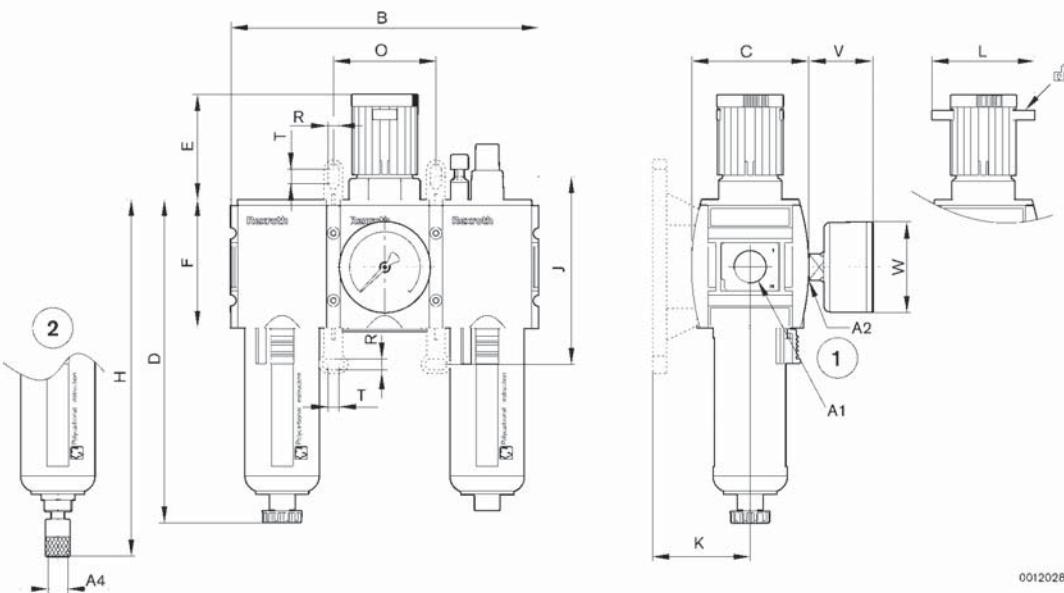
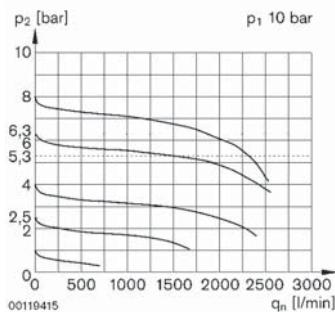
**AVVENTICS**

## Lubrication activation margin



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow;  
 $q_{n\ min.}$  = Min. nominal flow

## Flow rate characteristic (setting range $p_2$ : 0.5 to 8 bar) (7 to 145 psi)



- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	I	J	K	L	O	R	T	V	W
G 1/4	G 1/4	G 1/8	156	59	163,5	53,2	65	180,5	5,6	95	49,4	52	52	5,4	7,3	35	50
G 3/8	G 1/4	G 1/8	156	59	163,5	53,2	65	180,5	5,6	95	49,4	52	52	5,4	7,3	35	50

# Compressed air maintenance unit, series AS2-Metric

Pressure regulator AS2-RGS, G 1/4 - G 3/8, ATEX approved

**AVVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Regulator Knob lockable	
Supply pressure	16 bar (232 psi)	
Secondary pressure	See table	
Nominal flow $Q_n$	See table	
Secondary pressure = 6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)		
Temperature range	-10° to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	any	
Materials	Body Thread insert	Polyamide, seals Buna-N(NBR) Die-cast zinc
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min](CFM)	Secondary pressure [bar](psi)	Weight [kg](lbs.)	Part no. with pressure gauge
	G 1/4	2200 (78)	0,1 - 1 (1 - 14)	0,320 (0.71)	R412006101
	G 1/4	2200 (78)	0,1 - 2 (1 - 29)	0,320 (0.71)	R412006103
	G 1/4	2200 (78)	0,2 - 4 (2 - 58)	0,320 (0.71)	R412006105
	G 1/4	2200 (78)	0,5 - 8 (7 - 116)	0,320 (0.71)	R412006107
	G 1/4	2200 (78)	<b>0,5 - 10 (7 - 145)</b>	0,320 (0.71)	R412006109
	G 1/4	2200 (78)	<b>0,5 - 16 (7 - 232)</b>	0,320 (0.71)	R412006111
	G 3/8	2700 (95)	0,1 - 1 (1 - 14)	0,320 (0.71)	R412006113
	G 3/8	2700 (95)	0,1 - 2 (1 - 29)	0,320 (0.71)	R412006115
	G 3/8	2700 (95)	0,2 - 4 (2 - 58)	0,320 (0.71)	R412006117
	G 3/8	2700 (95)	0,5 - 8 (7 - 116)	0,320 (0.71)	R412006119
	G 3/8	2700 (95)	<b>0,5 - 10 (7 - 145)</b>	0,320 (0.71)	R412006121
	G 3/8	2700 (95)	<b>0,5 - 16 (7 - 232)</b>	0,320 (0.71)	R412006123

## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min](CFM)	Secondary pressure [bar](psi)	Weight [kg](lbs.)	Part no. without pressure gauge
	G 1/4	2200 (78)	0,1 - 1 (1 - 14)	0,248 (0.55)	R412006100
	G 1/4	2200 (78)	0,1 - 2 (1 - 29)	0,248 (0.55)	R412006102
	G 1/4	2200 (78)	0,2 - 4 (2 - 58)	0,248 (0.55)	R412006104
	G 1/4	2200 (78)	0,5 - 8 (7 - 116)	0,248 (0.55)	R412006106
	G 1/4	2200 (78)	<b>0,5 - 10 (7 - 145)</b>	0,248 (0.55)	R412006108
	G 1/4	2200 (78)	<b>0,5 - 16 (7 - 232)</b>	0,248 (0.55)	R412006110
	G 3/8	2700 (95)	0,1 - 1 (1 - 14)	0,248 (0.55)	R412006112
	G 3/8	2700 (95)	0,1 - 2 (1 - 29)	0,248 (0.55)	R412006114
	G 3/8	2700 (95)	0,2 - 4 (2 - 58)	0,248 (0.55)	R412006116
	G 3/8	2700 (95)	0,5 - 8 (7 - 116)	0,248 (0.55)	R412006118
	G 3/8	2700 (95)	<b>0,5 - 10 (7 - 145)</b>	0,248 (0.55)	R412006120
	G 3/8	2700 (95)	<b>0,5 - 16 (7 - 232)</b>	0,248 (0.55)	R412006122

## Accessories (to be ordered separately)

Accessory	Part no.
Pressure regulator valve seal kit	R961400030
Mounting plate AS2-MBR-...-W01 (incl. 2 bolts)	R432031071
Mounting strap AS2-MBR-...-W03	R412006370
Block assembly kit AS2-MBR-...-W04	R412006371

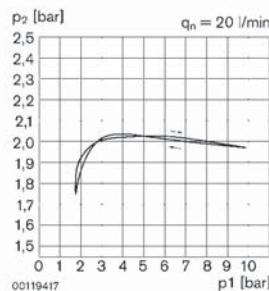
See accessories section for pressure gauges

# Compressed air maintenance unit, series AS2-Metric

Pressure regulator AS2-RGS, G 1/4 - G 3/8, ATEX approved

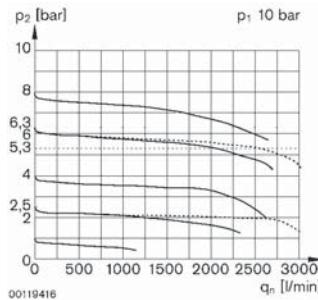
AVVENTICS 

## Pressure characteristics curve

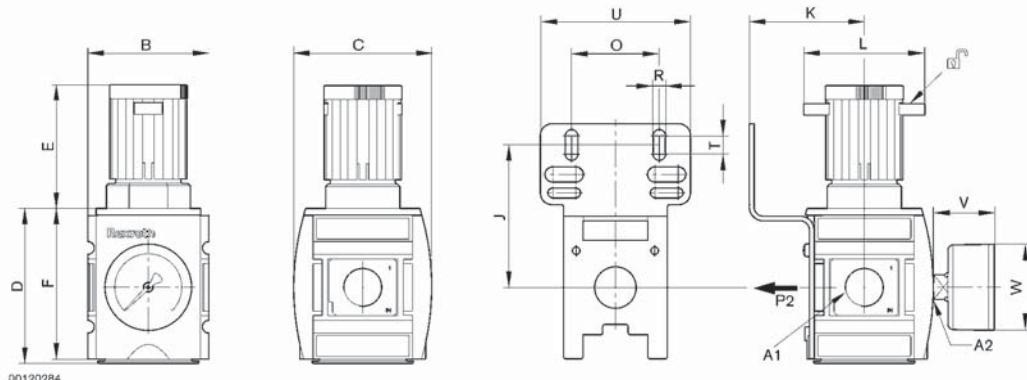


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 0.5 to 8 bar) (7 to 145 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



(mounting bracket not included, order separately)

A1	A2	B	C	D	E	F	J	K	L	O	R	T	U	V	W
G 1/4	G 1/4	52	59	66,8	57,9	65	61,8	49,4	52	38	5,4	10	65	35	50
G 3/8	G 1/4	52	59	66,8	57,9	65	61,8	49,4	52	38	5,4	10	65	35	50

# Compressed air maintenance unit, series AS2-Metric

Pressure regulator AS2-RGS-...-DS, with continuous pressure supply,  
G 1/4 - G 3/8, ATEX approved

**AVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob	
Supply pressure	16 bar (232 psi)	
Secondary pressure	See table	
Nominal flow $Q_n$	See table	
Secondary pressure = 6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)		
Temperature range	-10° to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	Any	
Materials	Body Thread insert Cover	Polyamide, seals Buna-N(NBR) Die-cast zinc ABS
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	

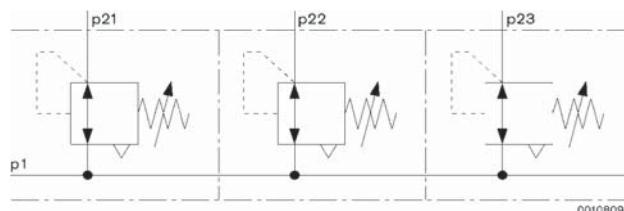


\* with dried air

Possible to assemble multiple regulators providing continuous inlet pressure and individual regulated pressure outlets.

In the case of block assembly, only gauge with  $\varnothing \leq 50$  can be used

## Example of application



0010809c

## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min](CFM)	Secondary pressure [bar](psi)	Weight [kg](lbs.)	Part no. without pressure gauge
	G 1/4	2200 (78)	0,1 - 1 (1 - 14)	0,248 (0.55)	R412006124
	G 1/4	2200 (78)	0,1 - 2 (1 - 29)	0,248 (0.55)	R412006125
	G 1/4	2200 (78)	0,2 - 4 (2 - 58)	0,248 (0.55)	R412006126
	G 1/4	2200 (78)	0,5 - 8 (7 - 116)	0,248 (0.55)	R412006127
	G 1/4	2200 (78)	<b>0,5 - 10 (7 - 145)</b>	0,248 (0.55)	R412006128
	G 1/4	2200 (78)	<b>0,5 - 10 (7 - 232)</b>	0,248 (0.55)	R412006129
	G 3/8	2700 (95)	0,1 - 1 (1 - 14)	0,248 (0.55)	R412006130
	G 3/8	2700 (95)	0,1 - 2 (1 - 29)	0,248 (0.55)	R412006131
	G 3/8	2700 (95)	0,2 - 4 (2 - 58)	0,248 (0.55)	R412006132
	G 3/8	2700 (95)	0,5 - 8 (7 - 116)	0,248 (0.55)	R412006133
	G 3/8	2700 (95)	<b>0,5 - 10 (7 - 145)</b>	0,248 (0.55)	R412006134
	G 3/8	2700 (95)	<b>0,5 - 16 (7 - 232)</b>	0,248 (0.55)	R412006135

## Accessories (to be ordered separately)

Accessory	Part no.
Pressure regulator valve seal kit	R961400030
Mounting plate AS2-MBR-...-W01 (incl. 2 bolts)	R432031071
Mounting strap AS2-MBR-...-W03	R412006370
Block assembly kit AS2-MBR-...-W04	R412006371

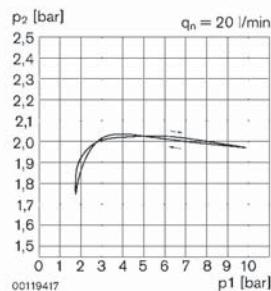
See accessories section for pressure gauges

# Compressed air maintenance unit, series AS2-Metric

Pressure regulator AS2-RGS-...-DS, with continuous pressure supply,  
G 1/4 - G 3/8, ATEX approved

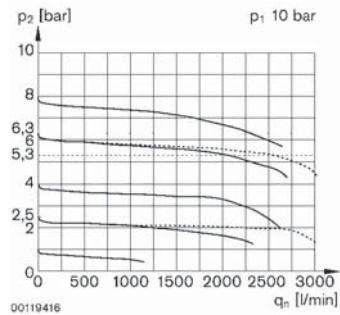
**AVVENTICS**

## Pressure characteristics curve

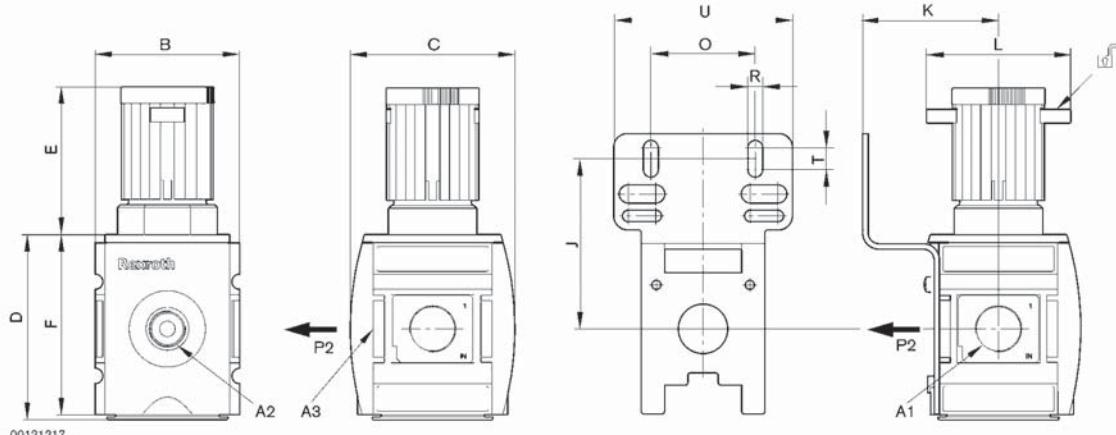


p<sub>1</sub> = Supply pressure; p<sub>2</sub> = Secondary pressure; q = Flow rate

## Flow rate characteristic (setting range p2: 0.5 to 10 bar) (7 to 145 psi)



p<sub>1</sub> = Supply pressure; p<sub>2</sub> = Secondary pressure; q<sub>n</sub> = Nominal flow



(mounting bracket not included, order separately)

p<sub>2</sub> = Secondary pressure

A1	A2	A3	B	C	D	E	F	J	K	L	O	R	T	U
G 1/4	G 1/4	G 1/4	52	59	66,8	57,9	65	61,8	49,4	52	38	5,4	10	65
G 3/8	G 1/4	G 1/4	52	59	66,8	57,9	65	61,8	49,4	52	38	5,4	10	65

# Compressed air maintenance unit, series AS2-Metric

Precision pressure regulator AS2-RGP, G 1/4 - G 3/8, ATEX approved

**AVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob	
Supply pressure	16 bar (232 psi)	
Secondary pressure	See table	
Nominal flow $Q_n$	See table	
Secondary pressure = 6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)		
Temperature range	-10° to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	Any	
Materials	Body Thread insert Cover	Polyamide, seals Buna-N(NBR) Die-cast zinc ABS
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Continuous air consumption = 2,6 NI / min (0.09 CFM), depends on secondary pressure  $p_2 = 6$  bar (87 psi)

## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min](CFM)	Secondary pressure [bar](psi)	Weight [kg](lbs.)	Part no. with pressure gauge
	G 1/4	2200 (78)	0,1 - 1 (1 - 14)	0,320 (0,71)	R412006137
	G 1/4	2200 (78)	0,1 - 2 (1 - 29)	0,320 (0,71)	R412006139
	G 1/4	2200 (78)	0,2 - 4 (2 - 58)	0,320 (0,71)	R412006141
	G 1/4	2200 (78)	0,5 - 8 (7 - 116)	0,320 (0,71)	R412006143
	G 1/4	2200 (78)	<b>0,5 - 10 (7 - 145)</b>	0,320 (0,71)	R412006145
	G 3/8	2700 (95)	0,1 - 1 (1 - 14)	0,320 (0,71)	R412006149
	G 3/8	2700 (95)	0,1 - 2 (1 - 29)	0,320 (0,71)	R412006151
	G 3/8	2700 (95)	0,2 - 4 (2 - 58)	0,320 (0,71)	R412006153
	G 3/8	2700 (95)	0,5 - 8 (7 - 116)	0,320 (0,71)	R412006155
	G 3/8	2700 (95)	<b>0,5 - 10 (7 - 145)</b>	0,320 (0,71)	R412006157

## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min](CFM)	Secondary pressure [bar](psi)	Weight [kg](lbs.)	Part no. without pressure gauge
	G 1/4	2200 (78)	0,1 - 1 (1 - 14)	0,248 (0,55)	R412006136
	G 1/4	2200 (78)	0,1 - 2 (1 - 29)	0,248 (0,55)	R412006138
	G 1/4	2200 (78)	0,2 - 4 (2 - 58)	0,248 (0,55)	R412006140
	G 1/4	2200 (78)	0,5 - 8 (7 - 116)	0,248 (0,55)	R412006142
	G 1/4	2200 (78)	<b>0,5 - 10 (7 - 145)</b>	0,248 (0,55)	R412006144
	G 3/8	2700 (95)	0,1 - 1 (1 - 14)	0,248 (0,55)	R412006148
	G 3/8	2700 (95)	0,1 - 2 (1 - 29)	0,248 (0,55)	R412006150
	G 3/8	2700 (95)	0,2 - 4 (2 - 58)	0,248 (0,55)	R412006152
	G 3/8	2700 (95)	0,5 - 8 (7 - 116)	0,248 (0,55)	R412006154
	G 3/8	2700 (95)	<b>0,5 - 10 (7 - 145)</b>	0,248 (0,55)	R412006156

## Accessories (to be ordered separately)

Accessory	Part no.
Pressure regulator valve seal kit	R961400031
Mounting plate AS2-MBR-...-W01	R432031071
Mounting strap AS2-MBR-...-W03	R412006370
Block assembly kit AS2-MBR-...-W04	R412006371

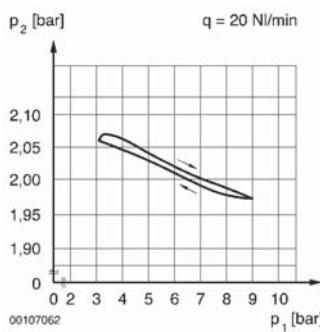
See accessories section for pressure gauges

# Compressed air maintenance unit, series AS2-Metric

Precision pressure regulator AS2-RGP, G 1/4 - G 3/8, ATEX approved

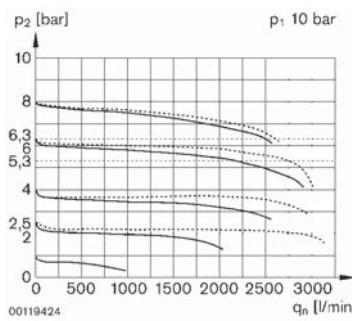
**AVENTICS** 

## Pressure characteristics curve

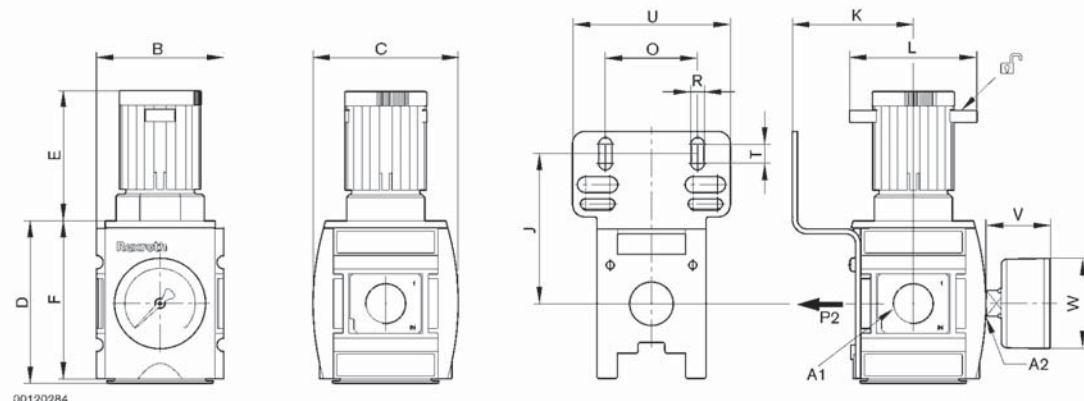


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 0.5 to 8 bar / 7 to 145 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



(mounting bracket not included, order separately)

A1	A2	B	C	D	E	F	J	K	L	O	R	T	U	V	W
G 1/4	G 1/4	52	59	66,8	53,2	65	61,8	49,4	52	38	5,4	10	65	35	50
G 3/8	G 1/4	52	59	66,8	53,2	65	61,8	49,4	52	38	5,4	10	65	35	50

# Compressed air maintenance unit, series AS2-Metric

Precision pressure regulator AS2-RGP-...-DS, with continuous pressure supply, G 1/4 - G 3/8, ATEX approved

**AVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob	
Supply pressure	16 bar (232 psi)	
Secondary pressure	See table	
Nominal flow $Q_n$	See table	
Secondary pressure = 6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)		
Temperature range	-10° to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	Any	
Materials	Body Thread insert Cover	Polyamide, seals Buna-N(NBR) Die-cast zinc ABS
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



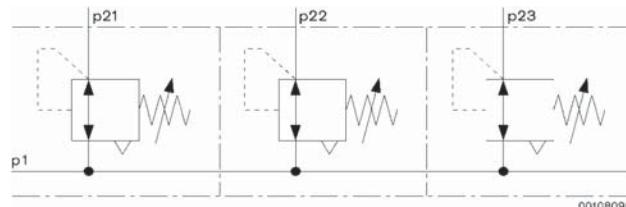
\* with dried air

Continuous air consumption = 2.6 l / min (0.09 CFM), depends on secondary pressure  $p_{i2} = 6$  bar (87 psi)

Possible to assemble multiple regulators providing continuous inlet pressure and individual regulated pressure outlets.

In the case of block assembly, only gauge with  $\varnothing \leq 50$  can be used

## Example of application



0010809C

## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min](CFM)	Secondary pressure [bar](psi)	Weight [kg](lbs.)	Part no. without pressure gauge
	G 1/4	2200 (78)	0,1 - 1 (1 - 14)	0,248 (0.55)	R412006160
	G 1/4	2200 (78)	0,1 - 2 (1 - 29)	0,248 (0.55)	R412006161
	G 1/4	2200 (78)	0,2 - 4 (2 - 58)	0,248 (0.55)	R412006162
	G 1/4	2200 (78)	0,5 - 8 (7 - 116)	0,248 (0.55)	R412006163
	G 1/4	2200 (78)	<b>0,5 - 10 (7 - 145)</b>	0,248 (0.55)	R412006164
	G 3/8	2700 (95)	0,1 - 1 (1 - 14)	0,248 (0.55)	R412006166
	G 3/8	2700 (95)	0,1 - 2 (1 - 29)	0,248 (0.55)	R412006167
	G 3/8	2700 (95)	0,2 - 4 (2 - 58)	0,248 (0.55)	R412006168
	G 3/8	2700 (95)	0,5 - 8 (7 - 116)	0,248 (0.55)	R412006169
	G 3/8	2700 (95)	<b>0,5 - 10 (7 - 145)</b>	0,248 (0.55)	R412006170

## Accessories (to be ordered separately)

Accessory	Part no.
Pressure regulator valve seal kit	R961400031
Mounting plate AS2-MBR-...-W01	R432031071
Mounting strap AS2-MBR-...-W03	R412006370
Block assembly kit AS2-MBR-...-W04	R412006371

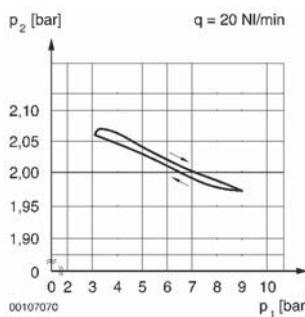
See accessories section for pressure gauges

# Compressed air maintenance unit, series AS2-Metric

Precision pressure regulator AS2-RGP-...-DS, with continuous pressure supply, G 1/4 - G 3/8, ATEX approved

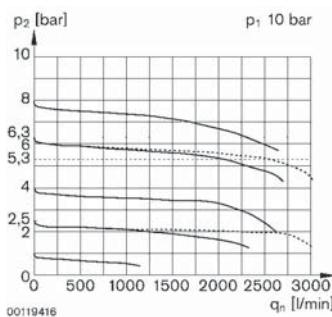
**AVENTICS**

## Pressure characteristics curve

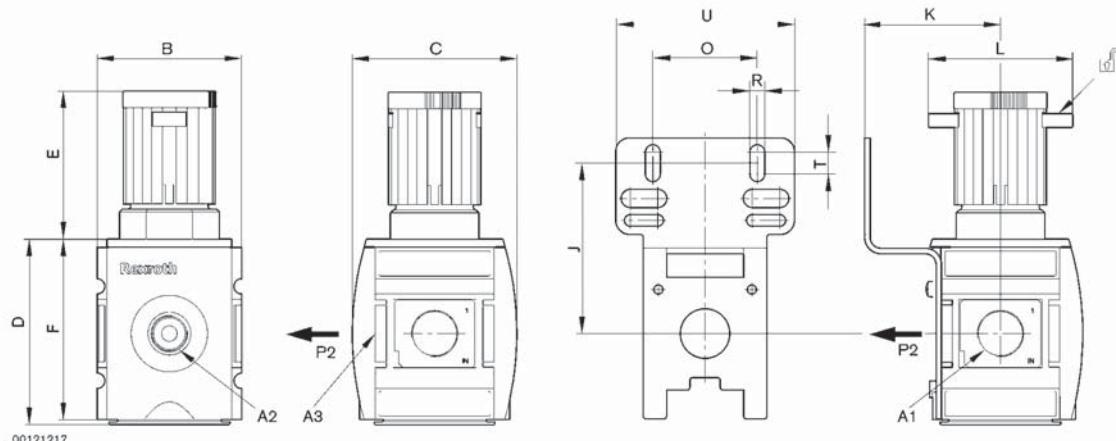


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 0.5 to 8 bar / 7 to 145 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



(mounting bracket not included, order separately)

$p_2$  = Secondary pressure

A1	A2	A3	B	C	D	E	F	J	K	L	O	R	T	U
G 1/4	G 1/4	G 1/4	52	59	66,8	53,2	65	61,8	49,4	52	38	5,4	10	65
G 3/8	G 1/4	G 1/4	52	59	66,8	53,2	65	61,8	49,4	52	38	5,4	10	65

# Compressed air maintenance unit, series AS2-Metric

Filter regulator AS2-FRE, G 1/4 - G 3/8, ATEX approved

**AVVENTICS**



## Technical Data

Type	Filter Pressure regulator	Filter element replaceable Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob
Supply pressure	Condensate drain	semi-automatic: 0.5 - 16 bar (7 - 232 psi) fully automatic : 1.5 - 16 bar (21 - 232 psi)
Secondary pressure		See table
Nominal flow $Q_n$		See table
Secondary pressure = 6,3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)		
Ambient temperature		-10°C to +50 °C (14 °F to +122 °F) *
Medium		Compressed air
Weight		See table
Installation position		Vertical
Materials	Body Thread insert Reservoir Bowl guard Cover Filter element	Polyamide, seals Buna-N(NBR) Die-cast zinc Polycarbonate or die cast zinc, with bayonet catch Polyamide (polycarbonate bowls only) ABS Polyethylene
Reservoir capacity		28 cm³ (with semi-automatic)
Filter porosity		5 µm
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min] (CFM)	Secondary pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. with pressure gauge (Poly./Metal)
	G 1/4	2100 (74)	0,5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,394 (0.87)	R412006200/R412006206
	G 1/4	2100 (74)	1,5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,437 (0.96)	R412006201/R412006207
	G 1/4	2100 (74)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,437 (0.96)	R412006202/R412006208
	G 3/8	2600 (92)	0,5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,437 (0.96)	R412006209/R412006215
	G 3/8	2600 (92)	1,5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,437 (0.96)	R412006210/R412006216
	G 3/8	2600 (92)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,437 (0.96)	R412006211/R412006217

## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min] (CFM)	Secondary pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. without pressure gauge (Poly./Metal)
	G 1/4	2100 (74)	0,5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,304 (0.67)	R412006175/R412006181
	G 1/4	2100 (74)	1,5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,347 (0.77)	R412006176/R412006182
	G 1/4	2100 (74)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,347 (0.77)	R412006177/R412006183
	G 3/8	2600 (92)	0,5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,347 (0.77)	R412006184/R412006190
	G 3/8	2600 (92)	1,5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,347 (0.77)	R412006185/R412006191
	G 3/8	2600 (92)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,347 (0.77)	R412006186/R412006192

# Compressed air maintenance unit, series AS2-Metric

Filter regulator AS2-FRE, G 1/4 - G 3/8, ATEX approved

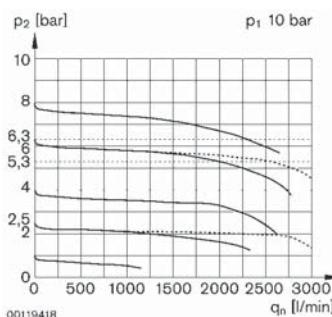
**AVVENTICS**

## ▲ Accessories (to be ordered separately)

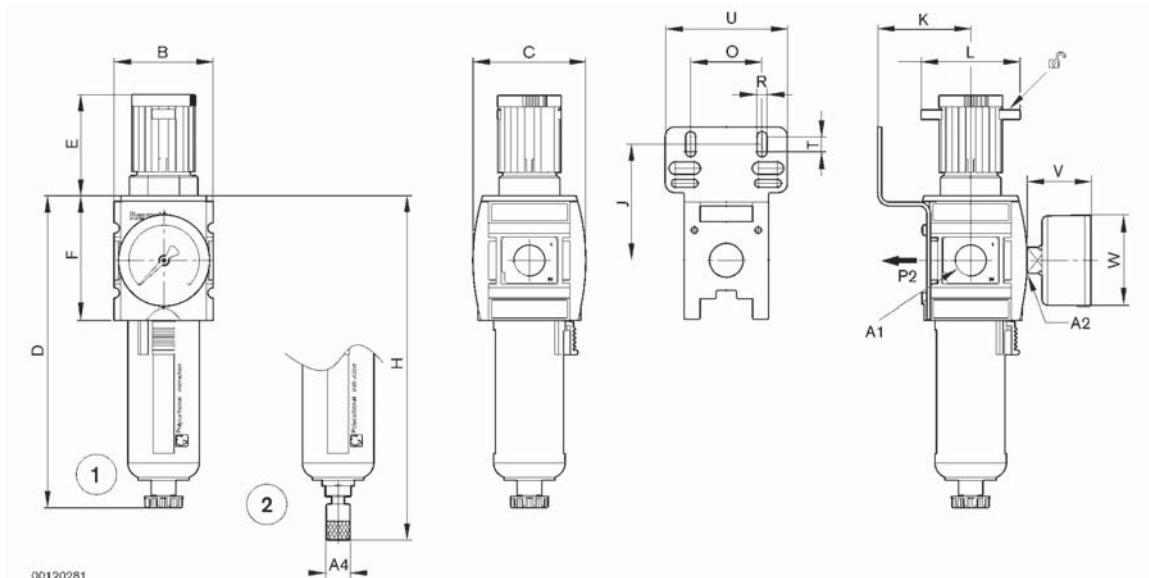
Accessory	Part no.
Filter element, 5 µm	1829207061
Pressure regulator valve seal kit	R961400030
Compression spring	R461400036
Mounting plate AS2-MBR-...-W01	R432031071
Mounting strap AS2-MBR-...-W03	R412006370
Block assembly kit AS2-MBR-...-W04	R412006371

See accessories section for filter reservoirs

## Pressure characteristics curve



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow;  $q$  = Flow rate



(mounting bracket not included, order separately)

- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	O	R	T	U	V	W
G 1/4	G 1/4	G 1/8	52	59	163,5	53,2	65	180,5	61,8	49,4	52	38	5,4	10	65	35	50
G 3/8	G 1/4	G 1/8	52	59	163,5	53,2	180,5	65	61,8	49,4	52	38	5,4	10	65	35	50

# Compressed air maintenance unit, series AS2-Metric

Standard filter AS2-FLS, 5 micron, G 1/4 - G 3/8, ATEX approved

**AVENTICS**



## Technical Data

Type	Filter element replaceable	
Supply pressure	See table	
Ambient temperature	-10°C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Cover: ABS Filter element: Polyethylene	
Reservoir capacity	28 cm³ (0.95 U.S Fl. oz.)	
Filter porosity	5 µm	
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Optionally with a semi or fully automatic condensate drain

Condensate drain opened without pressure or closed without pressure.

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow Q <sub>n</sub> [l/min] (CFM)	Supply pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. (Poly./Metal)
	G 1/4	2100 (74)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,212 (0.47)	R412006000/R412006006
	G 1/4	2100 (74)	1,5 - 16 (21 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,255 (0.56)	R412006001/R412006007
	G 1/4	2100 (74)	0 - 16 (0 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,255 (0.56)	R412006002/R412006008
	G 3/8	2400 (85)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,212 (0.47)	R412006009/R412006015
	G 3/8	2400 (85)	1,5 - 16 (21 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,255 (0.56)	R412006010/R412006016
	G 3/8	2400 (85)	0 - 16 (0 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,255 (0.56)	R412006011/R412006017

Nominal flow at inlet pressure 91 psi and 15 psi drop (P<sub>1</sub> = 6.3 bar, ΔP = 1 bar)

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Filter element, 5 µm	1829207061
Mounting plate AS2-MBR-....-W01	R432031071
Mounting strap AS2-MBR-....-W03	R412006370
Block assembly kit AS2-MBR-....-W04	R412006371

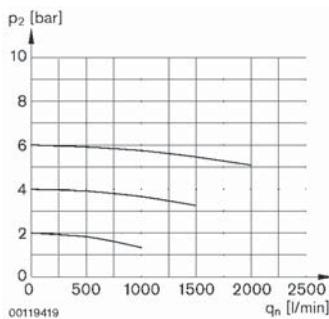
See accessories section for filter reservoirs

# Compressed air maintenance unit, series AS2-Metric

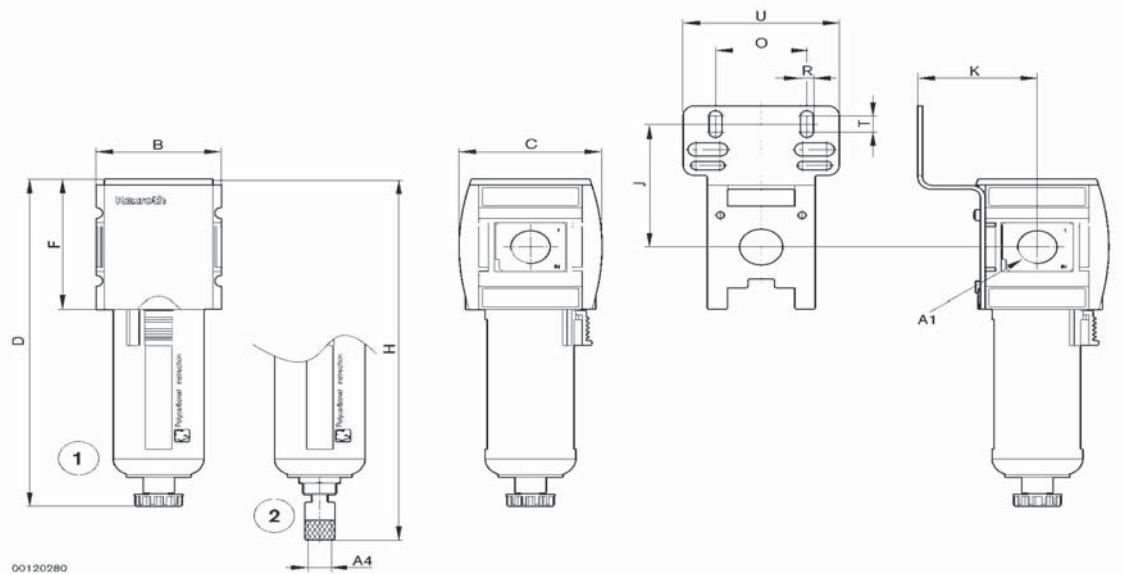
Standard filter AS2-FLS, 5 micron, G 1/4 - G 3/8, ATEX approved

AVVENTICS<sup>®</sup>

## Flow rate characteristic



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



(mounting bracket not included, order separately)

- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U
G 1/4	G 1/8	52	59	163,5	65	180,5	61,8	49,4	38	5,4	10	65
G 3/8	G 1/8	52	59	163,5	65	180,5	61,8	49,4	38	5,4	10	65

# Compressed air maintenance unit, series AS2-Metric

Pre-filter AS2-FLP, 0.3 micron, G 1/4 - G 3/8, ATEX approved

**AVVENTICS**



## Technical Data

Type	Pre-filter element replaceable	
Supply pressure	See table	
Temperature range	-10°C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Cover: ABS Filter element: Polymer-impregnated paper	
Reservoir capacity	12 cm³ (0.4 U.S. Fl. oz.) (with semi-automatic)	
Filter porosity	0,3 µm	
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Pre-filter for separating solid impurities up to 0.3 µm from compressed air and gases  
The filter element should be exchanged if there is an increase of  $\Delta p$  by max. 0.35 bar (5 psi) or once a year.

Dust separation = 99.99 %

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 2

- Humidity - water content: class 8

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow Q <sub>n</sub> [l/min] (CFM)	Supply pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. (Poly./Metal)
	G 1/4	400 (14)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,220 (0.49)	R412006018/R412006024
	G 1/4	400 (14)	1,5 - 16 (21 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,263 (0.58)	R412006019/R412006025
	G 1/4	400 (14)	0 - 16 (0 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,263 (0.58)	R412006020/R412006026
	G 3/8	400 (14)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,263 (0.58)	R412006027/R412006033
	G 3/8	400 (14)	1,5 - 16 (21 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,263 (0.58)	R412006028/R412006034
	G 3/8	400 (14)	0 - 16 (0 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,263 (0.58)	R412006029/R412006035

Nominal flow at inlet pressure 91 psi and 1.5 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 0.1$  bar)

$$Q = Q_n \times f \quad (f = \text{Correction factor for various supply pressures } p_1)$$

p1																
[bar]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
[psi]	14	29	43	58	72	87	101	116	130	145	159	174	188	203	217	232
f	0,25	0,38	0,5	0,65	0,75	0,88	1	1,13	1,25	1,38	1,5	1,63	1,75	1,88	2	2,13

## Accessories (to be ordered separately)

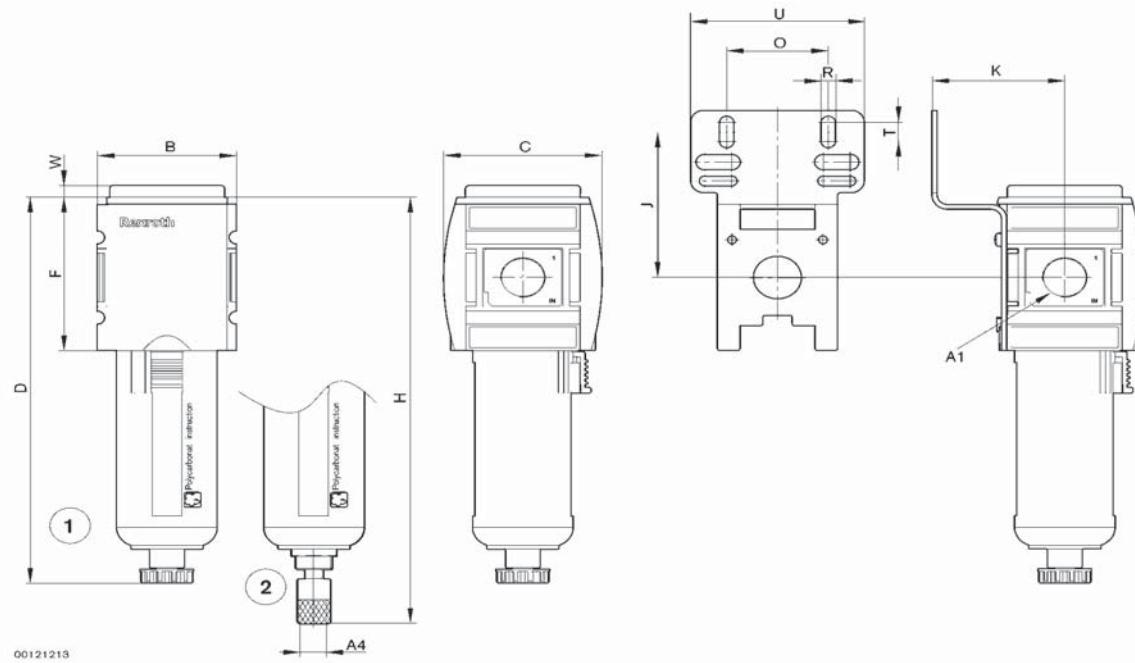
	Accessory	Part no.	
		1829207047	R961400025
	Filter element for automatic operation		
	Filter element for semi-automatic operation		
	Mounting plate AS2-MBR-...-W01	R432031071	
	Mounting strap AS2-MBR-...-W03	R412006370	
	Block assembly kit AS2-MBR-...-W04	R412006371	

See accessories section for pre-filter reservoirs

# Compressed air maintenance unit, series AS2-Metric

Pre-filter AS2-FLP, 0.3 micron, G 1/4 - G 3/8, ATEX approved

**AVENTICS**



(mounting bracket not included, order separately)

- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U	W
G 1/4	G 1/8	52	59	163,5	65	180,5	61,8	49,4	38	5,4	10	65	5
G 3/8	G 1/8	52	59	163,5	65	180,5	61,8	49,4	38	5,4	10	65	5

# Compressed air maintenance unit, series AS2-Metric

Coalescing filter AS2-FLC, 0.01 micron, G 1/4 - G 3/8, ATEX approved

**AVENTICS**



## Technical Data

Type	Micro-filter element replaceable	
Supply pressure	See table	
Temperature range	-10 °C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Cover: ABS Filter element: Borsilicate glass fibre	
Reservoir capacity	12 cm³ (0.4 U.S. Fl. oz.)	
Filter porosity	0.01 µm	
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	

Standard	NFE 49004
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\* with dried air

Micro filter for the separation of oil, water and solid impurities of up to 0.01 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 1

- Oil content: class 1

The filter element must be replaced after a pressure rise  $\Delta p$  of max. 0.35 bar (5 psi) or once a year.

Filter is resistant to mineral oils and synthetic oils

Oil separation, residual oil content < 0.01 mg/m³ at t = 20 °C (68 °F) and p1 = 7 bar (102 psi)

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.



## Part no.

Symbol	Threaded ports	Nominal flow Q <sub>n</sub> [l/min] (CFM) 1) 2)	Supply pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. (Poly./Metal) (*w/contam. display)
	G 1/4	300 (10.6)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl, with or w/o contamination display, semi-automatic, w/o pressure: open	0,220 (0.49)	R412006036/R412006042 R412006054*/R412006060*
	G 1/4	300 (10.6)	1,5 - 16 (21 - 232)	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: open	0,263 (0.58)	R412006037/R412006043 R412006055*/R412006061*
	G 1/4	300 (10.6)	0 - 16 (0 - 232)	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: closed	0,263 (0.58)	R412006038/R412006044 R412006056*/R412006062*
	G 3/8	300 (10.6)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl, with or w/o contamination display, semi-automatic, w/o pressure: open	0,220 (0.58)	R412006045/R412006051 R412006063*/R412006069*
	G 3/8	300 (10.6)	1,5 - 16 (21 - 232)	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: open	0,263 (0.58)	R412006046/R412006052 R412006064*/R412006070*
	G 3/8	300 (10.6)	0 - 16 (0 - 232)	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: closed	0,263 (0.58)	R412006047/R412006053 R412006065*/R412006071*

Nominal flow at inlet pressure 91 psi and 1.5 psi drop (P<sub>1</sub> = 6.3 bar,  $\Delta P$  = 0.1 bar)

$$Q = Q_n \times f \quad (f = \text{Correction factor for various supply pressures } p_1)$$

	p1															
[bar]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
[psi]	14	29	43	58	72	87	101	116	130	145	159	174	188	203	217	232
f	0,25	0,38	0,5	0,65	0,75	0,88	1	1,13	1,25	1,38	1,5	1,63	1,75	1,88	2	2,13

# Compressed air maintenance unit, series AS2-Metric

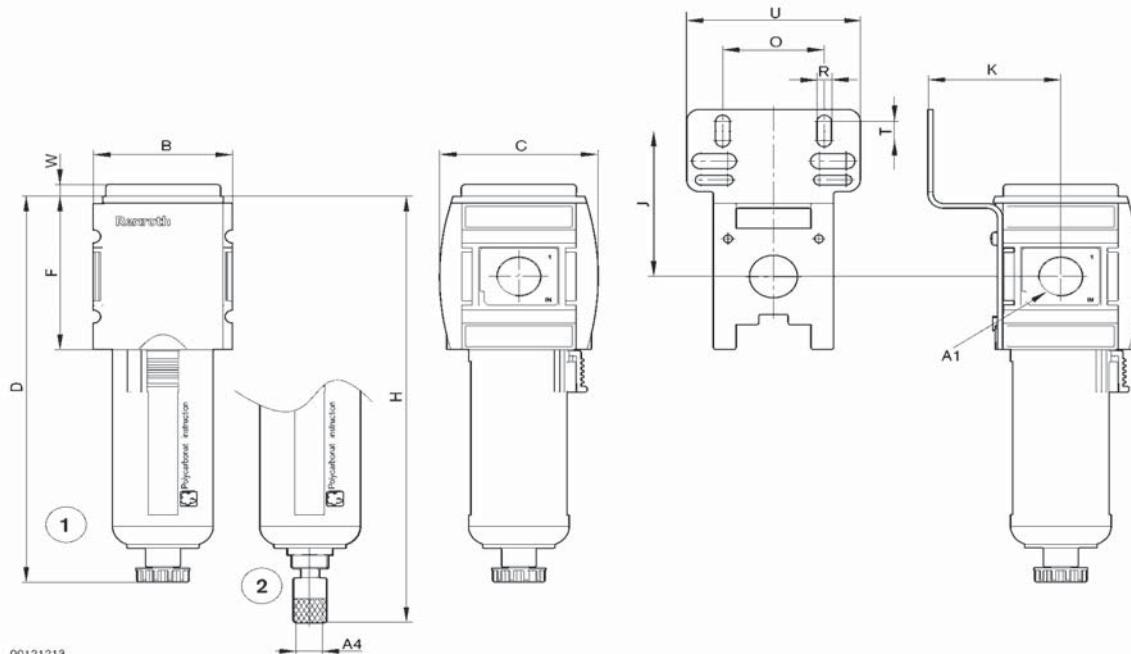
Coalescing filter AS2-FLC, 0.01 micron, G 1/4 - G 3/8, ATEX approved

**AVVENTICS**

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Filter element for fully automatic operation	R961400026
Filter element for semi-automatic operation	R961400027
Mounting plate AS2-MBR-....-W01	R432031071
Mounting strap AS2-MBR-....-W03	R412006370
Block assembly kit AS2-MBR-....-W04	R412006371

See accessories section for microfilter reservoirs



(mounting bracket not included, order separately)

- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U	W
G 1/4	G 1/8	52	59	163,5	65	180,5	61,8	49,4	38	5,4	10	65	5
G 3/8	G 1/8	52	59	163,5	65	180,5	61,8	49,4	38	5,4	10	65	5

# Compressed air maintenance unit, series AS2-Metric

Active carbon filter AS2-FLA, G 1/4 - G 3/8, ATEX approved

**AVENTICS**



## Technical Data

Type	Filter element replaceable	
Supply pressure	See table	
Temperature range	-10 °C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Filter element: Active carbon Cover: ABS	
Reservoir capacity	12 cm³ (0.4 U.S Fl. oz.)	
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Active carbon filter for absorption of oil vapor in compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3
- Humidity - water content: class 8
- Oil content: class 1

Oil separation, residual oil content < 0.005 mg/m³ at t = 20 °C (68 °F) and p1 = 7 bar (102 psi)

A micro filter must be connected upstream as a prefilter

## Part no.

Symbol	Threaded ports	Nominal flow Q <sub>n</sub> [l/min](CFM)	Supply pressure [bar](psi)	Weight [kg](lbs.)	Part no. (Poly./Metal)
	G 1/4	650 (23)	0 - 16 (0 - 232)	0,220 (0.49)	R412006072/R412006074
	G 3/8	650 (23)	0 - 16 (0 - 232)	0,220 (0.49)	R412006075/R412006077

Nominal flow at inlet pressure 91 psi and 1.5 psi drop (P<sub>1</sub> = 6.3 bar, ΔP = 0.1 bar)

$$Q = Q_n \times f \quad (f = \text{Correction factor for various supply pressures } p_1)$$

p <sub>1</sub>																
[bar]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
[psi]	14	29	43	58	72	87	101	116	130	145	159	174	188	203	217	232
f	0,25	0,38	0,5	0,65	0,75	0,88	1	1,13	1,25	1,38	1,5	1,63	1,75	1,88	2	2,13

## Accessories (to be ordered separately)

Accessory	Part no.
Active carbon filter reservoir AS2-CLA, metal (no glass) Active carbon filter reservoir AS2-CLA (polymer) Active carbon filter element	R412006349 R412006347 1829207044
Mounting plate AS2-MBR-...-W01	R432031071
Mounting strap AS2-MBR-...-W03	R412006370
Block assembly kit AS2-MBR-...-W04	R412006371

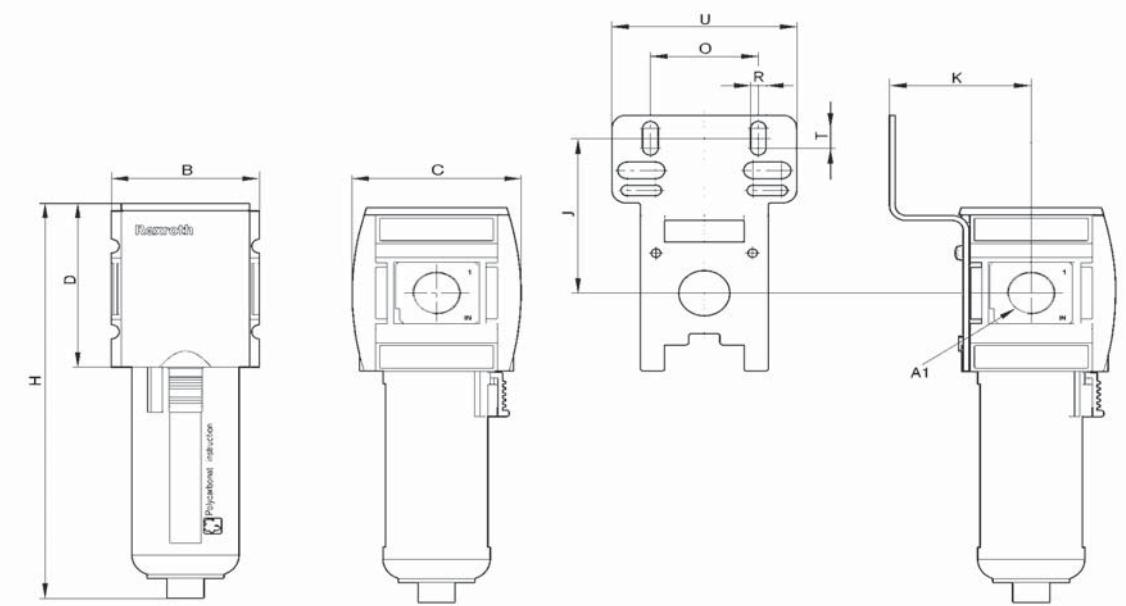
\* see accessories



# Compressed air maintenance unit, series AS2-Metric

Active carbon filter AS2-FLA, G 1/4 - G 3/8, ATEX approved

AVVENTICS<sup>®</sup>



(mounting bracket not included, order separately)

A1	B	C	D	H	J	K	O	R	T	U
G 1/4	52	59	65	157	61,8	49,5	38	5,4	10	65
G 3/8	52	59	65	157	61,8	49,5	38	5,4	10	65

# Compressed air maintenance unit, series AS2-Metric

Lubricator, oil-drop AS2-LBS, with semi-automatic oil filling, G 1/4 - G 3/8,  
ATEX approved

**AVENTICS**



## Technical Data

Type	Inspection glass with slotted screw for oil metering Can be filled with oil during operation See table		
Supply pressure	-10 °C to +50 °C (14 °F to +122 °F) *		
Temperature range	Medium		
Medium	Weight		
Weight	See table		
Installation position	vertical		
Materials	Body	Polyamide, seals Buna-N(NBR)	
	Thread insert	Die-cast zinc	
	Reservoir	Polycarbonate or die cast zinc, with bayonet catch	
	Bowl guard	Polyamide (polycarbonate bowls only)	
	Seal	ABS	
Reservoir capacity	40 cm³ (1.69 U.S. Fl. oz.)		
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)		



\* with dried air

Oil type: HL 68 (DIN 51 524 - ISO VG 68)

Standard values for oil metering: 1-2 drops / min at a nominal flow rate of  $Q_n = 1000 \text{ l} / \text{min}$   
(35.30 CFM)

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

The unit is equipped with a semi-automatic oil filling mechanism(standard). A threaded connector located in the lower section of the container can be used to connect a hose to the oil tank.

Pressing the top button opens a Venturi nozzle that provides a vacuum in the upper section of the container. This draws the oil into the container.

## Part no.

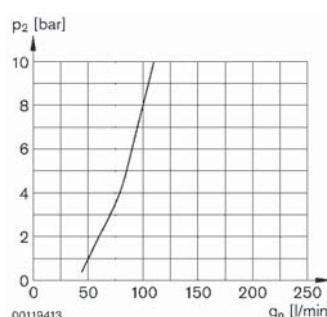
Symbol	Threaded ports	Nominal flow $Q_n$ [l/min] (CFM)	Supply pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. (Poly./Metal)
	G 1/4	2800 (99)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl **Ready for level sensor (non ATEX)	0,229 (0.5)	R412006225/R412006229 R412006226/Not available
	G 3/8	3100 (109)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl **Ready for level sensor (non ATEX)	0,229 (0.5)	R412006231/R412006235 R412006232/Not available

Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3 \text{ bar}$ ,  $\Delta P = 1 \text{ bar}$ )

## Accessories (to be ordered separately)

Accessory	Part no.
Lubricator reservoir AS2-CBS, metal (w/sight glass) Lubricator reservoir AS2-CBS (polycarbonate) Lubricator metering set, polycarbonate	R412006358 R412006352 R961400032
Mounting plate AS2-MBR----W01 Mounting strap AS2-MBR----W03 Block assembly kit AS2-MBR----W04	R432031071 R412006370 R412006371
**For low oil level sensor options, see Accessories Section	

## Lubrication activation margin



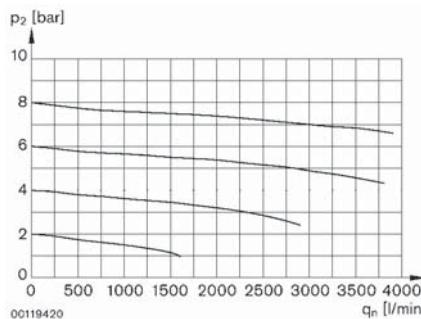
$p_2$  = Secondary pressure;  $q_{n \min.}$  = Min. nominal flow

# Compressed air maintenance unit, series AS2-Metric

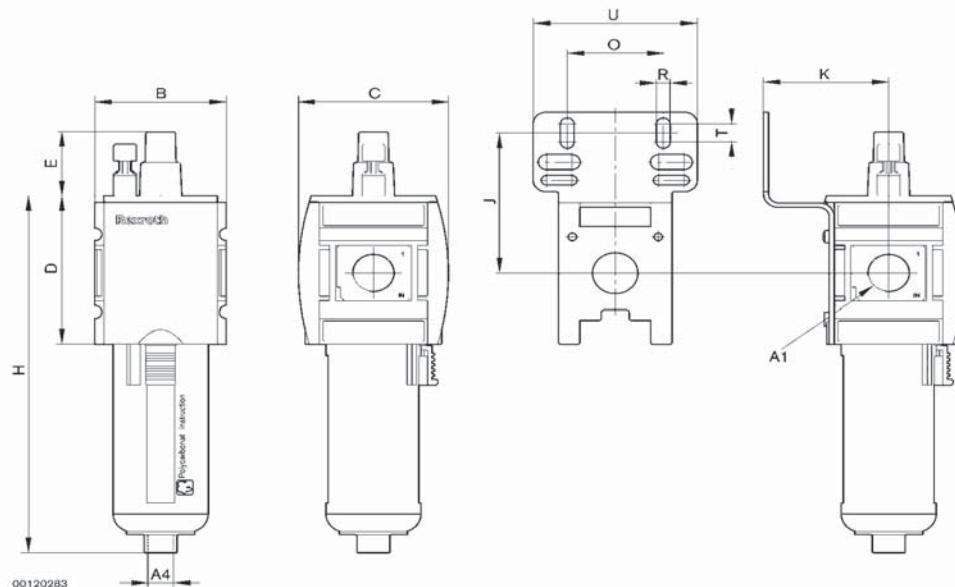
Lubricator, oil-drop AS2-LBS, with semi-automatic oil filling, G 1/4 - G 3/8,  
ATEX approved

AVVENTICS 

## Flow rate characteristic



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



(mounting bracket not included, order separately)

A1	A4	B	C	D	E	H	J	K	O	R	T	U
G 1/4	G 1/8	52	59	65	28,2	157	61,8	49,4	38	5,4	10	65
G 3/8	G 1/8	52	59	65	28,2	157	61,8	49,4	38	5,4	10	65

# Compressed air maintenance unit, series AS2-Metric

3/2 directional-control valve AS2-SOV, electrically operated, G 1/4 - G 3/8

**AVVENTICS**



## Technical Data

Type	Poppet valve
Working pressure	2.5 to 10 bar (36 to 145 psi)
Nominal flow Qn	see table
Secondary pressure	6.3 bar (91psi) and $\Delta p=1$ bar (15 psi)
Ambient temperature	-10 °C to +50 °C (14 °F to +122 °F) *
Medium	Compressed air
Weight	see table
Pickup power with AC 50 Hz	2,2 VA
Holding power with AC 50 Hz	1,6 VA
Power consumption with DC	2 W
Relative switch-on duration	100 %
Protection class (DIN 40 050)	IP 65 (NEMA4)
with connector	any
Installation position:	
Materials (body)	Polyamide, seals Buna-N(NBR)
Thread bushing	Die-cast zinc
Cover	ABS

\* with dried air



## ► Version:

Cut-off and sequencing valve with unrestricted cross-section.  
 Two switch positions: a) Basic position: input closed, output ventilated; b) Operated: input and output connected, exhaust closed.  
 Connection via electrical connector shape C, DIN 43 650.  
 Please observe note regarding compressed air preparation!

	Thread connection [psi]	Operational voltage	Qn l/min [CFM]	Operating pressure	Weight kg [lbs]	Notes	Part No.
	G 1/4	-	2000 (71)	36 ... 145	0.219 (0.48)	1	R412006264
	G 1/4	-			0.219 (0.48)	2	R412006258
	G 1/4	24VDC ±10%			0.219 (0.48)	3	R412006265
	G 1/4	110VAC 50/60Hz			0.219 (0.48)	3	R412006266
	G 1/4	240VAC 50/60Hz			0.219 (0.48)	3	R412006267
	G 3/8	-	2000 (71)	36 ... 145	0.219 (0.48)	1	R412006268
	G 3/8	-			0.219 (0.48)	2	R412006259
	G 3/8	24VDC ±10%			0.219 (0.48)	3	R412006269
	G 3/8	110VAC 50/60Hz			0.219 (0.48)	3	R412006270
	G 3/8	240VAC 50/60Hz			0.219 (0.48)	3	R412006271

1) without DO16 pilot valve 2) with CNOMO interface, without pilot valve

3) with DO16 pilot valve (use electrical connector DIN Form C, series CN1)

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Silencer: sintered bronze (short)	1827000033
Silencer: sintered bronze (long)	R412004817
Connector, shape C, DIN 43 650	1834484187
Mounting strap AS2-MBR-...-W03	R412006370
Mounting plate AS2-MBR-...-W01 (incl. 2 screws)	R432031071
Block assembly kit AS2-MBR-...-W04	R412006371

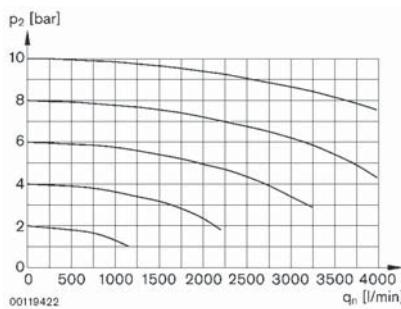
See online catalog, DO16 series for pilot valves

# Compressed air maintenance unit, series AS2-Metric

3/2 directional-control valve AS2-SOV, electrically operated, G 1/4 - G 3/8

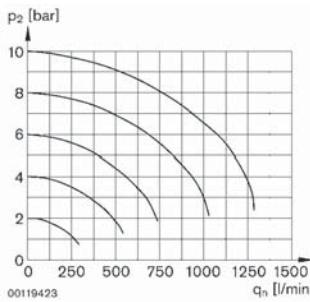
**AVENTICS** 

## Flow rate characteristic



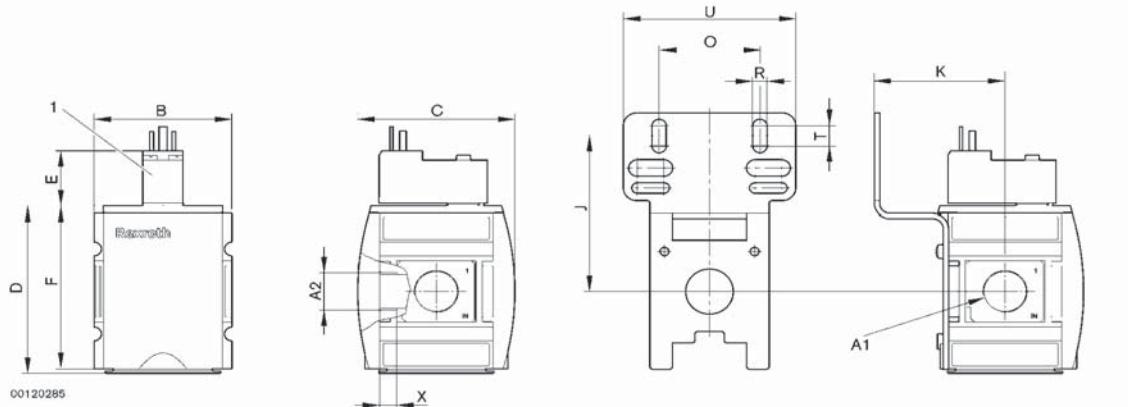
$p_2$  = secondary pressure  
 $q_n$  = nominal flow

## Rear exhaust



$p_2$  = secondary pressure  
 $q_n$  = nominal flow

## Drawing



1) Pilot valve

(mounting bracket not included, order separately)

A1	A2 *	B	C	D	E	F	J	K	O	R	T	U	X
G 1/4	G 1/4	52	59	66,8	21,9	65	61,8	49,4	38	5,4	10	65	10
G 3/8	G 1/4	52	59	66,8	21,9	65	61,8	49,4	38	5,4	10	65	10

\* Exhaust

# Compressed air maintenance unit, series AS2-Metric

3/2 directional-control valve AS2-SOV, pneumatically operated, G 1/4 - G 3/8,  
ATEX approved

**AVENTICS** 



## Technical Data

Type	Poppet valve
Working pressure	2.5 to 10 bar (36 to 145 psi)
Nominal flow $Q_n$	see table
Secondary pressure	6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)
Ambient temperature	-10 °C to +50 °C (14 °F to +122 °F) *
Medium	Compressed air
Weight	see table
Installation position	any

Materials (body)	Polyamide, seals Buna-N(NBR)
Thread bushing	Die-cast zinc
Cover	ABS

ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)
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\* with dried air



## ► Version:

Cut-off and sequencing valve with unrestricted cross-section.

Two switch positions: a) Basic position: input closed, output ventilated; b) Operated: input and output connected, exhaust closed.

Please observe note regarding compressed air preparation!

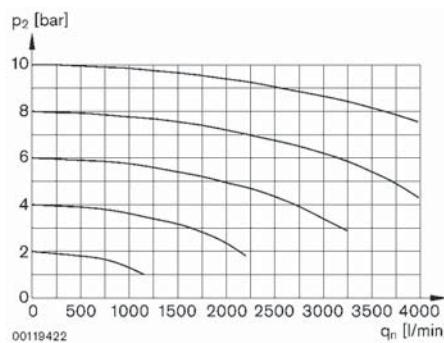
## ► Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l / min](CFM)	With options	Weight [kg](lbs.)	Part no.
	G 1/4	2000 (71)	Change-over valve / shut-off valve pneumatically operated	0,219 (0.49)	R412006262
	G 3/8	2000 (71)	Change-over valve / shut-off valve pneumatically operated	0,219 (0.49)	R412006263

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Silencer: sintered bronze (short)	R412004817
Mounting strap AS2-MBR-....-W03	R412006370
Mounting plate AS2-MBR-....-W01	R432031071
Block assembly kit AS2-MBR-....-W04	R412006371

## Flow rate characteristic



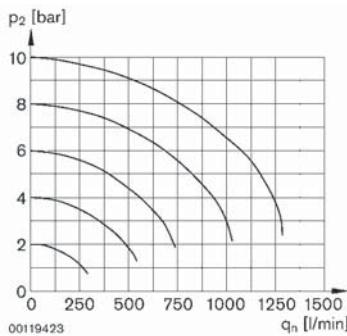
$p_2$  = secondary pressure  
 $q_n$  = nominal flow

# Compressed air maintenance unit, series AS2-Metric

3/2 directional-control valve AS2-SOV, pneumatically operated, G 1/4 - G 3/8,  
ATEX approved

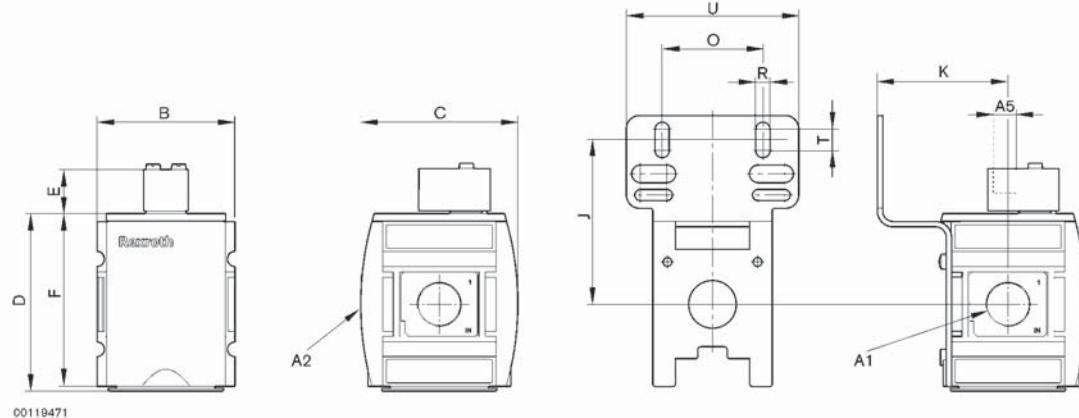
**AVENTICS** 

## Rear exhaust



$p_2$  = secondary pressure  
 $q_n$  = nominal flow

## Drawing



(mounting bracket not included, order separately)

A1	A2 *	A5	B	C	D	E	F	J	K	O	R	T	U	X
G 1/4	G 1/4	G 1/8	52	59	66,8	17	65	61,8	49,4	38	5,4	10	65	10
G 3/8	G 1/4	G 1/8	52	59	66,8	17	65	61,8	49,4	38	5,4	10	65	10

\* Exhaust

# Compressed air maintenance unit, series AS2-Metric

3/2-way shut-off valve (ball valve) AS2-BAV, mechanically operated, lockable option, G 1/4 - G 3/8, ATEX approved

**AVENTICS**



## Technical Data

Type	3/2 directional-control valve, operated by a knob, 3-fold lockable	
Nominal flow Secondary pressure = 6,3 bar (91 psi) and $\Delta p = 1 \text{ bar (15 psi)}$	See table	
Ambient temperature	$-10^\circ\text{C}$ to $+50^\circ\text{C}$ ( $14^\circ\text{F}$ to $+122^\circ\text{F}$ ) *	
Medium	Compressed air	
Weight	See table	
Installation position	any	
Materials	Body Thread bushing Cover Lockable slide plate	Polyamide, seals Buna-N(NBR) Die-cast zinc ABS Zinc plated steel
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Knob, can be turned  $90^\circ$  (Open-Closed) and can be locked in the closed position with a padlock

Knob with switch position display: crosswise: inlet closed, outlet to exhaust; lengthways: inlet and outlet connected, air exhaust closed

Exhaust air can be collected (G1/4)

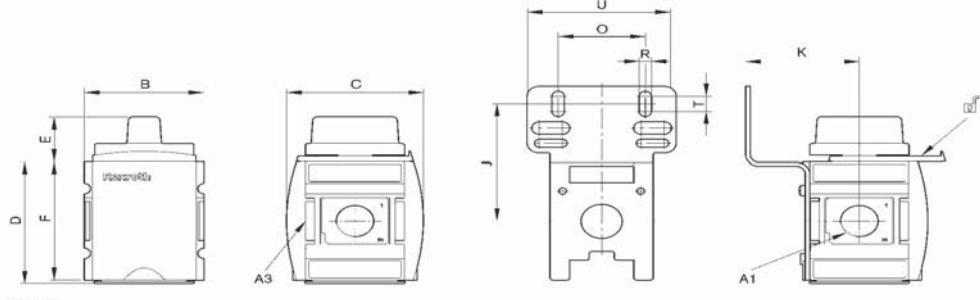
Air exhaust from connection A to R: nominal size 1.5

## Part no.

Symbol	Threaded ports	Nominal flow Q <sub>n</sub> [l/min] (CFM)	Weight [kg](lbs.)	Part no.
	G 1/4	2000 (71)	0,206 (0.45)	R412006256 (lockable) R412006252 (non-locking)
	G 3/8	2000 (71)	0,206 (0.45)	R412006257 (lockable) R412006253 (non-locking)

## ▲ Accessories (to be ordered separately)

Accessories	Part no.
Pneumatic silencer (short)	R412004817
Mounting plate AS2-MBR-....-W01	R432031071
Block assembly kit AS2-MBR-....-W04	R412006371
Mounting strap AS2-MBR-....-W03	R412006370



(mounting bracket not included, order separately)

A1	A3	B	C	D	E	F	J	K	O	R	T	U
G 1/4	G 1/4	52	59	63,8	23,5	62	61,8	49,4	38	5,4	10	65
G 3/8	G 1/4	52	59	63,8	23,5	62	61,8	49,4	38	5,4	10	65

# Compressed air maintenance unit, series AS2-Metric

Filling valve (soft start) AS2-SSV, G 1/4 - G 3/8, ATEX approved

**AVENTICS**



## Technical Data

Type	Poppet valve
Operating pressure	2.5 to 16 bar (36 to 232 psi)
Nominal flow $Q_n$	see table
Secondary pressure	6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)
Ambient temperature	-10°C to +50 °C (14 °F to +122 °F)*
Medium	Compressed air
Weight	see table
Installation position	any
Materials (body)	Polyamide, seals Buna-N(NBR)
Threaded bushing	Die-cast zinc
Cover	ABS
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)

\* with dried air



## ► Version:

Opening pressure: approx. 50% of input pressure

Actuating method: via secondary pressure

Only for closed systems

Please observe note regarding compressed air preparation!

Additionally technical data: see 3/2 directional-control valve AS 2 and filling valve AS 2

Slowly builds up the pressure in pneumatic installations, i.e. prevents sudden pressure build-up after a restart following mains pressure failure or EMERGENCY OFF, thus preventing dangerous, sudden cylinder movements.

## ► Part no.

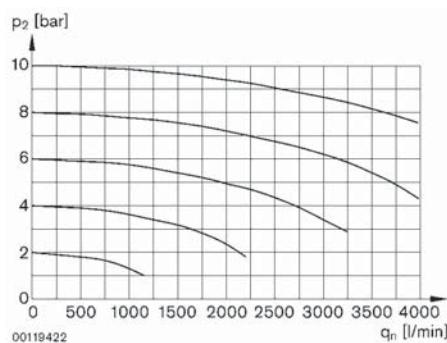
Symbol	Threaded ports	Nominal flow $Q_n$ [l / min](CFM)**	With options	Weight [kg](lbs.)	Part no.
	G 1/4	2000 (71)	Filling adjustable	0,203 (0.45)	R412006272
	G 3/8	2000 (71)	Filling adjustable	0,203 (0.45)	R412006273

\*\* Flow at 116 PSI inlet, 102 PSI outlet

## ▲ Accessories (to be ordered separately)

	Accessory	Part no.
	Mounting plate AS2-MBR----W01	R432031071
	Mounting strap AS2-MBR----W03 Block assembly kit AS2-MBR----W04	R412006370 R412006371

## Flow rate characteristic

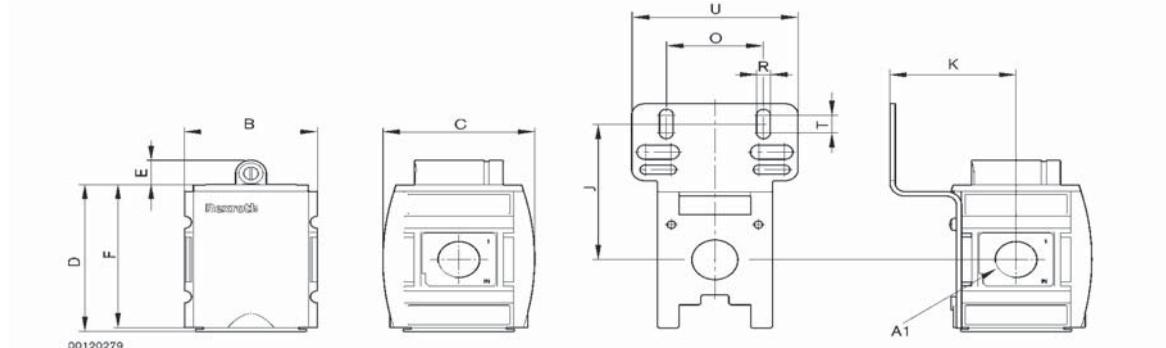


p2 = secondary pressure  
qn = nominal flow

# Compressed air maintenance unit, series AS2-Metric

Filling valve (soft start) AS2-SSV, G 1/4 - G 3/8, ATEX approved

AVVENTICS<sup>A</sup>



(mounting bracket not included, order separately)

A1	B	C	D	E	F	J	K	O	R	T	U
G 1/4	52	59	66,8	11,2	65	61,8	49,4	38	5,4	10	65
G 3/8	52	59	66,8	11,2	65	61,8	49,4	38	5,4	10	65

# Compressed air maintenance unit, series AS2-Metric

Distributor block AS2-DIS, 3-way, G 1/4 - G 3/8, ATEX approved

**AVVENTICS**



## Technical Data

Nominal flow	$Q_n$	See table
Secondary pressure	= 6,3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)	
Ambient temperature range		-10 °C to +50 °C (14 °F to +122 °F) *
Medium		Compressed air
Weight		See table
Installation position		any
Materials	Body Threaded insert Cover	Polyamide, seals Buna-N(NBR) Zn-die cast ABS
ATEX:		In zone 1 (gas-ex, category 2G)  In zone 21 (dust-ex, category 2D)  In zone 2 (gas-ex, category 3G)  In zone 22 (dust-ex, category 3D)



Suitable for flange assembly of a mechanical vacuum/pressure switch

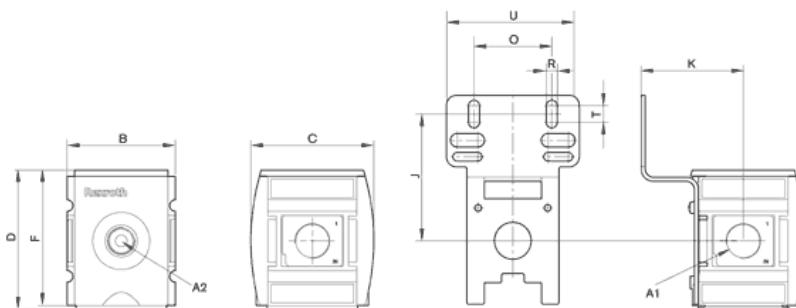
## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min] (CFM)	Weight [kg] (lbs)	Part no.
	G 1/4	2700 (1->2) (95 CFM) <sup>1)</sup>	0,250 (0.55)	R412006250
	G 3/8	3600 (1->2) (127 CFM) <sup>1)</sup>	0,250 (0.55)	R412006251

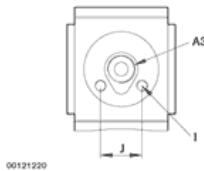
1) top (1->5) = 2000 l / min (70 CFM); front (1->4) = 900 l / min (31 CFM); below (1->3) = 2000 l / min (70 CFM)

## Accessories (to be ordered separately)

Accessory	Part no.
Mechanical vacuum switch, pabs = -0,9 - 0 bar (-13 - 0 psi)	0821100020
Mechanical pressure switch, p1 = 0,2 - 3 bar (2 - 43 psi)	0821100021
Mechanical pressure switch, p1 = 1 - 16 bar (15 - 232 psi)	0821100023
Spare seal for vacuum/pressure switch	R961400021
Block assembly kit AS2-MBR-...-W04	R412006371
Mounting strap AS2-MBR-...-W03	R412006370
Mounting plate AS2-MBR-...-W01	R432031071



(mounting bracket not included, order separately)



00121220

A1	A2	A3	B	C	D	F	I	J	K	O	R	T	U
G 1/4	G 1/4	G 1/4	52	59	66,8	65	M5	20	49,4	38	5,4	10	65
G 3/8	G 1/4	G 1/4	52	59	66,8	65	M5	20	49,4	38	5,4	10	65

# Compressed air maintenance unit, series AS3-Metric

AS3 Metric (G3/8 and G1/2) version index



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# Compressed air maintenance unit, series AS3-Metric

FR+ L Maintenance unit AS3-ACD, 2-in-1, G 3/8 - G 1/2, ATEX approved

**AVENTICS**



## Technical Data

Type	Filter Pressure regulator	Filter element replaceable Diaphragm-type pressure regulator with relief opening and reverse flow capability Regulator knob lockable
	Lubricator	Standard oil-drop lubricator with automatic oil filling Fill level – sight glass with slotted screw adjustment for oil metering
		Can be filled with oil during operation
Supply pressure	Condensate drain	semi-automatic: 0.5 - 16 bar (7 - 232 psi) fully automatic: 1.5 - 16 bar (21 - 232 psi)
Secondary pressure		See table
Nominal flow $Q_n$		See table
Secondary pressure = 6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)		
Temperature range		-10° to +50 °C (14 °F to +122 °F) *
Medium		Compressed air
Weight		See table
Installation position		Vertical
Materials	Body Thread insert Reservoir Bowl guard Cover Filter element	Polyamide, seals Buna-N(NBR) Die-cast zinc Polycarbonate or die cast zinc, with bayonet catch Polyamide (polycarbonate bowls only) ABS Polyethylene
Reservoir capacity	Filter Lubricator	49 cm³ (1.6 U.S. Fl. oz.) (semi-automatic) 80 cm³ (2.7 U.S. Fl. oz.)
Filter porosity		5 µm
ATEX		In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)

\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Oil type: HL 68 (DIN 51 524 - ISO VG 68)

Standard values for oil metering: 1-2 drops / min at a nominal flow rate of  $Q_n = 1000$  l / min  
(35.30 CFM)

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

► - semi and fully automatic condensate drain \*

\*either opened without pressure (NO) or closed without pressure (NC)

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min] (CFM)	Secondary pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. with pressure gauge (Poly./Metal)
	G 3/8	3500 (123)	0.5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	1.018 (2.244)	R412007298/R412007304
	G 3/8	3500 (123)	1.5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	1.067 (2.352)	R412007299/R412007305
	G 3/8	3500 (123)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	1.067 (2.352)	R412007300/R412007306
	G 1/2	3500 (123)	0.5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	1.018 (2.244)	R412007307/R412007313
	G 1/2	3500 (123)	1.5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	1.067 (2.352)	R412007308/R412007314
	G 1/2	3500 (123)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	1.067 (2.352)	R412007309/R412007315

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Spare parts kit: see filter pressure regulator valve AS3-FRE and oil-drop lubricator AS3-CBS	
Mounting plate AS3-MBR-....-W01	R432031072
Mounting strap AS3-MBR-....-W03	R412007370
Block assembly kit AS3-MBR-....-W04	R412007371
Block assembly kit (G 3/8) AS3-MBR-G038...-W05	R412007366
Block assembly kit (G 1/2) AS3-MBR-G012...-W05	R412007367

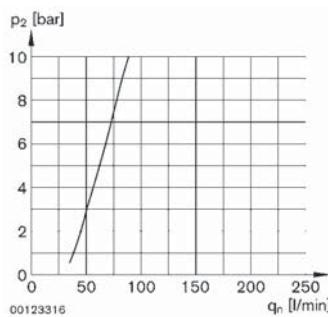


# Compressed air maintenance unit, series AS3-Metric

FR+L Maintenance unit AS3-ACD, 2-in-1, G 3/8 - G 1/2, ATEX approved

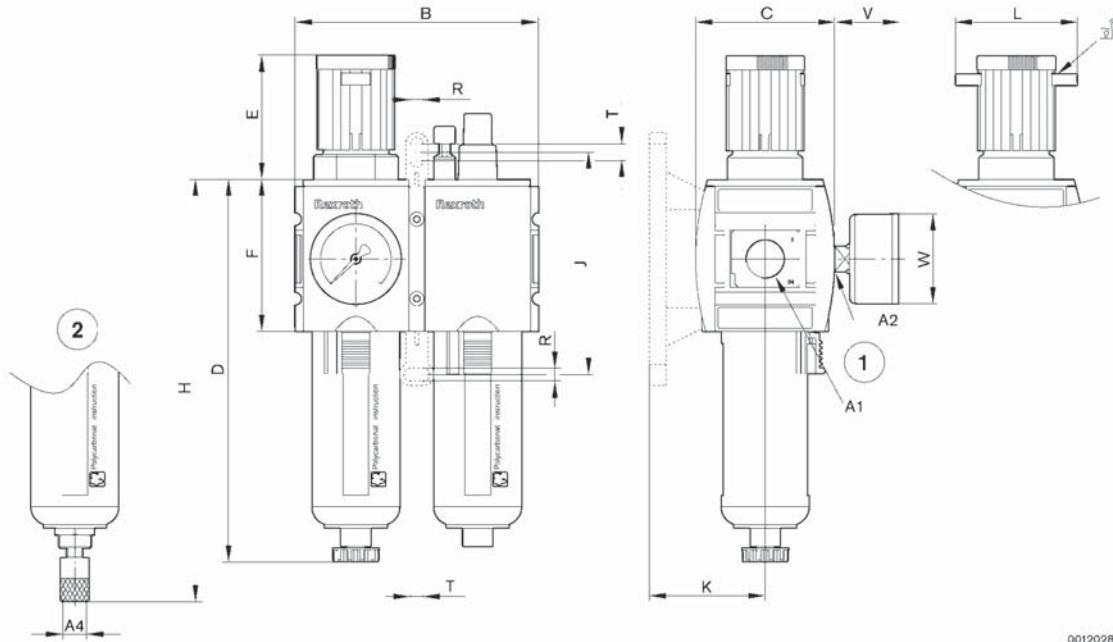
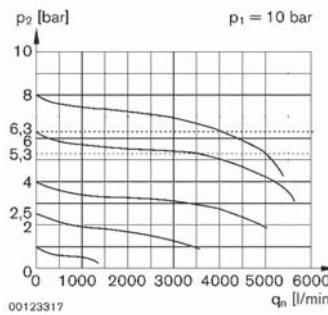
**AVVENTICS**

## Lubrication activation margin



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow;  
 $q_{n \text{ min.}}$  = Min. nominal flow

## Flow rate characteristic (setting range $p_2$ : 0.5 to 8 bar) (7 to 145 psi)



- 1) Semi-automatic condensate drain  
 2) Fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	R	T	V	W
G 3/8	G 1/4	G 1/8	126	74	189,5	63,5	80	206	104	71	59	6,4	8	32	50
G 1/2	G 1/4	G 1/8	126	74	189,5	63,5	80	206	104	71	59	6,4	8	32	50

# Compressed air maintenance unit, series AS3-Metric

FRL Maintenance unit AS3-ACT, 3-in-1, G 3/8 - G 1/2, ATEX approved



## Technical Data

Type	Filter Pressure regulator Lubricator	Filter element replaceable Diaphragm-type pressure regulator with relief opening and reverse flow capability Standard oil-drop lubricator with semi-automatic oil filling Fill level – sight glass with slotted screw adjustment for oil metering Can be filled with oil during operation semi-automatic: 0.5 - 16 bar (7 - 232 psi) fully automatic: 1.5 - 16 bar (21 - 232 psi)
Supply pressure	Condensate drain	See table See table
Secondary pressure	$Q_n$	Secondary pressure = 6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)
Nominal flow		-10° to +50 °C (14 °F to +122 °F) *
Medium		Compressed air
Weight		See table
Installation position		Vertical
Materials	Body Thread insert Reservoir Bowl guard Cover Filter element	Polyamide, seals Buna-N(NBR) Die-cast zinc Polycarbonate or die cast zinc, with bayonet catch Polyamide (carbonate bowls only) ABS Polyethylene
Reservoir capacity	Filter Lubricator	49 cm³ (1.6 U.S. Fl. oz.) (semi-automatic) 80 cm³ (2.7 U.S. Fl. oz.)
Filter porosity		5 µm
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Oil type: HL 68 (DIN 51 524 - ISO VG 68)

Standard values for oil metering: 1-2 drops / min at a nominal flow rate of  $Q_n = 1000$  l / min  
(35.30 CFM)

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

## ► - semi and fully automatic condensate drain\*

\* either opened without pressure (NO) or closed without pressure (NC)

Note: All Series AS filter drains include a manual drain function as standard.

## ► Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min] (CFM)	Secondary pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. with pressure gauge (Poly./Metal)
	G 3/8	3500 (123)	0.5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	1,353 (2.983)	R412007318/R412007324
	G 3/8	3500 (123)	1.5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	1,402 (3.091)	R412007319/R412007325
	G 3/8	3500 (123)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	1,402 (3.091)	R412007320/R412007326
	G 1/2	3500 (123)	0.5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, without pressure: open	1,353 (2.983)	R412007327/R412007333
	G 1/2	3500 (123)	1.5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: open	1,402 (3.091)	R412007328/R412007334
	G 1/2	3500 (123)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, without pressure: closed	1,402 (3.091)	R412007329/R412007335

## ▲ Accessories (to be ordered separately)

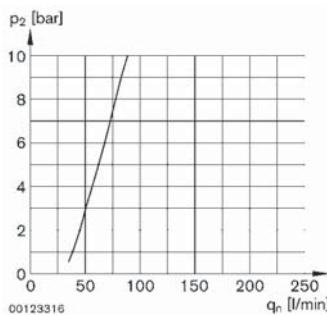
Accessory	Part no.
Spare parts kit: see filter pressure regulator valve AS3-FRE and oil-drop lubricator AS3-CBS	
Mounting plate AS3-MBR-....-W01	R432031072
Mounting strap AS3-MBR-....-W03	R412007370
Block assembly kit AS3-MBR-....-W04	R412007371
Mounting flange kit (G 3/8) AS3-MBR-G038...-W05	R412007366
Mounting flange kit (G 1/2) AS3-MBR-G012...-W05	R412007367

# Compressed air maintenance unit, series AS3-Metric

FRL Maintenance unit AS3-ACT, 3-in-1, G 3/8 - G 1/2, ATEX approved

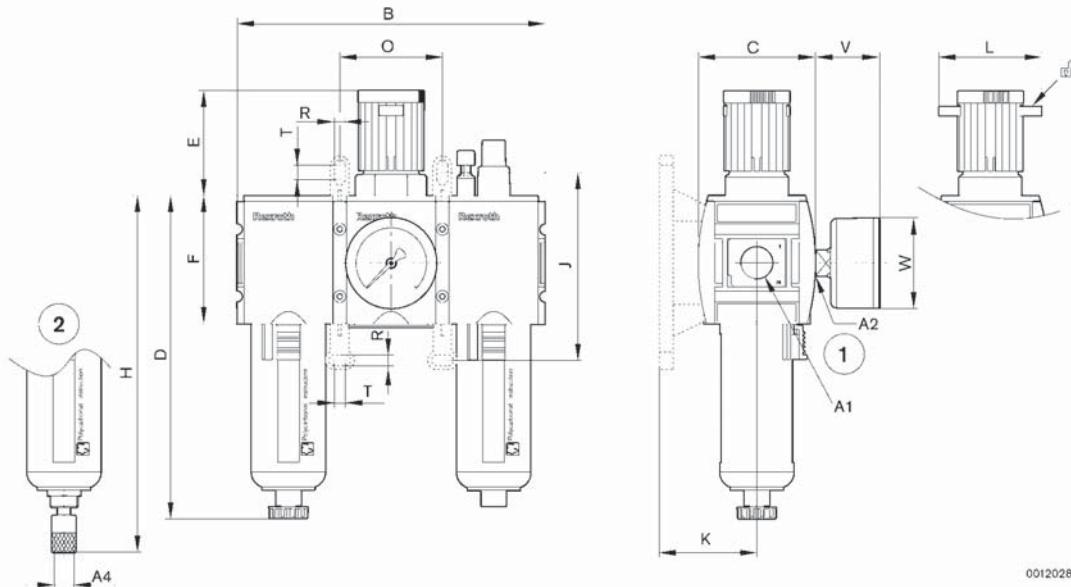
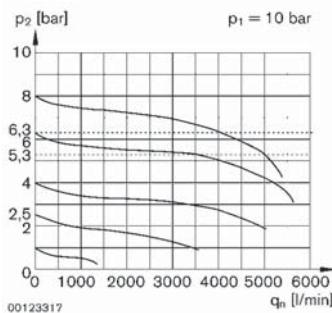
**AVVENTICS**

## Lubrication activation margin



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow;  
 $q_{n\ min.}$  = Min. nominal flow

## Flow rate characteristic (setting range $p_2$ : 0.5 to 8 bar) (7 to 145 psi)



- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	O	R	T	V	W
G 3/8 G 1/2	G 1/4 G 1/4	G 1/8 G 1/8	189	74	189,5 189,5	63,5 63,5	80 80	206 206	104 104	71 71	59 59	63 63	6,4 6,4	8 8	32 32	50 50

# Compressed air maintenance unit, series AS3-Metric

Pressure regulator AS3-RGS, G 3/8 - G 1/2, ATEX approved

**AVVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability	
Supply pressure	16 bar (232 psi)	
Secondary pressure	See table	
Nominal flow Q <sub>n</sub> [l/min]	See table	
Secondary pressure = 6.3 bar (91 psi) and Δp = 1 bar (15 psi)		
Temperature range	-10° to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	any	
Materials	Body Thread insert	Polyamide, seals Buna-N(NBR) Die-cast zinc
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

## Part no.

Symbol	Threaded ports	Nominal flow Q <sub>n</sub> [l/min](CFM)	Secondary pressure [bar](psi)	Weight [kg](lbs.)	Part no. with pressure gauge
	G 3/8	1600 (58)	0,1 - 1 (1 - 14)	0,600 (1.323)	R412007101
	G 3/8	4600 (162)	0,1 - 2 (1 - 29)	0,600 (1.323)	R412007103
	G 3/8	5000 (176)	0,2 - 4 (2 - 58)	0,600 (1.323)	R412007105
	G 3/8	4300 (151)	0,5 - 8 (7 - 116)	0,600 (1.323)	R412007107
	G 3/8	4300 (151)	<b>0,5 - 10 (7 - 145)</b>	0,600 (1.323)	R412007109
	G 3/8	3500 (123)	<b>0,5 - 16 (7 - 232)</b>	0,600 (1.323)	R412007111
	G 1/2	1600 (58)	0,1 - 1 (1 - 14)	0,600 (1.323)	R412007113
	G 1/2	4600 (162)	0,1 - 2 (1 - 29)	0,600 (1.323)	R412007115
	G 1/2	5000 (176)	0,2 - 4 (2 - 58)	0,600 (1.323)	R412007117
	G 1/2	5200 (183)	0,5 - 8 (7 - 116)	0,600 (1.323)	R412007119
	G 1/2	5200 (183)	<b>0,5 - 10 (7 - 145)</b>	0,600 (1.323)	R412007121
	G 1/2	4000 (141)	<b>0,5 - 16 (7 - 232)</b>	0,600 (1.323)	R412007123

## Part no.

Symbol	Threaded ports	Nominal flow Q <sub>n</sub> [l/min](CFM)	Secondary pressure [bar](psi)	Weight [kg](lbs.)	Part no. without pressure gauge
	G 3/8	1600 (58)	0,1 - 1 (1 - 14)	0,528 (1.164)	R412007100
	G 3/8	4600 (162)	0,1 - 2 (1 - 29)	0,528 (1.164)	R412007102
	G 3/8	5000 (178)	0,2 - 4 (2 - 58)	0,528 (1.164)	R412007104
	G 3/8	4300 (151)	0,5 - 8 (7 - 116)	0,528 (1.164)	R412007106
	G 3/8	4300 (151)	<b>0,5 - 10 (7 - 145)</b>	0,528 (1.164)	R412007108
	G 3/8	3500 (123)	<b>0,5 - 16 (7 - 232)</b>	0,528 (1.164)	R412007110
	G 1/2	1600 (58)	0,1 - 1 (1 - 14)	0,528 (1.164)	R412007112
	G 1/2	4600 (162)	0,1 - 2 (1 - 29)	0,528 (1.164)	R412007114
	G 1/2	5000 (176)	0,2 - 4 (2 - 58)	0,528 (1.164)	R412007116
	G 1/2	5200 (183)	0,5 - 8 (7 - 116)	0,528 (1.164)	R412007118
	G 1/2	5200 (183)	<b>0,5 - 10 (7 - 145)</b>	0,528 (1.164)	R412007120
	G 1/2	4000 (141)	<b>0,5 - 16 (7 - 232)</b>	0,528 (1.164)	R412007122

## Accessories (to be ordered separately)

Accessory	Part no.
Pressure regulator valve seal kit	R961400144
Mounting plate AS3-MBR-...-W01 (incl. 2 bolts)	R432031072
Mounting strap AS3-MBR-...-W03	R412007370
Block assembly kit AS3-MBR-...-W04	R412007371
Mounting flange kit (G 3/8) AS3-MBR-G038...-W05	R412007366
Mounting flange kit (G 1/2) AS3-MBR-G012...-W05	R412007367
Control panel nut AS3-MBR-...-W06	R412007372

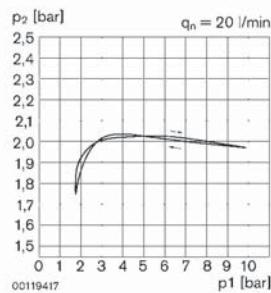
See accessories section for gauges

# Compressed air maintenance unit, series AS3-Metric

Pressure regulator AS3-RGS, G 3/8 - G 1/2, ATEX approved

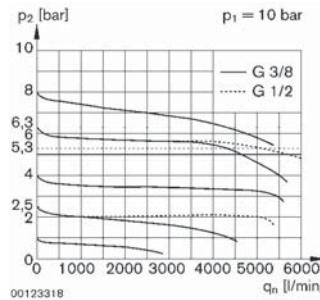
**AVENTICS**

## Pressure characteristics curve

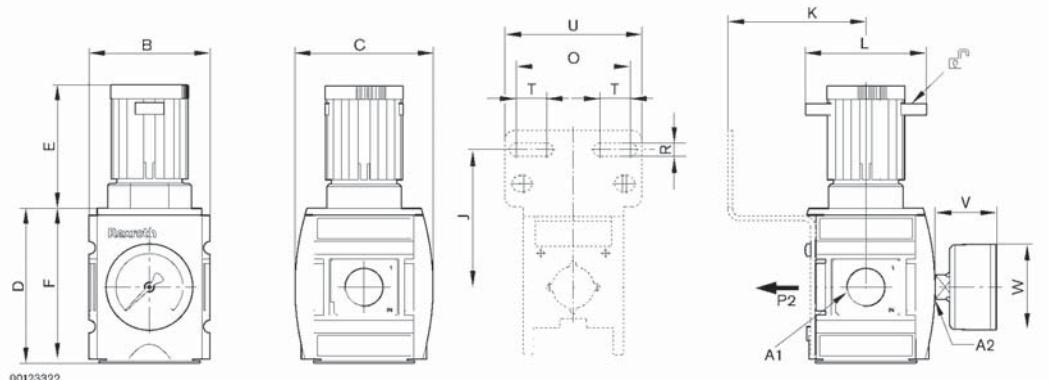


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 0.5 to 8 bar / 7 to 116 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



A1	A2	B	C	D	E	F	J	K	L	O	R	T	U	V	W
G 3/8	G 1/4	63	74	82	63,5	80	72,5	71	59	60	7	16	72	35	50
G 1/2	G 1/4	63	74	82	63,5	80	72,5	71	59	60	7	16	72	35	50

# Compressed air maintenance unit, series AS3-Metric

Pressure regulator AS3-RGS-...-DS, with continuous pressure supply,  
G 3/8 - G 1/2, ATEX approved

**AVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob	
Supply pressure	16 bar (232 psi)	
Secondary pressure	See table	
Nominal flow $Q_n$	See table	
Secondary pressure = 6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)		
Temperature range	-10° to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	Any	
Materials	Body Thread insert Cover	Polyamide, seals Buna-N(NBR) Die-cast zinc ABS
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	

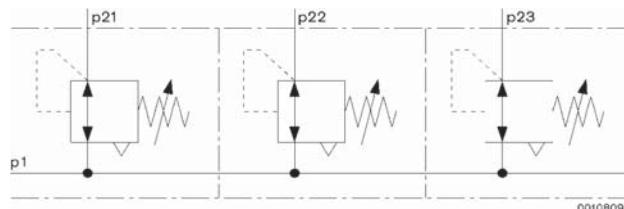


\* with dried air

The p1 working pressure can be supplied from the left or the right in the device combination. With high nominal flows, a supply on both sides is recommended!

In the case of multiple regulator assemblies, only gauge with  $\varnothing \leq 50$  can be used

## Example of application



## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min](CFM)	Secondary pressure [bar](psi)	Weight [kg](lbs.)	Part no. without pressure gauge
	G 3/8	1600 (58)	0,1 - 1 (1 - 14)	0,528 (1.164)	R412007124
	G 3/8	4600 (162)	0,1 - 2 (1 - 29)	0,528 (1.164)	R412007125
	G 3/8	5000 (176)	0,2 - 4 (2 - 58)	0,528 (1.164)	R412007126
	G 3/8	4300 (151)	0,5 - 8 (7 - 116)	0,528 (1.164)	R412007127
	G 3/8	4300 (151)	<b>0,5 - 10 (7 - 145)</b>	0,528 (1.164)	R412007128
	G 3/8	3500 (123)	<b>0,5 - 10 (7 - 232)</b>	0,528 (1.164)	R412007129
	G 1/2	1600 (58)	0,1 - 1 (1 - 14)	0,528 (1.164)	R412007130
	G 1/2	4600 (162)	0,1 - 2 (1 - 29)	0,528 (1.164)	R412007131
	G 1/2	5000 (176)	0,2 - 4 (2 - 58)	0,528 (1.164)	R412007132
	G 1/2	5200 (183)	0,5 - 8 (7 - 116)	0,528 (1.164)	R412007133
	G 1/2	5200 (183)	<b>0,5 - 10 (7 - 145)</b>	0,528 (1.164)	R412007134
	G 1/2	4000 (141)	<b>0,5 - 16 (7 - 232)</b>	0,528 (1.164)	R412007135

## Accessories (to be ordered separately)

Accessory	Part no.
Pressure regulator valve seal kit	R961400144
Mounting plate AS3-MBR-...-W01 (incl. 2 bolts)	R432031072
Mounting strap AS3-MBR-...-W03	R412007370
Block assembly kit AS3-MBR-...-W04	R412007371
Mounting flange kit (G 3/8) AS3-MBR-G038...-W05	R412007366
Mounting flange kit (G 1/2) AS3-MBR-G012...-W05	R412007367
Control panel nut AS3-MBR-...-W06	R412007372

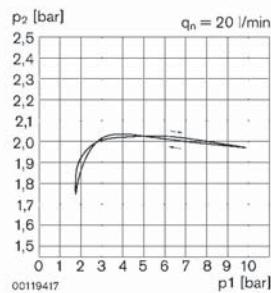
See accessories section for gauges

# Compressed air maintenance unit, series AS3-Metric

Pressure regulator AS3-RGS-...-DS, with continuous pressure supply,  
G 3/8 - G 1/2, ATEX approved

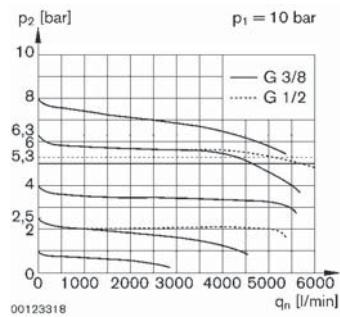
**AVENTICS**

## Pressure characteristics curve

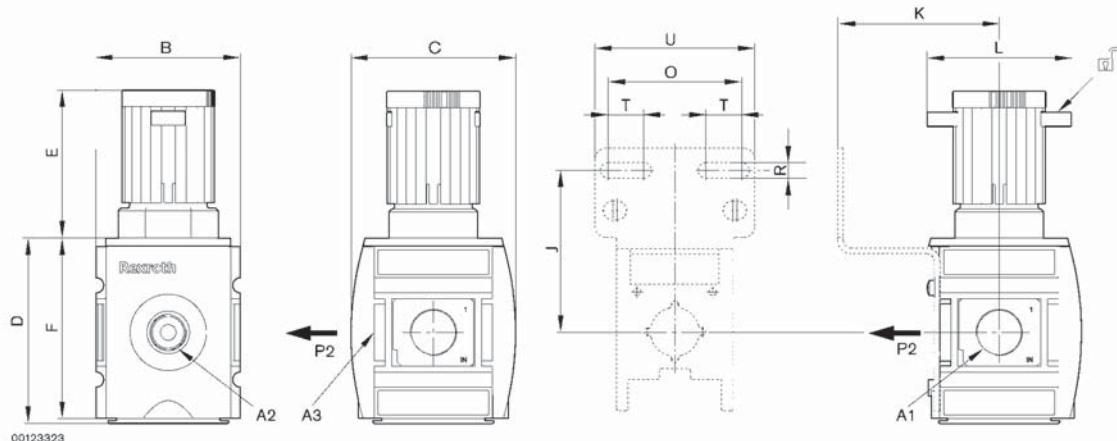


p<sub>1</sub> = Supply pressure; p<sub>2</sub> = Secondary pressure; q = Flow rate

## Flow rate characteristic (setting range p2: 0.5 to 8 bar / 7 to 116 psi)



p<sub>1</sub> = Supply pressure; p<sub>2</sub> = Secondary pressure; q<sub>n</sub> = Nominal flow



p<sub>2</sub> = Secondary pressure

A1	A2	A3	B	C	D	E	F	J	K	L	O	R	T	U
G 3/8	G 1/4	G 3/8	63	74	82	63,5	80	72,5	71	59	60	7	16	72
G 1/2	G 1/4	G 3/8	63	74	82	63,5	80	72,5	71	59	60	7	16	72

# Compressed air maintenance unit, series AS3-Metric

Precision pressure regulator AS3-RGP, G 3/8 - G 1/2, ATEX approved

**AVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob	
Supply pressure	16 bar (232 psi)	
Secondary pressure	See table	
Nominal flow $Q_n$	See table	
Secondary pressure = 6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)		
Temperature range	-10° to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	Any	
Materials	Body Thread insert Cover	Polyamide, seals Buna-N(NBR) Die-cast zinc ABS



\* with dried air  
Continuous air consumption = 2.6 l / min (0.09 CFM), depending on secondary pressure  $p_2 = 6$  bar (87 psi)

ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)
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## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min](CFM)	Secondary pressure [bar](psi)	Weight [kg](lbs.)	Part no. with pressure gauge
	G 3/8	1600 (58)	0,1 - 1 (1 - 14)	0,600 (1.323)	R412007137
	G 3/8	4600 (162)	0,1 - 2 (1 - 29)	0,600 (1.323)	R412007139
	G 3/8	5000 (178)	0,2 - 4 (2 - 58)	0,600 (1.323)	R412007141
	G 3/8	4300 (151)	0,5 - 8 (7 - 116)	0,600 (1.323)	R412007143
	G 3/8	4300 (151)	<b>0,5 - 10 (7 - 145)</b>	0,600 (1.323)	R412007145
	G 1/2	1600 (58)	0,1 - 1 (1 - 14)	0,600 (1.323)	R412007149
	G 1/2	4600 (162)	0,1 - 2 (1 - 29)	0,600 (1.323)	R412007151
	G 1/2	5000 (176)	0,2 - 4 (2 - 58)	0,600 (1.323)	R412007153
	G 1/2	5200 (183)	0,5 - 8 (7 - 116)	0,600 (1.323)	R412007155
	G 1/2	5200 (183)	<b>0,5 - 10 (7 - 145)</b>	0,600 (1.323)	R412007157

## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min](CFM)	Secondary pressure [bar](psi)	Weight [kg](lbs.)	Part no. without pressure gauge
	G 3/8	1600 (58)	0,1 - 1 (1 - 14)	0,528 (1.164)	R412007136
	G 3/8	4600 (162)	0,1 - 2 (1 - 29)	0,528 (1.164)	R412007138
	G 3/8	5000 (178)	0,2 - 4 (2 - 58)	0,528 (1.164)	R412007140
	G 3/8	4300 (151)	0,5 - 8 (7 - 116)	0,528 (1.164)	R412007142
	G 3/8	4300 (151)	<b>0,5 - 10 (7 - 145)</b>	0,528 (1.164)	R412007144
	G 1/2	1600 (58)	0,1 - 1 (1 - 14)	0,528 (1.164)	R412007148
	G 1/2	4600 (162)	0,1 - 2 (1 - 29)	0,528 (1.164)	R412007150
	G 1/2	5000 (176)	0,2 - 4 (2 - 58)	0,528 (1.164)	R412007152
	G 1/2	5200 (183)	0,5 - 8 (7 - 116)	0,528 (1.164)	R412007154
	G 1/2	5200 (183)	<b>0,5 - 10 (7 - 145)</b>	0,528 (1.164)	R412007156

## Accessories (to be ordered separately)

Accessory	Part no.
Pressure regulator valve seal kit	R961400145
Mounting plate AS3-MBR-...-W01	R432031072
Mounting strap AS3-MBR-...-W03	R412007370
Block assembly kit AS3-MBR-...-W04	R412007371
Mounting flange kit (G 3/8) AS3-MBR-G038...-W05	R412007366
Mounting flange kit (G 1/2) AS3-MBR-G012...-W05	R412007367
Control panel nut AS3-MBR-...-W06	R412007372

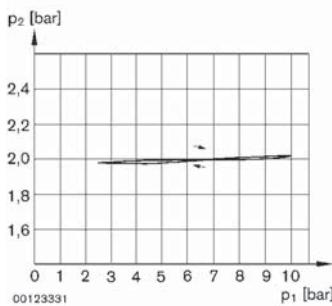
See accessories section for gauges

# Compressed air maintenance unit, series AS3-Metric

Precision pressure regulator AS3-RGP, G 3/8 - G 1/2, ATEX approved

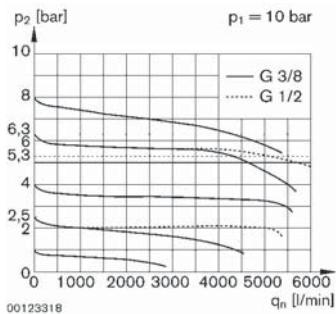
AVVENTICS<sup>®</sup>

## Pressure characteristics curve

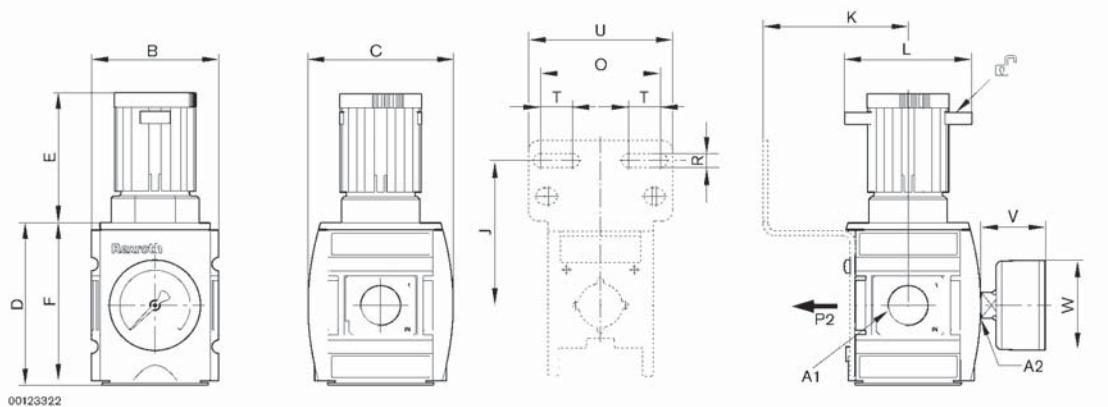


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 0.5 to 8 bar / 7 to 116 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



A1	A2	B	C	D	E	F	J	K	L	O	R	T	U	V	W
G 3/8	G 1/4	63	74	82	63,5	80	72,5	71	59	60	7	16	72	35	50
G 1/2	G 1/4	63	74	82	63,5	80	72,5	71	59	60	7	16	72	35	50

# Compressed air maintenance unit, series AS3-Metric

Precision pressure regulator AS3-RGP-...-DS, with continuous pressure supply, G 3/8 - G 1/2, ATEX approved

**AVENTICS**



## Technical Data

Type	Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob	
Supply pressure	16 bar (232 psi)	
Secondary pressure	See table	
Nominal flow $Q_n$	See table	
Secondary pressure = 6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)		
Temperature range	-10° to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	Any	
Materials	Body Thread insert Cover	Polyamide, seals Buna-N(NBR) Die-cast zinc ABS
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	

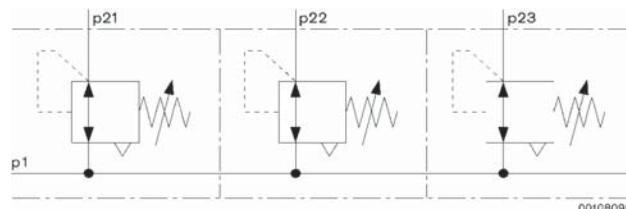


\* with dried air

Continuous air consumption = 2.6 l / min (0.09 CFM), depending on secondary pressure  $p_2$  = 6 bar (87 psi)

The  $p_1$  working pressure can be supplied from the left or the right in the device combination. With high nominal flows, a supply on both sides is recommended!  
In the case of block assembly, only gauge with  $\varnothing \leq 50$  can be used

## Example of application



## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min](CFM)	Secondary pressure [bar](psi)	Weight [kg](lbs.)	Part no. without pressure gauge
	G 3/8	1600 (58)	0,1 - 1 (1 - 14)	0,528 (1.164)	R412007160
	G 3/8	4600 (162)	0,1 - 2 (1 - 29)	0,528 (1.164)	R412007161
	G 3/8	5000 (176)	0,2 - 4 (2 - 58)	0,528 (1.164)	R412007162
	G 3/8	4300 (151)	0,5 - 8 (7 - 116)	0,528 (1.164)	R412007163
	G 3/8	4300 (151)	<b>0,5 - 10 (7 - 145)</b>	0,528 (1.164)	R412007164
	G 1/2	1600 (58)	0,1 - 1 (1 - 14)	0,528 (1.164)	R412007166
	G 1/2	4600 (162)	0,1 - 2 (1 - 29)	0,528 (1.164)	R412007167
	G 1/2	5000 (176)	0,2 - 4 (2 - 58)	0,528 (1.164)	R412007168
	G 1/2	5200 (183)	0,5 - 8 (7 - 116)	0,528 (1.164)	R412007169
	G 1/2	5200 (183)	<b>0,5 - 10 (7 - 145)</b>	0,528 (1.164)	R412007170

## Accessories (to be ordered separately)

Accessory	Part no.
Pressure regulator valve seal kit	R961400145
Mounting plate AS3-MBR-...-W01	R432031072
Mounting strap AS3-MBR-...-W03	R412007370
Block assembly kit AS3-MBR-...-W04	R412007371
Mounting flange kit (G 3/8) AS3-MBR-G038...-W05	R412007366
Mounting flange kit (G 1/2) AS3-MBR-G012...-W05	R412007367
Control panel nut AS3-MBR-...-W06	R412007372

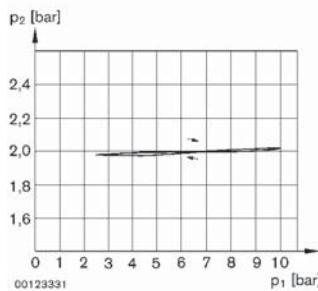
See accessories section for gauges

# Compressed air maintenance unit, series AS3-Metric

Precision pressure regulator AS3-RGP-...-DS, with continuous pressure supply, G 3/8 - G 1/2, ATEX approved

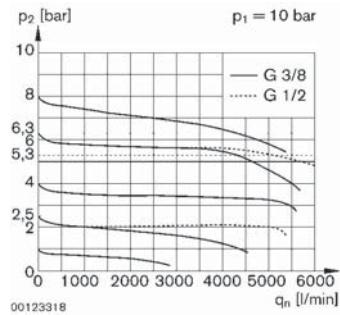
**AVENTICS**

## Pressure characteristics curve

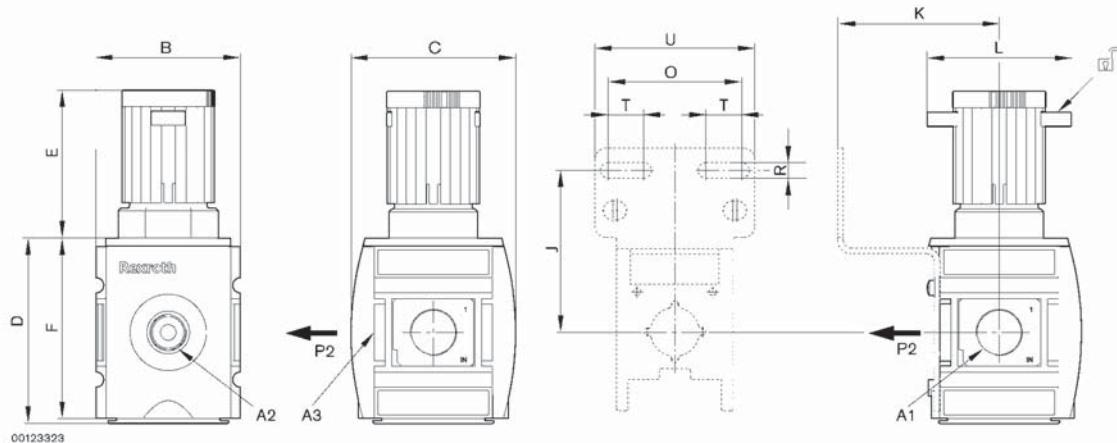


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 0.5 to 8 bar / 7 to 116 psi)



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



$p_2$  = Secondary pressure

A1	A2	A3	B	C	D	E	F	J	K	L	O	R	T	U
G 3/8	G 1/4	G 3/8	63	74	82	63	80	72,5	71	59	60	7	16	72
G 1/2	G 1/4	G 3/8	63	74	82	63	80	72,5	71	59	60	7	16	72

# Compressed air maintenance unit, series AS3-Metric

Filter regulator AS3-FRE, G 3/8 - G 1/2, ATEX approved

**AVVENTICS**



## Technical Data

Type	Filter Pressure regulator	Filter element replaceable Diaphragm-type pressure regulator with relief opening and reverse flow capability Lockable regulator knob
Supply pressure	Condensate drain	semi-automatic: 0.5 - 16 bar (7 - 232 psi) fully automatic: 1.5 - 16 bar (21 - 232 psi)
Secondary pressure		See table
Nominal flow $Q_n$		See table
Secondary pressure = 6,3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)		
Ambient temperature		-10°C to +50 °C (14 °F to +122 °F) *
Medium		Compressed air
Weight		See table
Installation position		Vertical
Materials	Body Thread insert Reservoir Bowl guard Cover Filter element	Polyamide, seals Buna-N(NBR) Die-cast zinc Polycarbonate or die cast zinc, with bayonet catch Polyamide (polycarbonate bowls only) ABS Polyethylene
Reservoir capacity	–	49 cm³ (1.6 U.S. Fl. oz.) (semi-automatic)
Filter porosity		5 µm
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	

\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.



## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min] (CFM)	Secondary pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. with pressure gauge (Poly./Metal)
	G 3/8	4300 (151)	0,5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,658 (1.451)	R412007200/R412007206
	G 3/8	4300 (151)	1,5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,707 (1.559)	R412007201/R412007207
	G 3/8	4300 (151)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,707 (1.559)	R412007202/R412007208
	G 1/2	5100 (180)	0,5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,658 (1.451)	R412007209/R412007215
	G 1/2	5100 (180)	1,5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,707 (1.559)	R412007210/R412007216
	G 1/2	5100 (180)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,707 (1.559)	R412007211/R412007217

## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min] (CFM)	Secondary pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. without pressure gauge
	G 3/8	4300 (151)	0,5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,586 (1.292)	R412007175/R412007181
	G 3/8	4300 (151)	1,5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,635 (1.400)	R412007176/R412007182
	G 3/8	4300 (151)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,635 (1.400)	R412007177/R412007183
	G 1/2	5100 (180)	0,5 - 8 (7 - 116)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,586 (1.292)	R412007184/R412007190
	G 1/2	5100 (180)	1,5 - 8 (21 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,635 (1.400)	R412007185/R412007191
	G 1/2	5100 (180)	0 - 8 (0 - 116)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,635 (1.400)	R412007186/R412007192

# Compressed air maintenance unit, series AS3-Metric

Filter regulator AS3-FRE, G 3/8 - G 1/2, ATEX approved

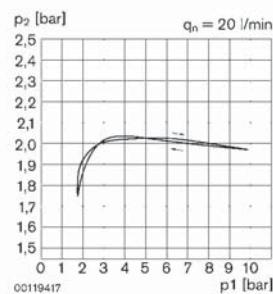
**AVENTICS** 

## ▲ Accessories (to be ordered separately)

	Accessory	Part no.
	Filter element, 5 µm	1829207068
	Pressure regulator valve seal kit	R961400144
	Mounting plate AS3-MBR-...-W01	R432031072
	Mounting strap AS3-MBR-...-W03	R412007370
	Block assembly kit AS3-MBR-...-W04	R412007371
	Mounting flange kit (G 3/8) AS3-MBR-G038...-W05	R412007366
Mounting flange kit (G 1/2) AS3-MBR-G012...-W05	R412007367	
Control panel nut AS3-MBR-...-W06	R412007372	

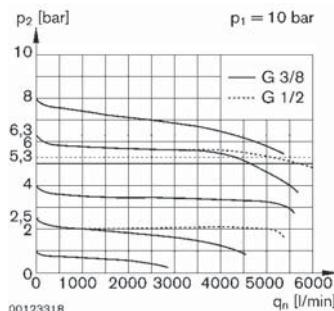
See accessories section for filter reservoirs

## Pressure characteristics curve



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q$  = Flow rate

## Flow rate characteristic (setting range $p_2$ : 0.5 to 8 bar) (7 to 116 psi)

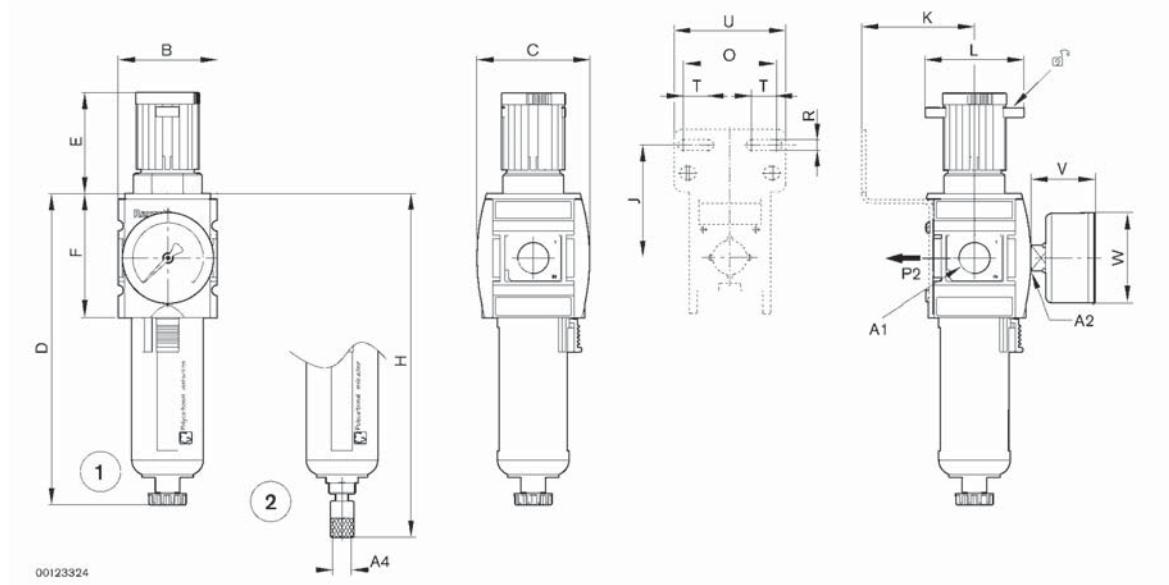


$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow;  $q$  = Flow rate

# Compressed air maintenance unit, series AS3-Metric

Filter regulator AS3-FRE, G 3/8 - G 1/2, ATEX approved

**AVVENTICS**



- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	O	R	T	U	V	W
G 3/8	G 1/4	G 1/8	63	74	189,5	63,5	80	206	72,5	71	59	60	7	16	72	35	50
G 1/2	G 1/4	G 1/8	63	74	189,5	63,5	80	206	72,5	71	59	60	7	16	72	35	50

# Compressed air maintenance unit, series AS3-Metric

Standard filter AS3-FLS, 5 micron, G 3/8 - G 1/2, ATEX approved

**AVENTICS**



## Technical Data

Type	Filter element replaceable	
Supply pressure	See table	
Ambient temperature	-10°C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Cover: ABS Filter element: Polyethylene	
Reservoir capacity	49 cm³ (1.6 U.S. Fl. oz.) (semi-automatic)	
Filter porosity	5 µm	
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Filter for separating solid impurities up to 5 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3

- Humidity - water content: class 8

Optionally with a semi or fully automatic condensate drain

Condensate drain opened without pressure or closed without pressure.

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow Q <sub>n</sub> [l/min] (CFM)	Supply pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. (Poly./Metal)
	G 3/8	3500 (123)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,361 (0.796)	R412007000/R412007006
	G 3/8	3500 (123)	1,5 - 16 (21 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,410 (0.904)	R412007001/R412007007
	G 3/8	3500 (123)	0 - 16 (0 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,410 (0.904)	R412007002/R412007008
	G 1/2	3500 (123)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,361 (0.796)	R412007009/R412007015
	G 1/2	3500 (123)	1,5 - 16 (21 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,410 (0.904)	R412007010/R412007016
	G 1/2	3500 (123)	0 - 16 (0 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,410 (0.904)	R412007011/R412007017

Nominal flow at inlet pressure 91 psi and 15 psi drop (P<sub>1</sub> = 6.3 bar, ΔP = 1 bar)

## Accessories (to be ordered separately)

	Accessory	Part no.
	Filter element, 5 µm	1829207068
	Mounting plate AS3-MBR-...-W01	R432031072
	Mounting strap AS3-MBR-...-W03	R412007370
	Block assembly kit AS3-MBR-...-W04	R412007371
	Mounting flange kit (G 3/8) AS3-MBR-G038...-W05	R412007366

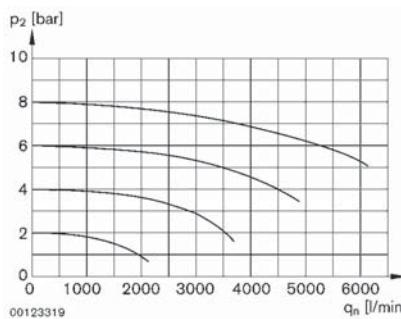
See accessories section for filter reservoirs

# Compressed air maintenance unit, series AS3-Metric

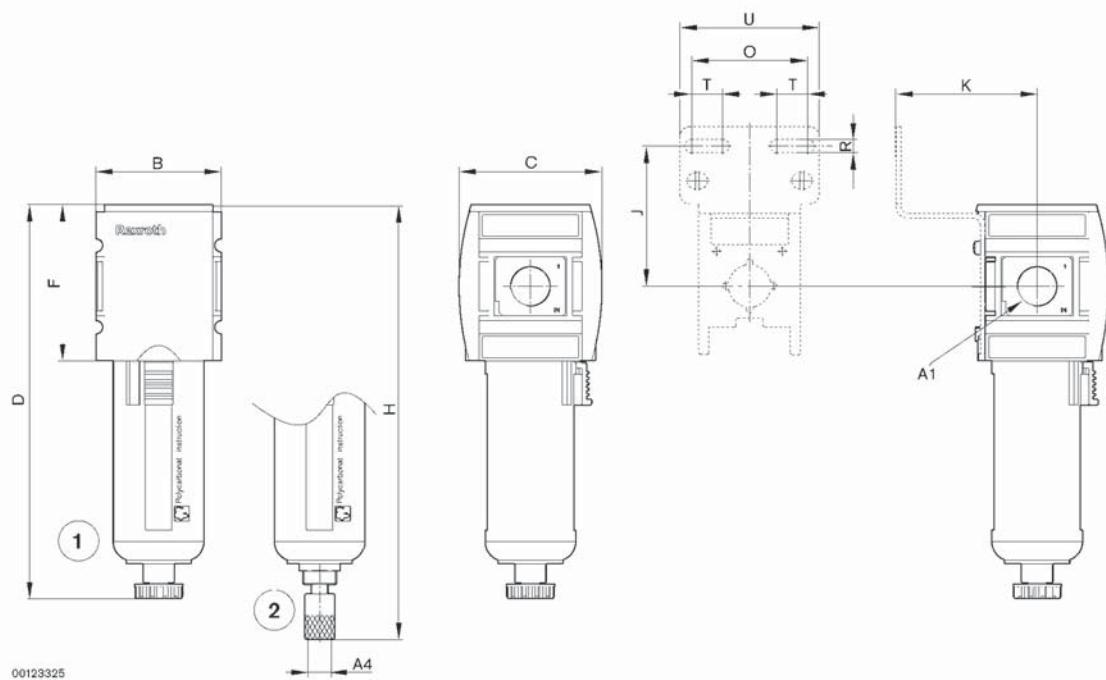
Standard filter AS3-FLS, 5 micron, G 3/8 - G 1/2, ATEX approved

**AVENTICS**

## Flow rate characteristic



p<sub>1</sub> = Supply pressure; p<sub>2</sub> = Secondary pressure; q<sub>n</sub> = Nominal flow



- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U
G 3/8	G 1/8	63	74	189,5	80	206	72,5	71	60	7	16	72
G 1/2	G 1/8	63	74	189,5	80	206	72,5	71	60	7	16	72

# Compressed air maintenance unit, series AS3-Metric

Pre-filter AS3-FLP, 0.3 micron, G 3/8 - G 1/2, ATEX approved

**AVENTICS**



## Technical Data

Type	Pre-filter element replaceable	
Supply pressure	See table	
Temperature range	-10°C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Cover: ABS Filter element: Polymer-impregnated paper	
Reservoir capacity	49 cm³ (1.6 U.S. Fl. oz.) (semi-automatic)	
Filter porosity	0,3 µm	
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Pre-filter for separating solid impurities up to 0,3 µm from compressed air and gases  
The filter element should be exchanged if there is an increase of  $\Delta p$  by max. 0.35 bar (5 psi) or once a year.

Dust separation = 99,99 %

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 2

- Humidity - water content: class 8

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.

## Part no.

Symbol	Threaded ports	Nominal flow Q <sub>n</sub> [l/min] (CFM)	Supply pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. (Poly./Metal)
	G 3/8	900 (32)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,361 (0.796)	R412007018/R412007024
	G 3/8	900 (32)	1,5 - 16 (21 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,410 (0.904)	R412007019/R412007025
	G 3/8	900 (32)	0 - 16 (0 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,410 (0.904)	R412007020/R412007026
	G 1/2	900 (32)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl, semi-automatic, w/out pressure: open	0,361 (0.796)	R412007027/R412007033
	G 1/2	900 (32)	1,5 - 16 (21 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: open	0,410 (0.904)	R412007028/R412007034
	G 1/2	900 (32)	0 - 16 (0 - 232)	Polycarbonate w/guard or metal bowl, fully automatic, w/out pressure: closed	0,410 (0.904)	R412007029/R412007035

Nominal flow at inlet pressure 91 psi and 1.5 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 0.1$  bar)

$$Q = Q_n \times f \quad (f = \text{Correction factor for various supply pressures } p_1)$$

	p1															
[bar]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
[psi]	14	29	43	58	72	87	101	116	130	145	159	174	188	203	217	232
f	0,25	0,38	0,5	0,65	0,75	0,88	1	1,13	1,25	1,38	1,5	1,63	1,75	1,88	2	2,13

## Accessories (to be ordered separately)

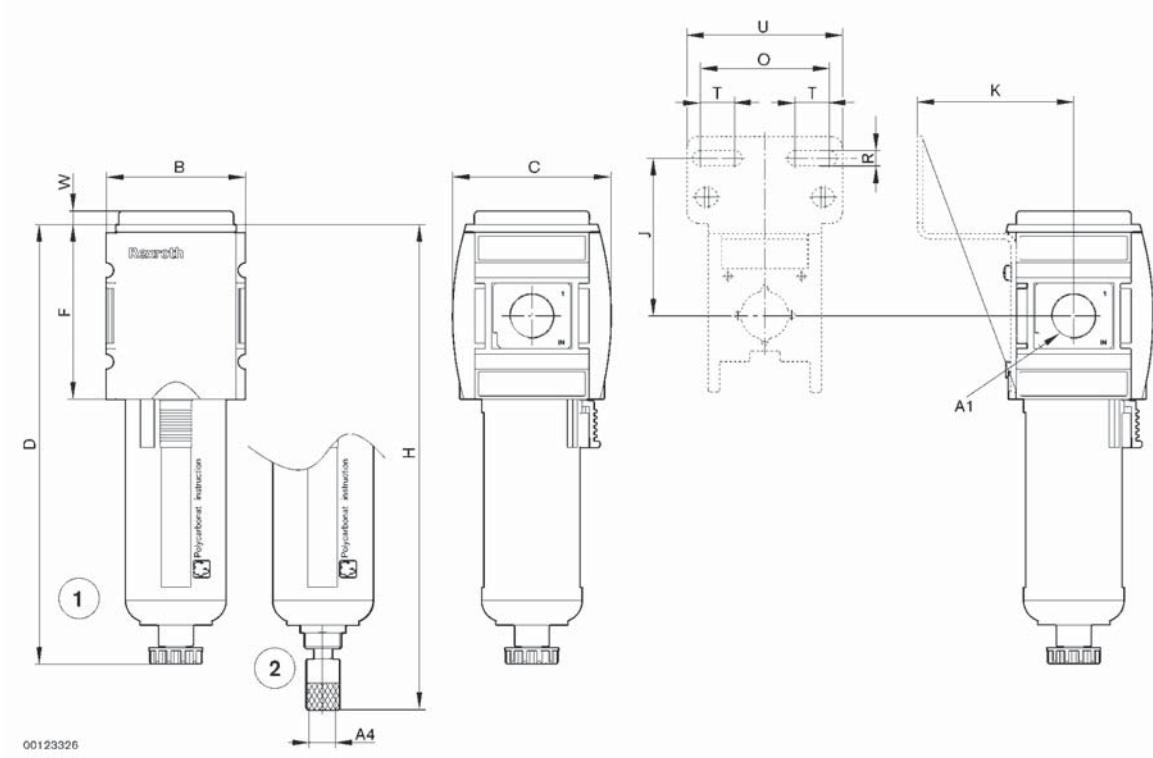
	Accessory	Part no.													
		Filter element	Mouting plate AS3-MBR-....-W01	Mouting strap AS3-MBR-....-W03	Block assembly kit AS3-MBR-....-W04	Mounting flange kit (G 3/8) AS3-MBR-G038...-W05	Mounting flange kit (G 1/2) AS3-MBR-G012...-W05	R961400140	R432031072	R412007370	R412007371	R412007366	R412007367		

See accessories section for pre-filter reservoirs

# Compressed air maintenance unit, series AS3-Metric

Pre-filter AS3-FLP, 0.3 micron, G 3/8 - G 1/2, ATEX approved

**AVENTICS** 



- 1) Semi-automatic condensate drain
- 2) Fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U	W
G 3/8	G 1/8	63	74	189,5	80	206	72,5	71	60	7	16	72	5
G 1/2	G 1/8	63	74	189,5	80	206	72,5	71	60	7	16	72	5

# Compressed air maintenance unit, series AS3-Metric

Coalescing filter AS3-FLC, 0.01 micron, G 3/8 - G 1/2, ATEX approved

**AVENTICS**



## Technical Data

Type	Micro-filter element replaceable	
Supply pressure	See table	
Temperature range	-10 °C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Cover: ABS Filter element: Borsilicate glass fibre	
Reservoir capacity	49 cm³ (1.6 U.S. Fl. oz.) (semi-automatic)	
Filter porosity	0,01 µm	
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	
Standard	NFE 49004	

\* with dried air

Micro filter for the separation of oil, water and solid impurities of up to 0.01 µm from compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 1
- Oil content: class 1

The filter element must be replaced after a pressure rise  $\Delta p$  of max. 0.35 bar (5 psi) or once a year.

Filter is resistant to mineral oils and synthetic oils

Oil separation, residual oil content < 0.01 mg/m³ at t = 20 °C (68 °F) and p1 = 7 bar (102 psi)

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

Note: All Series AS filter drains include a manual drain function as standard.



## Part no.

Symbol	Threaded ports	Nominal flow Q <sub>n</sub> [l/min] (CFM)	Supply pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. (Poly./Metal) (*w/contam. display)
	G 3/8	700 (25)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl, with or w/o contamination display, semi-automatic, w/o pressure: open	0,361 (0.796)	R412007036/R412007042 R412007054*/R412007060*
	G 3/8	700 (25)	1,5 - 16 (21 - 232)	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: open	0,410 (0.904)	R412007037/R412007043 R412007055*/R412007061*
	G 3/8	700 (25)	0 - 16 (0 - 232)	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: closed	0,410 (0.904)	R412007038/R412007044 R412007056*/R412007062*
	G 1/2	700 (25)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl, with or w/o contamination display, semi-automatic, w/o pressure: open	0,361 (0.796)	R412007045/R412007051 R412007063*/R412007069*
	G 1/2	700 (25)	1,5 - 16 (21 - 232)	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: open	0,410 (0.904)	R412007046/R412007052 R412007064*/R412007070*
	G 1/2	700 (25)	0 - 16 (0 - 232)	Polycarbonate w/guard or metal bowl, with or w/o contamination display, fully automatic, w/o pressure: closed	0,410 (0.904)	R412007047/R412007053 R412007065*/R412007071*

Nominal flow at inlet pressure 91 psi and 1.5 psi drop (P<sub>1</sub> = 6.3 bar,  $\Delta P$  = 0.1 bar)

$$Q = Q_n \times f \quad (f = \text{Correction factor for various supply pressures } p_1)$$

	p1															
[bar]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
[psi]	14	29	43	58	72	87	101	116	130	145	159	174	188	203	217	232
f	0,25	0,38	0,5	0,65	0,75	0,88	1	1,13	1,25	1,38	1,5	1,63	1,75	1,88	2	2,13

# Compressed air maintenance unit, series AS3-Metric

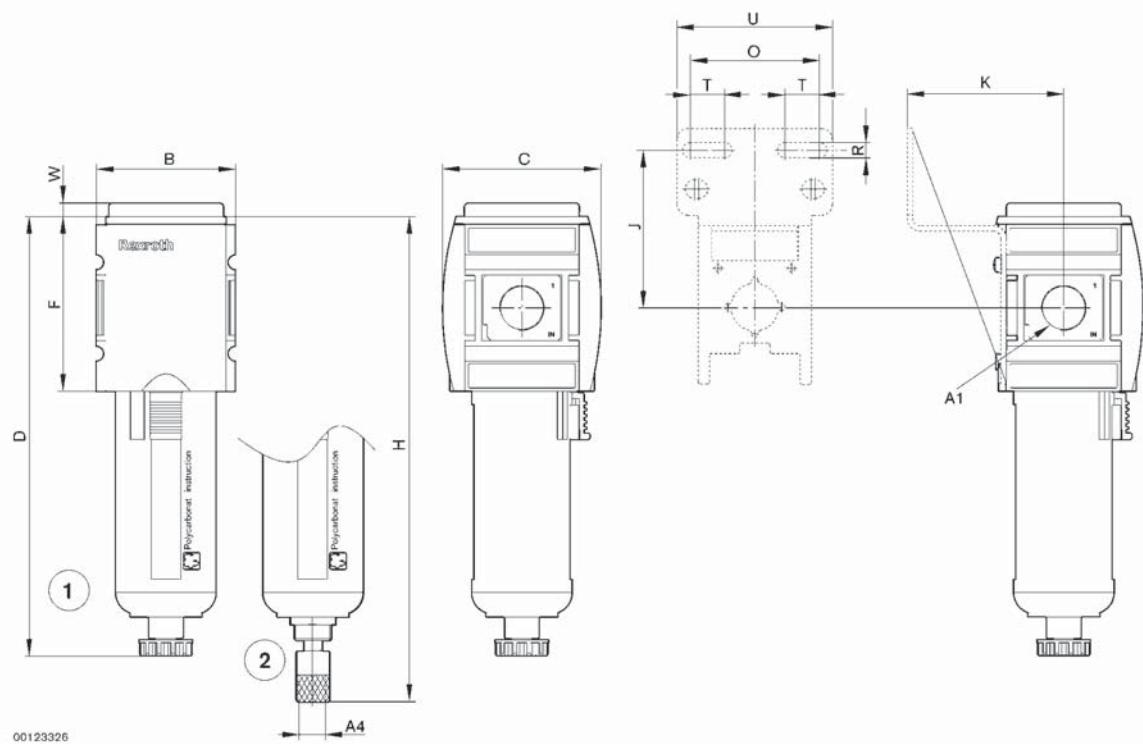
Coalescing filter AS3-FLC, 0.01 micron, G 3/8 - G 1/2, ATEX approved

**AVVENTICS**

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Contamination display AS Filter element	R412006363 R961400141
Mounting plate AS3-MBR-...-W01	R432031072
Mounting strap AS3-MBR-...-W03	R412007370
Block assembly kit AS3-MBR-...-W04	R412007371
Mounting flange kit (G 3/8) AS3-MBR-G038...-W05	R412007366
Mounting flange kit (G 1/2) AS3-MBR-G012...-W05	R412007367

See accessories section for microfilter reservoirs



- 1) Semi-automatic condensate drain  
2) Fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U	W
G 3/8	G 1/8	63	74	189,5	80	206	72,5	71	60	7	16	72	5
G 1/2	G 1/8	63	74	189,5	80	206	72,5	71	60	7	16	72	5

# Compressed air maintenance unit, series AS3-Metric

Active carbon filter AS3-FLA, G 3/8 - G 1/2, ATEX approved

**AVENTICS**



## Technical Data

Type	Filter element replaceable	
Supply pressure	See table	
Temperature range	-10 °C to +50 °C (14 °F to +122 °F) *	
Medium	Compressed air	
Weight	See table	
Installation position	vertical	
Materials	Body: Polyamide, seals Buna-N(NBR) Thread insert: Die-cast zinc Reservoir: Polycarbonate or die cast zinc, with bayonet catch Bowl guard: Polyamide (polycarbonate bowls only) Filter element: Active carbon Cover: ABS	
Reservoir capacity	49 cm³ (1.6 U.S. Fl. oz.)	
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)	



\* with dried air

Active carbon filter for absorption of oil vapor in compressed air and gases

For quality classes according to DIN ISO 8573-1

- Solid impurities: class 3
- Humidity - water content: class 8
- Oil content: class 1

Oil separation, residual oil content < 0.005 mg/m³ at t = 20 °C (68 °F) and p1 = 7 bar (102 psi)

A micro filter must be connected upstream as a prefilter

## Part no.

Symbol	Threaded ports	Nominal flow Q <sub>n</sub> [l/min](CFM)	Supply pressure [bar](psi)	Weight [kg](lbs.)	Part no. (Poly./Metal)
	G 3/8	1000 (35)	0 - 16 (0 - 232)	0.375 (0.827)	R412007072/R412007074
	G 1/2	1000 (35)	0 - 16 (0 - 232)	0.375 (0.827)	R412007075/R412007077

Nominal flow at inlet pressure 91 psi and 1.5 psi drop (P<sub>1</sub> = 6.3 bar, ΔP = 0.1 bar)

$$Q = Q_n \times f \quad (f = \text{Correction factor for various supply pressures } p_1)$$

	p <sub>1</sub>															
[bar]	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
[psi]	14	29	43	58	72	87	101	116	130	145	159	174	188	203	217	232
f	0,25	0,38	0,5	0,65	0,75	0,88	1	1,13	1,25	1,38	1,5	1,63	1,75	1,88	2	2,13

## Accessories (to be ordered separately)

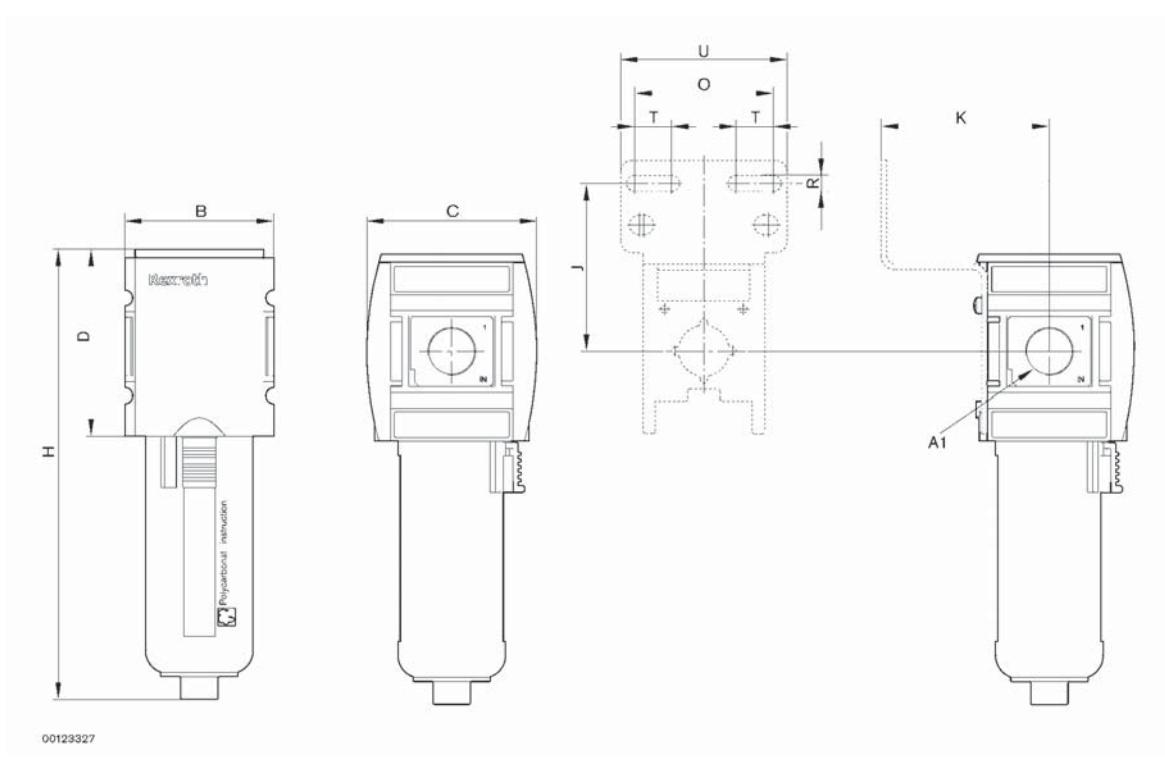
Accessory	Part no.
Active carbon filter reservoir AS3-CLA, metal (no glass)	R412007349
Active carbon filter reservoir AS3-CLA (polymer)	R412007347
Active carbon filter element	R961400143
Mounting plate AS3-MBR-....W01	R432031072
Mounting strap AS3-MBR-....W03	R412007370
Block assembly kit AS3-MBR-....W04	R412007371
Mounting flange kit (G 3/8) AS3-MBR-G038...-W05	R412007366
Mounting flange kit (G 1/2) AS3-MBR-G012...-W05	R412007367

\* see accessories

# Compressed air maintenance unit, series AS3-Metric

Active carbon filter AS3-FLA, G 3/8 - G 1/2, ATEX approved

AVVENTICS<sup>A</sup>



A1	B	C	D	H	J	K	O	R	T	U
G 3/8 G 1/2	63 63	74 74	80 80	183 183	72,5 72,5	71 71	60 60	7 7	16 16	72 72

# Compressed air maintenance unit, series AS3-Metric

Lubricator, oil-drop AS3-LBS, with semi-automatic oil filling,  
G 3/8 - G 1/2, ATEX approved

**AVENTICS**



## Technical Data

Type	Inspection glass with slotted screw for oil metering Can be filled with oil during operation See table		
Supply pressure	-10 °C to +50 °C (14 °F to +122 °F) *		
Temperature range	Medium		
Medium	Weight		
Weight	See table		
Installation position	vertical		
Materials	Body	Polyamide, seals Buna-N(NBR)	
	Thread insert	Die-cast zinc	
	Reservoir	Polycarbonate or die cast zinc, with bayonet catch	
	Bowl guard	Polyamide (polycarbonate bowls only)	
	Seal	ABS	
Reservoir capacity	80 cm <sup>3</sup> (2.7 U.S. Fl. oz.)		
ATEX	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)		



\* with dried air

Oil type: HL 68 (DIN 51 524 - ISO VG 68)

Standard values for oil metering: 1-2 drops / min at a nominal flow rate of Qn = 1000 l / min  
(35.30 CFM)

Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

The unit is equipped with a semi-automatic oil filling mechanism (standard). A threaded connector located in the lower section of the container can be used to connect a hose to the oil tank.

Pressing the top button opens a Venturi nozzle that provides a vacuum in the upper section of the container. This draws the oil into the container.

## Part no.

Symbol	Threaded ports	Nominal flow Q <sub>n</sub> [l/min] (CFM)	Supply pressure [bar](psi)	Options	Weight [kg](lbs.)	Part no. (Poly./Metal)
	G 3/8	8000 (282)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl **Ready for level sensor (non ATEX)	0,343 (0.756)	R412007225 / R412007229 R412007232 / (n/a)
	G 1/2	8000 (282)	0,5 - 16 (7 - 232)	Polycarbonate w/guard or metal bowl **Ready for level sensor (non ATEX)	0,343 (0.756)	R412007231/R412007235 R412007226 / (n/a)

Nominal flow at inlet pressure 91 psi and 15 psi drop (P<sub>1</sub> = 6.3 bar, ΔP = 1 bar)

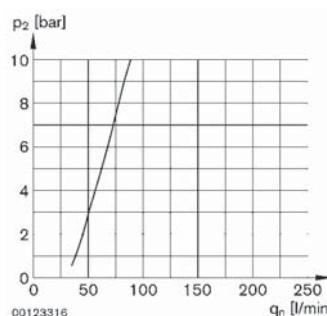
## Accessories (to be ordered separately)

### Accessory

### Part no.

	Lubricator reservoir AS3-CBS, metal (w/sight glass) Lubricator reservoir AS3-CBS (polycarbonate) Lubricator metering set, polycarbonate	R412007358 R412007352 R961400032
	Mounting plate AS3-MBR-....-W01 Mounting strap AS3-MBR-....-W03 Block assembly kit AS3-MBR-....-W04 Mounting flange kit (G 3/8) AS3-MBR-G038...-W05 Mounting flange kit (G 1/2) AS3-MBR-G012...-W05  **For low oil level sensor options, see Accessories Section	R432031072 R412007370 R412007371 R412007366 R412007367

## Lubrication activation margin



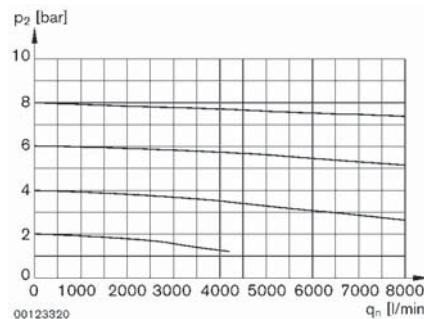
p<sub>2</sub> = Secondary pressure; q<sub>n min.</sub> = Min. nominal flow

# Compressed air maintenance unit, series AS3-Metric

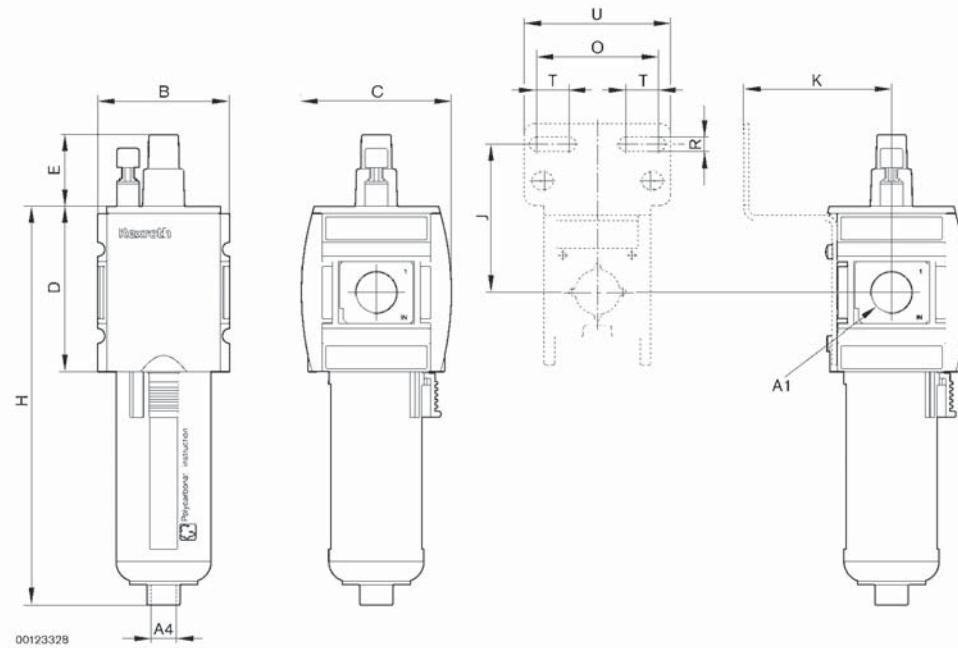
Lubricator AS3-LBS, with semi-automatic oil filling,  
G 3/8 - G 1/2, ATEX approved

AVVENTICS 

## Flow rate characteristic



$p_1$  = Supply pressure;  $p_2$  = Secondary pressure;  $q_n$  = Nominal flow



A1	A4	B	C	D	E	H	J	K	O	R	T	U
G 3/8	G 1/8	63	74	80	26	183	72,5	71	60	7	16	72
G 1/2	G 1/8	63	74	80	26	183	72,5	71	60	7	16	72

# Compressed air maintenance unit, series AS3-Metric

3/2 directional-control dump valve AS3-SOV, electrically operated,  
G 3/8 - G 1/2

**AVVENTICS**



## Technical Data

Type	Poppet valve
Working pressure	2.5 -10 bar (36 - 145 psi)
Nominal flow $q_n$	see table
Secondary pressure	6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)
Ambient temperature	-10 °C to +50 °C (14 °F to +122 °F) *
Medium	Compressed air
Weight	see table
Pickup power with AC 50 Hz	2.2 VA
Holding power with AC 50 Hz	1.6 VA
Power consumption with DC	2 W
Relative switch-on duration	100 %
Protection class (DIN 40 050) with electrical connector	IP 65 (NEMA 4)
Installation position:	any
Materials (body)	Polyamide, seals Buna-N(NBR)
Thread bushing	Die-cast zinc
Cover	ABS

\* with dried air

## ► Version:

Cut-off and sequencing valve with unrestricted cross-section.  
Two switch positions: a) Basic position: input closed, output ventilated; b) Operated: input and output connected, exhaust closed.  
Connection via electrical connector shape C, DIN 43 650, see online catalog series CN1.  
Please observe note regarding compressed air preparation!

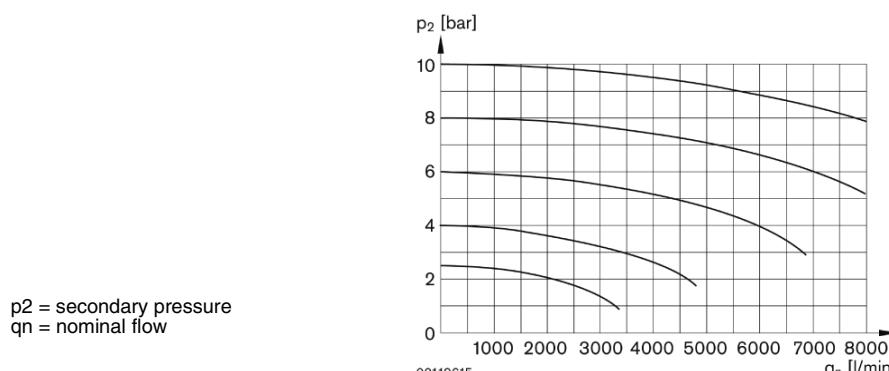


	Thread connection [psi]	Operational voltage	$Q_n$ l/min [CFM]	Operating pressure	Weight kg [lbs]	Notes	Part No.
	G 3/8	-	-	-	0.459 (1.01)	1	R412007264
	G 3/8	-	-	-	0.459 (1.01)	2	R412007258
	G 3/8	24VDC ±10%	4500 (159)	36 ... 145	0.459 (1.01)	3	R412007265
	G 3/8	110VAC 50/60Hz	-	-	0.459 (1.01)	3	R412007266
	G 3/8	240VAC 50/60Hz	-	-	0.459 (1.01)	3	R412007267
	G 1/2	-	-	-	0.459 (1.01)	1	R412007268
	G 1/2	-	-	-	0.459 (1.01)	2	R412007259
	G 1/2	24VDC ±10%	4500 (159)	36 ... 145	0.459 (1.01)	3	R412007269
	G 1/2	110VAC 50/60Hz	-	-	0.459 (1.01)	3	R412007270
	G 1/2	240VAC 50/60Hz	-	-	0.459 (1.01)	3	R412007271

1) without DO16 pilot valve 2) with CNOMO interface, without pilot valve

3) with DO16 pilot valve (use electrical connector DIN Form C, series CN1)

## Flow rate characteristic



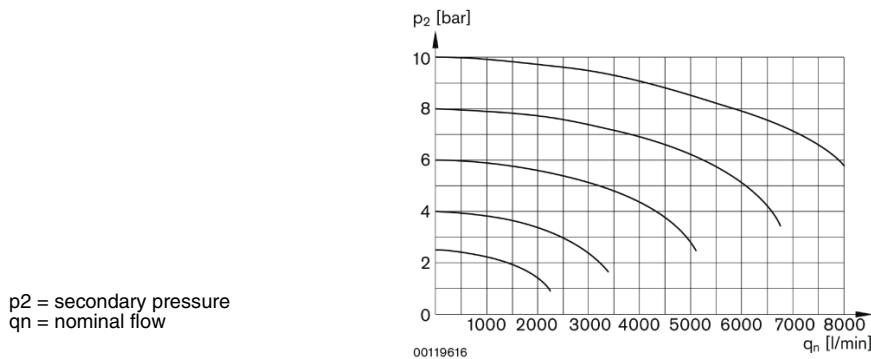
# Compressed air maintenance unit, series AS3-Metric

3/2 directional-control dump valve AS3-SOV, electrically operated,  
G 3/8 - G 1/2

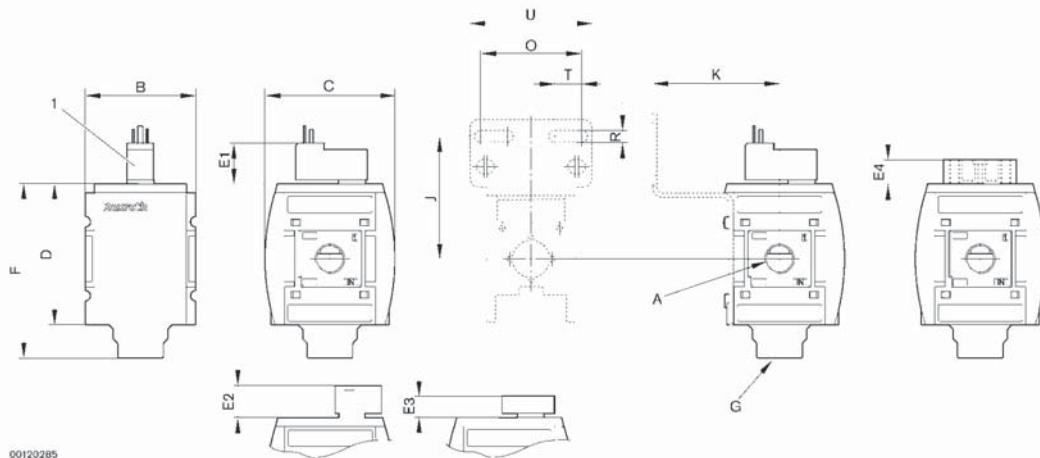
**AVENTICS** 



## Rear exhaust



## Drawing



(mounting bracket not included, order separately)

A	G	B	C	D	E1	E2	E3	E4	F	J	K	O	R	T
G3/8	G1/2	63	74	80	23.2	18.5	12.3	10	99	72.5	66	60	7	16
G1/2	G1/2	63	74	80	23.2	18.5	12.3	10	99	72.5	66	60	7	16
A	U													
G3/8	72													
G1/2	72													

# Compressed air maintenance unit, series AS3-Metric

3/2 directional-control dump valve AS3-SOV, pneumatically operated,  
G 3/8 - G 1/2, ATEX approved

**AVENTICS**



## Technical Data

Type	Poppet valve
Working pressure	2.5 - 10 bar (36 - 145 psi)
Nominal flow $q_n$	see table
Secondary pressure	6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)
Ambient temperature	-10 °C to +50 °C (14 °F to +122 °F) *
Medium	Compressed air
Weight	see table
Installation position	any

Materials (body)	Polyamide, seals Buna-N(NBR)
Thread bushing	Die-cast zinc
Cover	ABS

ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)
-------	--

\* with dried air



## ► Version:

Cut-off and sequencing valve with unrestricted cross-section.

Two switch positions: a) Basic position: input closed, output ventilated; b) Operated: input and output connected, exhaust closed.

Please observe note regarding compressed air preparation!

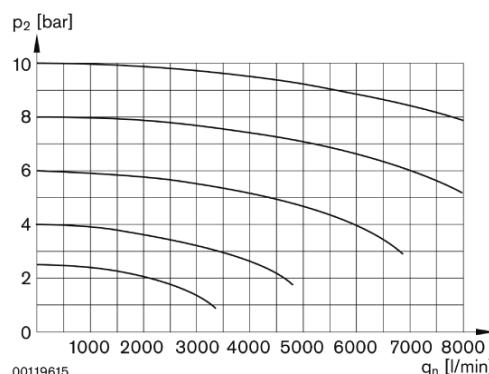
## ► Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l / min](CFM)	With options	Weight [kg](lbs.)	Part no.
	G 3/8	4500 (159)	Change-over valve / shut-off valve pneumatically operated	0,459 (1.01)	R412007262
	G 1/2	4500 (159)	Change-over valve / shut-off valve pneumatically operated	0,459 (1.01)	R412007263

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Silencer: sintered bronze G 1/2 (sold in multiples of 2)	1827000003
Mounting strap AS3-MBR-...-W03	R412007370
Mounting plate AS3-MBR-...-W01	R432031072
Block assembly kit AS3-MBR-...-W04	R412007371

## Flow rate characteristic



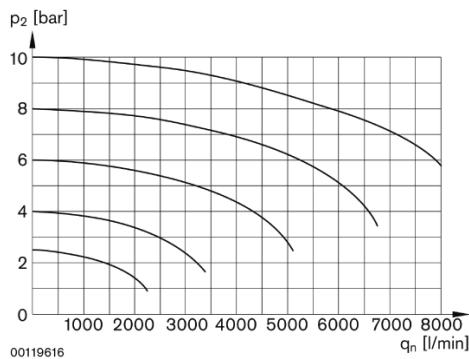
$p_2$  = secondary pressure  
 $q_n$  = nominal flow

# Compressed air maintenance unit, series AS3-Metric

3/2 directional-control dump valve AS3-SOV, pneumatically operated,  
G 3/8 - G 1/2, ATEX approved

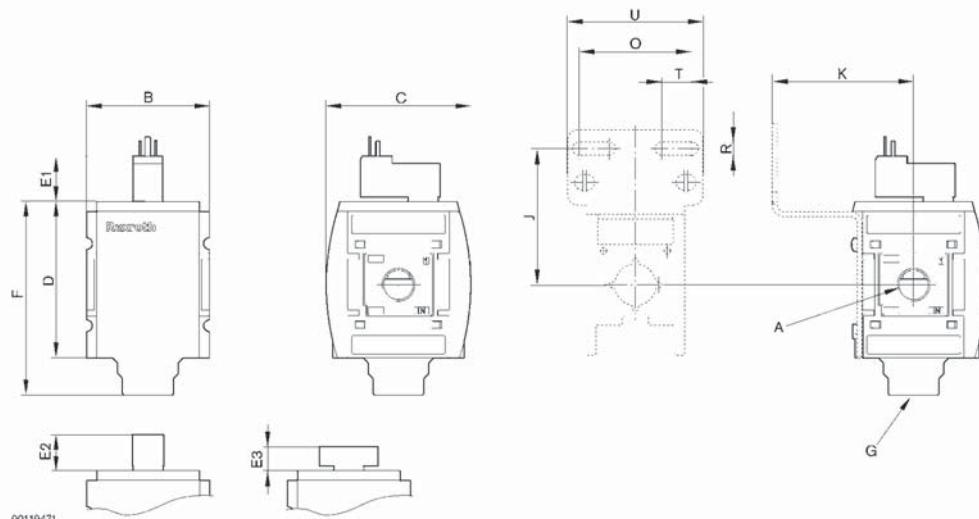
AVVENTICS 

## Rear exhaust



p<sub>2</sub> = secondary pressure  
q<sub>n</sub> = nominal flow

## Drawing



(mounting bracket not included, order separately)

A	G	B	C	D	E1	E2	E3	F	J	K	O	R	T	U
G3/8	G1/2	63	74	80	23.2	18.5	12.3	99	72.5	66	60	7	16	72
G1/2	G1/2	63	74	80	23.2	18.5	12.3	99	72.5	66	60	7	16	72

# Compressed air maintenance unit, series AS3-Metric

3/2 directional-control dump valve AS3-SOV, electrically operated,  
G 3/8 - G 1/2, with valve position feedback

**AVENTICS**



## Technical Data

Type	Poppet valve, can be assembled into blocks
Working pressure	2.5 - 10 bar (36 - 145 psi)
Nominal flow qn	see table
Secondary pressure	6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)
Ambient temperature	-10 °C to +50 °C (14 °F to +122 °F) <sup>*</sup>
Medium	Compressed air
Weight	see table
Installation position	any

Materials (body)	Polyamide, seals Buna-N(NBR)
Thread bushing	Die-cast zinc
Cover	ABS



## Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- Can be used in circuits with increased efficiency.
- An ST6 sensor (contactless) is used to detect the piston position in the not actuated state (position: exhaust).

Operating voltage	Power consumption		
	DC	DC	
		W	
24 V		2	

		Port	Exhaust	Operat-ing voltage	Qn			Weight	Note	Part No.
					DC	1▶2	2▶3			
					[l/min]	[kg]				
		G 3/8 G 3/8 G 3/8 G 3/8 G 1/2 G 1/2 G 1/2 G 1/2	G 1/2	24 V	4500	4500	3200	0.459	1); 3); 5) 1); 4); 5) 1); 3) 1); 4) 1); 3); 5) 1); 4); 5) 1); 3); 6) 1); 4); 6)	R412007377 R412007378 R412007379 R412007380 R412007383 R412007384 R412007385 R412007386
	-	G 3/8 G 3/8 G 1/2 G 1/2	G 1/2	-	4500	4500	3200	0.459	2); 3) 2); 4) 2); 3) 2); 4)	R412007381 R412007382 R412007387 R412007388

- 1) Basic valve with pilot valve
  - 2) Basic valve without pilot valve
  - 3) Electronic sensor (part no. 0830100629) included in scope of delivery (assembled).
  - 4) Sensor not included in scope of delivery, sensor installation prepared.
  - 5) Electr. connection: Plug; ISO 15217, form C
  - 6) Electr. connection: Socket; M12x1
- Nominal flow Qn at 6.3 bar and  $\Delta p = 1$  bar.

Dimensions and flow diagrams are available from our online catalog.

# Compressed air maintenance unit, series AS3-Metric

3/2-way shut-off valve (ball valve) AS3-BAV, mechanically operated, lockable,  
G 3/8 - G 1/2, ATEX approved

**AVENTICS**



## Technical Data

Type	3/2 directional-control valve, operated by a knob, 3-fold lockable		
Nominal flow Secondary pressure = 6,3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)	See table		
Ambient temperature	$-10^{\circ}\text{C}$ to $+50^{\circ}\text{C}$ ( $14^{\circ}\text{F}$ to $+122^{\circ}\text{F}$ ) *		
Medium	Compressed air		
Weight	See table		
Installation position	any		
Materials	Body	Polyamide, seals Buna-N(NBR)	
	Thread bushing	Die-cast zinc	
	Cover	ABS	
	Lockable slide plate	Zinc plated steel	
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)		



\* with dried air

Knob, can be turned  $90^{\circ}$  (Open-Closed) and can be locked in the closed position with a padlock  
Knob with switch position display: crosswise: inlet closed, outlet to exhaust; lengthways: inlet and outlet connected, air exhaust closed

Exhaust air can be collected (G1/2)

Air exhaust from connection A to R: nominal size 1.5 (internally throttled)

## Part no.

Symbol	Threaded ports	Nominal flow Q <sub>n</sub> [l/min] (CFM)	Weight [kg](lbs.)	Part no.
	G 3/8	4500 (159)	0.446 (0.953)	R412007260
	G 1/2	4500 (159)	0.446 (0.953)	R412007261

## ▲ Accessories (to be ordered separately)

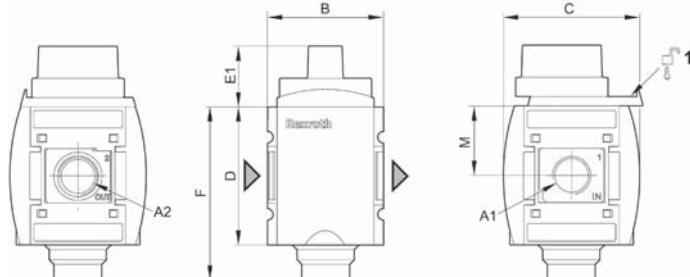
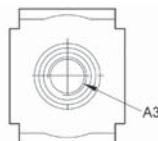
Accessories	Part no.
Silencer, sintered bronze G 1/2 (sold in multiples of 2)	182700003
Mounting plate AS3-MBR-....-W01	R432031072
Block assembly kit AS3-MBR-....-W04	R412007371
Mounting strap AS3-MBR-....-W03	R412007370

A3 = ventilation port

A1 = input

A2 = output

1) Mounting option for padlocks; max. shackle Ø 8



A1	A2	A3	B	C	D	E1	F	M				
G 3/8	G 3/8	G 1/2	63	74	80	28	99	42.5				
G 1/2	G 1/2	G 1/2	63	74	80	28	99	42.5				

# Compressed air maintenance unit, series AS3-Metric

Filling valve (soft start) AS3-SSV, G 3/8 - G 1/2, ATEX approved

**AVVENTICS**



## Technical Data

Type	Poppet valve
Operating pressure	2.5 to 16 bar (36 to 232 psi)
Nominal flow $Q_n$	see table
Secondary pressure	6.3 bar (91 psi) and $\Delta p = 1$ bar (15 psi)
Ambient temperature	-10°C to +50 °C (14 °F to +122 °F)*
Medium	Compressed air
Weight	see table
Installation position	any
Materials (body)	Polyamide, seals Buna-N(NBR)
Threaded bushing	Die-cast zinc
Cover	ABS
ATEX:	In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)

\* with dried air



## ► Version:

Opening pressure: approx. 50% of input pressure

Actuating method: via secondary pressure

Only for closed systems

Please observe note regarding compressed air preparation!

Additionally technical data: see 3/2 directional-control valve AS 3 and filling valve AS 3

Slowly builds up the pressure in pneumatic installations, i.e. prevents sudden pressure build-up after a restart following mains pressure failure or EMERGENCY OFF, thus preventing dangerous, sudden cylinder movements.

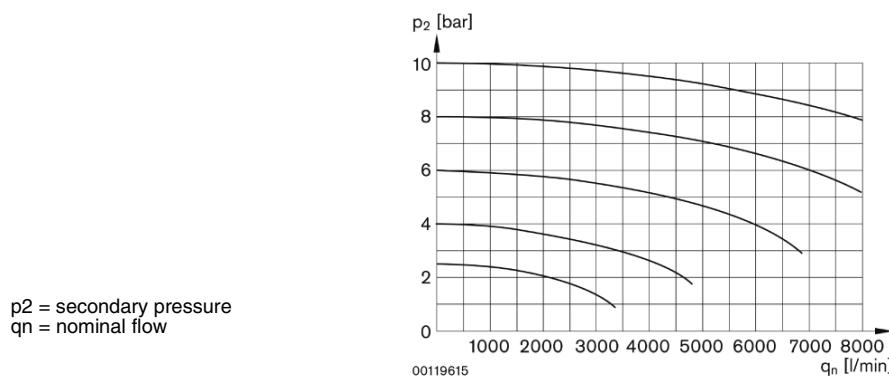
## ► Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l / min](CFM)	With options	Weight [kg](lbs.)	Part no.
	G 3/8	4500 (159)	Filling adjustable	0.43 (0.95)	R412007272
	G 1/2	4500 (159)	Filling adjustable	0.43 (0.95)	R412007273

## ▲ Accessories (to be ordered separately)

Accessory	Part no.
Mounting plate AS3-MBR-...-W01	R432031072
Mounting strap AS3-MBR-...-W03	R412007370
Block assembly kit AS3-MBR-...-W04	R412007371

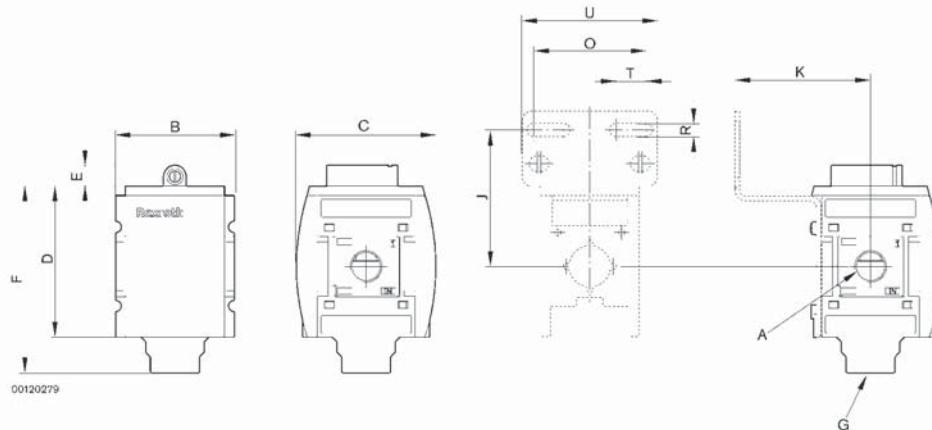
## Flow rate characteristic



# Compressed air maintenance unit, series AS3-Metric

Filling valve (soft start) AS3-SSV, G 3/8 - G 1/2, ATEX approved

**AVENTICS** 



(mounting bracket not included, order separately)

A	G	B	C	D	E	F	J	K	O	R	T	U		
G3/8	G1/2	63	74	80	11	99	72.5	66	60	7	16	72		
G1/2	G1/2	63	74	80	11	99	72.5	66	60	7	16	72		

# Compressed air maintenance unit, series AS3-Metric

Distributor block AS3-DIS, 4-way, G 3/8 - G 1/2, ATEX approved

**AVVENTICS**



## Technical Data

Nominal flow	$Q_n$	See table
Operating pressure		0 - 16 bar (0 to 232 psi)
Ambient temperature range		-10 °C to +50 °C (14 °F to +122 °F) *
Medium		Compressed air
Weight		See table
Installation position		any
Materials		Polyamide, seals Buna-N(NBR)
	Body	Die cast Zinc
	Threaded insert	ABS
	Cover	
ATEX		In zone 1 (gas-ex, category 2G) In zone 21 (dust-ex, category 2D) In zone 2 (gas-ex, category 3G) In zone 22 (dust-ex, category 3D)



Suitable for flange assembly of a mechanical vacuum/pressure switch

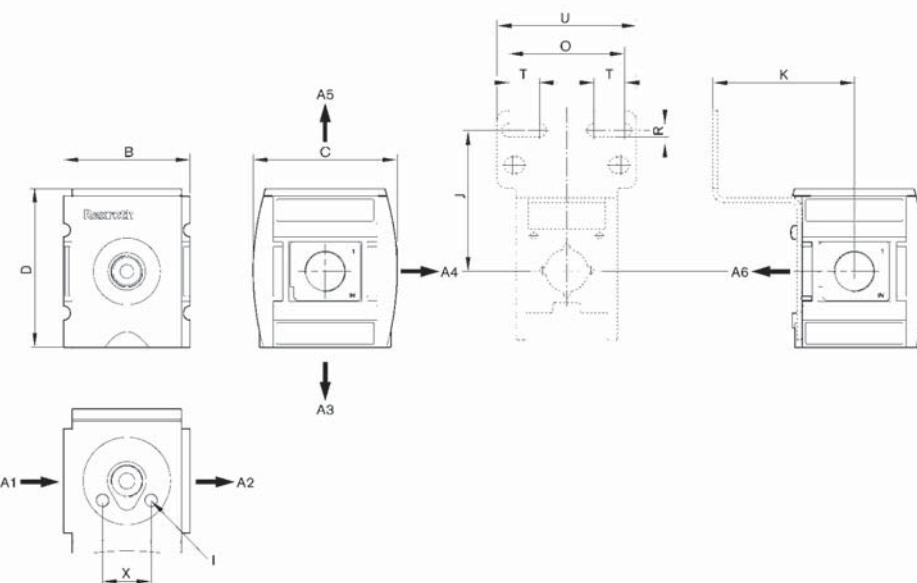
## Part no.

Symbol	Threaded ports	Nominal flow $Q_n$ [l/min] (CFM)	Weight [kg] (lbs)	Part no.
	G 3/8	7250 (256) (A1-A2) 5500 (194) (A1-A3) 2250 (79) (A1-A4) 2250 (79) (A1-A5) 2250 (79) (A1-A6)	0,320 (0.705)	R412007250
	G 1/2	7250 (256) (A1-A2) 5500 (194) (A1-A3) 2250 (79) (A1-A4) 2250 (79) (A1-A5) 2250 (79) (A1-A6)	0,320 (0.705)	R412007251

Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 1$  bar)

## Accessories (to be ordered separately)

Accessory	Part no.
Mechanical pressure switch, $p_{abs} = 0.1 - 1$ bar (1 - 15 psi)	0821100020
Mechanical vacuum/pressure switch, $p_1 = 0.2 - 3$ bar (2 - 43 psi)	0821100021
Mechanical pressure switch, $p_1 = 1 - 16$ bar (15 - 232 psi)	0821100023
Mounting plate AS3-MBR-....-W01	R432031072
Mounting strap AS3-MBR-....-W03	R412007370
Block assembly kit AS3-MBR-....-W04	R412007371
Mounting flange kit (G 3/8) AS3-MBR-G038...-W05	R412007366
Mounting flange kit (G 1/2) AS3-MBR-G012...-W05	R412007367
Spare seal for pressure switch	R961400021



A1 A2	A3	A4 A6	A5	B	C	D	I	J	K	O	R	T	U	X
G 3/8	G 1/2	G 3/8	G 1/4	63	74	80,5	M5	72,5	71	60	7	16	72	20
G 1/2	G 1/2	G 3/8	G 1/4	63	74	80,5	M5	72,5	71	60	7	16	72	20

# Compressed air maintenance unit, series AS5-Metric

AS5 Metric (G3/4 and G1) version index

**AVENTICS** 

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# Compressed air maintenance unit, series AS5-Metric

FR+L Maintenance unit AS5-ACD, 2-in-1 with gauge, 5 micron, G3/4 - G1

**AVENTICS**



0019785

Controller version

Diaphragm-type pressure regulator  
relieving\*, lockable adjustment knob

Filter version

Filter

Filter porosity / size

5 µm

Filter reservoir volume

87 cm<sup>3</sup>

Lubricator version

semi-automatic oil filling during operation

Oil type

HL 68 (DIN 51 524 - ISO VG 68)

Lubricator reservoir volume

181 cm<sup>3</sup>

Installation location

vertical

Ambient temperature min./max.

-10 °C / +50 °C

Medium

Compressed air to ISO 8573-1:2001

materials:

acrylonitrile butadiene styrene (ABS)

Cover

Polyethylene

Filter insert

Polyamide

Housing

Die cast zinc

Threaded bushing

	Thread connection	Operating pressure [bar]	Adjust. range [bar]	Condensate drain		Part No. (Reservoir material)	
				Polycarb.	Metal	Polycarb.	Metal
	G 3/4	0 ... 16	0.5 ... 8	fully automatic, closed w/o pressure	R412009300	R412009306	
	G 1	0 ... 16		fully automatic, closed w/o pressure	R412009309	R412009315	
	G 3/4	1.5 ... 16		fully automatic, open w/o pressure	R412009299	R412009305	
	G 1	1.5 ... 16		fully automatic, open w/o pressure	R412009308	R412009314	
	G 3/4	0.5 ... 16		semi-automatic, opened w/o pressure	R412009298	R412009304	
	G 1	0.5 ... 16		semi-automatic, opened w/o pressure	R412009307	R412009313	
Part No.	Reservoir	Protective guard	Qn l/min	Weight [kg]			
Polycarb.	Metal						
R412009300	R412009306	Polycarbonate/ Die cast zinc	Polyamide/ None	12,300		1.878/3.068	
R412009309	R412009315						
R412009299	R412009305	Die cast zinc	None			1.878/3.068	
R412009308	R412009314						
R412009298	R412009304					1.827/3.017	
R412009307	R412009313						

Nominal flow Qn at 6.3 bar [91 psi] and  $\Delta p = 1$  bar [15 psi]

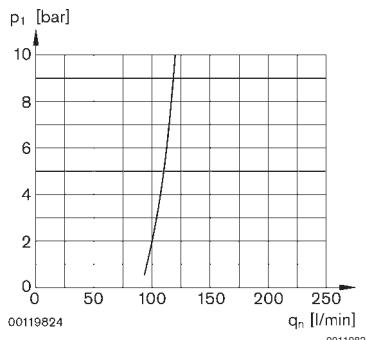
\* For AS5 regulators only, improved regulation is achieved by the use of an internal precision regulator. The piloting regulator consumes a maximum of 1.5 l/min at an inlet pressure of 87 psi (6 bar).

# Compressed air maintenance unit, series AS5-Metric

FR+L Maintenance unit AS5-ACD, 2-in-1 with gauge, 5 micron, G3/4 - G1

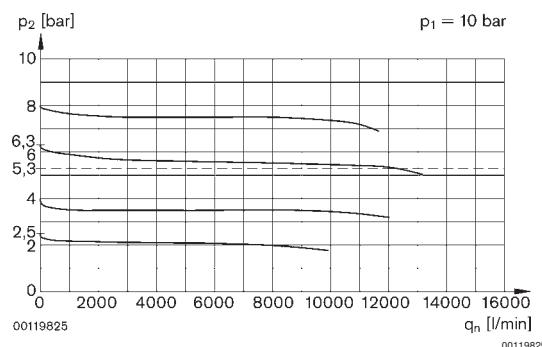
**AVVENTICS**

## lubricator activation margin



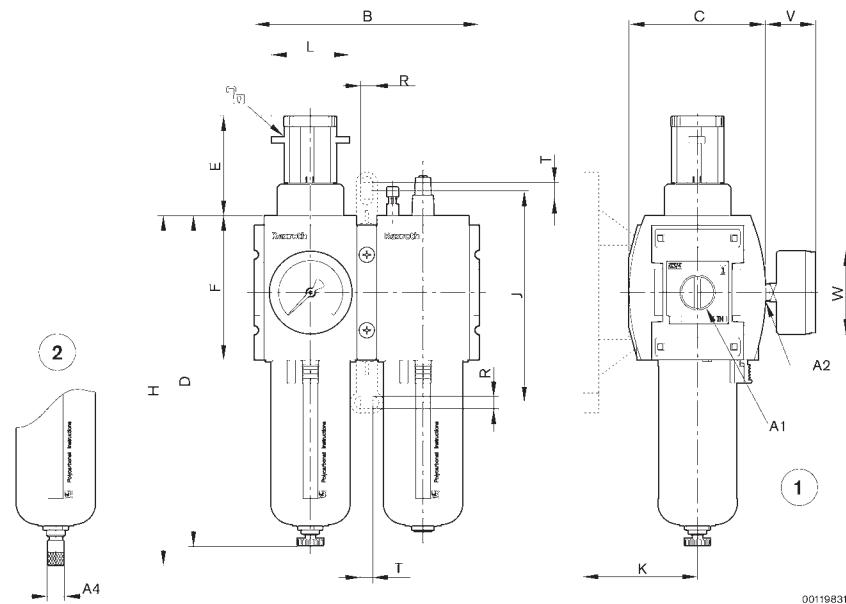
$p_1$  = operating pressure;  $p_2$  = secondary pressure;  $q_n$  = nominal flow;  $q_{n\min.}$  = min. nominal flow

## flow rate characteristic (setting range $p_2$ : 0.5 - 8 bar)



$p_1$  = operating pressure;  $p_2$  = secondary pressure;  $q_n$  = nominal flow;  $q_{n\min.}$  = min. nominal flow

## dimensioned drawing



- 1) semi-automatic condensate drain
- 2) fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	R	T	V	W
G3/4	G1/4	G1/8	170	103	250	75	109	266	140	86.5	59	8.5	10	38	63
G1	G1/4	G1/8	170	103	250	75	109	266	140	86.5	59	8.5	10	38	63

# Compressed air maintenance unit, series AS5-Metric

F+R+L Maintenance unit AS5-ACT, 3-in-1 with gauge, 5 micron, G3/4 - G1

**AVENTICS**



Controller version

Diaphragm-type pressure regulator  
relieving\*, lockable adjustment knob

Filter version

Filter

Filter porosity

Replaceable filter insert

Filter reservoir volume

5  $\mu\text{m}$

Lubricator version

87  $\text{cm}^3$

Oil type

semi-automatic oil filling during operation

Lubricator reservoir volume

HL 68 (DIN 51 524 - ISO VG 68)

Installation location

181  $\text{cm}^3$

Ambient temperature min./max.

vertical

Medium

-10°C / +50°C

materials:

Compressed air to ISO 8573-1:2001

Cover

acrylonitrile butadiene styrene (ABS)

Filter insert

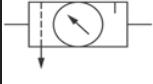
polyethylene

Housing

Polyamide

Threaded bushing

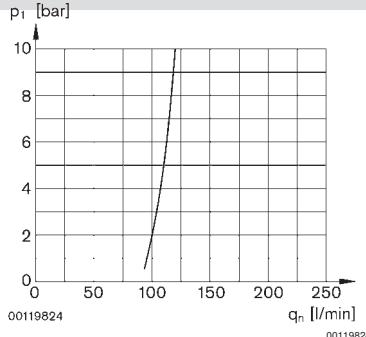
Diecast zinc

	Thread connection	Operating pressure [bar]	Adjust. range [bar]	Condensate drain	Part No. (Reservoir material)	
					Polycarbonate	Metal
	G 3/4	0 ... 16	0.5 ... 8	fully automatic, closed w/o pressure	R412009320	R412009326
	G 1	0 ... 16		fully automatic, closed w/o pressure	R412009329	R412009335
	G 3/4	1.5 ... 16		fully automatic, open w/o pressure	R412009319	R412009325
	G 1	1.5 ... 16		fully automatic, open w/o pressure	R412009328	R412009334
	G 3/4	0.5 ... 16		semi-automatic, opened w/o pressure	R412009318	R412009324
	G 1	0.5 ... 16		semi-automatic, opened w/o pressure	R412009327	R412009333
Part No.	Reservoir			Protective guard	Qn l/min	Weight [kg]
Polycarb.	Metal					
R412009320	R412009326					2.678/3.217
R412009329	R412009335					2.678/3.217
R412009319	R412009325	Polycarbonate/ Die cast zinc		Polyamide/ None	12,300	2.678/3.217
R412009328	R412009334					2.678/3.217
R412009318	R412009324					2.627/3.166
R412009327	R412009333					2.627/3.166

Nominal flow Qn at 6.3 bar [91 psi] and  $\Delta p = 1$  bar [15 psi]

\* For AS5 regulators only, improved regulation is achieved by the use of an internal precision regulator. The piloting regulator consumes a maximum of 1.5 l/min at an inlet pressure of 87 psi (6 bar).

#### **lubricator activation margin**



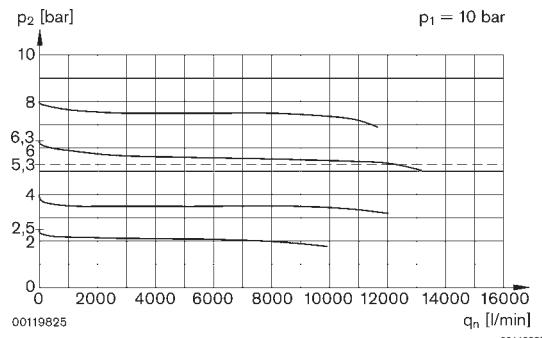
p1 = operating pressure; p2 = secondary pressure; qn = minimum nominal flow

# **Compressed air maintenance unit, series AS5-Metric**

F+R+L Maintenance unit AS5-ACT, 3-in-1 with gauge, 5 micron, G3/4 - G1

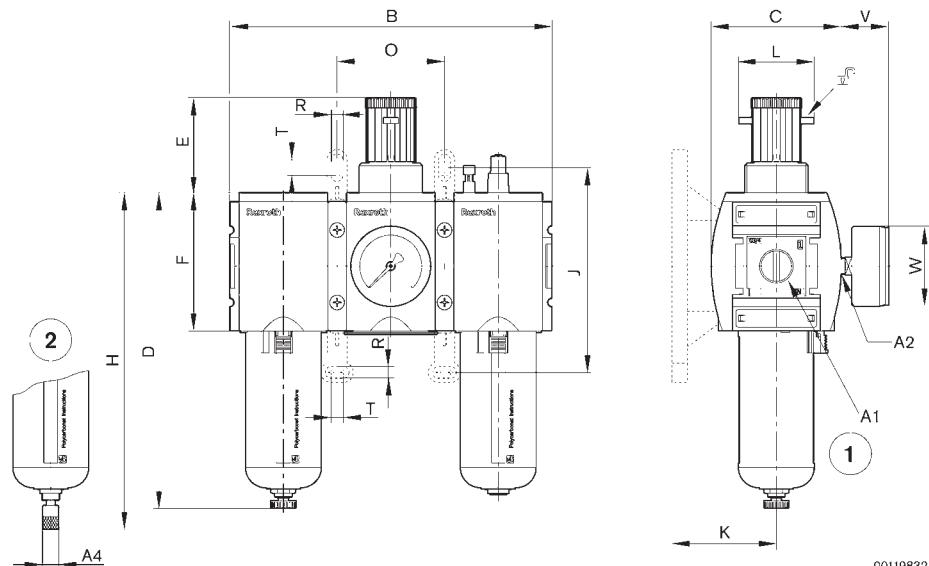
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**flow rate characteristic (setting range p2: 0.5 - 8 bar)**



p<sub>1</sub> = working pressure; p<sub>2</sub> = secondary pressure; q<sub>n</sub> = nominal flow

## dimensioned drawing



1) semi-automatic condensate drain

<sup>2)</sup> fully automatic condensate drain

# Compressed air maintenance unit, series AS5-Metric

Pressure regulator AS5-RGS, with or without gauge, G3/4 - G1

**AVENTICS**



00119787

## Version

Diaphragm-type pressure regulator  
relieving\*, lockable adjustment knob

### Installation location

any

### Working pressure min/max

-- / 16 bar

### Ambient temperature min./max.

-10 °C / +50 °C

### Medium

compressed air acc. to ISO 8573-1: 2001

dry air

class 6-4-3

### materials:

Polyamide

### Housing

Diecast zinc

### Threaded bushing

acrylonitrile butadiene styrene (ABS)

### Cover

	Port	Qn [l/min]	Adjustment range [bar]	Pressure gauges	Weight [kg]	Part No.
	G 3/4	14500	0.1 - 1	with gauge	0.997	R412009101
	G 3/4		0.1 - 2			R412009103
	G 3/4		0.2 - 4			R412009105
	G 3/4		0.5 - 8			R412009107
	G 3/4		0.5 - 10			R412009109
	G 3/4		0.5 - 16			R412009111
	G 1		0.1 - 1			R412009113
	G 1		0.1 - 2			R412009115
	G 1		0.2 - 4			R412009117
	G 1		0.5 - 8			R412009119
	G 1		0.5 - 10			R412009121
	G 1		0.5 - 16			R412009123
	G 3/4	14500	0.1 - 1	without gauge	0.905	R412009100
	G 3/4		0.1 - 2			R412009102
	G 3/4		0.2 - 4			R412009104
	G 3/4		0.5 - 8			R412009106
	G 3/4		0.5 - 10			R412009108
	G 3/4		0.5 - 16			R412009110
	G 1		0.1 - 1			R412009112
	G 1		0.1 - 2			R412009114
	G 1		0.2 - 4			R412009116
	G 1		0.5 - 8			R412009118
	G 1		0.5 - 10			R412009120
	G 1		0.5 - 16			R412009122

Nominal flow Qn at 6.3 bar and  $\Delta p = 1$  bar.

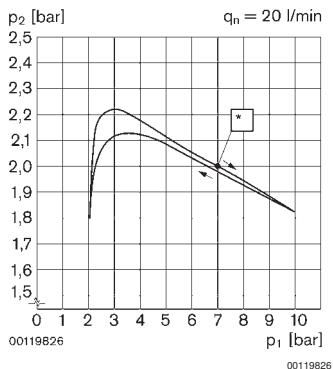
\* For AS5 regulators only, improved regulation is achieved by the use of an internal precision regulator. The piloting regulator consumes a maximum of 1.5 l/min at an inlet pressure of 87 psi (6 bar).

# Compressed air maintenance unit, series AS5-Metric

Pressure regulator AS5-RGS, with or without gauge, G3/4 - G1

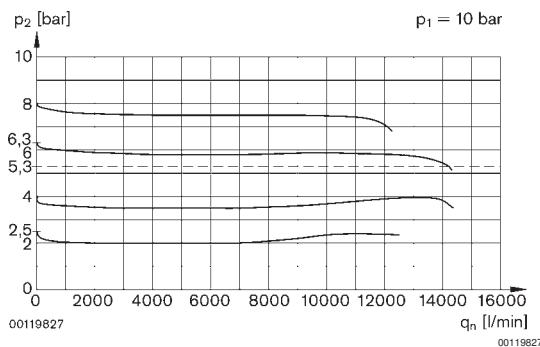
**AVENTICS**

## pressure characteristics curve



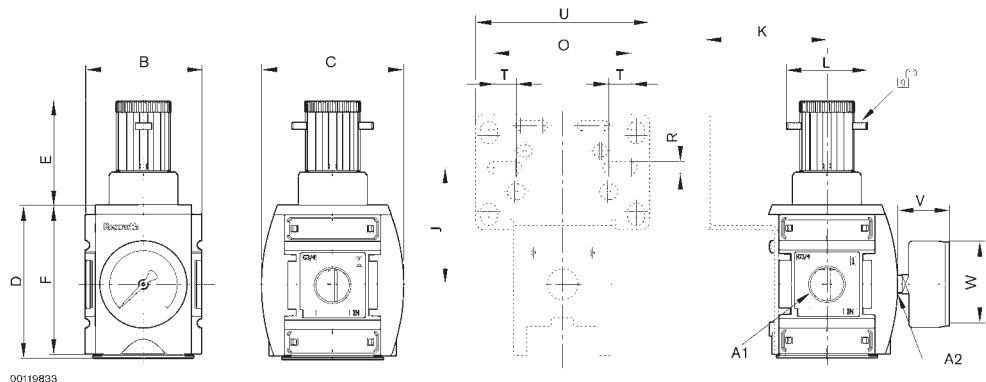
$p_1$  = working pressure;  $p_2$  = secondary pressure;  $q$  = flow rate  
 \* starting point

## flow rate characteristic (setting range $p_2$ : 0.5 - 8 bar)



$p_1$  = working pressure;  $p_2$  = secondary pressure;  $q_n$  = nominal flow

## dimensioned drawing



A1	A2	B	C	D	E	F	J	K	L	O	R	T	U	V	W
G3/4	G1/4	85	103	112	75	109	83	87	59	98	7	16	124	38	63
G1	G1/4	85	103	112	75	109	83	87	59	98	7	16	124	38	63

# Compressed air maintenance unit, series AS5-Metric

Filter regulator AS5-FRE, with or w/out gauge, 5 or 40 micron, G3/4 - G1

**AVVENTICS**



Regulator version	Diaphragm-type pressure regulator
Installation location	vertical
Ambient temperature min./max.	-10°C / +50°C
Controller version	relieving*, lockable adjustment knob
Filter version	Filter
	Replaceable filter insert
Filter reservoir volume	87 cm³
Medium materials:	Compressed air to ISO 8573-1:2001
Housing	Polyamide
Threaded bushing	Die cast zinc
Cover	acrylonitrile butadiene styrene (ABS)
Filter insert	polyethylene
Protective guard	polyamide

	Thread connection [bar]	Filter (µm)	Oper. press.	Adjust. range [bar]	Gauge	Condensate drain	Part No. (Reservoir material)	
							Polycarb.	Metal
	G 3/4	5	0.5 ... 16	0.5 ... 8	with gauge	semi-auto., opened w/o pressure	R412009200	R412009206
	G 3/4	5	1.5 ... 16			fully automatic, open w/o pressure	R412009201	R412009207
	G 3/4	5	0 ... 16			fully auto.,closed w/o pressure	R412009202	R412009208
	G 1	5	0.5 ... 16			semi-auto., opened w/o pressure	R412009209	R412009215
	G 1	5	1.5 ... 16			fully automatic, open w/o pressure	R412009210	R412009216
	G 1	5	0 ... 16			fully auto.,closed w/o pressure	R412009211	R412009217
	G 3/4	5	0.5 ... 16	0.5 ... 8	w/o gauge	semi-auto., opened w/o pressure	R412009175	R412009181
	G 3/4	5	1.5 ... 16			fully automatic, open w/o pressure	R412009176	R412009182
	G 3/4	5	0 ... 16			fully auto.,closed w/o pressure	R412009177	R412009183
	G 1	5	0.5 ... 16			semi-auto., opened w/o pressure	R412009184	R412009190
	G 1	5	1.5 ... 16			fully automatic, open w/o pressure	R412009185	R412009191
	G 1	5	0 ... 16			fully auto.,closed w/o pressure	R412009186	R412009192
	G 3/4	5	0.5 ... 16	0.5 ... 10	w/o gauge	semi-auto., opened w/o pressure	R412009193	
	G 3/4	5	1.5 ... 16			fully automatic, open w/o pressure	R412009194	
	G 3/4	5	0 ... 16			fully auto.,closed w/o pressure	R412009195	
	G 1	5	0.5 ... 16			semi-auto., opened w/o pressure	R412009196	
	G 1	5	1.5 ... 16			fully automatic, open w/o pressure	R412009197	
	G 1	5	0 ... 16			fully auto.,closed w/o pressure	R412009198	
	G 3/4	40	0.5 ... 16	0.5 ... 10	w/o gauge	semi-auto., opened w/o pressure	R412009218	
	G 3/4	40	1.5 ... 16			fully automatic, open w/o pressure	R412009219	
	G 3/4	40	0 ... 16			fully auto.,closed w/o pressure	R412009220	
	G 1	40	0.5 ... 16			semi-auto., opened w/o pressure	R412009221	
	G 1	40	1.5 ... 16			fully automatic, open w/o pressure	R412009222	
	G 1	40	0 ... 16			fully auto.,closed w/o pressure	R412009223	

\* For AS5 regulators only, improved regulation is achieved by the use of an internal precision regulator. The piloting regulator consumes a maximum of 1.5 l/min at an inlet pressure of 87 psi (6 bar).

# Compressed air maintenance unit, series AS5-Metric

Filter regulator AS5-FRE, with or w/out gauge, 5 or 40 micron, G3/4 - G1



Part No.		Flow rate l/min	Reservoir	Protective guard	Weight [kg]
Polycarb.	Metal				
R412009200	R412009206				1.082/1.621
R412009201	R412009207				1.133/1.672
R412009202	R412009208	13,000	Polycarbonate/ Die cast zinc	Polyamide/ None	1.133/1.672
R412009209	R412009215				1.082/1.621
R412009210	R412009216				1.133/1.672
R412009211	R412009217				1.133/1.672
R412009175	R412009181				0.990/1.529
R412009176	R412009182				1.041/1.580
R412009177	R412009183	13,000	Polycarbonate/ Die cast zinc	Polyamide/ None	1.041/1.580
R412009184	R412009190				0.990/1.529
R412009185	R412009191				1.041/1.580
R412009186	R412009192				1.041/1.580
R412009193					0.990/ --
R412009194					1.041/ --
R412009195		13,000	Polycarbonate	Polyamide	1.041/ --
R412009196					0.990/ --
R412009197					1.041/ --
R412009198					1.041/ --
R412009218					0.990/ --
R412009219					1.041/ --
R412009220		13,000	Polycarbonate	Polyamide	1.041/ --
R412009221					0.990/ --
R412009222					1.041/ --
R412009223					1.041/ --

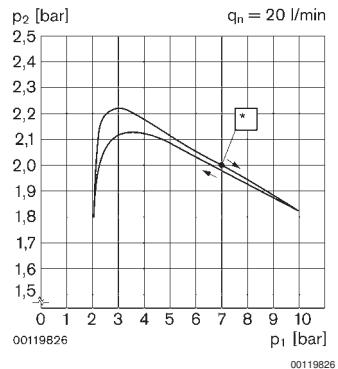
Nominal flow Qn at 6.3 bar [91 psi] and  $\Delta p = 1$  bar [15 psi]

# Compressed air maintenance unit, series AS5-Metric

Filter regulator AS5-FRE, with or w/out gauge, 5 or 40 micron, G3/4 - G1

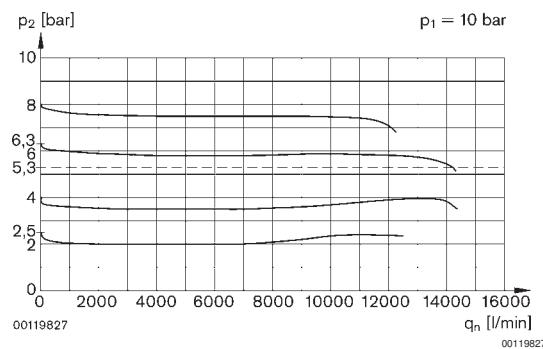
AVVENTICS 

## pressure characteristics curve



$p_1$  = working pressure;  $p_2$  = secondary pressure;  $q$  = flow rate  
\* starting point

## flow rate characteristic (setting range $p_2$ : 0.5 - 8 bar)

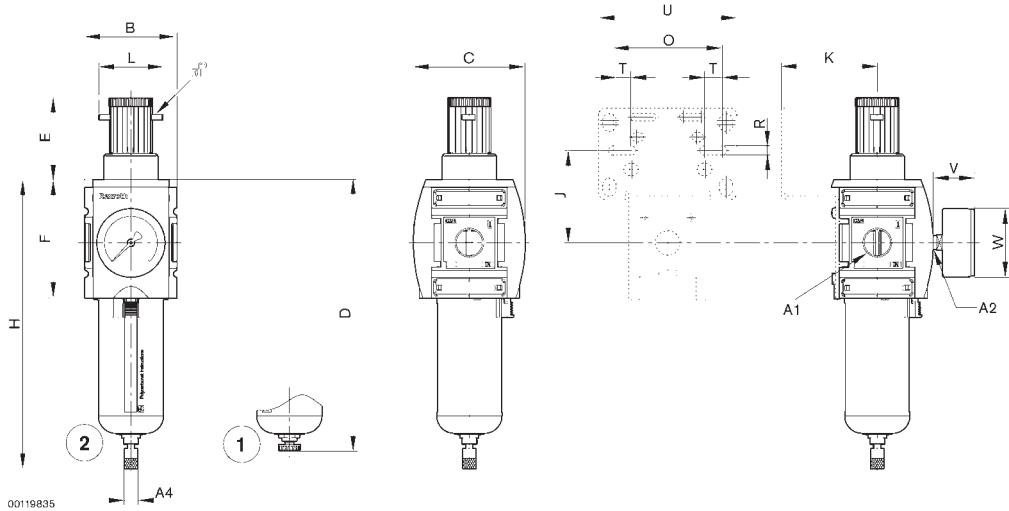


$p_1$  = working pressure;  $p_2$  = secondary pressure;  $q_n$  = nominal flow;  $q$  = flow rate

# Compressed air maintenance unit, series AS5-Metric

Filter regulator AS5-FRE, with or w/out gauge, 5 or 40 micron, G3/4 - G1

**AVENTICS** 



- 1) semi-automatic condensate drain
- 2) fully automatic condensate drain

A1	A2	A4	B	C	D	E	F	H	J	K	L	O	R	T
G3/4	G1/4	G1/8	63	103	250	75	109	266	83	87	59	98	7	16
G1	G1/4	G1/8	63	103	250	75	109	266	83	87	59	98	7	16
A1	U	V	W											
G3/4	124	38	63											
G1	124	38	63											

# Compressed air maintenance unit, series AS5-Metric

Standard filter AS5-FLS, 5 or 40 micron, G3/4 - G1

**AVVENTICS**



Ambient temperature min./max.	-10°C / +50°C
Installation location	vertical
Version	Replaceable filter insert
Filter reservoir volume	87 cm³
Medium	Compressed air to ISO 8573-1:2001
materials:	
Housing	Polyamide, seals Buna-N (NBR)
Threaded bushing	Diecast zinc
Cover	acrylonitrile butadiene styrene (ABS)
Filter insert	polyethylene

	Thread connection [bar]	Filter (µm)	Oper. press. 5	Flow rate [l/min]	Condensate drain	Part No.	
						(Reservoir material) Polycarb.	Metal
	G 3/4	5	0.5 ... 16	7800	semi-auto., opened w/o pressure	R412009000	R412009006
	G 3/4	5	1.5 ... 16		fully automatic, open w/o pressure	R412009001	R412009007
	G 3/4	5	0 ... 16		fully auto., closed w/o pressure	R412009002	R412009008
	G 3/4	40	0.5 ... 16		semi-auto., opened w/o pressure	R412009003	
	G 3/4	40	1.5 ... 16		fully automatic, open w/o pressure	R412009004	
	G 3/4	40	0 ... 16		fully auto., closed w/o pressure	R412009005	
	G 1	5	0.5 ... 16	7800	semi-auto., opened w/o pressure	R412009009	R412009015
	G 1	5	1.5 ... 16		fully automatic, open w/o pressure	R412009010	R412009016
	G 1	5	0 ... 16		fully auto., closed w/o pressure	R412009011	R412009017
	G 1	40	0.5 ... 16		semi-auto., opened w/o pressure	R412009012	
	G 1	40	1.5 ... 16		fully automatic, open w/o pressure	R412009013	
	G 1	40	0 ... 16		fully auto., closed w/o pressure	R412009014	
Part No.	Polycarb.	Metal	Reservoir		Protective guard	Weight [kg]	
R412009000	R412009006						0.718/1.257
R412009001	R412009007						0.769/1.308
R412009002	R412009008		Polycarbonate/ Die Cast Zinc		Polyamide/ None		0.769/1.308
R412009003							0.718/ --
R412009004							0.769/ --
R412009005							0.769/ --
R412009009	R412009015						0.718/1.257
R412009010	R412009016						0.769/1.308
R412009011	R412009017		Polycarbonate/ Die Cast Zinc		Polyamide/ None		0.769/1.308
R412009012							0.718/ --
R412009013							0.769/ --
R412009014							0.769/ --

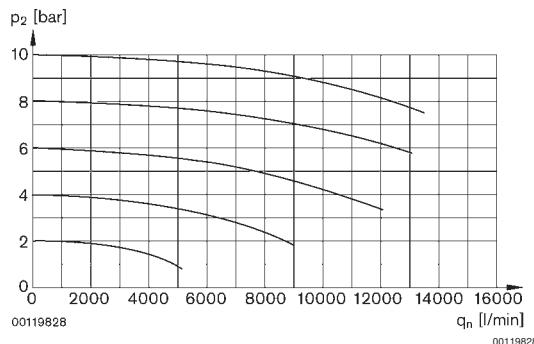
Nominal flow Qn at 6.3 bar [91 psi] and  $\Delta p = 1$  bar [15 psi]

# Compressed air maintenance unit, series AS5-Metric

Standard filter AS5-FLS, 5 or 40 micron, G3/4 - G1

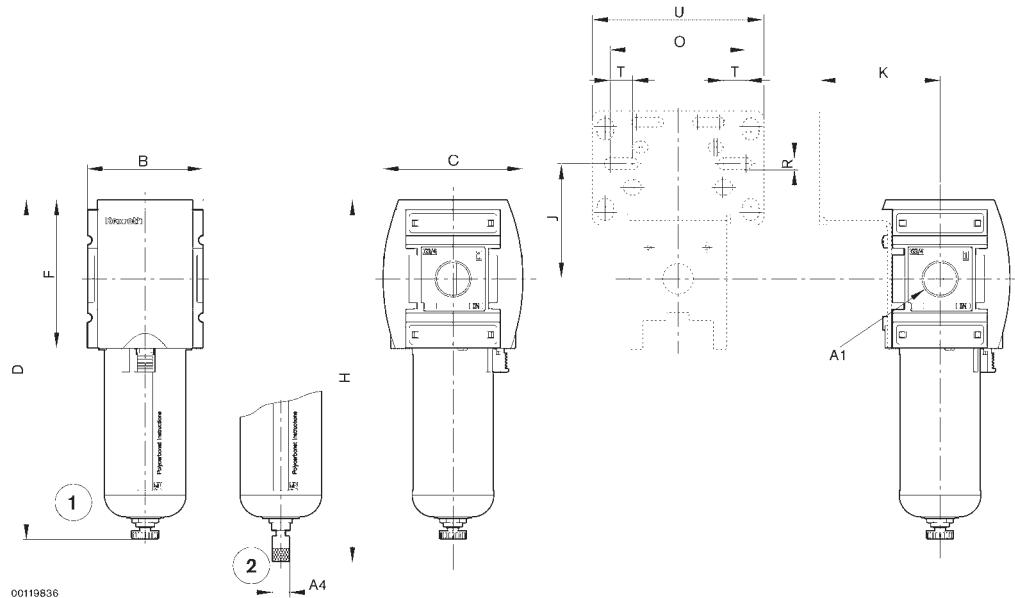
**AVENTICS**

## flow rate characteristic



p1 = working pressure; p2 = secondary pressure; qn = nominal flow

## dimensioned drawing



- 1) semi-automatic condensate drain  
2) fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U		
G3/4	G1/8	85	103	250	109	266	83	87	98	7	16	124		
G1	G1/8	85	103	250	109	266	83	87	98	7	16	124		

# Compressed air maintenance unit, series AS5-Metric

Pre-filter AS5-FLP, 0.3 micron, G3/4 - G1

**AVVENTICS**

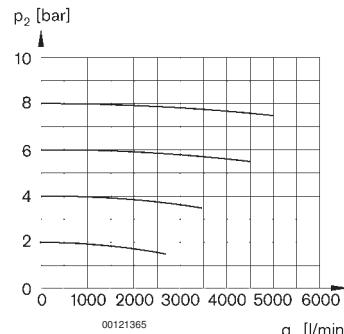


Ambient temperature min./max.	-10°C / +50°C
Installation location	vertical
Filter reservoir volume	87 cm³
Medium	compressed air
materials:	
Housing	Polyamide, seals Buna-N (NBR)
Threaded bushing	Diecast zinc
Cover	acrylonitrile butadiene styrene
Filter insert	Polymer impregnated paper

	Thread conn. [bar]	Oper. press.	Flow rate [l/min]	Condensate drain	with contam. display	Part No.	
						(Reservoir material)	
	G 3/4	0.5 ... 16	2200	semi-auto., opened w/o pressure	no	R412009018	R412009024
	G 3/4	1.5 ... 16		semi-auto., opened w/o pressure	yes	R412009021	R412009025
	G 3/4	0 ... 16		fully automatic, open w/o pressure	no	R412009019	R412009026
	G 3/4	0.5 ... 16		fully automatic, open w/o pressure	yes	R412009022	
	G 3/4	1.5 ... 16		fully auto., closed w/o pressure	no	R412009020	
	G 3/4	0 ... 16		fully auto., closed w/o pressure	yes	R412009023	
	G 1	0.5 ... 16	2200	semi-auto., opened w/o pressure	no	R412009027	R412009033
	G 1	1.5 ... 16		semi-auto., opened w/o pressure	yes	R412009030	R412009034
	G 1	0 ... 16		fully automatic, open w/o pressure	no	R412009028	R412009035
	G 1	0.5 ... 16		fully automatic, open w/o pressure	yes	R412009031	
	G 1	1.5 ... 16		fully auto., closed w/o pressure	no	R412009029	
	G 1	0 ... 16		fully auto., closed w/o pressure	yes	R412009032	
Part No.	Polycarb.	Metal	Filter (µm)	Reservoir	Protective guard	Weight [kg]	
R412009018	R412009024		0.3	Polycarbonate/ Die Cast Zinc	Polyamide/ None	0.73/1.3	
R412009021	R412009025		0.3			0.77/1.3	
R412009019	R412009026		0.3			0.77/1.3	
R412009022			0.3			0.73/1.3	
R412009020			0.3			0.77/1.3	
R412009023			0.3			0.77/1.3	
R412009027	R412009033		0.3	Polycarbonate/ Die Cast Zinc	Polyamide/ None	0.73/1.3	
R412009030	R412009034		0.3			0.77/1.3	
R412009028	R412009035		0.3			0.77/1.3	
R412009031			0.3			0.73/1.3	
R412009029			0.3			0.77/1.3	
R412009032			0.3			0.77/1.3	

Nominal flow at inlet pressure 91 psi with 1.5 psi pressure drop [6.3 bar at  $\Delta p = 0.1$  bar]

#### flow rate characteristic



p<sub>1</sub> = working pressure; p<sub>2</sub> = secondary pressure; q<sub>n</sub> = nominal flow

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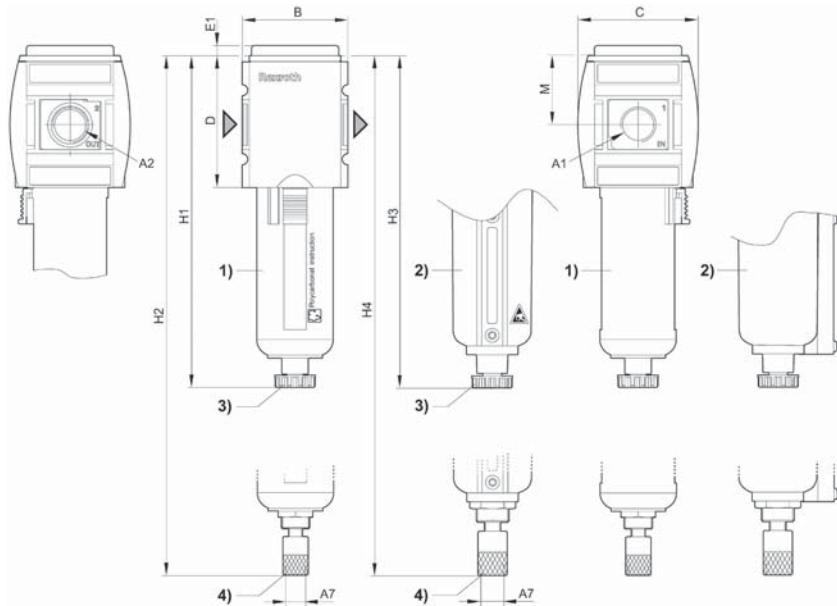
178

# Compressed air maintenance unit, series AS5-Metric

Pre-filter AS5-FLP, 0.3 micron, G3/4 - G1

**AVVENTICS**

dimensioned drawing, no contamination display



1) Plastic reservoir and protective guard with window

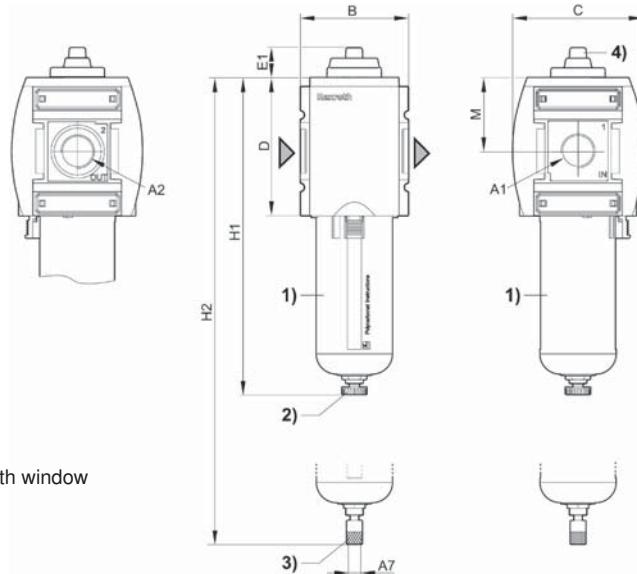
2) Metal reservoir with inspection glass

3) Semi-automatic condensate drain

4) Fully automatic condensate drain

A1	A2	A7	B	C	D	E1	H1	H2	H3	H4	M
G 3/4	G 3/4	G 1/8	85	103	109	5	250	266	254	270.5	58
G 1	G 1	G 1/8	85	103	109	5	250	266	254	270.5	58

Dimensions, with contamination display



1) Plastic reservoir and protective guard with window

2) Semi-automatic condensate drain

3) Fully automatic condensate drain

4) contamination display

A1	A2	A7	B	C	D	E1	H1	H2	M
G 3/4	G 3/4	G 1/8	85	103	109	23.7	250	266	58
G 1	G 1	G 1/8	85	103	109	23.7	250	266	58

# Compressed air maintenance unit, series AS5-Metric

Coalescing filter AS5-FLC, 0.01 micron, G3/4 - G1

**AVVENTICS**

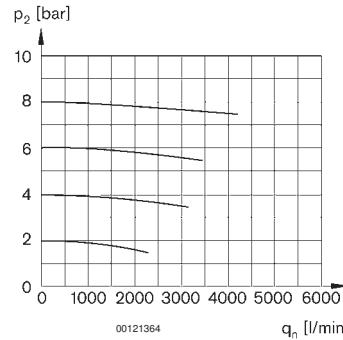


Ambient temperature min./max.	-10 °C / +50 °C
Installation location	vertical
Filter reservoir volume	87 cm³
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3
ATEX	II 2G2D -10 °C ≤ Ta ≤ 50 °C
materials:	Body: Polyamide, seals Buna-N (NBR)
Threaded bushing	Diecast zinc
Cover	acrylonitrile butadiene styrene

	Thread conn. [bar]	Oper. press.	Flow rate [l/min]	Condensate drain	with contam. display	Part No.	
						(Reservoir material)	Polycarb.
	G 3/4	0.5 ... 16	1600	semi-auto., opened w/o pressure	no	R412009036	R412009042
	G 3/4	1.5 ... 16		semi-auto., opened w/o pressure	yes	R412009054	R412009060
	G 3/4	0 ... 16		fully automatic, open w/o pressure	no	R412009037	R412009043
	G 3/4	0.5 ... 16		fully automatic, open w/o pressure	yes	R412009055	R412009061
	G 3/4	1.5 ... 16		fully auto., closed w/o pressure	no	R412009038	R412009044
	G 3/4	0 ... 16		fully auto., closed w/o pressure	yes	R412009056	R412009062
	G 1	0.5 ... 16	1600	semi-auto., opened w/o pressure	no	R412009045	R412009051
	G 1	1.5 ... 16		semi-auto., opened w/o pressure	yes	R412009063	R412009069
	G 1	0 ... 16		fully automatic, open w/o pressure	no	R412009046	R412009052
	G 1	0.5 ... 16		fully automatic, open w/o pressure	yes	R412009064	R412009070
	G 1	1.5 ... 16		fully auto., closed w/o pressure	no	R412009047	R412009053
	G 1	0 ... 16		fully auto., closed w/o pressure	yes	R412009065	R412009071
Part No.	Polycarb.	Filter porosity (µm)		Reservoir	Protective guard	Weight [kg]	
R412009036	R412009042		0.01	Polycarbonate/ Die Cast Zinc	Polyamide/ None	0.73/1.3	
R412009054	R412009060		0.01			0.77/1.3	
R412009037	R412009043		0.01			0.77/1.3	
R412009055	R412009061		0.01			0.73/1.3	
R412009038	R412009044		0.01			0.77/1.3	
R412009056	R412009062		0.01			0.77/1.3	
R412009045	R412009051		0.01	Polycarbonate/ Die Cast Zinc	Polyamide/ None	0.73/1.3	
R412009063	R412009069		0.01			0.77/1.3	
R412009046	R412009052		0.01			0.77/1.3	
R412009064	R412009070		0.01			0.73/1.3	
R412009047	R412009053		0.01			0.77/1.3	
R412009065	R412009071		0.01			0.77/1.3	

Nominal flow at inlet pressure 91 psi with 1.5 psi pressure drop [6.3 bar at  $\Delta p = 0.1$  bar]

flow rate characteristic



$p_1$  = working pressure;  $p_2$  = secondary pressure;  $q_n$  = nominal flow

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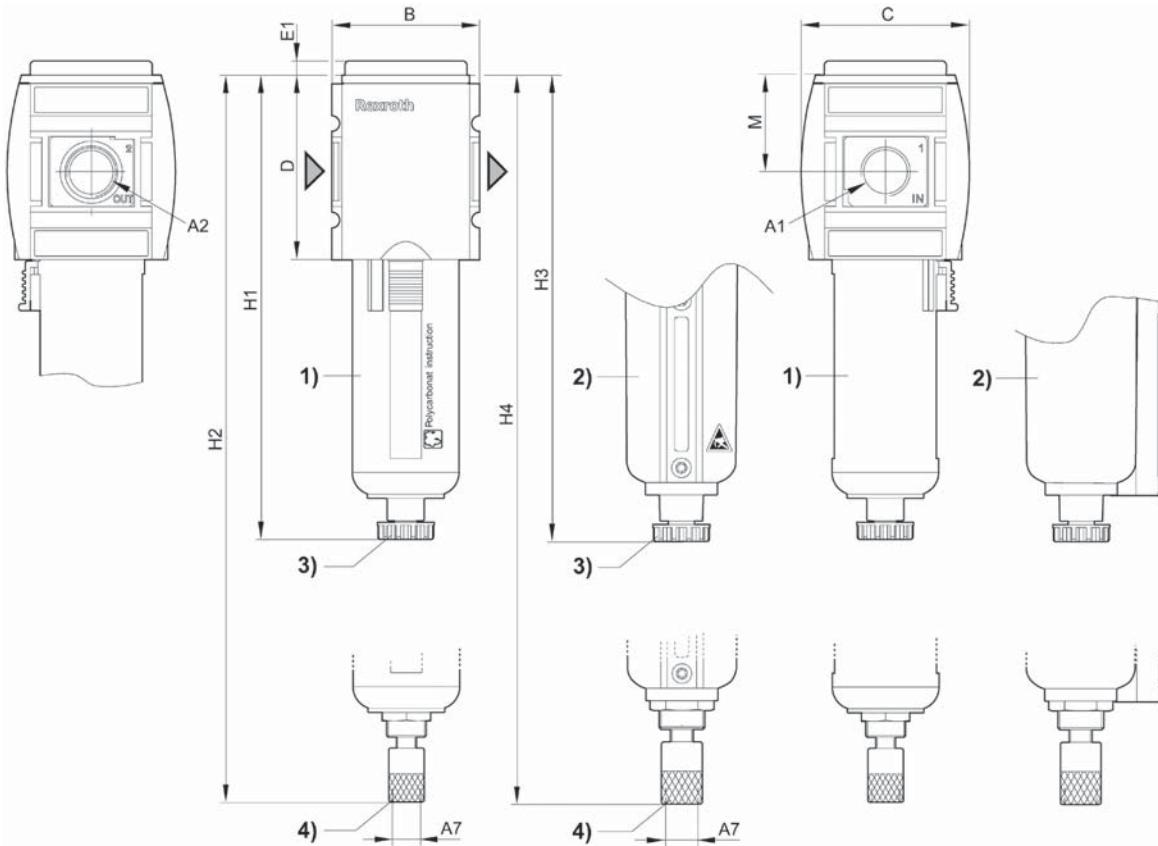
180

# Compressed air maintenance unit, series AS5-Metric

Coalescing filter AS5-FLC, 0.01 micron, G3/4 - G1

**AVVENTICS**

dimensioned drawing, no contamination display



00123326\_m

- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with inspection glass
- 3) Semi-automatic condensate drain
- 4) Fully automatic condensate drain

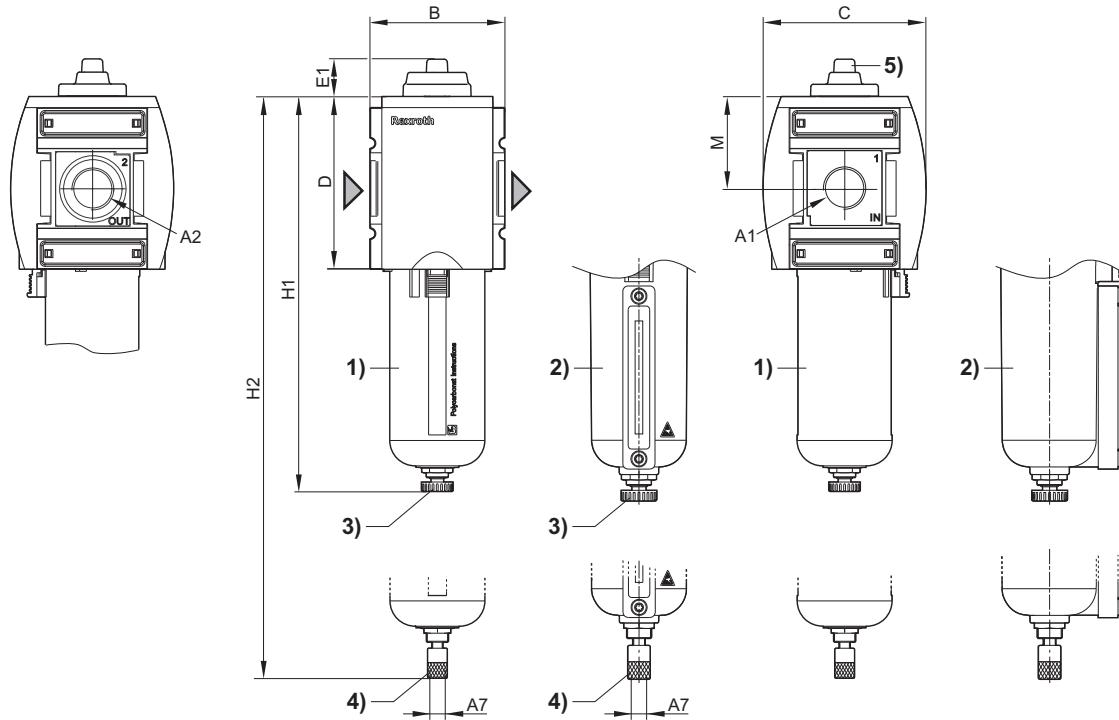
Part No.	A1	A2	A7	B	C	D	E1	H1	H2	H3	H4	M
R412009036	G 3/4	G 3/4	G 1/8	85	103	109	5	250	266	254	270	58
R412009037	G 3/4	G 3/4	G 1/8	85	103	109	5	250	266	254	270	58
R412009038	G 3/4	G 3/4	G 1/8	85	103	109	5	250	266	254	270	58
R412009042	G 3/4	G 3/4	G 1/8	85	103	109	5	250	266	254	270	58
R412009043	G 3/4	G 3/4	G 1/8	85	103	109	5	250	266	254	270	58
R412009044	G 3/4	G 3/4	G 1/8	85	103	109	5	250	266	254	270	58
R412009045	G 1	G 1	G 1/8	85	103	109	5	250	266	254	270	58
R412009046	G 1	G 1	G 1/8	85	103	109	5	250	266	254	270	58
R412009047	G 1	G 1	G 1/8	85	103	109	5	250	266	254	270	58
R412009051	G 1	G 1	G 1/8	85	103	109	5	250	266	254	270	58
R412009052	G 1	G 1	G 1/8	85	103	109	5	250	266	254	270	58
R412009053	G 1	G 1	G 1/8	85	103	109	5	250	266	254	270	58

# Compressed air maintenance unit, series AS5-Metric

Coalescing filter AS5-FLC, 0.01 micron, differential pressure indicator, G3/4 - G1

**AVVENTICS**

dimensioned drawing, with contamination display



00133991

- 1) Plastic reservoir and protective guard with window
- 2) Metal reservoir with level indicator
- 3) Semi-automatic condensate drain
- 4) Fully automatic condensate drain
- 5) contamination display

Part No.	A1	A2	A7	B	C	D	E1	H1	H2	M	
R412009054	G 3/4	G 3/4	G 1/8	85	103	109	23.7	250	--	58	
R412009055	G 3/4	G 3/4	--	85	103	109	23.7	--	266	58	
R412009056	G 3/4	G 3/4	--	85	103	109	23.7	--	266	58	
R412009060	G 3/4	G 3/4	G 1/8	85	103	109	23.7	250	--	58	
R412009061	G 3/4	G 3/4	--	85	103	109	23.7	--	266	58	
R412009062	G 3/4	G 3/4	--	85	103	109	23.7	--	266	58	
R412009063	G 1	G 1	G 1/8	85	103	109	23.7	250	--	58	
R412009064	G 1	G 1	--	85	103	109	23.7	--	266	58	
R412009065	G 1	G 1	--	85	103	109	23.7	--	266	58	
R412009069	G 1	G 1	G 1/8	85	103	109	23.7	250	--	58	
R412009070	G 1	G 1	--	85	103	109	23.7	--	266	58	
R412009071	G 1	G 1	--	85	103	109	23.7	--	266	58	

# Compressed air maintenance unit, series AS5-Metric

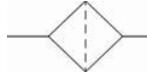
Active carbon filter AS5-FLA, G3/4 - G1

AVVENTICS<sup>A</sup>



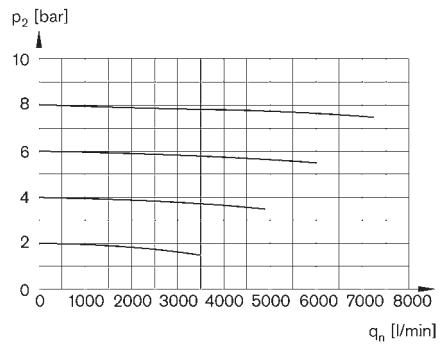
00119385

Ambient temperature min./max.	-10 °C / +50 °C
Installation location	vertical
Filter reservoir volume	87 cm <sup>3</sup>
Medium	compressed air acc. to ISO 8573-1: 2001 dry air
Compressed air class	class 6-4-3
materials:	
Housing	Polyamide, seals Buna-N (NBR)
Threaded bushing	Diecast zinc
Cover	acrylonitrile butadiene styrene

	Port	Qn [l/min]	Operating pressure [bar]	Reservoir	Protective guard	Weight [kg]	Part No.
	G 3/4	1700	0 - 16	Polycarbonate	polyamide	0.375	R412009072
	G 1						R412009075

The use of a coalescing filter (type FLC) upstream is strongly recommended  
nominal flow with secondary pressure 6.3 bar at  $\Delta p = 0.1$  bar

## flow rate characteristic



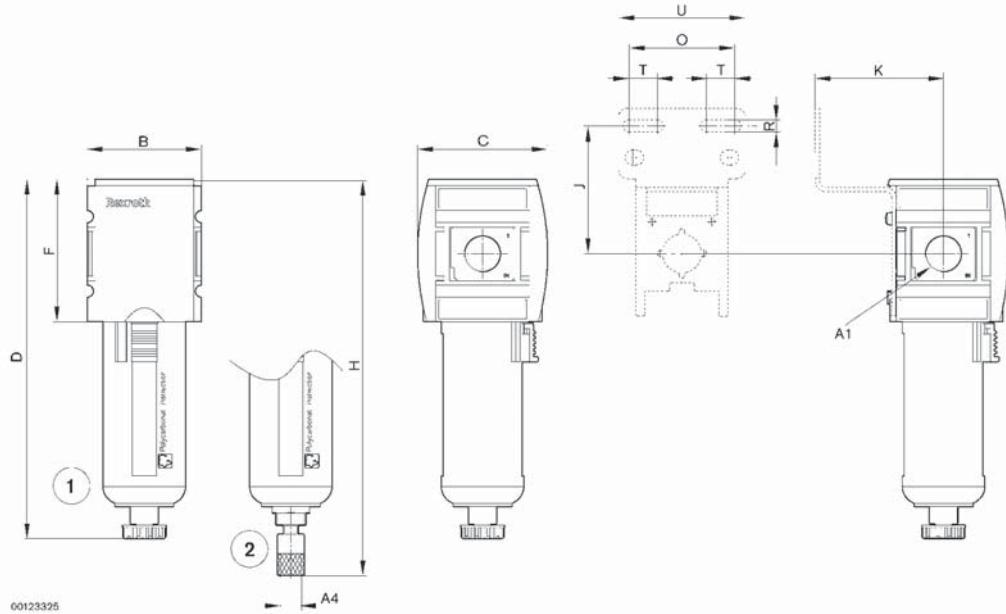
p1 = working pressure; p2 = secondary pressure; qn = nominal flow

# Compressed air maintenance unit, series AS5-Metric

Active carbon filter AS5-FLA, G3/4 - G1

AVVENTICS<sup>®</sup>

## dimensioned drawing



- 1) semi-automatic condensate drain  
2) fully automatic condensate drain

A1	A4	B	C	D	F	H	J	K	O	R	T	U		
G 3/4	G 1/8	63	74	189.5	80	206	72.5	71	60	7	16	72		
G 1	G 1/8	63	74	189.5	80	206	72.5	71	60	7	16	72		

# Compressed air maintenance unit, series AS5-Metric

Lubricator, oil-drop AS5-LBS, with semi-automatic filling, G3/4 - G1

**AVENTICS**

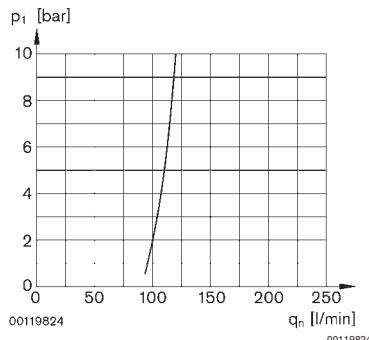


Ambient temperature min./max.	-10°C / +50°C
Medium	Compressed air to ISO 8573-1:2001
Type of filling	semi-automatic oil filling during operation
Installation location	vertical
Reservoir volume	181 cm³
Oil type	HL 68 (DIN 51 524 - ISO VG 68)
materials:	Polyamide, seals Buna-N (NBR)
Housing	Diecast zinc
Threaded bushing	acrylonitrile butadiene styrene (ABS)
Cover	

	Thread conn. [bar]	Oper. press.	Flow rate [l/min]	Protective guard	Weight [kg]	Ready for oil level sensor	Part No. (Reservoir material)	
							Polycarb.	Metal
	G 3/4	0.5 ... 16	15,800	Polyamide/none	0.762/1.302	no	R412009225	R412009229
	G 3/4	0.5 ... 16	15,800	Polyamide/none	0.762/1.302	yes	R412009226	R412009230
	G 1	0.5 ... 16	15,800	Polyamide/none	0.762/1.302	no	R412009231	R412009235
	G 1	0.5 ... 16	15,800	Polyamide/none	0.762/1.302	yes	R412009232	R412009236

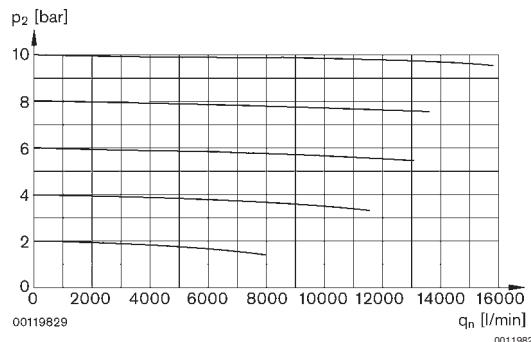
Reservoir materials: Polycarbonate or die-cast zinc  
Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 1$  bar)

## lubricator activation margin



$p_2$  = secondary pressure;  $q_{nmin}$ . = min. nominal flow

## flow rate characteristic



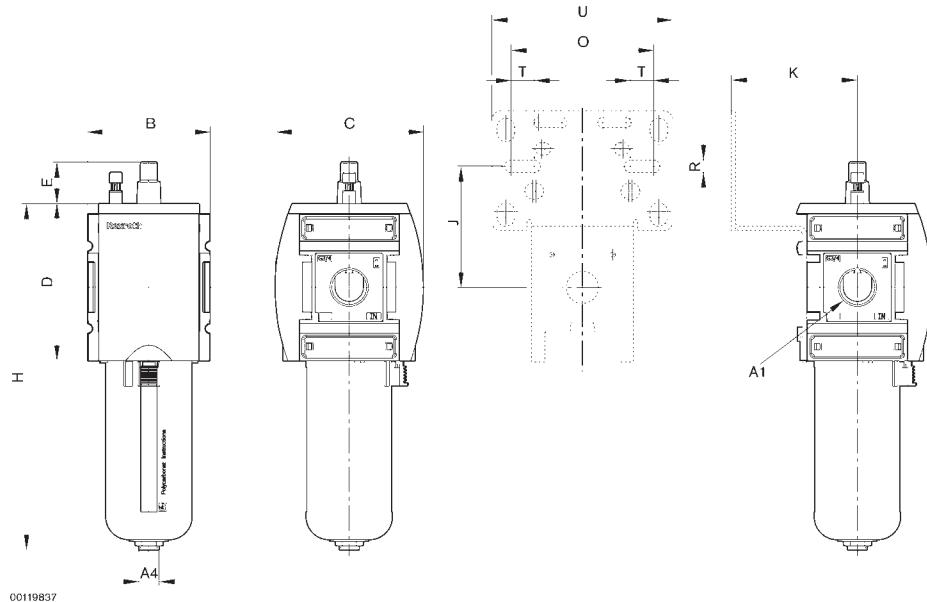
$p_1$  = working pressure;  $p_2$  = secondary pressure;  $q_n$  = nominal flow

# Compressed air maintenance unit, series AS5-Metric

Lubricator, oil-drop AS5-LBS, with semi-automatic filling, G3/4 - G1

**AVENTICS**

dimensioned drawing



00119837

A1	A4	B	C	D	E	H	J	K	O	R	T	U		
G3/4	G1/8	85	103	109	29	239	83	87	98	7	16	124		
G1	G1/8	85	103	109	29	239	83	87	98	7	16	124		

# Compressed air maintenance unit, series AS5-Metric

3/2 directional control dump valve, AS5-SOV electrically operated, G3/4 - G1

**AVVENTICS**



00119378

Ambient temperature min./max.	-10°C / +50°C
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3
materials:	
Housing	Polyamide, seals Buna-N (NBR)
Protective cover	Acrylonitrile butadiene styrene (ABS)
Threaded bushing	Die cast zinc

Power consumption at 24 V DC	Switch-on power at 230V 50 Hz AC	Holding power at 230V 50 Hz AC
W	VA	VA
2	2,2	1,6

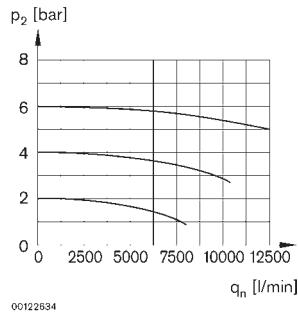
	Thread connection [psi]	Operational voltage	Qn l/min [CFM]	Operating pressure	Weight kg [lbs]	Notes	Part No.
	G 3/4	-			0.641 (1.413)	1	R412009264
	G 3/4	-			0.620 (1.367)	2	R412009258
	G 3/4	24VDC ±10%	12500	36 ... 145	0.677 (1.493)	3	R412009265
	G 3/4	110VAC 50/60Hz	(441)		0.677 (1.493)	3	R412009266
	G 3/4	240VAC 50/60Hz			0.677 (1.493)	3	R412009267
	G 1	-			0.641 (1.413)	1	R412009268
	G 1	-			0.620 (1.367)	2	R412009259
	G 1	24VDC ±10%	12500	36 ... 145	0.677 (1.493)	3	R412009269
	G 1	110VAC 50/60Hz	(441)		0.677 (1.493)	3	R412009270
	G 1	240VAC 50/60Hz			0.677 (1.493)	3	R412009271

1) without DO16 pilot valve 2) with CNOMO interface, without pilot valve

3) with DO16 pilot valve (use electrical connector DIN Form C, series CN1)

Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 1$  bar)

## flow rate characteristic, 1 - 2



00122634

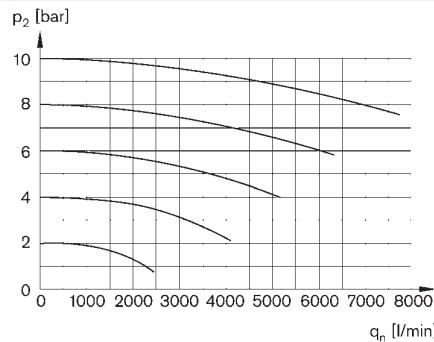
00122634

p2 = secondary pressure qn = nominal flow

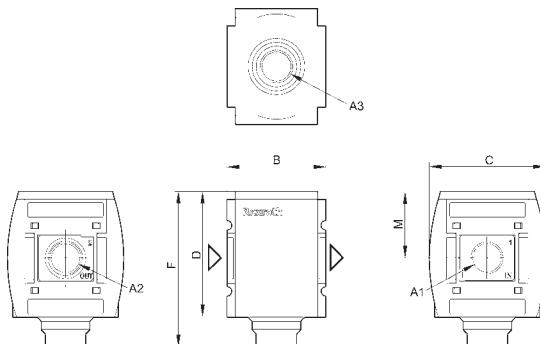
# Compressed air maintenance unit, series AS5-Metric

3/2 directional control dump valve, AS5-SOV electrically operated, G3/4 - G1

**AVVENTICS**



00123196

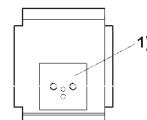


A1 = input

A2 = output

A3 = ventilation port

1) Transition plate with CNOMO porting configuration for pilot valve DO30



A1	A2	A3	B	C	D	E1	F	M	N	Q			
G 3/4	G 3/4	G 1/2	85	103	109	14.2	125	58	M4	21			
G 1	G 1	G 1/2	85	103	109	14.2	125	58	M4	21			

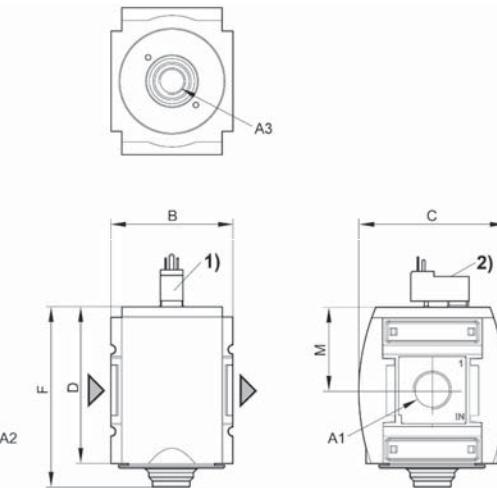
A1 = input

A2 = output

A3 = ventilation port

1) For electrical connector according to ISO

2) Manual override



A1	A2	A3	B	C	D	F	M						
G 3/4	G 3/4	G 1/2	85	103	109	125	58						
G 1	G 1	G 1/2	85	103	109	125	58						

# Compressed air maintenance unit, series AS5-Metric

3/2 directional control dump valve, AS5-SOV, pneumatically operated, G3/4 - G1

**AVENTICS**



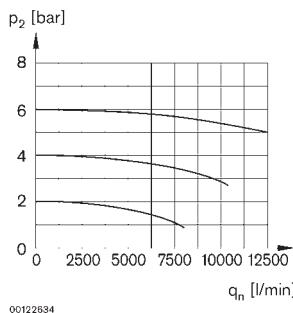
00119377

Ambient temperature min./max.	-10 °C / +50 °C
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3
ATEX	II 2G2D -10 °C ≤ Ta ≤ 50 °C
materials:	
Housing	Polyamide, seals Buna-N (NBR)
Protective cover	Acrylonitrile butadiene styrene (ABS)
Thread connection	Die cast zinc

	Working pressure min/max [bar]	Port	Weight [kg]	Part No.
	2.5 / 10	G 3/4		R412009262
		G 1	0,459	R412009263

Nominal flow  $Q_n = 12500 \text{ l/m}$  at  $P_1 = 6.3 \text{ bar}$  and  $\Delta p = 1 \text{ bar}$ .

## flow rate characteristic, 1 - 2

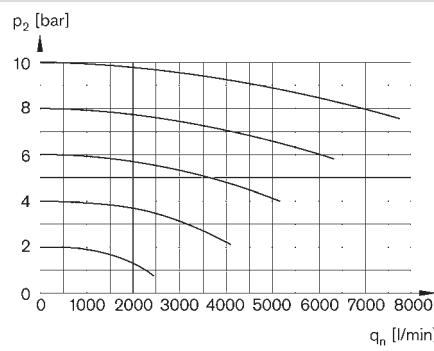


00122634

00122634

$p_2$  = secondary pressure  $q_n$  = nominal flow

## rear exhaust, 2 - 3



00123196

00123196

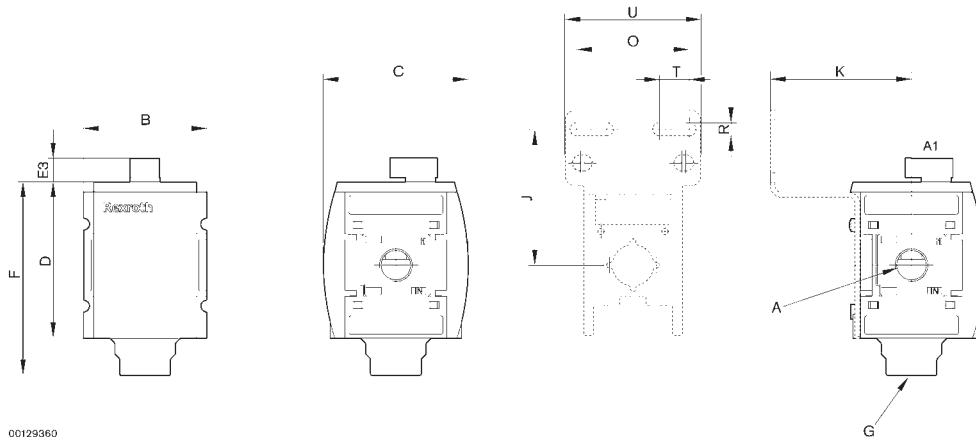
$p_2$  = secondary pressure  $q_n$  = nominal flow

# Compressed air maintenance unit, series AS5-Metric

3/2 directional control dump valve, AS5-SOV, pneumatically operated, G3/4 - G1

AVENTICS 

dimensioned drawing



A1	A2	B	C	D	E3	F	G	J	K	O	R	T	U
G 3/4	G 1/8	63	74	80	12.3	99	72.5	66	254	60	7	16	72
G 1	G 1	63	74	80	12.3	99	72.5	66	254	60	7	16	72

# Compressed air maintenance unit, series AS5-Metric

3/2-way shut-off valve (ball valve) AS5-BAV, lockable, G3/4 - G1

**AVENTICS** 



Ambient temperature min./max.

-10°C / +50°C

Medium

Compressed air to ISO 8573-1:2001

materials:

Housing

Polyamide

Threaded bushing

Diecast zinc

Cover

acrylonitrile butadiene styrene (ABS)

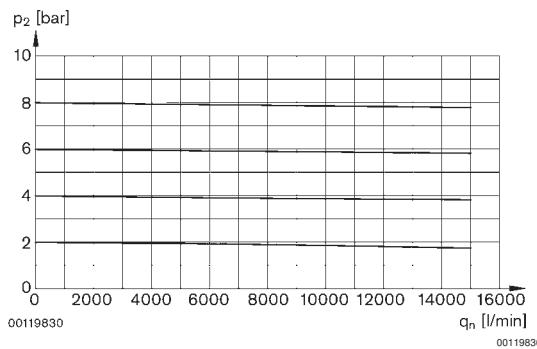
Seals

Acrylonitrile butadiene rubber

	Port	Qn [l/min]	Weight [kg]	Part No.
	G 3/4 G 1	14500	0.825	R412009260 R412009261

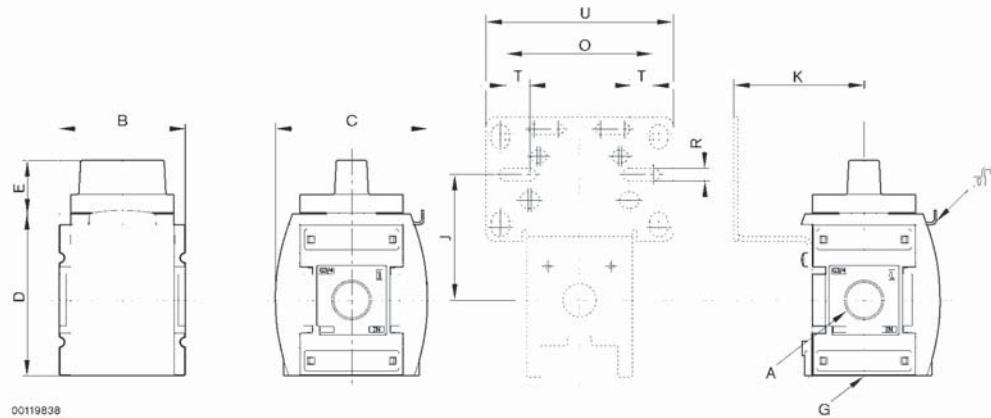
Nominal flow Qn at 6.3 bar and  $\Delta p = 1$  bar.

## flow rate characteristic



p2 = secondary pressure; qnmin. = min. nominal flow

## dimensioned drawing



A	B	C	D	E	G	J	K	O	R	T	U			
G3/4	85	103	109	36	G3/4	83	87	98	7	16	124			
G1	85	103	109	36	G3/4	83	87	98	7	16	124			

# Compressed air maintenance unit, series AS5-Metric

Filling valve (soft start), AS5-SSV, G3/4 - G1

**AVENTICS**



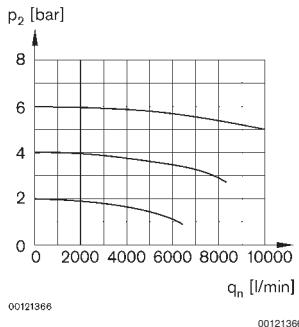
00119380

Working pressure min/max	2.5 / 16 bar
Ambient temperature min./max.	-10°C / +50°C
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class materials:	class 6.4-3
Housing	Polyamide, seals Buna-N
Threaded bushing	Diecast zinc
Protective cover	Acrylonitrile butadiene styrene (ABS)

	Thread connection	Flow [l/min]	Weight [kg]	Part No.
	G 3/4 G 1	10000	0,43	R412009272
				R412009273

nominal flow with secondary pressure 6,3 bar at  $\Delta p = 1$  bar

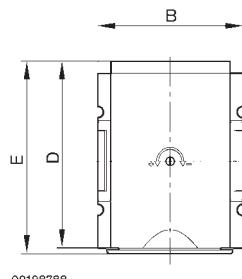
## flow rate characteristic



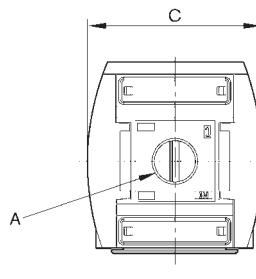
00121366      00121366

$p_2$  = secondary pressure  
 $q_n$  = nominal flow

## dimensioned drawing



00128788



00128788

A	1)	B	C	D	E							
G3/4	18	85	103	109	112							

A	1)	B	C	D	E							
G1	18	85	103	109	112							

# **Compressed air maintenance unit, series AS5-Metric**

Distributor block AS5-DIS, 2-way, G3/4 - G1

AVVENTICS<sup>®</sup>



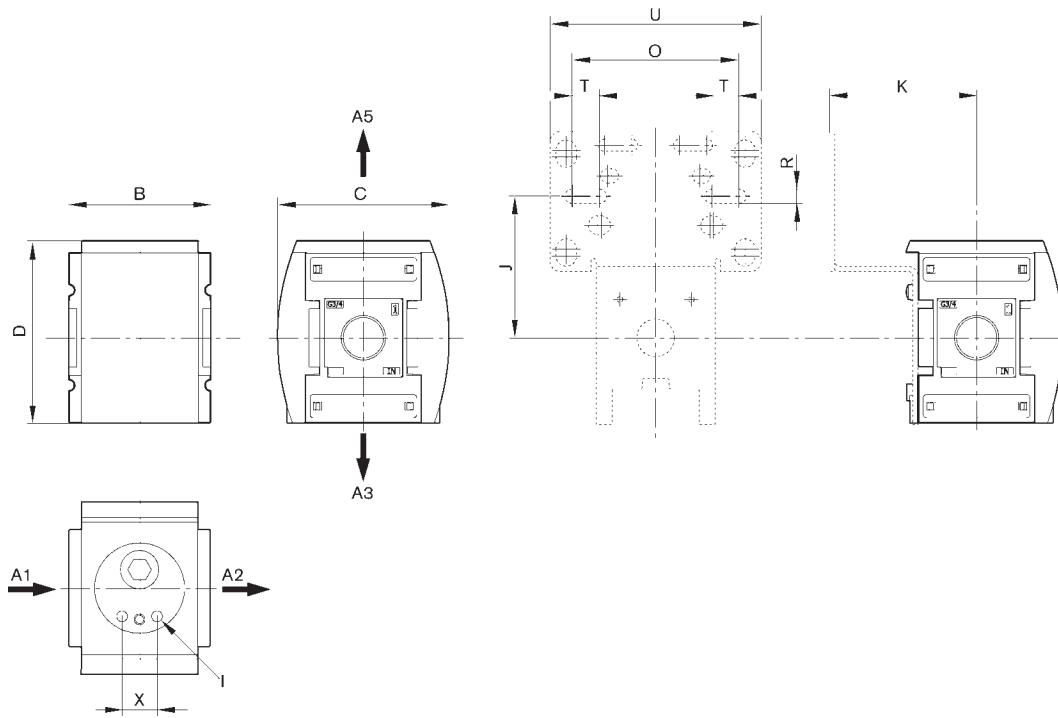
00119807

Ambient temperature min./max.	-10 °C / +50 °C
Medium	Compressed air to ISO 8573-1:2001
materials:	
Housing	Polyamide, seals Buna-N (NBR)
Threaded bushing	Diecast zinc
Cover	acrylonitrile butadiene styrene (ABS)

	Port	Qn [l/min]	Weight [kg]	Part No.
	G 3/4	12000	0.648	R412009250
	G 1			R412009251

Nominal flow at inlet pressure 91 psi and 15 psi drop ( $P_1 = 6.3$  bar,  $\Delta P = 1$  bar)

## dimensioned drawing



00119839

A	G	B	C	D	E	J	K	O	R	T	U	X
G3/4	G3/4	85	103	109	36	83	87	98	7	16	124	20
G1	G3/4	85	103	109	36	83	87	98	7	16	124	20

# Compressed air maintenance unit, series AS2, AS3, AS5

Accessories Index

**AVENTICS** 



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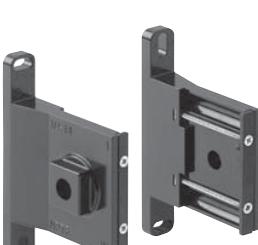
Mounting bracket



Mounting strap



Block assembly  
(joiner) kit



Mounting flange kit

# Compressed air maintenance unit, series AS2

Accessories -Mounting bracket AS2-MBR-...-W01

AVVENTICS

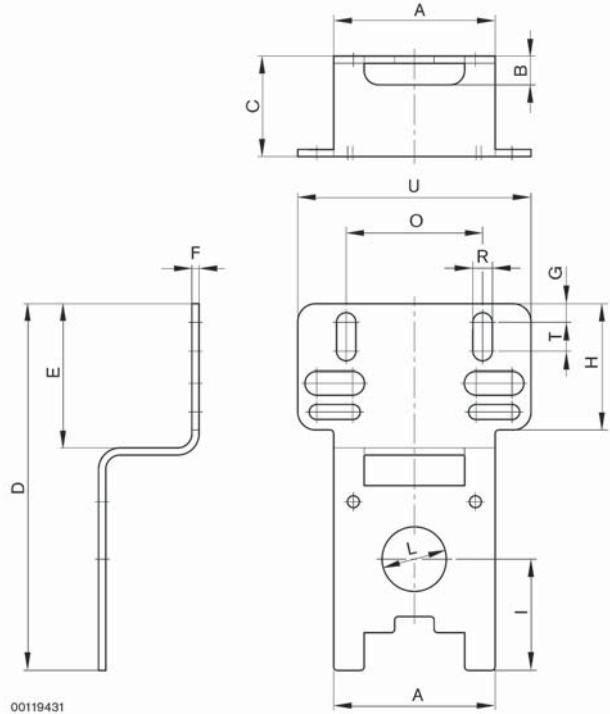
## Mounting plate AS2-MBR-...-W01-NPT (for inch or metric versions)

Weight	See table
Materials	Sheet metal, galvanized
Suitable for all individual devices 2 screws supplied loose	Self-tapping Torx screws



## Part no.

Weight [lbs]	Part no.
0.14	R432031071



00119431

A	B	C	D	E	F	G	H	I	L	O	R	T	U
1.890	0.315	1.102	4.016	1.575	0.079	0.205	1.378	1.220	0.787	1.496	0.213	0.315	2.559

Dimensions in inches

# Compressed air maintenance unit, series AS2

Accessories - Mounting strap AS2-MBR-...-W03

AVVENTICS 

## ► ★ Mounting strap AS2-MBR-...-W03 (for inch or metric versions, also serves as joiner)

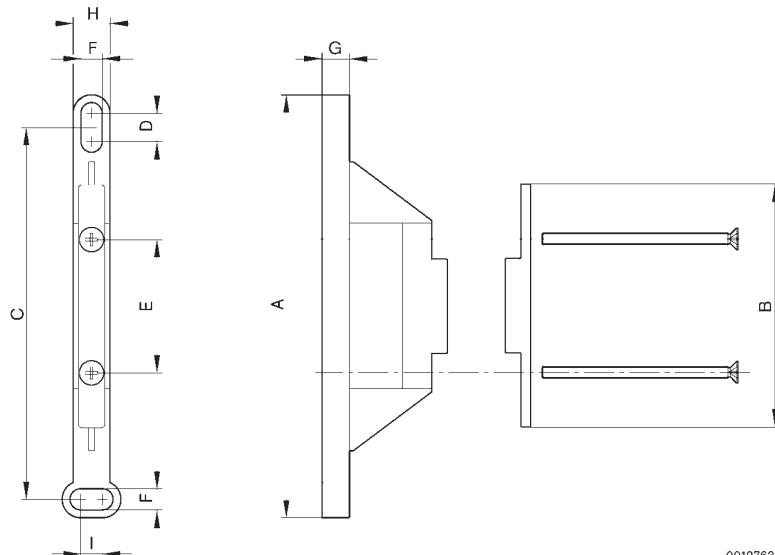
Weight	See table
Materials	PA 66 (Polyamide 6.6)

Suitable for all individual devices  
2 screws supplied loose



## ► ★ Part no.

Weight [lbs]	Part no.
0.03	R412006370



A	B	C	D	E	F	G	H	I
4.252	2.441	3.740	0.287	1.339	0.213	0.276	0.370	0.213

Dimensions in inches

# Compressed air maintenance unit, series AS2

Accessories - Block assembly kit AS2-MBR-...-W04

AVVENTICS<sup>A</sup>

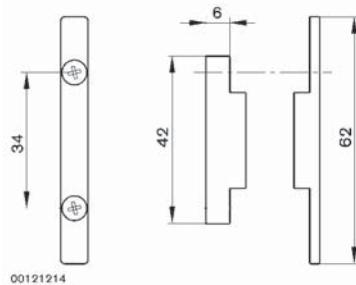
## Block assembly (joiner) kit AS2-MBR-...-W04 (for inch or metric versions)

Weight	See table
Materials	PA 66 (Polyamide 6.6)
2 screws supplied loose	



## Part no.

Weight [lbs]	Part no.
0.02	R412006371



A	B	C	D
2.441	1.654	1.339	0.236

Dimensions in inches

# Compressed air maintenance unit, series AS2

Accessories - Mounting flange kit AS2-MBR-...-W05 NPTF Version

AVVENTICS®

## ►★ Mounting flange kit, NPTF threads AS2-MBR-...-W05 (attaches to inch or metric unit)

Weight See table

Materials Zn - diecasting

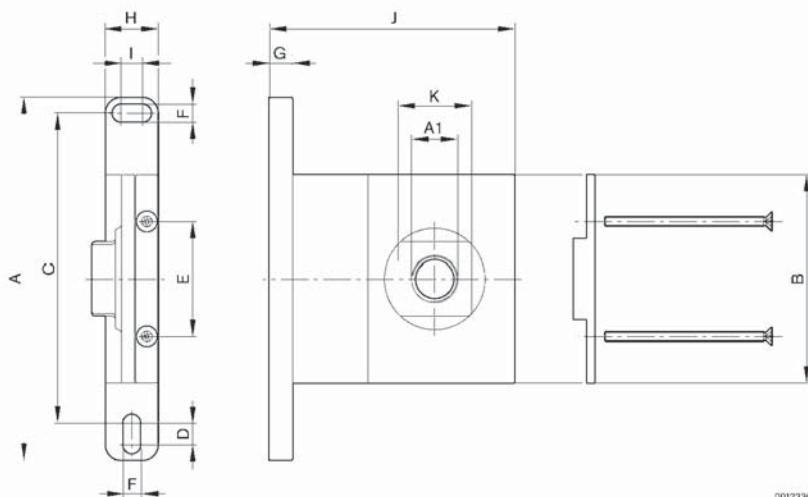
► Two block assembly elements (IN/OUT)

4 mounting screws and 2 O-rings supplied loose



## ►★ Part no.

Threaded ports	Weight [lbs]	Part no.
1/4-18 NPTF	1.047	R432000729
3/8-18 NPTF	1.047	R432000730



A1	A	B	C	D	E	F	G	H	I	J	K
1/4 NPTF	4.26	2.443	3.61	0.288	1.34	0.213	0.276	0.63	0.288	2.87	0.867
3/8 NPTF	4.26	2.443	3.61	0.288	1.34	0.213	0.276	0.63	0.288	2.87	0.867

Dimensions in inches

# Compressed air maintenance unit, series AS2

Accessories - Mounting flange kit AS2-MBR-...-W05 Metric version

AVVENTICS®

## ►★ Mounting flange kit, metric threads AS2-MBR-...-W05 (attaches to metric or inch unit)

Weight See table

Materials Zn - diecasting

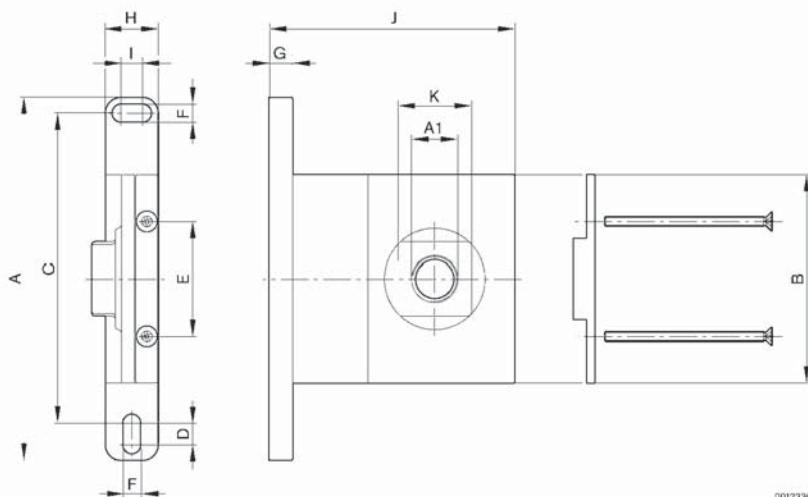
► Two block assembly elements (IN/OUT)

4 mounting screws and 2 O-rings supplied loose



## ►★ Part no.

Threaded ports	Weight [kg](lbs.)	Part no.
G 1/4	0,475 (1.047)	R412006366
G 3/8	0,475 (1.047)	R412006367



A1	A	B	C	D	E	F	G	H	I	J	K
G 1/4	108	62	91,5	7,3	34	5,4	7	16	7,3	73	22
G 3/8	108	62	91,5	7,3	34	5,4	7	16	7,3	73	22

# Compressed air maintenance unit, series AS2

Accessories - Control panel nut AS2-MBR-...-W06 (for Inch or Metric versions)

AVVENTICS<sup>A</sup>

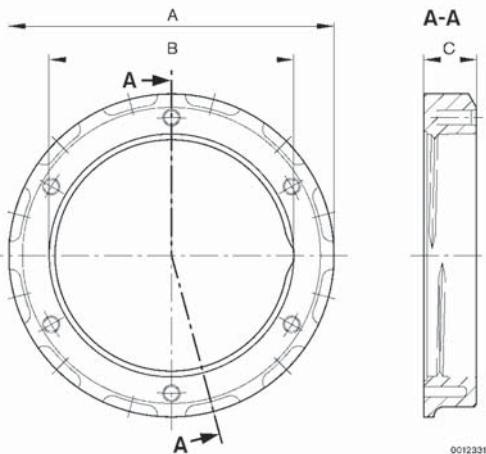
## Control panel nut AS2-MBR-...-W06

Weight	See table
Materials	PA 66 (Polyamide 6.6)



## Part no.

Weight [lbs]	Part no.
0.013	R412006372



A	B	C
1.891	M36x1,5	0.315

Dimensions in inches

# Compressed air maintenance unit, series AS2

Accessories - Reservoir AS2-CBS/-CLA/-CLS

AVVENTICS<sup>A</sup>

## ►★ Reservoir AS2-CBS/-CLA-CLS

Materials	Reservoir Protective guard	Polycarbonate or die cast zinc, with bayonet catch PA (polycarbonate version)
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Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.



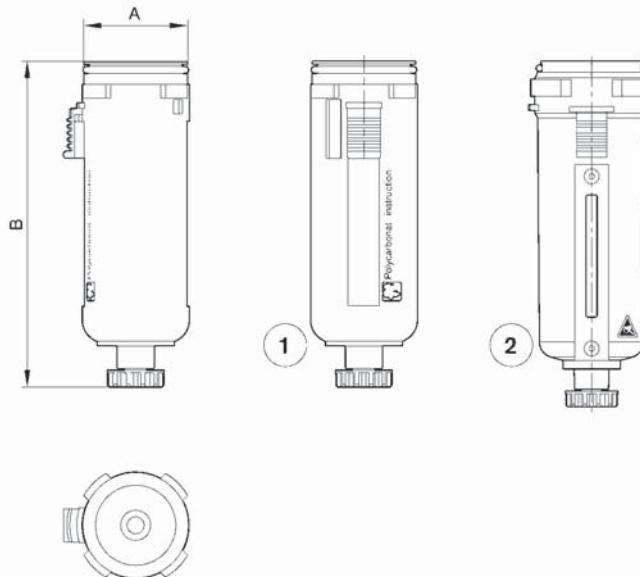
## ►★ Part no. (CLS for filters)

For threaded ports	Type	Reservoir	Weight lbs. (kg)	Part no.
NPT or G	Semi-automatic, open without pressure	Die cast Zinc	0.56 (0.252)	R412006344
	Fully automatic, open without pressure	Die cast Zinc	0.64 (0.288)	R412006345
	Fully automatic, closed without pressure	Die cast Zinc	0.64 (0.288)	R412006346
	Semi-automatic, open without pressure	Polycarbonate	0.13 (0.059)	R412006338
	Fully automatic, open without pressure	Polycarbonate	0.23 (0.104)	R412006339
	Fully automatic, closed without pressure	Polycarbonate	0.23 (0.104)	R412006340

Polycarbonate version has Polyamide guard

Note: All Series AS filter drains include a manual drain function as standard.

## Reservoir for standard filter, pre-filter, or coalescing filter; semi-automatic, without pressure: open (CLS)



Part No.	Type	A in. (mm)	B in. (mm)
R412006338	Polycarbonate (1)	1.48 (37.6)	4.54 (115.5)
R412006344	Die cast zinc (2)	1.48 (37.6)	4.54 (115.5)

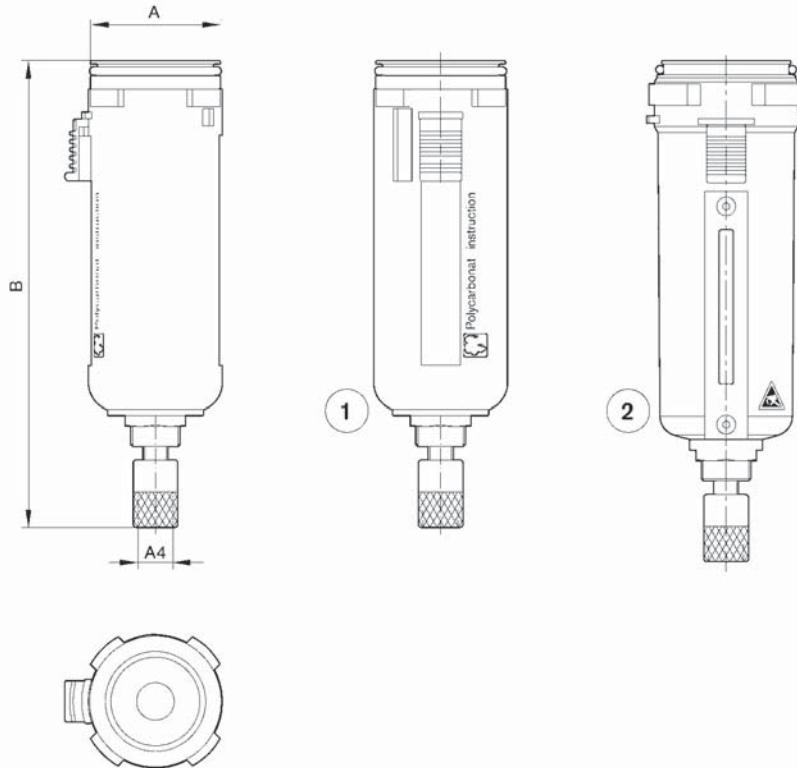
# Compressed air maintenance unit, series AS2

Accessories - Reservoir AS2-CBS/-CLA/-CLS

AVVENTICS<sup>A</sup>



Reservoir for standard filter, pre-filter, or coalescing filter; fully automatic, without pressure: open (CLS)



Part No.	Type	A4	A in. (mm)	B in. (mm)	Weight lbs. (kg)
R412006339	Polycarbonate (1), open	G 1/8	1.48 (37.6)	5.20 (132)	0.23 (0.104)
R412006340	Polycarbonate (1), closed	G 1/8	1.48 (37.6)	5.20 (132)	0.23 (0.104)
R412006345	Die cast zinc (2), open	G 1/8	1.48 (37.6)	5.20 (132)	0.64 (0.288)
R412006346	Die cast zinc (2), closed	G 1/8	1.48 (37.6)	5.20 (132)	0.64 (0.288)

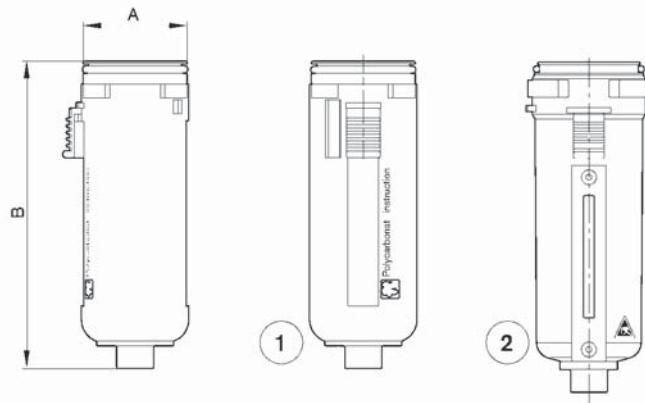
Polycarbonate version has Polyamide guard.

# Compressed air maintenance unit, series AS2

Accessories - Reservoir AS2-CBS/-CLA/-CLS

AVVENTICS 

## Reservoir for activated carbon filter (CLA) / oil-drop lubricator (CBS)



For threaded ports	Type	Reservoir	Weight lbs. (kg)	Part no.
NPT or G	CLA CLA CBS CBS	Die cast Zinc Polycarbonate Die cast Zinc Polycarbonate	0.75 (0.338) 0.13 (0.059) 0.56 (0.254) 0.17 (0.075)	R412006349 R412006347 R412006358 R412006352

Part No.	Type	A in. (mm)	B in. (mm)
R412006349	CLA	1.48 (37.6)	4.27 (108.5)
R412006347	CLA	1.48 (37.6)	4.27 (108.5)
R412006358	CBS	1.72 (43.8)	4.96 (126)
R412006352	CBS	1.72 (43.8)	4.80 (122)

Polycarbonate reservoir has Polyamide protective guard.

# Compressed air maintenance unit, series AS3

Accessories - Mounting bracket AS3-MBR-...-W01

AVVENTICS 

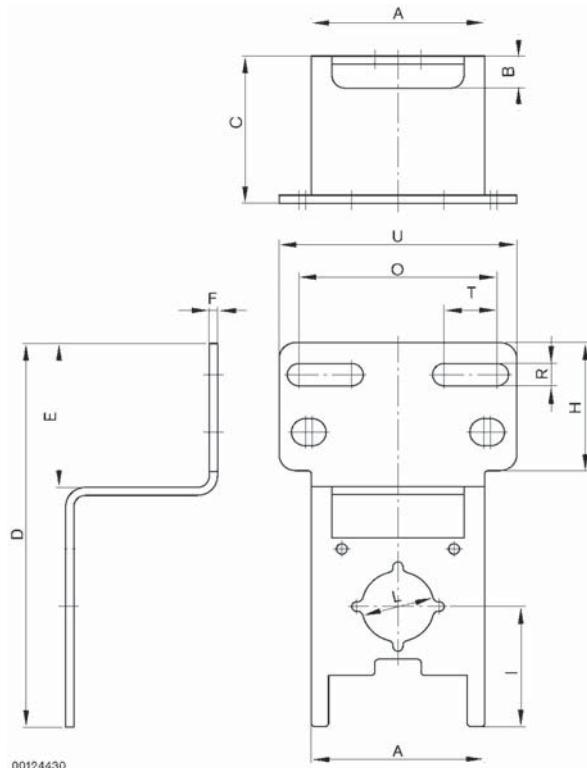
## Mounting bracket AS3-MBR-...-W01-NPT (for inch or metric versions)

Weight	See table
Materials	Sheet metal, galvanized
Suitable for all individual devices 2 screws supplied loose	Self-tapping Torx screws



## Part no.

Weight [lbs.]	Part no.
0.287	R432031072



A	B	C	D	E	F	G	H	I	L	O	R	T	U
2.067	0.394	1.811	4.724	1.772	0.098	0.394	1.575	1.476	0.984	0.362	0.276	0.630	2.835

Dimensions in inches

# Compressed air maintenance unit, series AS3

Accessories - Mounting strap AS3-MBR-...-W03

AVVENTICS 

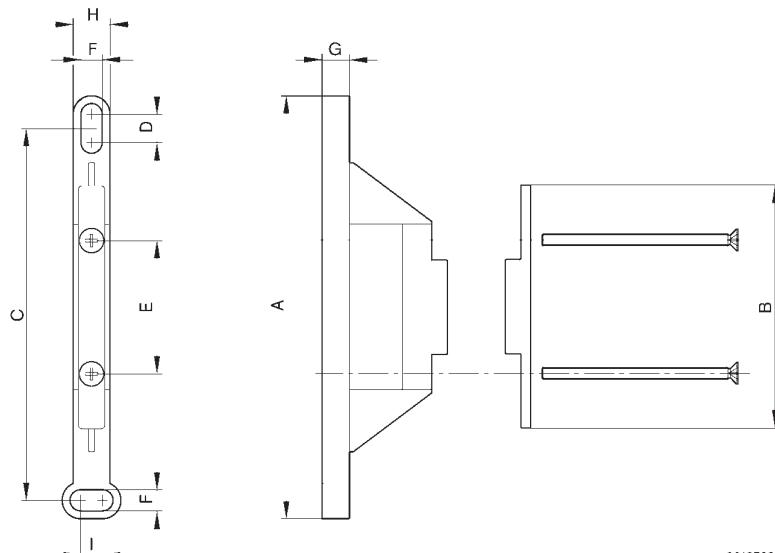
## ► ★ Mounting strap AS3-MBR-...-W03 (for inch or metric versions, also serves as joiner)

Weight	See table
Materials	PA 66 (Polyamide 6.6)
Suitable for all individual devices 2 screws supplied loose	



## ► ★ Part no.

Weight [lbs.]	Part no.
0.121	R412007370



A	B	C	D	E	F	G	H	I
4.724	2.953	4.094	0.315	1.654	0.252	0.472	0.472	0.315

Dimensions in inches

# Compressed air maintenance unit, series AS3

Accessories - Block assembly kit AS3-MBR-...-W04

AVVENTICS<sup>®</sup>

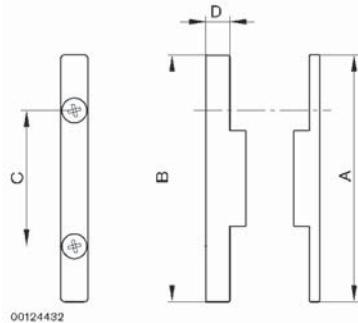
## Block assembly (joiner) kit AS3-MBR-...-W04 (for inch or metric versions)

Weight	See table
Materials	PA 66 (Polyamide 6.6)
2 screws supplied loose	



## Part no.

Weight [lbs.]	Part no.
0.071	R412007371



A	B	C	D
2.953	2.953	1.654	0.492

Dimensions in inches

# Compressed air maintenance unit, series AS3

Accessories - Mounting flange kit kit AS3-MBR-...-W05 NPTF version

AVVENTICS<sup>®</sup>

## ►★ Mounting flange kit, NPTF threads AS3-MBR-...-W05 (attaches to inch or metric unit)

Weight

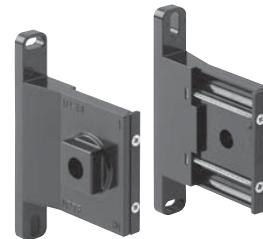
See table

Materials

Zn - diecasting

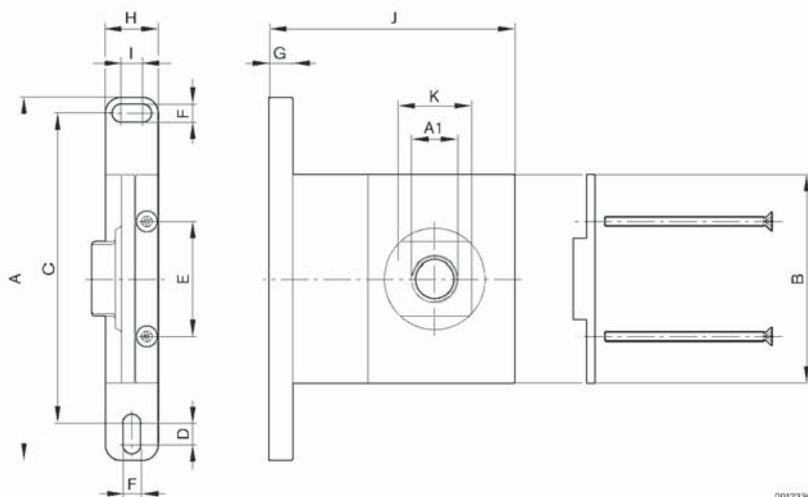
► Two block assembly elements (IN/OUT)

4 mounting screws and 2 O-rings supplied loose



## ►★ Part no.

Threaded ports	Weight [lbs.]	Part no.
3/8 NPTF	1.82	R432002017
1/2 NPTF	1.82	R432002018



A1	A	B	C	D	E	F	G	H	I	J	K
3/8 NPTF	4.724	2.953	4.094	0.315	1.654	0.252	0.276	0.787	0.315	4.035	1.181
1/2 NPTF	4.724	2.953	4.094	0.315	1.654	0.252	0.276	0.787	0.315	4.035	1.181

Dimensions in inches

# Compressed air maintenance unit, series AS3

Accessories - Mounting flange kit AS3-MBR-...-W05 Metric version

AVVENTICS®

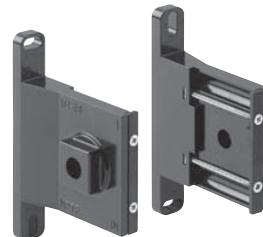
## ►★ Mounting flange kit, metric threads AS3-MBR-...-W05 (attaches to metric or inch unit)

Weight See table

Materials Zn - diecasting

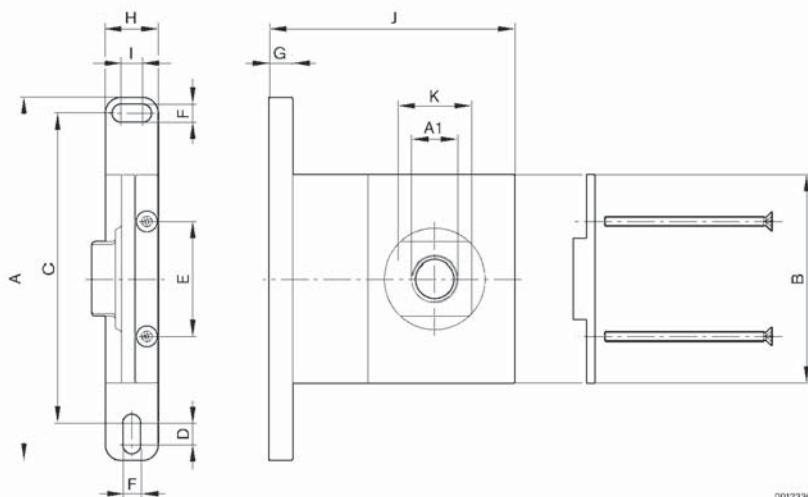
► Two block assembly elements (IN/OUT)

4 mounting screws and 2 O-rings supplied loose



## ►★ Part no.

Threaded ports	Weight [kg](lbs.)	Part no.
G 3/8	0,825 (1.82)	R412007366
G 1/2	0,825 (1.82)	R412007367



A1	A	B	C	D	E	F	G	H	I	J	K
G 3/8	120	75	104	8	42	6,4	7	20	8	102,5	30
G 1/2	120	75	104	8	42	6,4	7	20	8	102,5	30

# Compressed air maintenance unit, series AS3

Accessories - Control panel nut AS3-MBR-...-W06 (for Inch or Metric versions)

AVVENTICS<sup>A</sup>

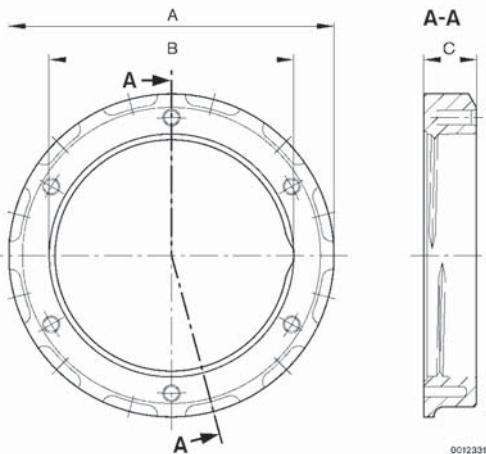
## Control panel nut AS3-MBR-...-W06

Weight	See table
Materials	PA 66 (Polyamide 6.6)



## Part no.

Weight [lbs.]	Part no.
0.013	R412007372



B	A	C
M42x1,5	2.185	0.315

Dimensions in inches

# Compressed air maintenance unit, series AS3

Accessories - Reservoir AS3-CBS/-CLA/-CLS

AVVENTICS 

## ► ★ Reservoir AS3-CBS/-CLA/-CLS

Materials	Reservoir Protective guard	Polycarbonate or die cast zinc, with bayonet catch PA (polycarbonate version)
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Plastic containers may only be cleaned with water, soap suds, and other similar, neutral agents.

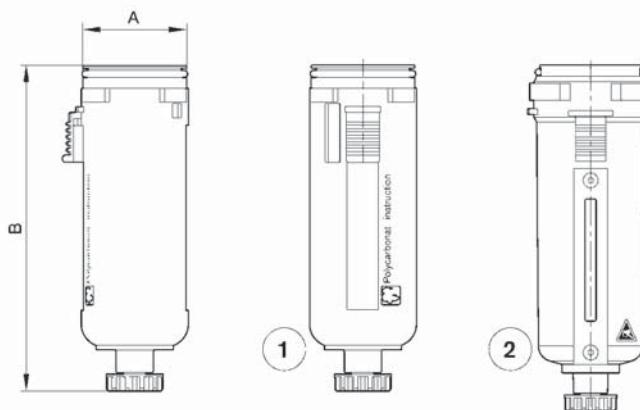


## ► ★ Part no. (CLS for filters)

thread connection	Condensate drain	Reservoir	Protective guard	Weight lbs. (kg)	Part No.
NPT or G	semi-automatic, opened without pressure	Diecast zinc	-	0.86 (0.39)	R412007344
	fully automatic, open without pressure	Diecast zinc	-	0.86 (0.39)	R412007345
	fully automatic, closed without pressure	Diecast zinc	-	0.86 (0.39)	R412007346
	semi-automatic, opened without pressure	Polycarbonate	Polyamide	0.16 (.073)	R412007338
	fully automatic, open without pressure	Polycarbonate	Polyamide	0.26 (0.118)	R412007339
	fully automatic, closed without pressure	Polycarbonate	Polyamide	0.26 (0.118)	R412007340

Polycarbonate version has Polyamide protective guard.

## Reservoir for standard, pre-filter, or coalescing filter; semi-automatic, without pressure: open (CLS)



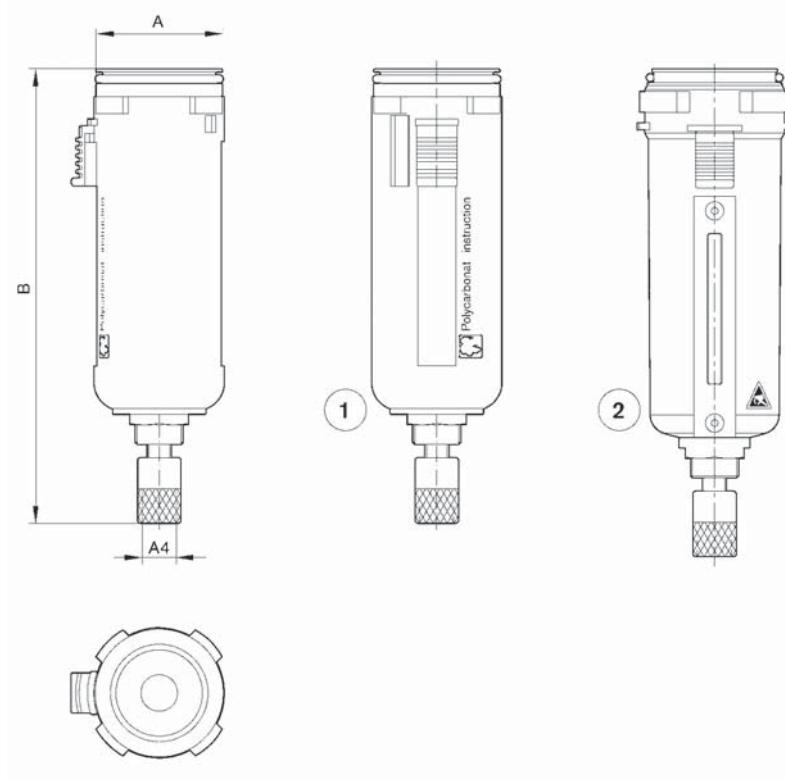
Part No.	A in. (mm)	B in. (mm)
R412007338	1.72 (43.8)	5.06 (128.5) fig. 1
R412007344	1.72 (43.8)	5.06 (128.5) fig. 2

# Compressed air maintenance unit, series AS3

Accessories - Reservoir AS3-CBS/CLA/CLS

AVVENTICS<sup>A</sup>

Reservoir for standard filter, pre-filter, or coalescing filter; fully automatic, without pressure: open or closed (CLS)



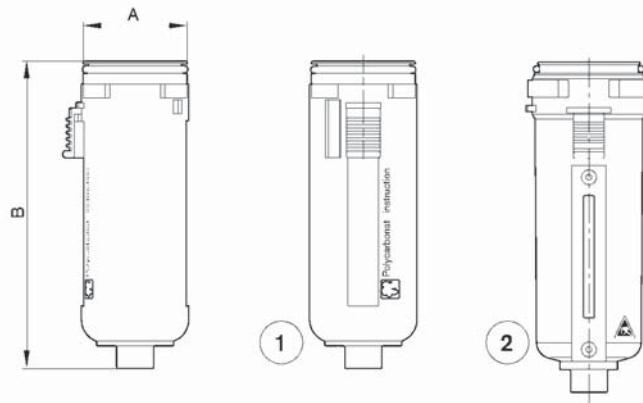
Part No.	Type	A4	A in. (mm)	B in. (mm)
R412007339	Open/Poly	G 1/8	1.72 (43.8)	5.71 (145)
R412007340	Closed/Poly	G 1/8	1.72 (43.8)	5.71 (145)
R412007345	Open/Metal	G 1/8	1.72 (43.8)	5.71 (145)
R412007346	Closed/Metal	G 1/8	1.72 (43.8)	5.71 (145)

# Compressed air maintenance unit, series AS3

Accessories - Reservoir AS3-CBS/-CLA/-CLS

**AVVENTICS** 

## Reservoir for activated carbon filter (CLA) / oil-drop lubricator (CBS)



For threaded ports	Type	Reservoir	Weight lbs. (kg)	Part no.
NPT or G	CLA CLA CBS CBS	Die cast Zinc Polycarbonate Die cast Zinc Polycarbonate	0.745 (0.338) 0.160 (0.073) 0.739 (0.335) 0.190 (0.086)	R412007349 R412007347 R412007358 R412007352

Polycarbonate version has Polyamide protective guard.

Part No.	Type	A in. (mm)	B in. (mm)
R412007349	CLA	1.72 (43.8)	4.96 (126)
R412007347	CLA	1.72 (43.8)	4.80 (122)
R412007358	CBS	1.72 (43.8)	4.80 (122)
R412007352	CBS	1.72 (43.8)	4.80 (122)

# Compressed air maintenance unit, series AS5

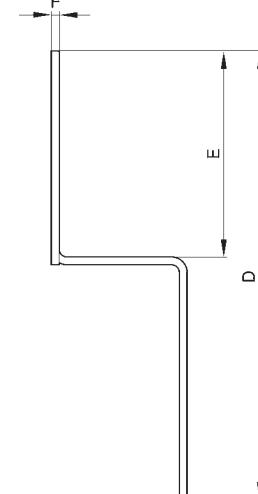
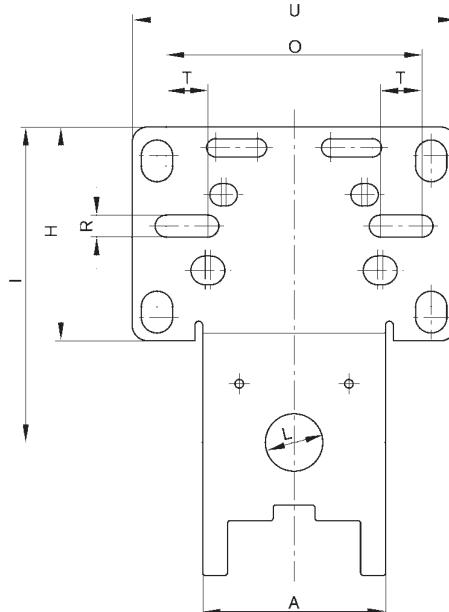
Accessories - Mounting bracket AS5-MBR-...-W01

AVVENTICS 

## \* Mounting plate, series AS5-MBR-...-W01-NPT (for inch or metric versions)



00119815



00127636

Material: sheet steel, galvanized  
2 mounting screws 3x10 (Torx 10 IP) DIN EN ISO 10664, supplied loose

Part No.	A	C	D	E	F	H	I	L	O	R	T	U
R432031073	2.756	2.049	6.772	3.11	0.118	3.228	4.764	0.984	3.858	0.276	0.63	4.882
Part No.	Weight [lbs]											
R432031073	0.869											

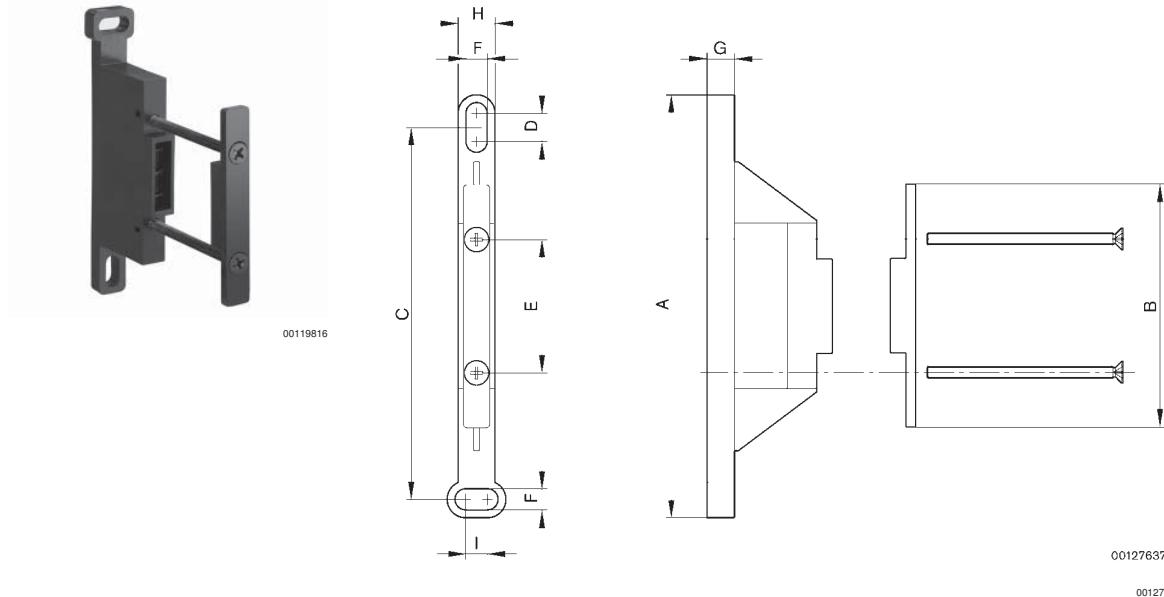
Dimensions in inches.

# Compressed air maintenance unit, series AS5

Accessories - Mounting strap and block assembly kit

AVVENTICS 

## \* Mounting strap, series AS5-MBR-...-W03 (for inch or metric versions, also serves as joiner)



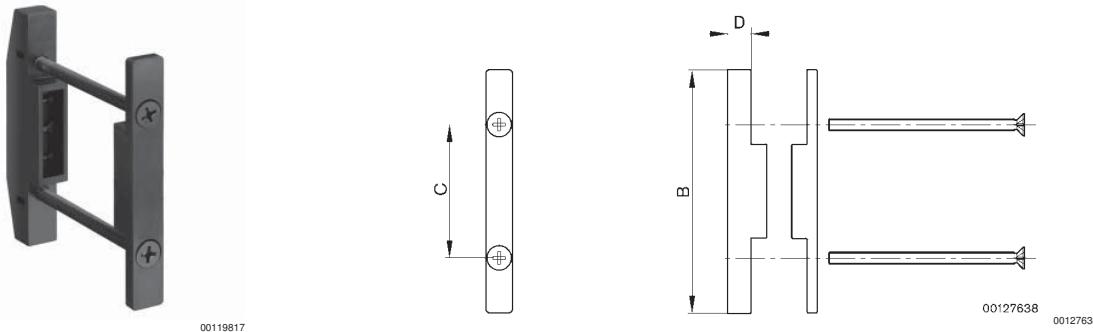
Material: Polyamide

2 mounting screws supplied loose

Part No.	A	B	C	D	E	F	G	H	I	Weight [lbs]
R412009370	6.378	4.016	5.315	0.394	2.246	0.335	0.394	0.69	0.394	0.265

Dimensions in inches.

## \* Block assembly (joiner) kit, series AS5-MBR-...-W04 (for inch or metric versions)



Material: Polyamide

2 mounting screws supplied loose

Part No.	B	C	D	Weight [lbs]
R412009371	4.016	2.246	0.67	0.165

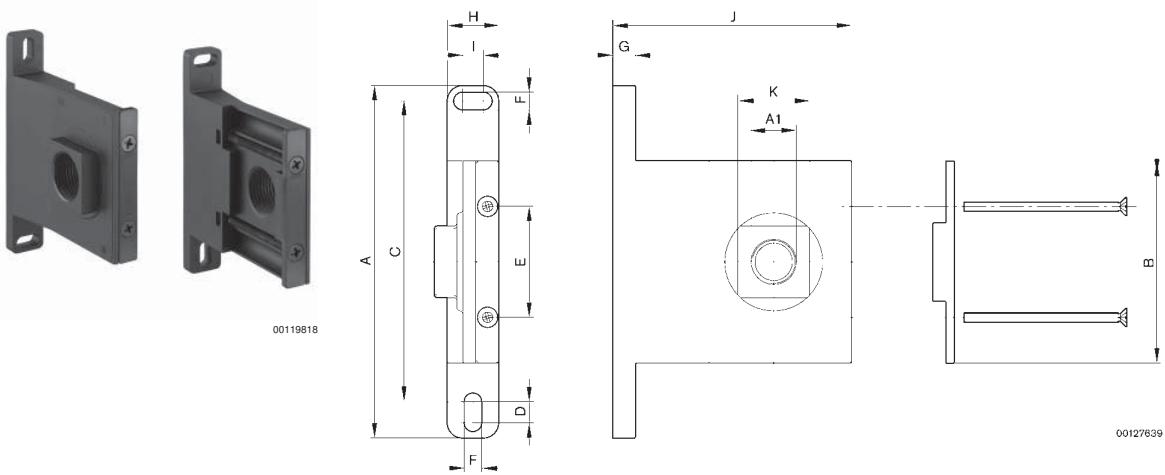
Dimensions in inches.

# Compressed air maintenance unit, series AS5

Accessories - Mounting flange kits AS5-MBR-...-W05, inch and metric

**AVVENTICS**

\* Mounting flange kit, NPTF threads, series AS5-MBR-...-W05 (attaches to inch or metric unit)



Material: die-cast zinc

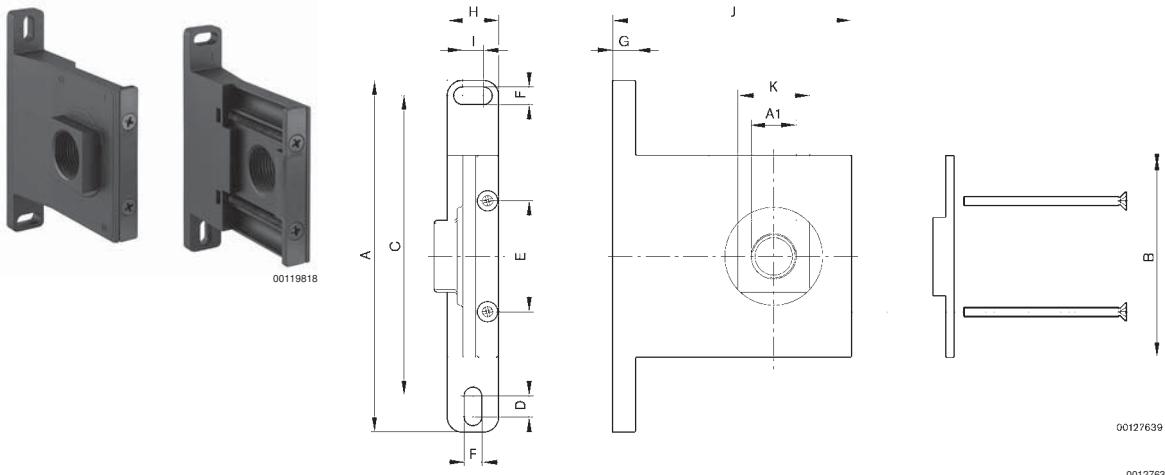
4 mounting screws and 2 O-rings supplied loose

Part No.	A1	A	B	C	D	E	F	G	H	I	J	K
R432002817	3/4 NPTF	6.299	4.016	5.315	0.394	2.246	0.335	0.394	1.182	0.394	5.0	1.615
R432002818	1 NPTF	6.299	4.016	5.315	0.394	2.246	0.335	0.394	1.182	0.394	5.0	1.615

Part No.	Weight [lbs]
R432002817	1.499
R432002818	1.499

Dimensions in inches.

\* Mounting flange kit, metric threads, series AS5-MBR-...-W05 (attaches to metric or inch unit)



material: die-cast zinc

4 mounting screws and 2 O-rings supplied loose

	A1	A	B	C	D	E	F	G	H	I	J	K
R412009366	G3/4	160	102	135	10	57	8.5	10	30	10	127	41
R412009367	G1	160	102	135	10	57	8.5	10	30	10	127	41

Dimensions in mm.

# Compressed air maintenance unit, series AS5

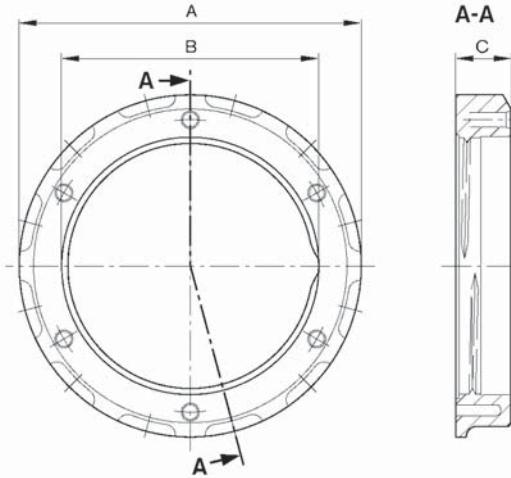
Accessories - Control panel Nut AS5-MBR-...-W06

AVVENTICS<sup>A</sup>

\* Panel nut, series AS5-MBR-...-W06 (for inch or metric versions)



00124065



00123311

	B	A	C									
1829234071	M50x1,5	64	7.5									

Dimensions in mm.

# Compressed air maintenance unit, series AS5

Accessories - Reservoirs

AVVENTICS<sup>A</sup>

## \* Reservoir, series AS5

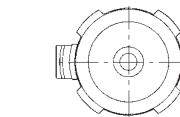
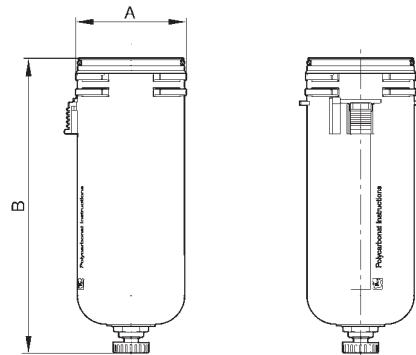
for filter, pre-filter, and coalescing filter AS5-CLS (for inch or metric versions)



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Condensate drain	Reservoir	Protective guard	Weight [lbs]	Part No.
semi-automatic, opened without pressure	Polycarbonate	Polyamide	0.419	R412009338
fully automatic, open without pressure	Polycarbonate	Polyamide	0.531	R412009339
fully automatic, closed without pressure	Polycarbonate	Polyamide	0.531	R412009340
semi-automatic, opened without pressure	Die-cast zinc	none	1.609	R412009344
fully automatic, open without pressure	Die-cast zinc	none	1.721	R412009345
fully automatic, closed without pressure	Die-cast zinc	none	1.721	R412009346

Standard PC reservoir with PA protective guard, semi-automatic, without pressure: open



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00119840

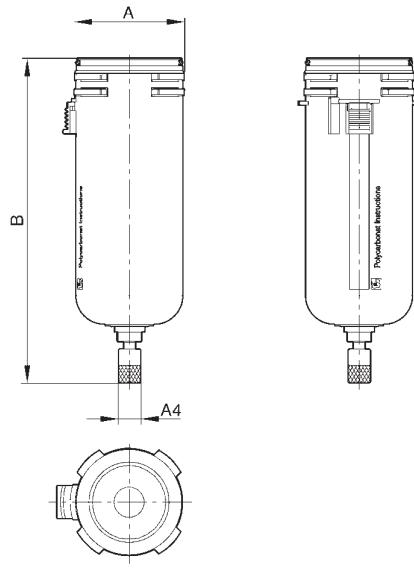
	A	B
R412009338	2.364	6.508

# Compressed air maintenance unit, series AS5

Accessories - Reservoirs

AVVENTICS<sup>®</sup>

Standard PC reservoir with PA protective guard, fully automatic AS5-CLS (for inch or metric versions)



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00119841

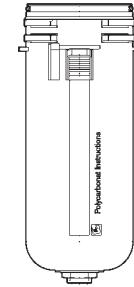
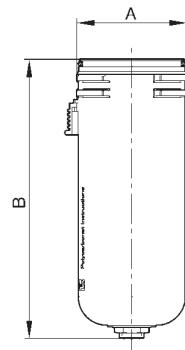
Part no.	Drain	A4	A	B
R412009339	Normally Open	G1/8	2.364	7.165
R412009340	Normally Closed	G1/8	2.364	7.165

Dimension in inches.

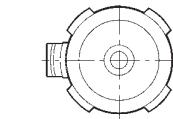
\* Reservoir for lubricator, series AS5-CBS (for inch or metric versions)



00119813



	A	B
R412009352	2.364	6.094



00119842

00119842

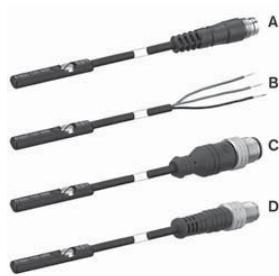
Port	Reservoir	Weight [lbs]	Part No.
	Polycarbonate	0.419	R412009352

Reservoir: Polycarbonate. lubricator

# Compressed air maintenance unit, series AS2, AS3, AS5

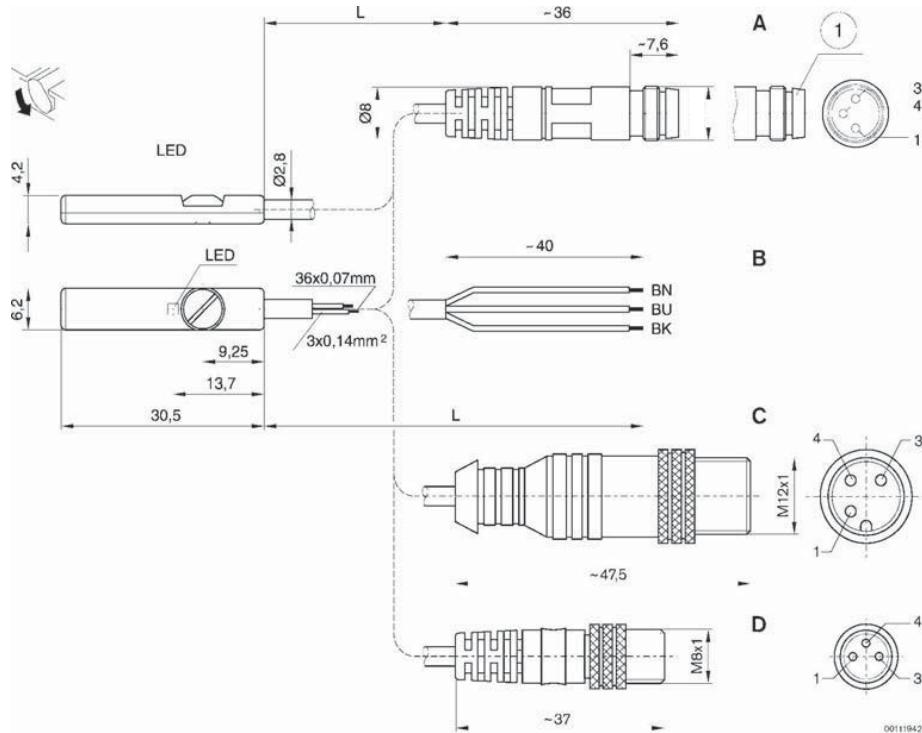
Accessories - Sensor Series ST6, reed type  
For lubricators with oil level sensing capability

**AVVENTICS**



Ambient temperature min./max.	-13°F / +158°F (-25°C / +70° C)
Protection class according to DIN EN 60529:2000	See table
Switching point precision	±0,1
Switching time on	0,5 ms
Switching time off	0,1 ms
LED	yellow
Shock resistance	30 g / 11 ms
Vibration resistance	10-55 Hz, 1 mm
materials:	
Sensor	polyamide
Cable	polyurethane
Operating voltage	10 ... 30VAC/DC
Switching capacity max.	3W / 5VA

Style	Cable length (m)	Connector	Switching current max. (A)	Switching frequency max.	Part no.
B	3	-	AC/DC 0.13	< 300 Hz	0830100629
B	5	-	AC/DC 0.13	< 300 Hz	0830100630
B	10	-	AC/DC 0.13	< 300 Hz	R412004575
A	0.3	M8	AC/DC 0.13	< 300 Hz	0830100488
C	0.3	M12 x 1	AC/DC 0.13	< 300 Hz	0830100432
D	0.3	M8 x 1	AC/DC 0.13	< 300 Hz	0830100434
D	0.5	M8 x 1	AC/DC 0.13	< 300 Hz	0830100436



BN=brown, BK=black, BU=blue

# Compressed air maintenance unit, series AS2, AS3, AS5

Accessories - Transition plate AS...-...-CNOMO / W07

**AVENTICS** 

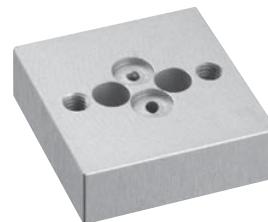
## ★ Transition plate AS...-...-CNOMO

Weight See table

Materials Aluminum

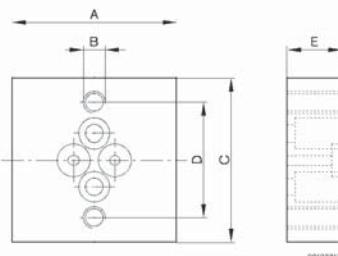
2 attachment bolts supplied loose

Use to adapt AS2, AS3 and AS5 pilot operated valves  
to accept CNOMO pilot valves.



## ► ★ Part no.

Weight [lbs]	Part no.
0.055	R412006360



A	B	C	D	E
1.182	M4	1.182	0.827	0.394

Dimensions in inches

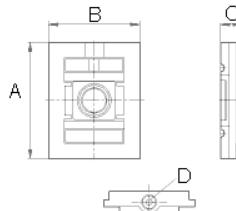
## Transition plate AS...-W07

Materials: Fiberglass-reinforced Polyamide

Use to connect Series AS components of  
unequal sizes in a modular way.



Part Number	Description
R412010121	Connects AS2 components to AS3
R412010122	Connects AS3 components to AS5



Part Number	A	B	C	D
R412010121	2.95 (75)	2.40 (61)	0.55 (14)	G1/8 BSPP
R412010122	4.02 (102)	3.15 (80)	0.71 (18)	G1/4 BSPP

Dimensions in inches (mm)

# Compressed air maintenance unit, series AS2, AS3, AS5

Accessories - Mechanical pressure switch, series PM1

Flange or pipe connection, for use with distributor blocks AS2, AS3 and AS5 - DIS

**AVVENTICS**



## Technical Data

Type	Diaphragm, spring loaded
Operating pressure range	see table
Protection against overpressure	80 bar (1160 psi)
Switching precision	± 3 % (based on center range range)
Ambient temperature range	-25 °C to +80 °C (-13 °F to +176 °F)
Medium	compressed air
Installation position	any
Weight	0,2 kg (0.4 lbs)
Materials	Al Perbunan
Switching element	Micro switch (change-over contact)
Max. switching voltage	250 V DC/AC 24 V for M12
Max. switching capacity, ohmic load 24/60/110/220 V AC	15/12/7/7 A
Max. switching capacity, inductive load 24/60/110/220 V AC	12/9/5/5 A
Max. switching capacity, ohmic load 24/60/110/220 V DC	10/1,5/0,65/0,25 A
Max. switching capacity, inductive load 24/60/110/220 V DC	8/1/0,4/0,15 A
Max. switching frequency	100 cycles/min.
Max. Shock resistance	15 g, closing time 11ms
Electrical connection	via standardized electrical connector
Number of pins	3 + earth ground
Protection class (DIN 40 050)	IP 65 (NEMA 4)



## Part number, flange connection (includes electrical connector DIN Form A)

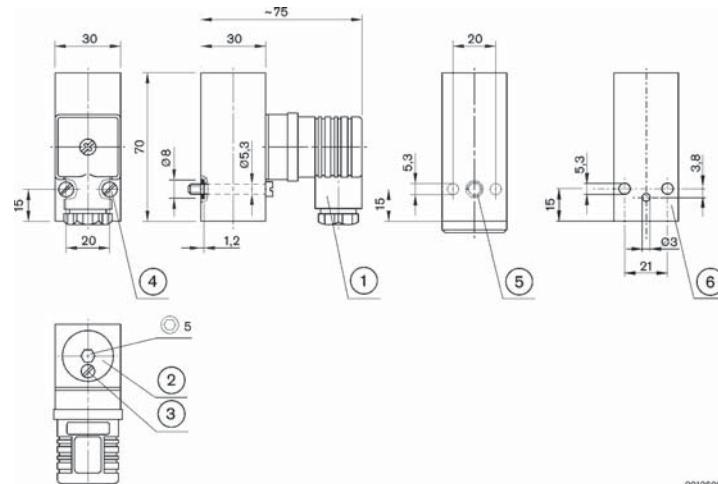
		Part no.
	Mechanical vacuum switch, pabs = -13 ... 0 psi Mechanical pressure switch, p1 = 2 ... 43 psi	0821100020 0821100021
	Mechanical pressure switch, p1 = 15 ... 232 psi	0821100023
	Seal kit for flange connected pressure switch	R961400021

## Part number, pipe connection G1/4 (includes electrical connector DIN Form A)

		Part no.
	Mechanical vacuum switch, pabs = -13 ... 0 psi Mechanical pressure switch, p1 = 2 ... 43 psi	0821100010 0821100011
	Mechanical pressure switch, p1 = 15 ... 232 psi	0821100013
	Accessory: Pipe nipple G1/4 for pipe-connected switch	1823391017

For pressure characteristic curves, see on-line catalog.

## flange connection 0821100020 / 0821100021 / 0821100023



- 1) Electrical connector
- 2) Adjusting screw
- 3) Adjustment protection
- 4) Cylinder screw M5
- 5) O-ring
- 6) Flange connection CNOMO 060580

00106001

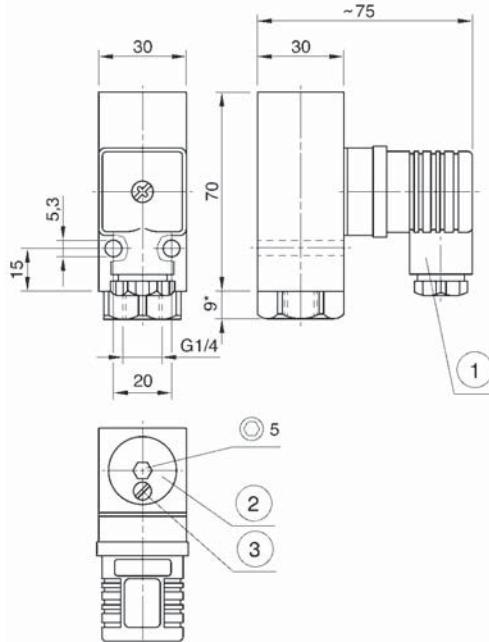
# **Compressed air maintenance unit, series AS2, AS3, AS5**

Accessories - Mechanical pressure switch, series PM1

Flange or pipe connection/Double nipple

**AVVENTICS**

pipe connection 0821100010 / 0821100011 / 0821100013



\* for 0821100011 = 15 mm

1) el. connector 2) adjusting screw 3) adjustment protection

✓) On connectors. —, adjustable.

## Double Nipple

**for connection to pressure switches**

(for PE5, PM1, etc.)



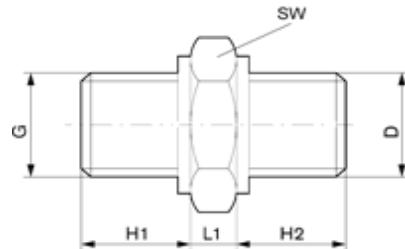
<b>Part Number</b>	<b>Thread (G) with o-ring</b>	<b>Thread (D)</b>	<b>SW</b>	<b>L1</b>	<b>H1</b>	<b>H2</b>
R412010016	1/4 BSPP	1/4 BSPP*	17	12	8.5	10.5
R412010018	1/4 BSPP	1/4 NPT**	17	12	8.5	13.5

---

Dimensions in mm.

\*PTFE seal ring included

\*\*No sealant applied on NPT version



# Compressed air maintenance unit, series AS2, AS3, AS5

Accessories - Contamination display AS2, AS3, AS5 / Repair Parts & Kits

**AVVENTICS**

## Contamination display AS2-AS3-AS5

Weight See table

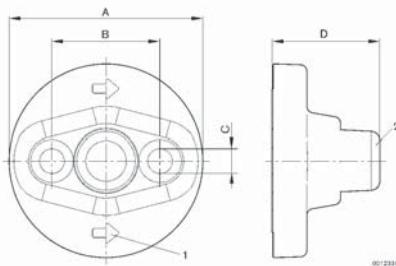
Materials Body POM  
Level indicator Polycarbonate

► Contamination display for microfilter AS2-FLC, AS3-FLC, and AS5-FLC  
2 mounting screws (M5x20; DIN 965) and 2 O-rings (4x1.5; DIN 3771) supplied loose



## Part no.

Weight (lbs)	Part no.
0.055	R412006363



1) Flow direction

2) Display: green =  $\Delta p < 0.35$  bar [5 psi] (5 psi); red =  $\Delta p \geq 0.35$  bar [5 psi] (85 psi)

A	B	C	D
1.694	0.945	0.217	0.945

Dimensions in inches

## Repair Parts and Kits

Replacement Filter Elements			Regulator Repair Kits	
Type	Element for units with manual drain or no drain (model code HO or -NON)	Element for units with automatic (float) drain (type -AO or AC)	Regulator Type	Repair Kit
AS2-FLS or AS2-FRE, 40 micron	R961400009	R961400009	AS2 Standard Regulator*	R961400030
AS2-FLS or AS2-FRE, 5 micron	1829207061	1829207061	AS2 Precision Regulator	R961400031
AS2-FLP	R961400025	1829207047	AS3 Standard Regulator*	R961400144
AS2-FLC	R961400027	R961400026	AS3 Precision Regulator	R961400145
AS2-FLA	1829207044	N/A	AS5 Std. Reg.* 010 = 15 PSI max output	R961403334
AS3-FLS or AS3-FRE, 40 micron	R961400142	R961400142	AS5 Std. Reg.* 020 = 29 PSI max output	R961403335
AS3-FLS or AS3-FRE, 5 micron	1829207068	1829207068	AS5 Std. Reg.* 040 = 58 PSI max output	R961403336
AS3-FLP	R961400140	R961400140	AS5 Std. Reg.* 080 = 116 PSI max output	R961403337
AS3-FLC	R961400141	R961400141	AS5 Std. Reg.* 100 = 145 PSI max output	R961403338
AS3-FLA	R961400143	N/A	AS5 Std. Reg.* 160 = 232 PSI max output	R961403339
AS5-FLS or AS5-FRE, 40 micron	R961403332	R961403332		
AS5-FLS or AS5-FRE, 5 micron	R961403328	R961403328		
AS5-FLP	R961403330	R961403330		
AS5-FLC	R961403331	R961403331		
AS5-FLA	R961403333	N/A		

\*Combination units, including filter-regulators, use a Standard regulator design.

# Compressed air maintenance unit, series AS2-AS3

Diaphragm-type dryer, Series AS...-ADD,  
1/4 - 1/2 BSPP and NPT

**AVVENTICS**



## Technical Data

Type	Diaphragm-type dryer
Working pressure	4 - 12.5 bar (58 - 181 psi)
Lowering pressure dew point	20 °C (68 °F)
Ambient/medium temperature	+2 °C to +50 °C (36 °F to +122 °F) *
Medium	Compressed air
Installation position	vertical



Materials (body)	Polyamide, seals Buna-N(NBR)
Thread bushing	Die-cast zinc
Cover	ABS
Reservoir	Aluminum

## Technical Remarks

- Note: air may not contain condensate
- purge air approx. 12% of nominal flow Qn
- Recommended pre-filtering [μm]: 5 / 0.01 μm

Symbol	Series	Port Size	Qn [l/min]	Reservoir	Note	Weight [kg]	Part No. BSPP	Part No. NPT
	AS2	3/8	50	Aluminum	Fig. 1	0.48	R412006078	R432031914
			100		Fig. 1	0.57	R412006079	R432031915
			150		Fig. 1	0.69	R412006080	R432031916
			200		Fig. 1	0.70	R412006081	R432031917
			300		Fig. 2	1.43	R412006082	R432031918
			400		Fig. 2	1.73	R412006083	R432031919
	AS3	1/2	400	Aluminum	Fig. 1	2.03	R412007078	R432031920
			500		Fig. 2	3.26	R412007079	R432031921
			660		Fig. 2	3.56	R412007080	R432031922
			950		Fig. 2	3.90	R412007081	R432031923

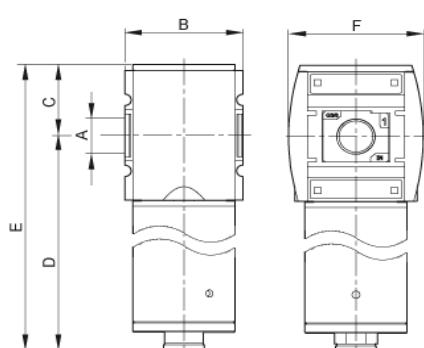


Fig. 1

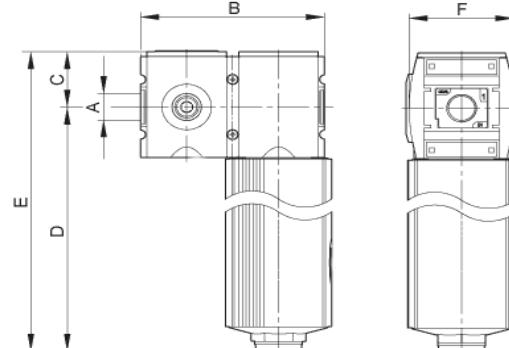


Fig. 2 (includes distribution block)

Part No.		A	B	C	D	E	F
R412006078	R432031914	3/8	52	34	167.9	201.9	59
R412006079	R432031915	3/8	52	34	217.9	251.9	59
R412006080	R432031916	3/8	52	34	257.9	291.9	59
R412006081	R432031917	3/8	52	34	317.9	351.9	59
R412006082	R432031918	3/8	104	34	412	446	59
R412006083	R432031919	3/8	104	34	472	506	59
R412007078	R432031920	1/2	63	43	478	521	74
R412007079	R432031921	1/2	126	43	464	507	74
R412007080	R432031922	1/2	126	43	515	558	74
R412007081	R432031923	1/2	126	43	584	627	74

# Compressed air maintenance unit, series AS2, AS3, AS5

Accessories - Vacuum type pressure gauge (for metric versions)

**AVVENTICS**

## \* Pressure gauges, Series PG1

ROB-SAS, for series AS2–AS5



00123444

Ambient temperature min./max.

+0°C / +50°C (+32°F /+122°F)

Medium

compressed air acc. to ISO 8573-1: 2001

Compressed air class

class 6-4-3

Version

Bourdon tube pressure gauge

Class

2,5

Materials:

Polyamide

Housing

Polytetrafluoroethylene (PTFE)

Seal

brass

Thread

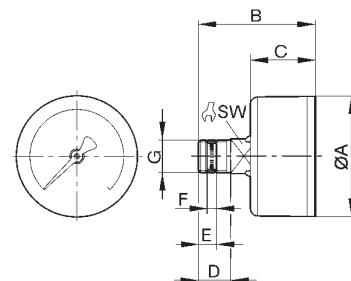
Material: male threaded connection = brass; seal = PTFE

For all AS2-AS5 regulators with G/BSPP threads, and for AS2-AS5 regulators with NPT threads manufactured before February 2009  
(date codes 581 to 981)

Symbol	Port	Display range		Application	Housing dia. inch [mm]	Weight lbs.[kg]	Part No.
		psi	[bar]				
	G 1/4	0 - 23 (0 - 1.6)	0 - 17 (0 - 1.2)	0 - 17 (0 - 1.2)	1.58" (40)	0.176 (0.08)	R412004407
	G 1/4	0 - 36 (0 - 2.5)	0 - 29 (0 - 2)	0 - 29 (0 - 2)	1.58" (40)	0.176 (0.08)	R412004408
	G 1/4	0 - 58 (0 - 4)	0 - 46 (0 - 3.2)	0 - 46 (0 - 3.2)	1.58" (40)	0.176 (0.08)	R412004409
	G 1/4	0 - 87 (0 - 6)	0 - 58 (0 - 4)	0 - 58 (0 - 4)	1.58" (40)	0.176 (0.08)	R412004410
	G 1/4	0 - 145 (0 - 10)	0 - 116 (0 - 8)	0 - 116 (0 - 8)	1.58" (40)	0.176 (0.08)	R412004411
	G 1/4	0 - 232 (0 - 16)	0 - 145 (0 - 10)	0 - 145 (0 - 10)	1.58" (40)	0.176 (0.08)	R412004412
	G 1/4	0 - 23 (0 - 1.6)	0 - 17 (0 - 1.2)	0 - 17 (0 - 1.2)	1.97" (50)	0.198 (0.09)	R412004413
	G 1/4	0 - 36 (0 - 2.5)	0 - 29 (0 - 2)	0 - 29 (0 - 2)	1.97" (50)	0.198 (0.09)	R412004414
	G 1/4	0 - 58 (0 - 4)	0 - 46 (0 - 3.2)	0 - 46 (0 - 3.2)	1.97" (50)	0.198 (0.09)	R412004415
	G 1/4	0 - 87 (0 - 6)	0 - 58 (0 - 4)	0 - 58 (0 - 4)	1.97" (50)	0.198 (0.09)	R412004416
	G 1/4	0 - 145 (0 - 10)	0 - 116 (0 - 8)	0 - 116 (0 - 8)	1.97" (50)	0.198 (0.09)	R412004417
	G 1/4	0 - 232 (0 - 16)	0 - 145 (0 - 10)	0 - 145 (0 - 10)	1.97" (50)	0.198 (0.09)	R412004418
	G 1/4	0 - 23 (0 - 1.6)	0 - 17 (0 - 1.2)	0 - 17 (0 - 1.2)	2.48" (63)	0.22 (0.1)	R412004419
	G 1/4	0 - 36 (0 - 2.5)	0 - 29 (0 - 2)	0 - 29 (0 - 2)	2.48" (63)	0.22 (0.1)	R412004420
	G 1/4	0 - 58 (0 - 4)	0 - 46 (0 - 3.2)	0 - 46 (0 - 3.2)	2.48" (63)	0.22 (0.1)	R412004421
	G 1/4	0 - 87 (0 - 6)	0 - 58 (0 - 4)	0 - 58 (0 - 4)	2.48" (63)	0.22 (0.1)	R412004422
	G 1/4	0 - 145 (0 - 10)	0 - 116 (0 - 8)	0 - 116 (0 - 8)	2.48" (63)	0.22 (0.1)	R412004423
	G 1/4	0 - 232 (0 - 16)	0 - 145 (0 - 10)	0 - 145 (0 - 10)	2.48" (63)	0.22 (0.1)	R412004424

Housing and Dial: black

Dual Scales: bar = white (outside); psi = gray (inside)



Ø (mm/inch)	ØA	B	C	D	E	F	G	SW (A/F) (mm)
40 / 1.58"	1.537	1.752	0.926	0.394	0.221	0.083	G 1/4	14 mm
50 / 1.97"	1.931	1.872	1.044	0.512	0.284	0.146	G 1/4	14 mm
63 / 2.48"	2.443	1.872	1.143	0.512	0.284	0.146	G 1/4	14 mm

Dimensions in inches.

# Compressed air maintenance unit, series AS2, AS3, AS5

Accessories - Vacuum type pressure gauge (for inch versions)

**AVVENTICS**

## \* Pressure gauges, Series PG1-Inch

ROB-SAS, for series MU1 (inch), NL1 (inch), AS2-AS5 (Inch)

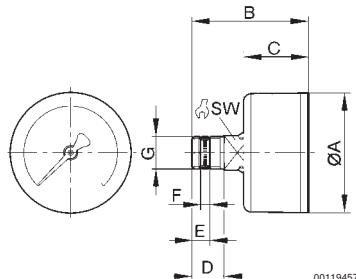


Ambient temperature min./max.	32 F / 122 F (+0°C / +50°C)
Medium	compressed air acc. to ISO 8573-1: 2001
Compressed air class	class 6-4-3
Version	Bourdon tube pressure gauge
Housing color	Outer Scale in PSI Inner Scale in Bar black housing black face
Class	white outer scale white part number grey inner scale
materials:	2.5 (Accurate to 2.5% of full scale pressure)
Housing	polyamide
Seal	PTFE (polytetrafluoroethylene)
Thread	brass

For AS2-AS5 regulators with NPT threads manufactured after January 2009, (date codes 982-992, 001-460), and all MU1/NL1 inch

	Version	Port	Display range [psi]	Application [psi]	Housing diameter [in]	Weight [lb]	Scale value [psi]	Part No.
ROB-SAS	ROB-SAS	1/8 NPT	0 - 40	0 - 30	1.58	0.2	1	R412010060
		1/8 NPT	0 - 60	0 - 45	1.58	0.2	2	R412010061
		1/8 NPT	0 - 100	0 - 75	1.58	0.2	2	R412010062
		1/8 NPT	0 - 160	0 - 120	1.58	0.2	5	R412010063
		1/8 NPT	0 - 200	0 - 150	1.58	0.2	5	R412010064
		1/8 NPT	0 - 300	0 - 225	1.58	0.2	10	R412010065
		1/4 NPT	0 - 40	0 - 30	1.97	0.2	1	R412010066
		1/4 NPT	0 - 60	0 - 45	1.97	0.2	2	R412010067
		1/4 NPT	0 - 100	0 - 75	1.97	0.2	2	R412010068
		1/4 NPT	0 - 160	0 - 120	1.97	0.2	5	R412010069
		1/4 NPT	0 - 200	0 - 150	1.97	0.2	5	R412010070
		1/4 NPT	0 - 300	0 - 225	1.97	0.2	10	R412010071
		1/4 NPT	0 - 40	0 - 30	2.48	0.22	1	R412010072
		1/4 NPT	0 - 60	0 - 45	2.48	0.22	2	R412010073
		1/4 NPT	0 - 100	0 - 75	2.48	0.22	2	R412010074
		1/4 NPT	0 - 160	0 - 120	2.48	0.22	5	R412010075
		1/4 NPT	0 - 200	0 - 150	2.48	0.22	5	R412010076
		1/4 NPT	0 - 300	0 - 225	2.48	0.22	10	R412010077

dimensions (in inches, unless otherwise noted)



<b>Ø</b>	<b>G</b>	<b>ØA</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>SW</b>								
40mm	1/8 NPT	1.58	1.75	0.93	0.39	14mm								
50mm	1/4 NPT	1.93	1.87	1.05	0.51	14mm								
63mm	1/4 NPT	2.48	1.90	1.15	0.51	14mm								

# Compressed air maintenance unit, series AS2, AS3, AS5

Technical information

AVVENTICS<sup>®</sup>

## Filters:

Filter types FLS, FLP and FLC include one of three types of condensate drain valves (type FLA includes no drain):

### Semi-automatic, opened without pressure

The semi-automatic drain valve opens, releasing the bowl contents, when the bowl pressure is reduced to a level of 7 PSI or below (i.e. when the supply pressure is closed off). The drain valve closes when the bowl pressure climbs above the 7 PSI level.\* The semi-automatic drain can be manually opened, manually closed off, or left in semi-automatic mode by appropriately positioning the drain operator at the bottom of the bowl. See Figure 1:

\*The above assumes external air pressure of 0 PSIG.

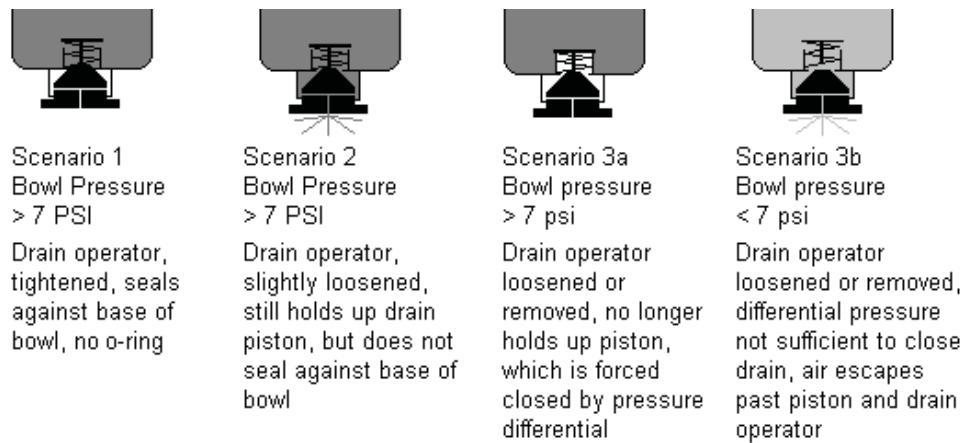
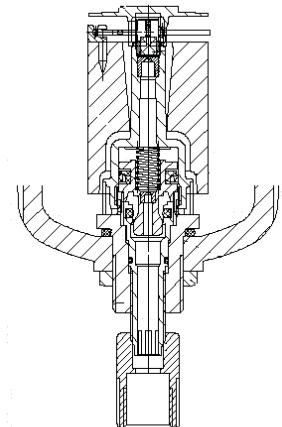


Figure 1: Semi automatic drain operation



### Fully-automatic, without pressure: open

The fully-automatic drain valve (without-pressure open) is, like the semi-automatic version, a normally-open drain which closes upon application of pressure to the bowl. The pressure required to keep this drain closed is 21 PSI. This version includes a float operator. When the float rises (moves away from the base of the bowl) whether due to condensate level rising or due to the orientation or movement of the bowl, the drain opens.

This version can be manually opened by turning the knurled operator at the bottom of the bowl.

# Compressed air maintenance unit, series AS2, AS3, AS5

Technical information

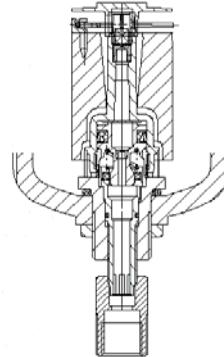
AVVENTICS<sup>®</sup>

## Filters (cont.):

### Fully-automatic, without pressure: closed

Similar to the fully-automatic, without pressure: open version, this drain operates using a float. When the condensate reaches a predetermined level, the drain opens. As the condensate drains and the level lowers, the drain closes. The status of this drain, however, does not depend on bowl pressure (i.e. it does not open when bowl pressure is relieved). Therefore, it can be used in applications requiring very low bowl pressure.

This version can also be manually opened by turning the knurled drain operator at the bottom of the bowl.



## Regulators:

### Reverse flow functionality

All Series AS2 and AS3 regulators (and combination filter-regulators) include a reverse flow function. When upstream pressure reaches zero PSIG, downstream pressure is vented through the supply port of the regulator at a full flow rate, rather than at a reduced rate via the relief port under the adjustment knob. No external check valve is required.

Series AS5 regulators do not currently include this functionality.

### Application example (see Figure 2):

Air savings and decreased cycle time through use of differential pressure. Contact Rexroth for details.)

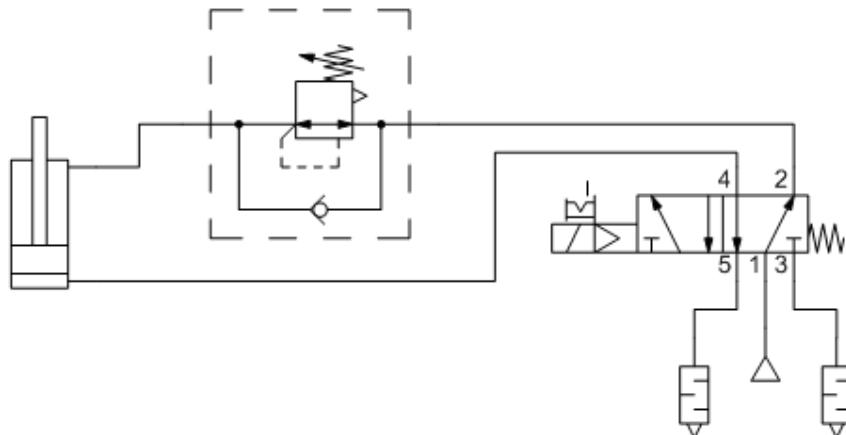


Figure 2: Differential pressure pneumatic circuit schematic

### Special considerations for AS5 regulators

To provide improved hysteresis and, therefore, more stable control of pressure, all Series AS5 regulators (and combination filter-regulators) are equipped with an internal precision pilot regulator. The design does require that the regulator bleed off a small amount of air (approximately 1 liter per minute) to atmosphere. Depending on the application, the bleed rate may vary during operation.

# NOTICE TO PRODUCT USERS

## 1. WARNING: FLUID MEDIA

AVENTICS pneumatic devices are designed and tested for use with filtered, clean, dry, chemical free air at pressures and temperatures within the specified limits of the device. For use with media other than air or for human life support systems, AVENTICS must be consulted. Hydraulic cylinders are designed for operation with filtered, clean, petroleum based hydraulic fluid; operation using fire-resistant or other special types of fluids may require special packing and seals. Consult the factory.

## 2. WARNING: MATERIAL COMPATIBILITY

Damage to product seals or other parts caused by the use of non-compatible lubricants, oil additives or synthetic lubricants in the air system compressor or line lubrication devices voids the AVENTICS warranty and can result in product failure or other malfunction. See lubrication recommendations below.

**AIR LINE LUBRICANTS!** In service higher than 18 cycles per minute or with continuous flow of air through the device, an air line lubricator is recommended.\* (Do not use line lubrication with vacuum products.) However, the lubricator must be maintained since the oil will wash out the grease, and lack of lubrication will greatly shorten the life expectancy. The oils used in the lubricator must be compatible with the elastomers in the device. The elastomers are normally BUNA-N, NEOPRENE, VITON, SILICONE and HYTREL. AVENTICS recommends the use of only petroleum based oils without synthetic additives, and with an aniline point between 180° F and 210° F.

**COMPRESSOR LUBRICANTS!** All compressors (with the exception of special "oil free" units) pass oil mist or vapor from the internal crankcase lubricating system through to the compressed air. Since even small amounts of non-compatible lubricants can cause severe seal deterioration (which could result in component and system failure) special care should be taken in selecting compatible compressor lubricants.

## 3. WARNING: INSTALLATION AND MOUNTING

The user of these devices must conform to all applicable electrical, mechanical, piping and other codes in the installation, operation or repair of these devices.

**INSTALLATION !** Do not attempt to install, operate or repair these devices without proper training in the technique of working on pneumatic or hydraulic systems and devices, unless under trained supervision.

Compressed air and hydraulic systems contain high levels of stored energy. Do not attempt to connect, disconnect or repair these products when a system is under pressure. Always exhaust or drain the pressure from a system before performing any service work. Failure to do so can result in serious personal injury.

**MOUNTING!** Devices should be mounted and positioned in such a manner that they cannot be accidentally operated.

## 4. WARNING: APPLICATION AND USE OF PRODUCTS

The possibility does exist for any device or accessory to fail to operate properly through misuse, wear or malfunction. The user must consider these possibilities and should provide appropriate safe guards in the application or system design to prevent personal injury or property damage in the event of a malfunction.

## 5. WARNING: CONVERSION, MAINTENANCE AND REPAIR

When a device is disassembled for conversion to a different configuration, maintenance or repair, the device must be tested for leakage and proper operation after being reassembled and prior to installation.

**MAINTENANCE AND REPAIR!** Maintenance periods should be scheduled in accordance with frequency of use and working conditions. All AVENTICS products should provide a minimum of 1,000,000 cycles of maintenance free service when used and lubricated as recommended. However, these products should be visually inspected for defects and given an "in system" operating performance and leakage test once a year. Where devices require a major repair as a result of the one million cycles, one year, or routine inspection, the device must be disassembled, cleaned, inspected, parts replaced as required, rebuilt and tested for leakage and proper operation prior to installation. See individual catalogs for specific cycle life estimates.

## 6. PRODUCT CHANGES

Product changes including specifications, features, designs and availability are subject to change at any time without notice. For critical dimensions or specifications, contact factory.

\*Many AVENTICS pneumatic valves and cylinders can operate with or without air line lubrication; see individual sales catalogs for details.

-Refer to the appropriate service manual for parts and service information, most are available for download from [www.aventics.com/us](http://www.aventics.com/us)

## LIMITATIONS OF WARRANTIES & REMEDIES

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