



EQUIPMENT TECHNICAL DATA SHEETS

FILTER REGULATOR

PNEUMATIC VALVES & KROFTA AIR DISSOLVING TUBE (ADT) AIR FEED AIR FILTER / REGULATOR:

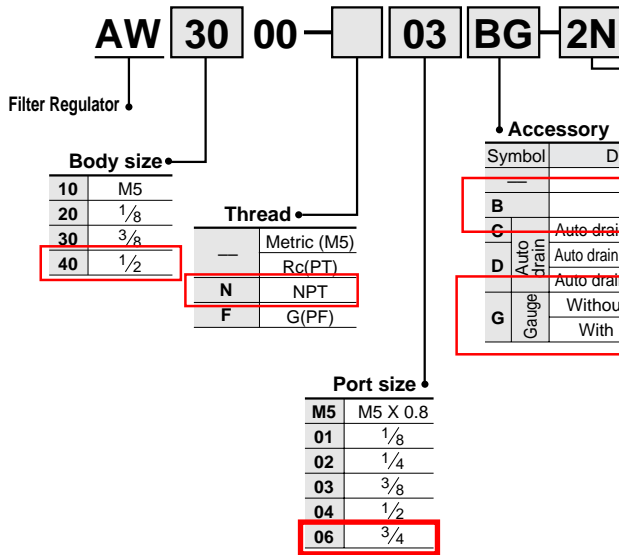
SMC Pneumatics – Model#AW40-N03BDG-6Z, 3/8" NPT, w/ bracket, auto-drain valve, gauge, and nylon bowl. 0-160 psi

SLUDGE TRANSFER PUMP AIR FEED AIR FILTER / REGULATOR:

SMC Pneumatics – Model#AW40-N06BDG-6Z, 3/4" NPT, w/ bracket, auto-drain valve, gauge, and nylon bowl. 0-160 psi

AW1000 to 4000

How to Order



Accessory

Symbol	Description	Applicable model
B	Bracket	AW1000 to AW4000-06
C	Auto drain float style (N.C.)	AW3000 to AW4000-06
D	Auto drain pressure differential	AW1000/2000
G	Auto drain float style (N.O.)	AW3000 to AW4000-06
G	Without limit indicator	AW1000
	With limit indicator	AW2000 to AW4000-06

Option

1 ⁽¹⁾	Set at 0.02 to 0.2MPa
2	Metal bowl
6	Nylon bowl
8	Metal bowl with level gauge (AW3000/4000 only)
C	Bowl guard (AW2000 only)
J ⁽²⁾	Drain guide (AW3000/4000 only)
N	Non relieving
R	Flow direction: Right to left
W	With drain cock and barb fittings (AW 3000/4000 only) (For nylon ø6, ø4)

*If more than one symbol is required to be listed when ordering, list in the alphabetical order. (Ex. 2NR)



Note 1) Only regulating spring is different from the standard model.
Note 2) Without valve mechanism

Option Combinations

☉Combinable ☐Impossible ●Depends on the model

	Description	Symbol	Auto drain			Option							Applicable Filter Regulator					
			D	D	C	1	2	6	8	C	J	N	R	W	AW1000	AW2000	AW3000	AW4000
Accessory	Auto drain pressure differential style	D				☉	☉	☉		●		☉	☉		☉	☉		☉
	Auto drain float style (N.O.)	D				☉	☉	☉				☉	☉				☉	☉
	Auto drain float style (N.C.)	C				☉	☉	☉	☉			☉	☉				☉	☉
Option	0.02 to 0.2MPa	-1	☉	☉	☉		☉	☉	●	●	●	☉	☉	●	☉	☉	☉	☉
	Metal bowl	-2	☉	☉	☉						●	☉	☉		☉	☉	☉	☉
	Nylon bowl	-6	☉	☉	☉					●	●	☉	☉	●	☉	☉	☉	☉
	Metal bowl with level gauge	-8		☉	☉						☉	☉					☉	☉
	With bowl guard	-C	☉			☉		☉				☉	☉		☉			
	Drain guide (Bore size: 1/4)	-J				☉	☉	☉	☉			☉	☉				☉	☉
	Non relieving	-N	☉	☉	☉	☉	☉	☉	☉	●	●	●	☉	●	☉	☉	☉	☉
	Flow direction: Right to left	-R	☉	☉	☉	☉	☉	☉	☉	●	●	●	☉	●	☉	☉	☉	☉
	One-touch drain cock with barb fittings	-W				☉		☉				☉	☉				☉	☉

⚠ Precautions

Be sure to read before handling. Refer to p.0-26 and 0-27 for Safety Instructions and common precautions on the products mentioned in this catalog, and refer to p.1.0-1 and 1.0-2 for precautions on every series.

Selection

⚠ Warning

- ① The residual secondary pressure cannot be released by releasing the supply pressure. To release the residual pressure, use a filter regulator designed for such use.

Installation and Adjustment

⚠ Warning

- ① Set up the regulator while verifying the pressure that is indicated on the supply and the secondary pressure gauges. Turning the handle excessively could damage the internal parts.
- ① The pressure gauge that is provided with the product for setting a pressure between 0.02 to 0.2MPa is the 0.2MPa style. To prevent damage to the pressure gauge, make sure that pressure in excess of 0.2MPa is not applied.

- ③ The adjustment handle must be operated manually. Using a tool to turn the handle could lead to damage.

⚠ Caution

- ① Release the lock to adjust the pressure. After the adjustment, engage the lock. Failure to observe this procedure could damage the handle or cause the secondary pressure to fluctuate.
- On the AW1000 and AW2000 styles, pull the adjustment handle to release the lock and push the handle to engage the lock. If it does not lock easily, turn the handle slightly clockwise or counterclockwise before pushing it.
 - On the AW3000 and AW4000 styles, pull the adjustment handle to release the lock. (An orange colored line is provided at the bottom of the adjustment handle for visual checking.) Push the adjustment handle to engage the lock. If it does not lock easily, turn the handle slightly clockwise or counterclockwise; then, push it until the orange colored line is no longer visible.







Orange mark

Maintenance Inspection

⚠ Warning

- ① Replace the filter element within 2 years of operation or before the pressure drop reaches 0.1MPa. Failure to observe this precaution could damage the filter element.

Modular Type Filter Regulators Series AW

Filter Regulator Series AW	Model	Port size	Options
 <p>Pages 366 through to 377</p>	AW10	M5 x 0.8	
	AW20	1/8, 1/4	
	AW30	1/4, 3/8	
	AW40	1/4, 3/8, 1/2	
	AW40-06	3/4	
	AW60	3/4, 1	
  <p>Pages 366 through to 377</p> 	AW20K	1/8, 1/4	Bracket Float type auto drain Square embedded type pressure gauge (except the AW10) Round type pressure gauge Digital pressure switch (except the AW10) Panel mount
	AW30K	1/4, 3/8	
	AW40K	1/4, 3/8, 1/2	
	AW40K-06	3/4	
	AW60K	3/4, 1	
  <p>Pages 378 through to 387</p> 	AWM20	1/8, 1/4	
	AWM30	1/4, 3/8	
	AWM40	1/4, 3/8, 1/2	
  <p>Pages 378 through to 387</p> 	AWD20	1/8, 1/4	
	AWD30	1/4, 3/8	
	AWD40	1/4, 3/8, 1/2	

- AC
- AF□
- AR
- AL
- AW□
- A□G
- AV
- AF800
- AF900

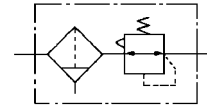
Filter Regulator

AW10 to AW60

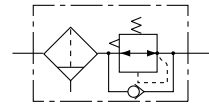
Filter Regulator with Backflow Function

AW20K to AW60K

JIS Symbol
Filter Regulator



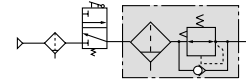
Filter Regulator with
Backflow Function



- Integrated filter and regulator units save space and require less piping.
- With the backflow function it incorporates a mechanism to exhaust the air pressure in the outlet side reliably and quickly.

Example)

When the air supply is cut off and releasing the inlet pressure to the atmosphere, the residual pressure release of the outlet side can be ensured for a safety purpose.



How to Order

AW **30** **K** - **03** **BE** - **1N**

① ② ③ ④ ⑤ ⑥

Made to Order

Refer to pages 374 through to 377 for details.

- Option/Semi-standard: Select one each for a to i.
 - Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.
- Example) AW30K-03BE-1N

	Symbol	Description	① Body size					
			10	20	30	40	60	
② With backflow function	Nil	Without backflow function	●	●	●	●	●	
	K ^{Note 1)}	With backflow function	—	●	●	●	●	
③ Thread type	Nil	Metric thread (M5)	●	—	—	—	—	
		Rc	—	●	●	●	●	
	N ^{Note 2)}	NPT	—	●	●	●	●	
	F ^{Note 3)}	G	—	●	●	●	●	
④ Port size	M5	M5	●	—	—	—	—	
	01	1/8	—	●	—	—	—	
	02	1/4	—	●	●	—	—	
	03	3/8	—	—	●	●	—	
	04	1/2	—	—	—	●	—	
	06	3/4	—	—	—	●	●	
	10	1	—	—	—	—	●	
⑤ Option	a Mounting	Nil	Without mounting option	●	●	●	●	●
		B ^{Note 5)}	With bracket	●	●	●	●	●
		H	With set nut (for panel fitting)	●	●	●	●	—
	b Float type auto drain	Nil	Without auto drain	●	●	●	●	●
		C	Float type auto drain (N.C.)	●	●	●	●	●
		D	Float type auto drain (N.O.)	—	—	●	●	●
	c Pressure gauge	Nil	Without pressure gauge	●	●	●	●	●
		E	Square embedded type pressure gauge (with limit indicator)	—	●	●	●	●
		G	Round type pressure gauge (without limit indicator)	●	—	—	—	—
			Round type pressure gauge (with limit indicator)	—	●	●	●	●
M		Round type pressure gauge (with color zone)	—	●	●	●	●	
Digital pressure switch		E1 ^{Note 6)}	Output: NPN output / Electrical entry: Wiring bottom entry	—	●	●	●	●
		E2 ^{Note 6)}	Output: NPN output / Electrical entry: Wiring top entry	—	●	●	●	●
	E3 ^{Note 6)}	Output: PNP output / Electrical entry: Wiring bottom entry	—	●	●	●	●	
	E4 ^{Note 6)}	Output: PNP output / Electrical entry: Wiring top entry	—	●	●	●	●	
⑥ Semi-standard	d Set pressure	Nil ^{Note 7)}	0.05 to 0.85 MPa setting	●	●	●	●	●
		1 ^{Note 8)}	0.02 to 0.2 MPa setting	●	●	●	●	●
	e Bowl ^{Note 9)}	Nil	Polycarbonate bowl	●	●	●	●	●
		2	Metal bowl	●	●	●	●	●
		6	Nylon bowl	●	●	●	●	●
8		Metal bowl with level gauge	—	—	●	●	●	
C		With bowl guard	—	●	—	—	—	
6C	Nylon bowl with bowl guard	—	●	—	—	—		

Filter Regulator *Series AW10 to AW60*

Filter Regulator with Backflow Function *Series AW20K to AW60K*



AW20, AW20K AW40, AW40K

	Symbol	Description	① Body size							
			10	20	30	40	60			
6 Semi-standard	f Drain port <small>Note 10)</small>	Nil	With drain cock		●	●	●	●	●	
		J <small>Note 11)</small>	Drain guide 1/8		—	●	—	—	—	
			Drain guide 1/4		—	—	●	●	●	
		W <small>Note 12)</small>	Drain cock with barb fitting: For ø6 x ø4 nylon tube		—	—	●	●	●	
	+									
	g Exhaust mechanism	Nil	Relieving type		●	●	●	●	●	
		N	Non-relieving type		●	●	●	●	●	
	+									
	h Flow direction	Nil	Flow direction: Left to right		●	●	●	●	●	
		R	Flow direction: Right to left		●	●	●	●	●	
+										
i Pressure unit	Nil	Name plate, caution plate for bowl, and pressure gauge in imperial units: MPa		●	●	●	●	●		
	Z <small>Note 13)</small>	Name plate, caution plate for bowl, and pressure gauge in imperial units: psi, °F		○ <small>Note 15)</small>	○ <small>Note 15)</small>	○ <small>Note 15)</small>	○ <small>Note 15)</small>	○ <small>Note 15)</small>		
	ZA <small>Note 14)</small>	Digital pressure switch: With unit conversion function		—	△ <small>Note 16)</small>	△ <small>Note 16)</small>	△ <small>Note 16)</small>	△ <small>Note 16)</small>		

- Note 1) The AW10 type comes with a backflow function as a standard feature. (K is not available.) When using the AW10 type as w/ backflow function, backflow may not occur with the set pressure 0.15 MPa or less. Please set the inlet pressure to at least 0.05 MPa higher than the set pressure.
- Note 2) Drain guide is NPT 1/8 (applicable to the AW20(K)) and NPT 1/4 (applicable to the AW30(K) to AW60(K)). The auto drain port comes with ø3/8" one-touch fitting (applicable to the AW30(K) to AW60(K)).
- Note 3) Drain guide is G 1/8 (applicable to the AW20(K)) and G 1/4 (applicable to the AW30(K) to AW60(K)).
- Note 4) Option B, G, H, M are not assembled and supplied loose at the time of shipment.
- Note 5) Assembly of a bracket and set nuts (AW10, AW20(K) to AW40(K))
Including 2 mounting screws for the AW60(K)
- Note 6) When choosing with H (panel mount), the installation space for lead wires will not be secured. In this case, select "wiring top entry" for the electrical entry.
- Note 7) Only the AW10 has a pressure setting of 0.05 to 0.7 MPa.
- Note 8) The only difference from the standard specifications is the adjusting spring for the regulator. It does not restrict the setting of 0.2 MPa or more. When the pressure gauge is attached, a 0.2 MPa pressure gauge will be fitted.
- Note 9) Refer to Chemical Data on page 287 when selecting a case material.
- Note 10) Float type auto drain: The combination of C and D is not possible.
- Note 11) Without a valve function
- Note 12) Metal bowl: The combination of 2 and 8 is not possible.
- Note 13) For thread type: M5 and NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.) The digital pressure switch will be equipped with the unit conversion function, setting to psi initially.
- Note 14) For options: E1, E2, E3, E4. This product is for overseas use only according to the new Measurement Law. (The SI unit is provided for use in Japan.)
- Note 15) ○: For thread type: M5 and NPT only
- Note 16) △: Select with options: E1, E2, E3, E4.

Standard Specifications

Model	AW10	AW20(K)	AW30(K)	AW40(K)	AW40(K)-06	AW60(K)
Port size	M5 x 0.8	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4	3/4, 1
Pressure gauge port size <small>Note 1)</small>	1/16 <small>Note 2)</small>	1/8		1/4		
Fluid	Air					
Ambient and fluid temperature <small>Note 3)</small>	-5 to 60°C (with no freezing)					
Proof pressure	1.5 MPa					
Maximum operating pressure	1.0 MPa					
Set pressure range	0.05 to 0.7 MPa	0.05 to 0.85 MPa				
Relief pressure <small>Note 4)</small>	Set pressure + 0.05 MPa [at relief flow rate of 0.1 ℓ/min (ANR)]					
Nominal filtration rating	5 μm					
Drain capacity (cm³)	2.5	8	25	45	45	45
Bowl material	Polycarbonate					
Bowl guard	—	Semi-standard	Standard			
Construction	Relieving type					
Mass (kg)	0.09	0.32	0.40	0.72	0.75	2.00

- Note 1) Pressure gauge connection threads are not available for F.R.L. unit with a square embedded type pressure gauge (AW20(K) to AW60(K)).
- Note 2) Use a bushing (part no:131368) when connecting the R1/8 pressure gauge to the Rc 1/16.
- Note 3) -5 to 50°C for the products with the digital pressure switch
- Note 4) Not applicable to the AW10.

- AC
- AF□
- AR
- AL
- AW□
- A□G
- AV
- AF800
- AF900

Series AW10 to AW60

Series AW20K to AW60K

Options/Part No.

Optional specifications			Model						
			AW10(K)	AW20(K)	AW30(K)	AW40(K)	AW40(K)-06	AW60(K)	
Bracket assembly ^{Note 1)}			AR10P-270AS	AW20P-270AS	AR30P-270AS	AR40P-270AS		AW60P-270AS ^{Note 6)}	
Set nut			AR10P-260S	AR20P-260S	AR30P-260S	AR40P-260S		— ^{Note 7)}	
Pressure gauge	Round type ^{Note 2)}	Standard	G27-10-R1	G36-10-□01		G46-10-□02			
		0.02 to 0.2 MPa setting	G27-10-R1 ^{Note 3)}	G36-2-□01		G46-2-□02			
	Round type ^{Note 2)} (with color zone)	Standard	—	G36-10-□01-L		G46-10-□02-L			
		0.02 to 0.2 MPa setting	—	G36-2-□01-L		G46-2-□02-L			
	Square embedded type ^{Note 4)}	Standard	—	GC3-10AS [GC3P-010AS (Pressure gauge cover only)]					
		0.02 to 0.2 MPa setting	—	GC3-2AS [GC3P-010AS (Pressure gauge cover only)]					
Digital pressure switch ^{Note 5)}	NPN output / Wiring bottom entry		—	ISE35-N-25-MLA [ISE35-N-25-M (Switch body only)]					
	NPN output / Wiring top entry			ISE35-R-25-MLA [ISE35-R-25-M (Switch body only)]					
	PNP output / Wiring bottom entry			ISE35-N-65-MLA [ISE35-N-65-M (Switch body only)]					
	PNP output / Wiring top entry			ISE35-R-65-MLA [ISE35-R-65-M (Switch body only)]					
Float type auto drain ^{Note 8) Note 9)}			N.C.	AD17	AD27	AD37	AD47		
			N.O.	—	—	AD38	AD48		

Semi-standard/Bowl Assembly Part No.

Semi-standard specifications						Model					
Bowl material	^{Note 8) Note 9)} Float type auto drain		^{Note 9)} With drain guide	With barb fitting	With bowl guard	AW10(K)	AW20(K)	AW30(K)	AW40(K)	AW40(K)-06	AW60(K)
	N.C.	N.O.									
Polycarbonate	—	—	—	—	●	—	C2SF-C	—	—		
	●	—	—	—	●	—	AD27-C	—	—		
	—	—	●	—	—	—	C2SF-J	C3SF-J	C4SF-J		
	—	—	●	●	—	—	—	C3SF-W	C4SF-W		
	—	—	●	—	●	—	C2SF-CJ	—	—		
Nylon	—	—	—	—	—	C1SF-6	C2SF-6	C3SF-6	C4SF-6		
	—	—	—	—	●	—	C2SF-6C	—	—		
	●	—	—	—	—	AD17-6	AD27-6	AD37-6	AD47-6		
	—	●	—	—	—	—	—	AD38-6	AD48-6		
	●	—	—	—	●	—	AD27-6C	—	—		
	—	—	●	—	—	—	C2SF-6J	C3SF-6J	C4SF-6J		
	—	—	—	●	—	—	—	C3SF-6W	C4SF-6W		
	—	—	●	—	●	—	C2SF-6CJ	—	—		
Metal	—	—	—	—	—	C1SF-2	C2SF-2	C3SF-2	C4SF-2		
	●	—	—	—	—	AD17-2	AD27-2	AD37-2	AD47-2		
	—	●	—	—	—	—	—	AD38-2	AD48-2		
	—	—	●	—	—	—	C2SF-2J	C3SF-2J	C4SF-2J		
Metal bowl with level gauge	—	—	—	—	—	—	—	C3LF-8	C4LF-8		
	●	—	—	—	—	—	—	AD37-8	AD47-8		
	—	●	—	—	—	—	—	AD38-8	AD48-8		
	—	—	●	—	—	—	—	C3LF-8J	C4LF-8J		

Note 1) Assembly of a bracket and set nuts

Note 2) □ in part numbers for a round pressure gauge indicates a type of connection thread. No indication is necessary for R; however, indicate N for NPT. Please contact SMC regarding the connection thread NPT and pressure gauge supply for psi unit specifications.

Note 3) Standard pressure gauge

Note 4) Including one O-ring and 2 mounting screws. []: Pressure gauge cover only

Note 5) Lead wire with connector (2 m), adapter, lock pin, O-ring (1 pc.), mounting screw (2 pcs.) are attached. []: Switch body only. Also, regarding how to order the digital pressure switch, please refer to page 388. A pressure switch adapter assembly (AW60P-310AS) will be additionally required for the AW60(K) only. Use the attached mounting screw (M3 x 0.5 x 14) for mounting. The mounting screw (M3 x 0.5 x 7) attached to the digital pressure switch assembly will not be required.

Note 6) Assembly of a bracket and 2 mounting screws

Note 7) Please consult SMC regarding the set nuts for the AW60(K).

Note 8) Minimum operating pressure: N.O. type—0.1 MPa; N.C. type—0.1 MPa (AD27) and 0.15 MPa (AD37/47). Please contact SMC for psi and °F unit specifications.

Note 9) Please consult SMC for details on drain piping to fit NPT or G port sizes.

Note) • Bowl O-ring is included for the AW20(K) to AW60(K).

• Bowl assembly for the AW30(K) to AW60(K) models comes with a bowl guard (steel band material). (except when the bowl material is metal)



Series AW10 to AW60 Series AW20K to AW60K Specific Product Precautions

Be sure to read before handling. Refer to front matters 42 and 43 for Safety Instructions and pages 287 to 291 for F.R.L. Precautions.

Selection

Warning

1. Residual pressure disposal (outlet pressure removal) is not possible for the AW20 to AW60 even though the inlet pressure is exhausted. When the residual pressure disposal is performed, use the filter regulator with backflow function (AW20K to AW60K).

Maintenance

Warning

1. Replace the element every 2 years or when the pressure drop becomes 0.1 MPa, whichever comes first, to prevent damage to the element.

Mounting and Adjustment

Warning

1. Set the regulator while verifying the displayed values of the inlet and outlet pressure gauges. Turning the regulator knob excessively can cause damage to the internal parts.
2. The pressure gauge included with regulators for 0.02 to 0.2 MPa setting is for up to 0.2 MPa use only (except the AW10). Exceeding 0.2 MPa of pressure can damage the gauge.
3. Do not use tools on the pressure regulator knob as this may cause damage. It must be operated manually.

Caution

1. Be sure to unlock the knob before adjusting the pressure and lock it after setting the pressure. Failure to follow this procedure can cause damage to the knob and the outlet pressure may fluctuate.
 - Pull the pressure regulator knob to unlock. (You can visually verify this with the "orange mark" that appears in the gap.)
 - Push the pressure regulator knob to lock. When the knob is not easily locked, turn it left and right a little and then push it (when the knob is locked, the "orange mark", i.e., the gap will disappear).



2. A knob cover is available to prevent careless operation of the knob. Refer to page 389 for details.

AC

AF□

AR

AL

AW□

A□G

AV

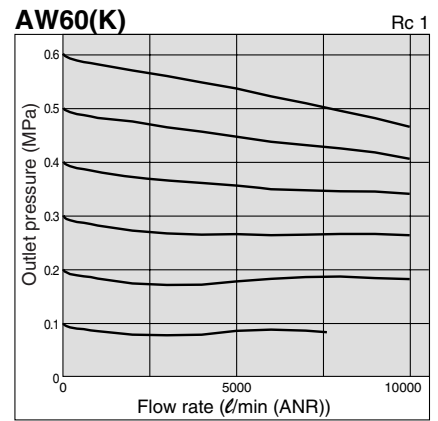
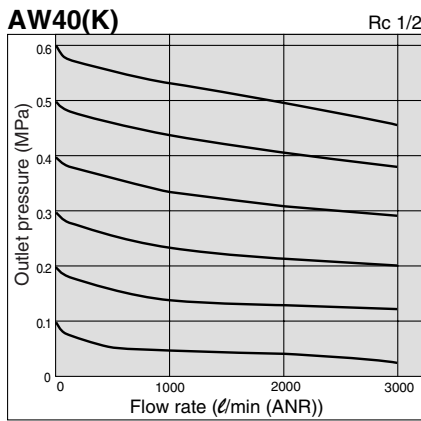
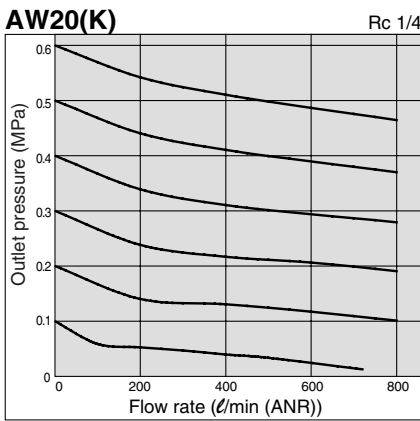
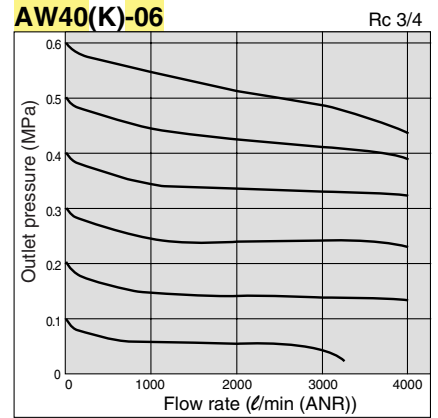
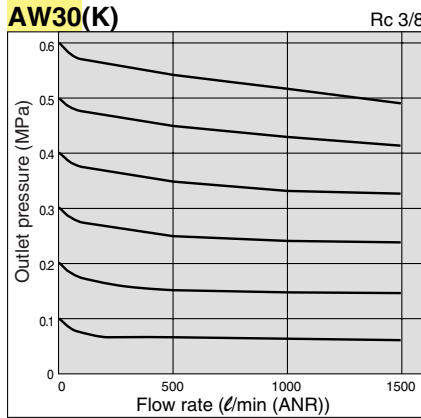
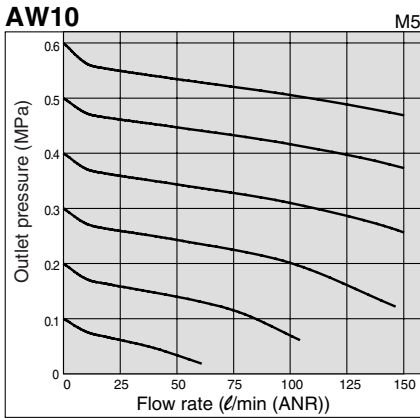
AF800
AF900

Series AW10 to AW60

Series AW20K to AW60K

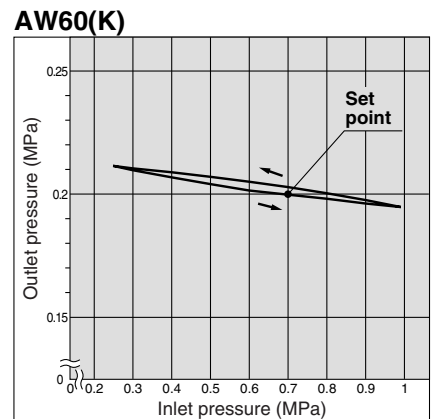
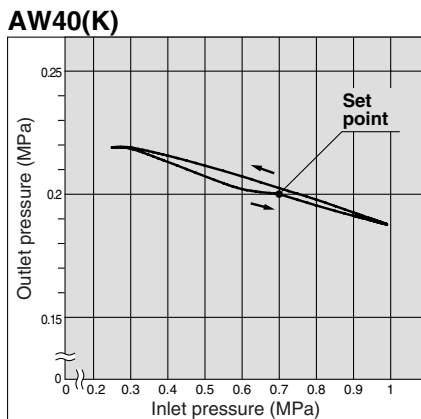
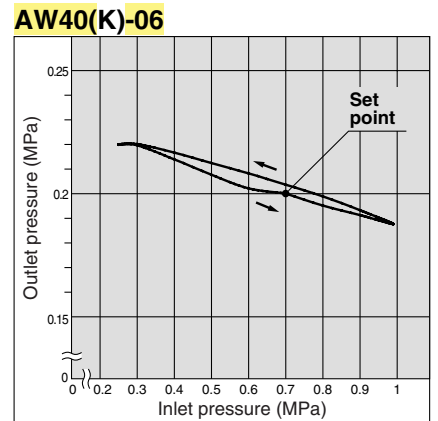
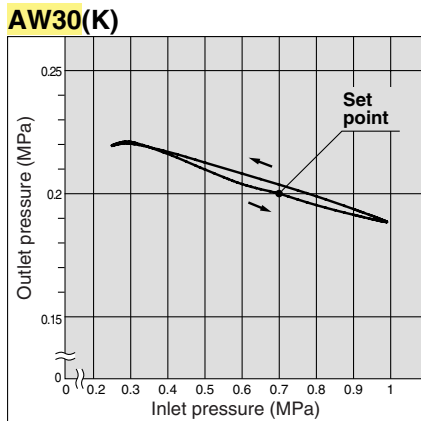
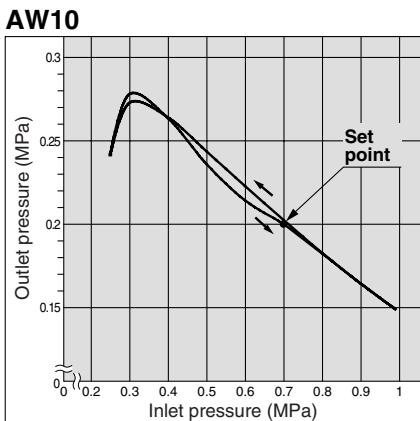
Flow Characteristics (Representative values)

Condition: Inlet pressure 0.7 MPa



Pressure Characteristics (Representative values)

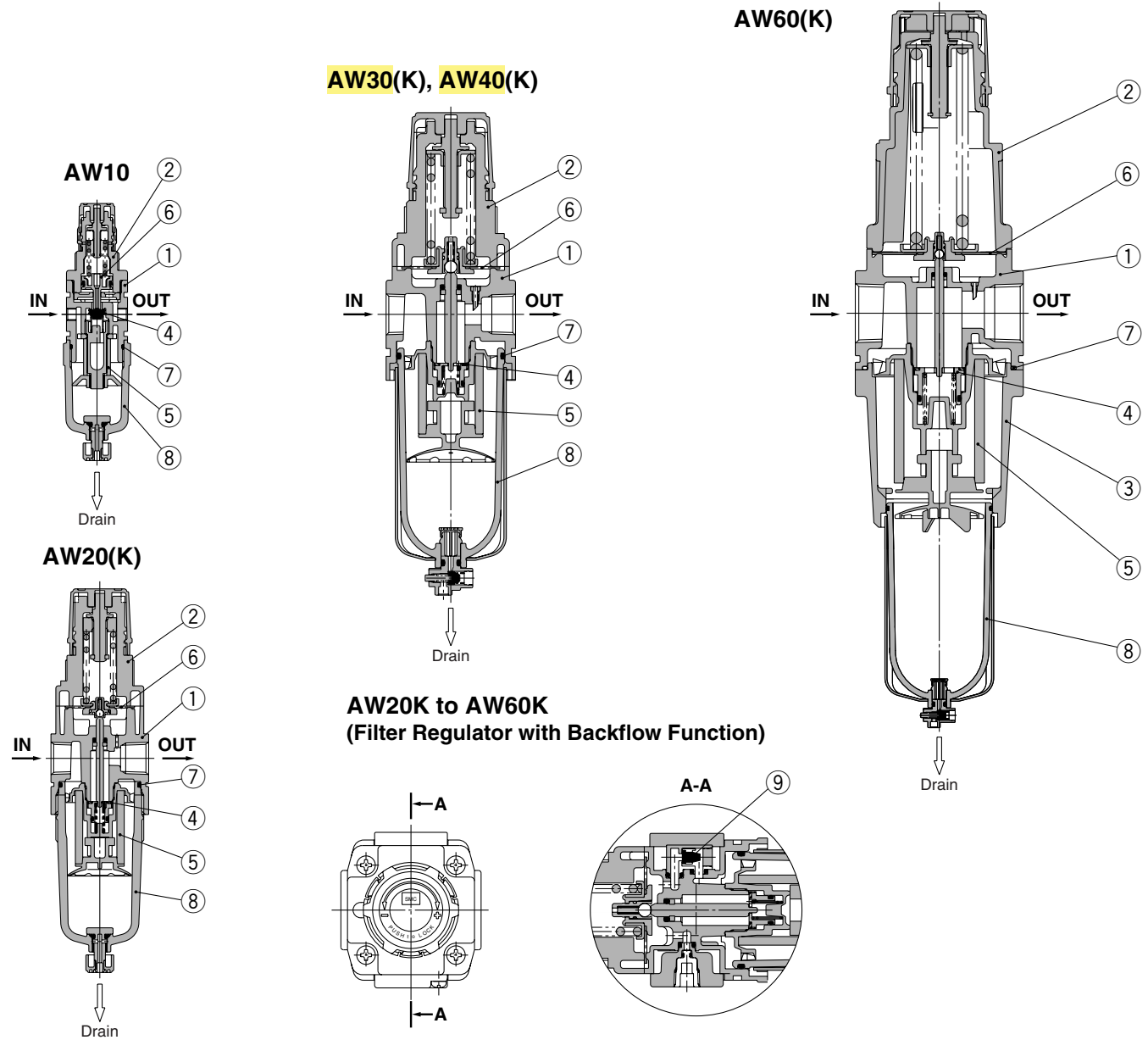
Conditions: Inlet pressure 0.7 MPa, Outlet pressure 0.2 MPa, Flow rate 20 l/min (ANR)



Filter Regulator *Series AW10 to AW60*

Filter Regulator with Backflow Function *Series AW20K to AW60K*

Construction



Component Parts

No.	Description	Material	Model	Color
1	Body	Zinc die-cast	AW10, AW20	Platinum silver
		Aluminum die-cast	AW30 to AW60	
2	Bonnet	Polyacetal	AW10 to AW40	Black
		Aluminum die-cast	AW60	
3	Housing	Aluminum die-cast	AW60	Platinum silver

Replacement Parts

No.	Description	Material	Part no.				
			AW10	AW20(K)	AW30(K)	AW40(K)	AR40(K)-06
4	Valve assembly	Brass, HNBR	AR10P-090S	AW20P-340AS	AW30P-340AS	AW40P-340AS	AW60P-090AS
5	Filter element	Non-woven fabric	AF10P-060S	AF20P-060S	AF30P-060S	AF40P-060S	AW60P-060S
6	Diaphragm assembly	Weatherable NBR	AR10P-150AS ^{Note 1)}	AR20P-150AS	AR30P-150AS	AR40P-150AS	AR50P-150AS
7	Bowl O-ring	NBR	C1SFP-260S	C2SFP-260S	C3SFP-260S	C4SFP-260S	
8	Bowl assembly ^{Note 2)}	Polycarbonate	C1SF	C2SF	C3SF ^{Note 3)}	C4SF ^{Note 3)}	
9	Check valve assembly ^{Note 4)}	—	—	AR20KP-020AS			

Note 1) The AW10 is a piston type. Assembly of a piston and a seal (KSYP-13).

Note 2) Bowl O-ring is included for the AW20(K) to AW60(K). Please contact SMC regarding the bowl assembly supply for psi and °F unit specifications.

Note 3) Bowl assembly for the AW30(K) to AW60(K) models comes with a bowl guard (steel band material).

Note 4) Check valve assembly is applicable for a filter regulator with backflow function (AW20K to AW60K) only.

Assembly of a check valve cover, check valve body assembly and 2 screws

Series AW10 to AW60

Series AW20K to AW60K

Working Principle (Filter Regulator with Backflow Function)

AW10



When the inlet pressure is higher than the regulating pressure, the check valve operates as a normal regulator (Figure 1).

When the inlet pressure is shut off and exhausted, any inlet pressure applied to the valve ① will be lost. The force for seating the valve ① is the valve spring force ② only. When the valve ① is opened using the outlet force, the outlet pressure will be exhausted at the inlet side. (Figure 2)

When the set pressure is 0.15 MPa or less, valve ① may not open due to the valve spring ② force.

AW20K to AW60K

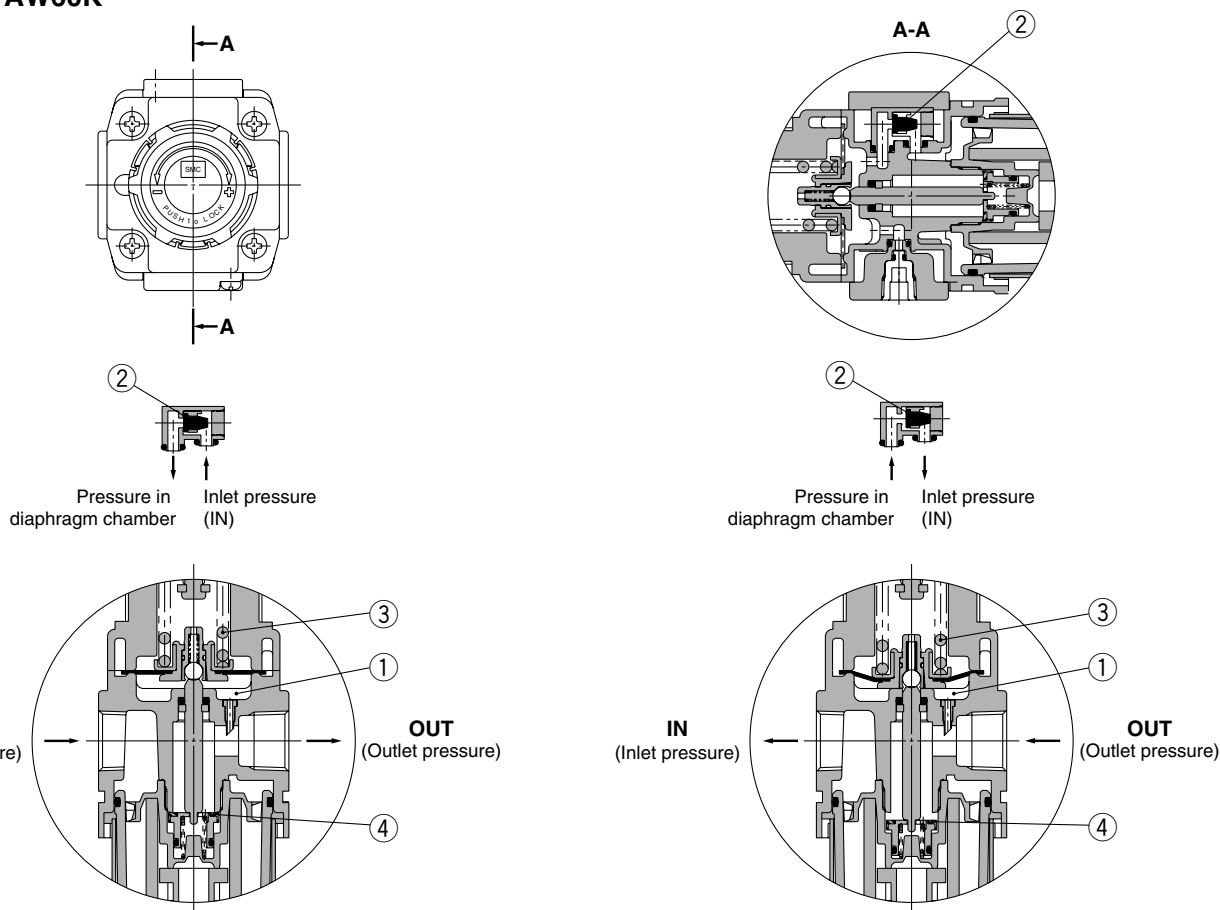


Figure 1 Normal

Figure 2 Backflow

When the inlet pressure is higher than the regulating pressure, the check valve ② closes and operates as a normal regulator (Figure 1).

When the inlet pressure is shut off and released, the check valve ② opens and the pressure in the diaphragm chamber ① is released into the inlet side (Figure 2).

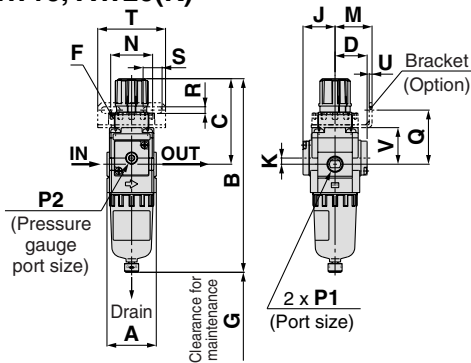
This lowers the pressure in the diaphragm chamber ① and the force generated by the pressure regulator spring ③ lifts the diaphragm. Valve ④ opens through the stem, and the outlet pressure is released to the inlet side (Figure 2).

Filter Regulator *Series AW10 to AW60*

Filter Regulator with Backflow Function *Series AW20K to AW60K*

Dimensions

AW10, AW20(K)



Panel fitting dimension

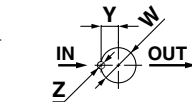
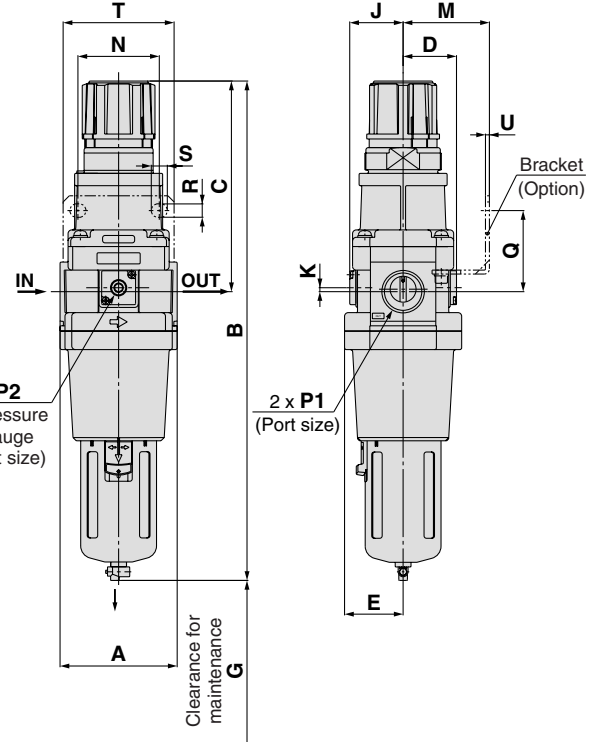
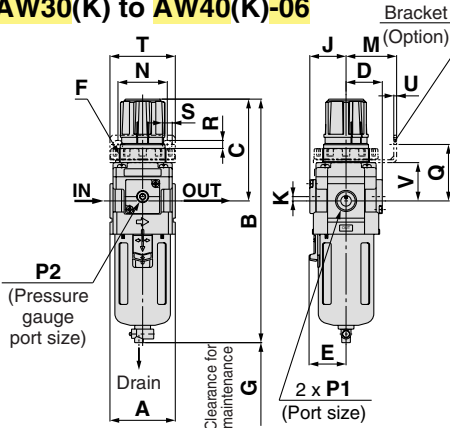


Plate thickness
AW10, AW20(K): Max. 3.5

AW60(K)



AW30(K) to AW40(K)-06



Panel fitting dimension

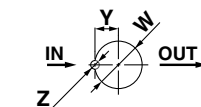


Plate thickness
AW30(K): Max. 3.5
AW40(K): Max. 5

Applicable model	AW20(K) to AW60(K)		AW10, AW20(K) to AW60(K)	AW20(K) to AW60(K)
Option	Square embedded type pressure gauge	Digital pressure switch	Round type pressure gauge	Round type pressure gauge (with color zone)
Dimensions				

Applicable model	AW10, AW20(K)		AW20(K)	AW30(K) to AW60(K)				
Optional/Semi-standard specifications	With auto drain (N.C.)	Metal bowl	With drain guide	With auto drain (N.O./N.C.)	Metal bowl	Metal bowl with level gauge	With drain guide	Drain cock with barb fitting
Dimensions								

Model	Standard specifications											Optional specifications							
	P1	P2	A	B (Note)	C	D	E	F	G	J	K	H	J	H	J	H	J	H	J
AW10	M5 x 0.8	1/16	25	108	48	12.5	—	M18 x 1	25	13	0	—	—	—	—	ø26	26	—	—
AW20(K)	1/8, 1/4	1/8	40	160	73	26	—	M28 x 1	40	26	5	□28	27	□27.8	37.5	ø37.5	63	ø37.5	63
AW30(K)	1/4, 3/8	1/8	53	201	86	29.5	30	M38 x 1.5	55	29.5	3.5	□28	30.5	□27.8	41	ø37.5	66	ø37.5	66
AW40(K)	1/4, 3/8, 1/2	1/4	70	239	92	37.5	38	M42 x 1.5	80	37.5	1.5	□28	38.5	□27.8	49	ø42.5	76	ø42.5	76
AW40(K)-06	3/4	1/4	75	242	93	37.5	38	M42 x 1.5	80	37.5	1.2	□28	38.5	□27.8	49	ø42.5	76	ø42.5	76
AW60(K)	3/4, 1	1/4	95	409	175	43.5	47.5	—	20	43.5	3.2	□28	44.5	□27.8	61.5	ø42.5	84	ø42.5	84

Model	Optional specifications											Semi-standard specifications				
	Bracket mount					Panel mount						With auto drain	With barb fitting	With drain guide	Metal bowl	Metal bowl with level gauge
	M	N	Q	R	S	T	U	V	W	Y	Z	B (Note)	B (Note)	B (Note)	B (Note)	B (Note)
AW10	25	28	30	4.5	6.5	40	2	18	18.5	—	—	125	—	—	107	—
AW20(K)	30	34	44	5.4	15.4	55	2.3	30	28.5	14	6	177	—	164	160	—
AW30(K)	41	40	46	6.5	8	53	2.3	31	38.5	19	7	242	209	208	214	234
AW40(K)	50	54	54	8.5	10.5	70	2.3	35.5	42.5	21	7	278	247	246	252	272
AW40(K)-06	50	54	56	8.5	10.5	70	2.3	37	42.5	21	7	282	251	249	255	275
AW60(K)	70	66	66	11	13	90	3.2	—	—	—	—	448	417	416	422	442

Note) The total length of B dimension is the length when the filter regulator knob is unlocked.

- AC
- AF□
- AR
- AL
- AW□
- A□G
- AV
- AF800
- AF900

Salt Spray Test Results (for reference)

1. Test Conditions

- 1) **Method:** In compliance with ASTM B117-07a (JIS Z 2371), leave parts in a salt spray test chamber, and compare rust generation.
- 2) **Conditions:** Temperature: 95°F (35°C) Salt Water Concentration: 5%
- 3) **Time:** 1000 hours [Frequency: 0hr, 24hrs, 48hrs, 72hrs, 96hrs, 168hrs, 240hrs, 480hrs, 720hrs, 1000hrs]
- 4) **Samples:** Parts for AF and AW30 (See Figure 1.)
 - Part descriptions: 4 parts (1) Body (2) Drain cock (3) Small screw for level gauge (4) Bonnet screw
 - Types: 2 Types A) Standard B) Special X480 (Coated with epoxy resin [External metal parts are made of SUS])
 - Refer to Table 1 for part materials and treatments. *Quantity; 2 pieces for each

2. Test Results Table 1 Salt spray resistance test results

No.	Description	Type	Material & Treatment	Results
1	Body	A Standard	Material: Die Cast Aluminum Treatment: Platinum Coating	Rusted in 480hrs Part of coating swelled
		B Special X480	Material: Die Cast Aluminum Treatment: Platinum & Epoxy Coating	Not rusted in 1000hrs Part of coating swelled
2	Drain cock	A Standard	Material: Die Cast Aluminum Treatment: Zinc Chromate	Rusted in 24hrs
		B Special X480	Material: SUS	Not rusted in 1000hrs
3	Cross recessed round head screw for metal bowl with level gauge	A Standard	Material: Steel Treatment: Nickel Plating	Rusted in 24hrs
		B Special X480	Material: SUS	Not rusted in 1000hrs
4	Self-tapping screw for AR and AW bonnet	A Standard	Material: Steel Treatment: Zinc Chromate	Rusted in 24hrs
		B Special X480	Material: SUS	Not rusted in 1000hrs

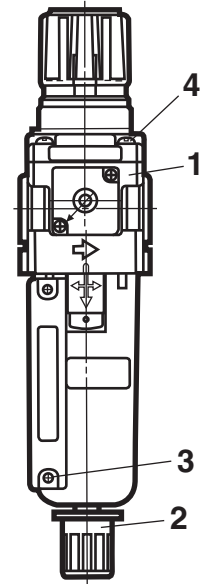
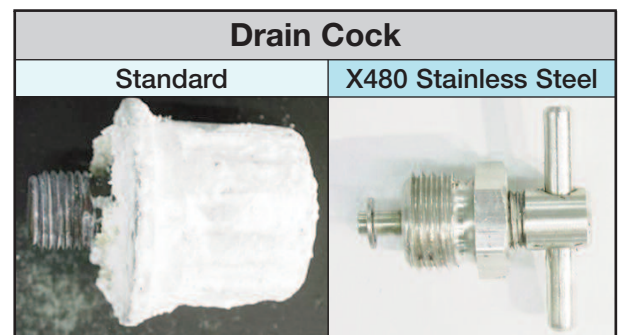
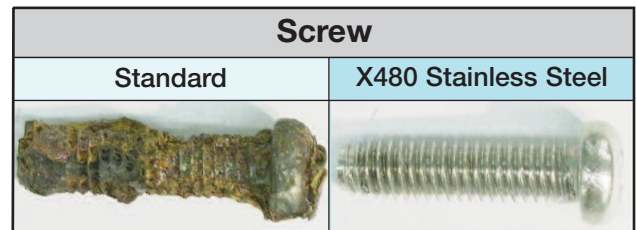
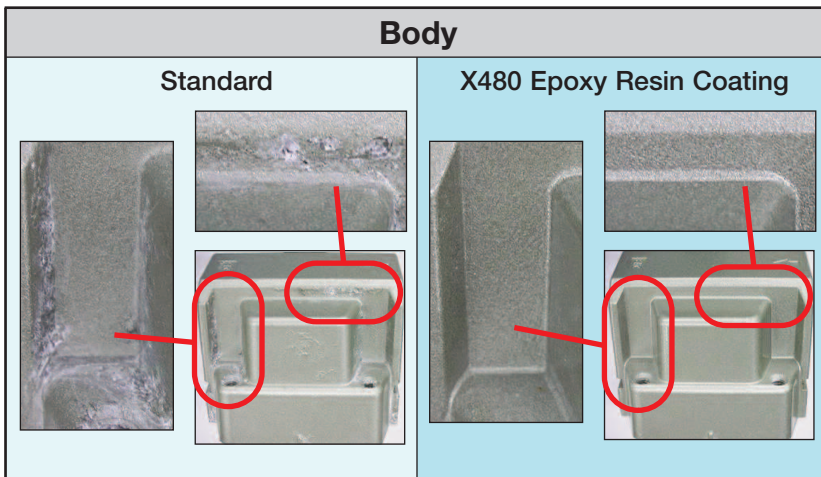


Figure 1



Caution! To ensure the safest possible operation of this product, please be sure to read thoroughly the "Safety Instructions" in our "Best Pneumatics" catalog before use.

UD45+ (NPT3/4)

Quality Air



Product

8102372408

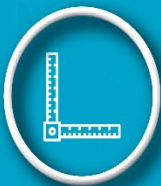
Links



Brochure



Technical Data



Dimensional
Drawing



Installation
Guide

Technical Specifications

100psi CFM: 95.0
125psi CFM: 107.2
150psi CFM: 118.7
Air Outlet: 3/4"
Weight (lbs): 5.2

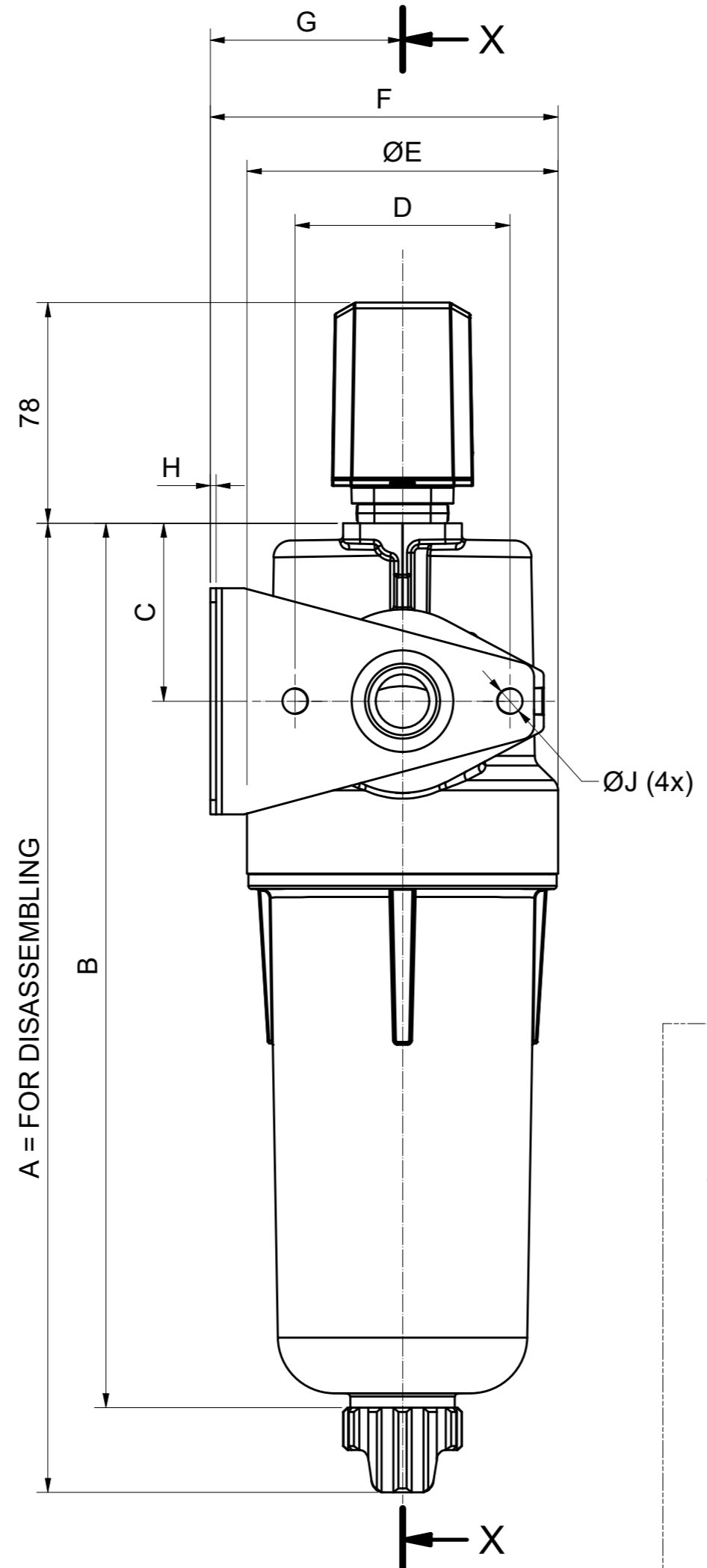
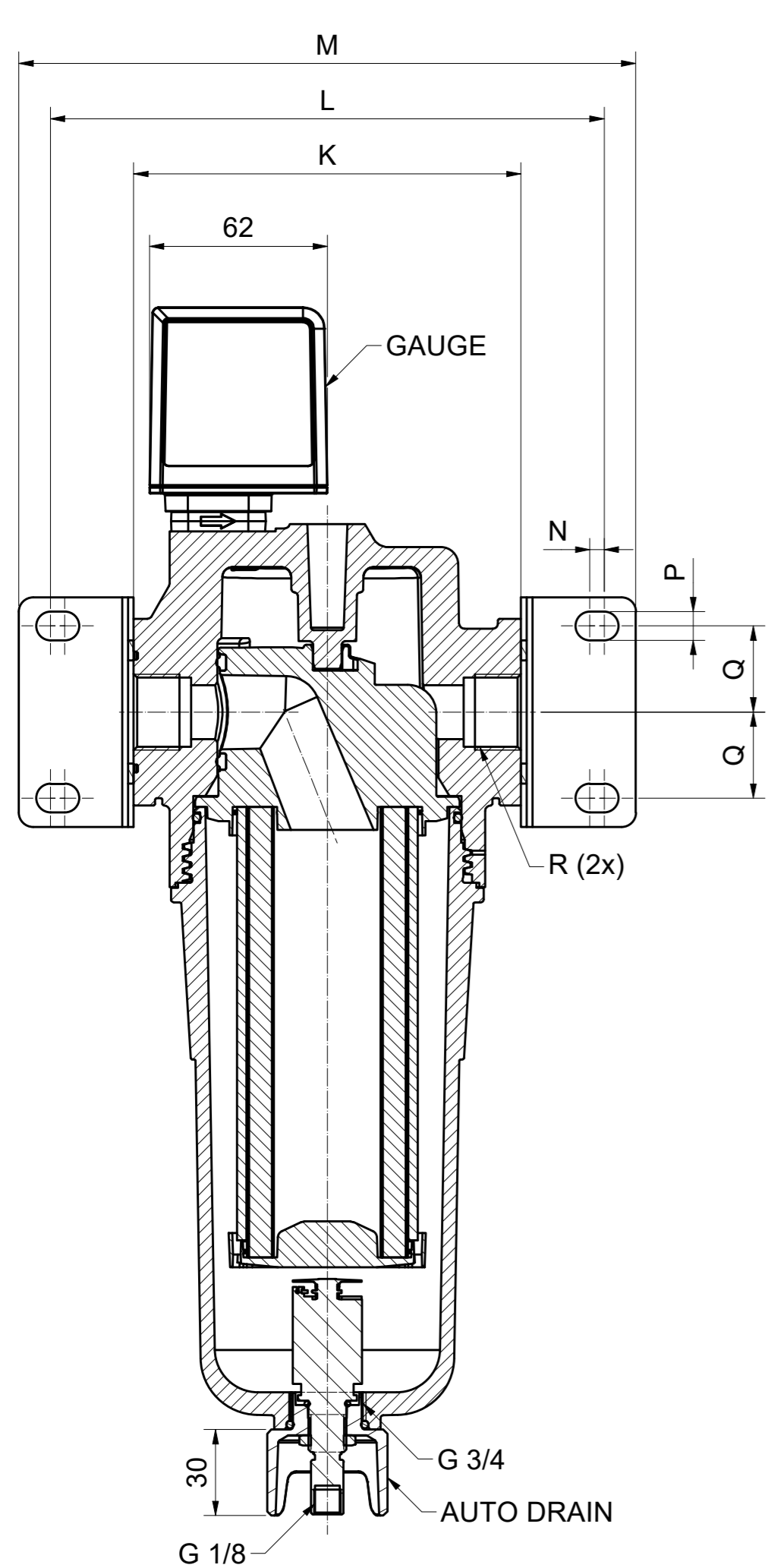
Model: UD+, DD+, DDp+, PD+, PDp+, QD+ 45

Name	UD 45+ (2)		UD 45+ (4)		DD 45+ (2)		DD 45+ (4)		DDp 45+ (2)		DDp 45+ (4)		PD 45+ (2)		PD 45+ (4)		PDp 45+ (2)		PDp 45+ (4)		QD 45+ (2)		QD 45+ (4)		
	inPASS (INPASS)	Yes (Y)	No (N)	Yes (Y)	No (N)	Yes (Y)	No (N)	Yes (Y)	No (N)	Yes (Y)	No (N)	Yes (Y)	No (N)	Yes (Y)	No (N)	Yes (Y)	No (N)	Yes (Y)	No (N)	Yes (Y)	No (N)	Yes (Y)	No (N)	Yes (Y)	No (N)
A REFERENCE CONDITIONS																									
8	Compressed air effective inlet pressure (psig)	101.5	11.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5
9	Ambient air temperature (°F)	68	6	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
10	Compressed air inlet temperature (°F)	68	6	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
159	Compressed air inlet dewpoint (°F)	37.4	4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
160	Test oil aerosol inlet concentration (mg/m ³)	10	1	10	10	-	-	-	-	-	-	10	10	-	-	-	-	-	-	-	-	-	-	-	-
B LIMITATIONS																									
1	Minimum ambient temperature (°F)	34	3	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
26	Maximum ambient temperature (°F)	150	10	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
25	Minimum compressed air inlet pressure (psig)	14.5	1.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
23	Maximum compressed air inlet pressure (psig)	232	2	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232	232
27	Minimum compressed air inlet temperature (°F)	34	3	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
24	Maximum compressed air inlet temperature (°F)	149	9	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149
140	Maximum time in use for element change (month) (174)	12	1	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
141	Maximum running hours for element change (h) (174)	8000	800	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	2000	2000	2000	2000
29	Maximum pressure drop for element change (psi) (174)	5.07	0.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	5.07	-	-	-	-	-
C PERFORMANCE DATA																									
24	Nominal volume flow at filter inlet (cfm) (64)	95.4	9.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
25	Initial pressure drop over filter when dry (psi)	-	-	-	-	-	-	0.73	0.73	-	-	-	-	0.8	0.8	-	-	1.1	1.1	-	-	-	-	-	-
26	Initial pressure drop over filter when saturated (psi) (189)	3.41	3.41	1.74	1.74	-	-	-	-	1.89	1.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-
270	Outlet oil aerosol concentration (mg/m ³) (64) (189)	<0.001	<0.001	<0.1	<0.1	-	-	-	-	<0.01	<0.01	-	-	-	-	-	-	<0.003	<0.003	-	-	-	-	-	-
272	Fractional filtration efficiency 0.01µm (%) (173)	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999
273	Fractional filtration efficiency 1µm (%) (173)	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999	99.999
274	Fractional filtration at MPPS (%) (173) (190)	99.940	99.940	97.030	97.030	97.550	97.550	97.550	97.550	99.670	99.670	99.670	99.670	99.670	99.670	99.670	99.670	99.970	99.970	99.970	99.970	99.970	99.970	99.970	99.970
182	Quality class of air at outlet of filter (68)	1--2	1--2	2--3	2--3	1--	1--	1--	1--	1--2	1--2	1--	1--	1--2	1--2	1--	1--	1--	1--	1--	1--	1--	1--	1--	1--
D DESIGN DATA																									
21	Mass (lbs)	5.91	5.23	5.91	5.23	6.02	5.32	5.91	5.23	6.02	5.32	5.91	5.23	6.02	5.32	5.91	5.23	6.02	5.32	6.09	5.47	6.09	5.47	6.09	5.47
23	Shipping length (in.)	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3
24	Shipping width (in.)	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
25	Shipping height (in.)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
31	Shipping mass (lbs)	5.91	5.23	5.91	5.23	6.02	5.32	5.91	5.23	6.02	5.32	5.91	5.23	6.02	5.32	5.91	5.23	6.02	5.32	6.09	5.47	6.09	5.47	6.09	5.47
32	Dimensions of inlet and outlet connections	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
34	Number of filter elements	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
O REMARKS																									
64	C24.C Referred to an absolute pressure of 1 bar and temperature of 20 °C	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)	(64)(68)(173)(174)(189)(190)
68	C182 According to ISO 8573-1 in a typical installation																								
173	C272 According to ISO 12500-3.																								
174	B140; Whatever comes first.																								
189	C26.C According to ISO 12500-1 at oil concentration upstream of the filter of 10 mg/m ³ .																								
190	C274 MPPS = 0,1 µm.																								
T DATA ON DATAPLATE																									
U ADDITIONAL DATA																									
V TECHNICAL PERFORMANCE DATA																									

All materials supplied are in compliance with the requirements of the List of Prohibited Substances

For DD+, PD+, UD+ and QD+

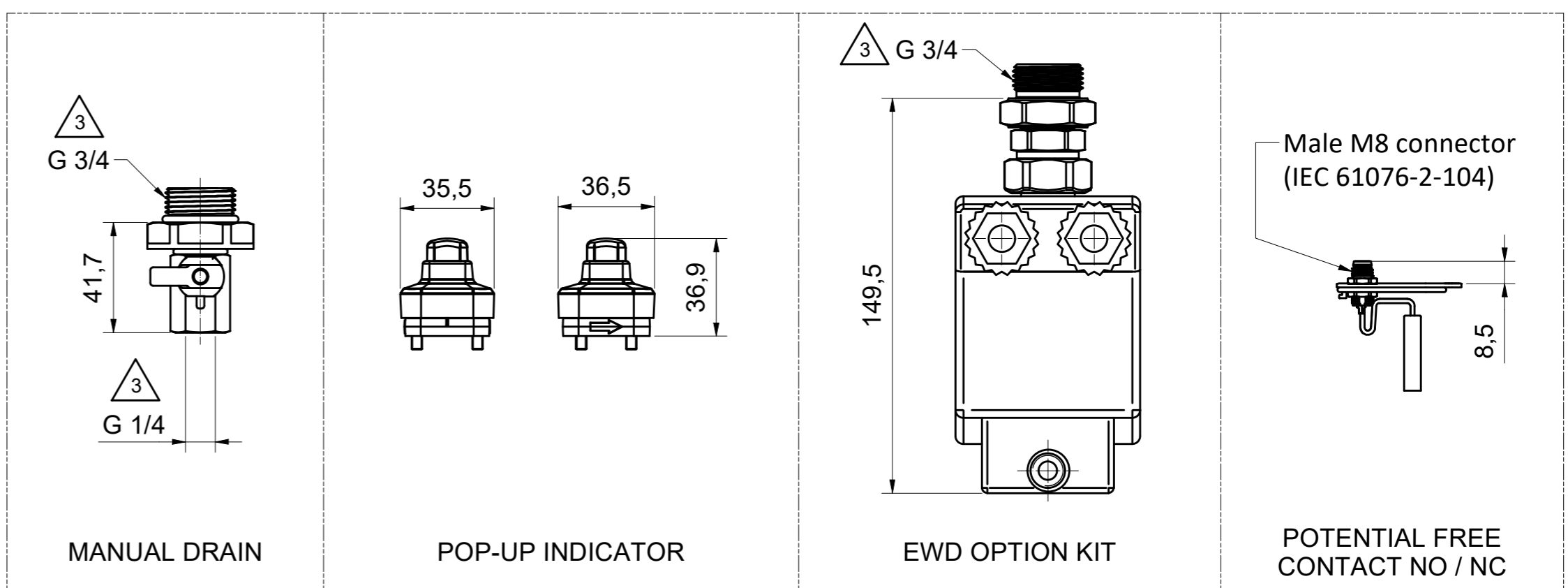
For: DDp+ and PDp+



STANDARD SCOPE OF SUPPLY														
DESIGNATION	7	15	25	45	75	110	145	180	240	300	360	430	525	630
DD+	1+3	1+3	1+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3
PD+	1+3	1+3	1+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3
UD+	1+3	1+3	1+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3
DDp+	1+4	1+4	1+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4
PDp+	1+4	1+4	1+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4
QD+	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5

- POP UP INDICATOR
- GAUGE
- AUTO DRAIN
- MANUAL DRAIN
- CONNECTIONS OF INDICATOR OR GAUGE ARE PLUGGED WITH HEXAGONAL SOCKET SCREW M4x4 OR M6x8

TYPE	NET MASS	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
7	1.2 kg	353	233	52	60	90	97	52	2	7	106	152	174	8	7	20	G 1/2 NPT 1/2
15	1.25 kg	353	233	52	60	90	97	52	2	7	106	152	174	8	7	20	G 1/2 NPT 1/2
25	1.43 kg	406	285.5	52	60	90	97	52	2	7	106	152	174	8	7	20	G 1/2 NPT 1/2
45	2.43 kg	453	313	63	76	110	123	68	2	9	135	193	215	5	10	30	G 3/4 NPT 3/4
75	2.87 kg	538	398	63	76	110	123	68	2	9	135	193	215	5	10	30	G 1 NPT 1
110	5.08 kg	590	429.5	84.5	103	143	163.5	92	2.5	8.5	175	253	275	5	10	42	G 1 1/2 NPT 1 1/2
145	5.6 kg	660	499.5	84.5	103	143	163.5	92	2.5	8.5	175	253	275	5	10	42	G 1 1/2 NPT 1 1/2
180	6.12 kg	730	569.5	84.5	103	143	163.5	92	2.5	8.5	175	253	275	5	10	42	G 1 1/2 NPT 1 1/2
240	9.34 kg	805	600	98	135	171	193.5	108	4	11.5	222	300	332	10	9	37.5	G 2 NPT 2
300	10.38 kg	898	693	98	135	171	193.5	108	4	11.5	222	300	332	10	9	37.5	G 2 NPT 2
	G 2 1/2 NPT 2 1/2																
360	10.2 kg	898	693	98	135	171	193.5	108	4	11.5	222	300	332	10	9	37.5	G 2 1/2 NPT 2 1/2
430	13.98 kg	1028	797.5	110	155	191	215.5	120	4	11.5	250	328	360	10	9	50	G 3 NPT 3
525	15.32 kg	1144	913.5	110	155	191	215.5	120	4	11.5	250	328	360	10	9	50	G 3 NPT 3
630	19.24 kg	1382	1151.5	110	155	191	215.5	120	4	11.5	250	328	360	10	9	50	G 3 NPT 3



Modification Notes:

- Thread values in Manual Drain and EWD Option Kit added.
- Recommended Torque values updated.

All Dimensions are in Metric System

Designation	Recommended Torque
Indicator / Pressure Gauge	1 Nm
Automatic Drain	Handtight
Manual Drain	4 Nm

Tolerances, if not indicated, according to: ATLAS COPCO STANDARD CLASS

Name	DIMENS. DRWG		DIMENS. DRWG (NO BYPASS)		Confidentiality Class acc. to 1102 K
Material	See Drawing		See Drawing		Confidential
Treatment	See Drawing		See Drawing		INV
Scale	1:2	Family	A2 Compare		Drawing owner
Drawn by	AIR27282	Blank nr.	Replaces		API
Version Drwg	Blank wt	Kg	Fini wt.	NA	Designation
Des checked.	Prod checked.	Approved.	Date	1/03/2022	

9827928800-M1 Parent 3D model Ed. Version 3D Pending

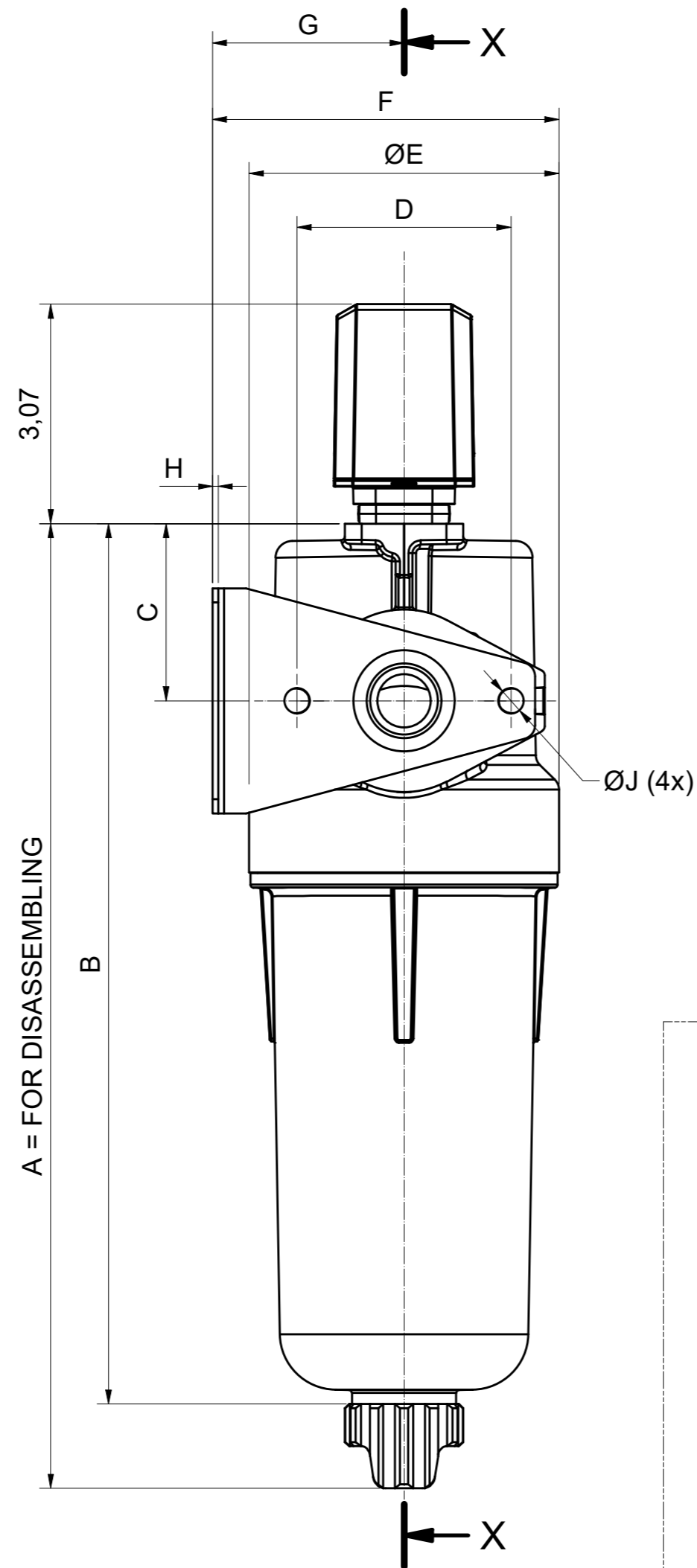
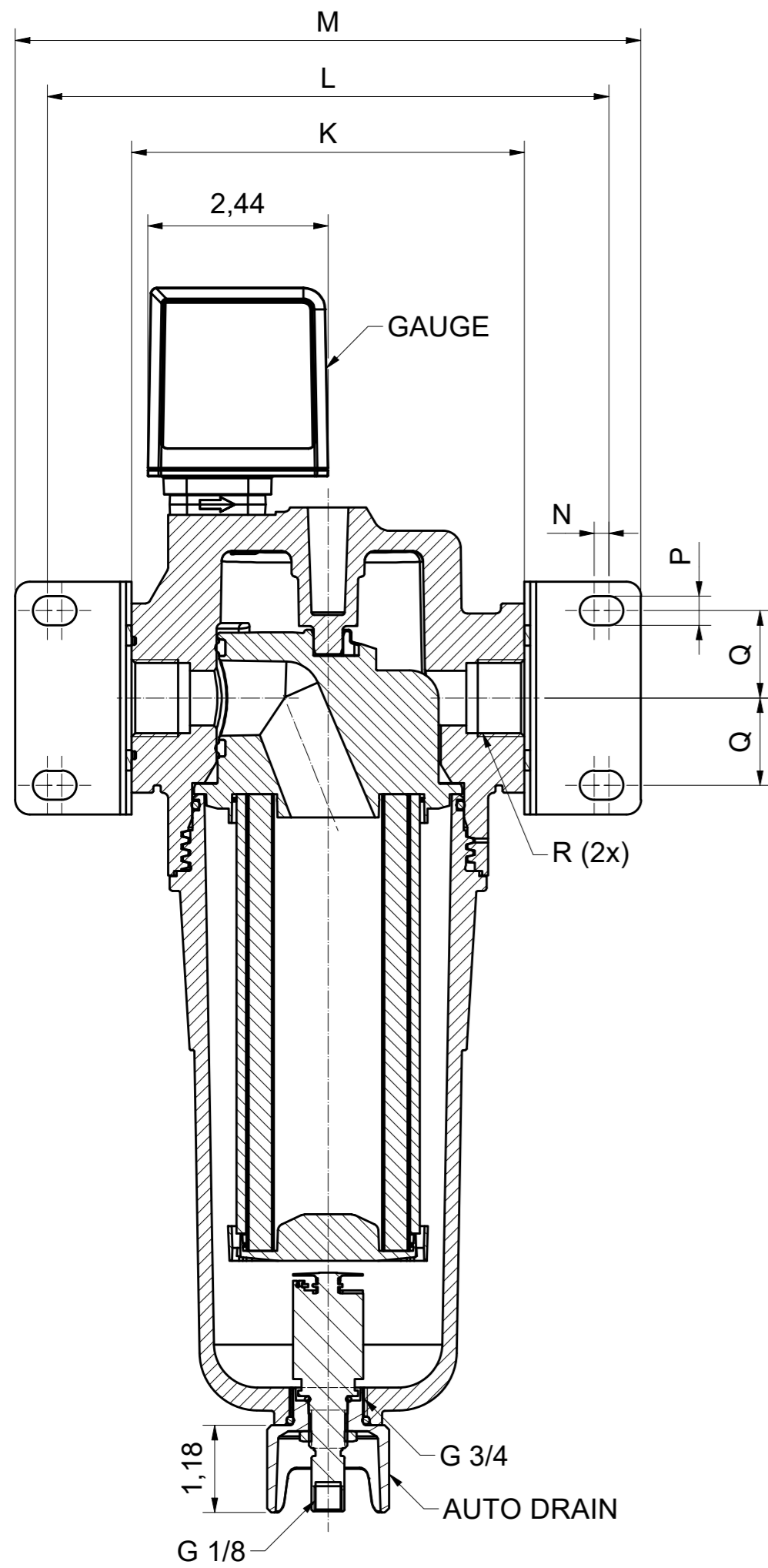
9827928800-01

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For DD+, PD+, UD+ and QD+

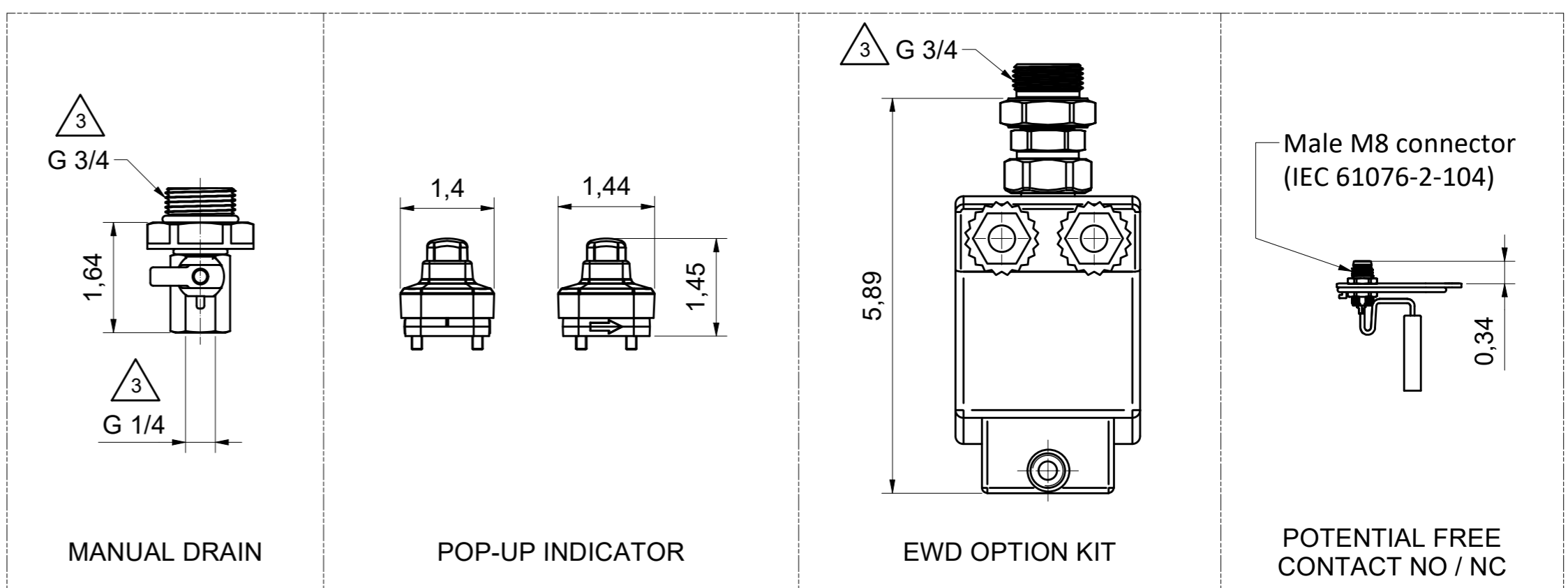
For: DDp+ and PDp+



STANDARD SCOPE OF SUPPLY														
DESIGNATION	7	15	25	45	75	110	145	180	240	300	360	430	525	630
DD+	1+3	1+3	1+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3
PD+	1+3	1+3	1+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3
UD+	1+3	1+3	1+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3	2+3
DDp+	1+4	1+4	1+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4
PDp+	1+4	1+4	1+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4	2+4
QD+	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5	4+5

- POP UP INDICATOR
- GAUGE
- AUTO DRAIN
- MANUAL DRAIN
- CONNECTIONS OF INDICATOR OR GAUGE ARE PLUGGED WITH HEXAGONAL SOCKET SCREW M4x4 OR M6x8

TYPE	NET MASS	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
7	2.65 lbs	13.90	9.17	2.05	2.36	3.54	3.82	2.05	0.08	0.28	4.17	5.98	6.85	0.31	0.28	0.79	G 1/2 NPT 1/2
15	2.76 lbs	13.90	9.17	2.05	2.36	3.54	3.82	2.05	0.08	0.28	4.17	5.98	6.85	0.31	0.28	0.79	G 1/2 NPT 1/2
25	3.15 lbs	15.98	11.24	2.05	2.36	3.54	3.82	2.05	0.08	0.28	4.17	5.98	6.85	0.31	0.28	0.79	G 1/2 NPT 1/2
45	5.36 lbs	17.83	12.32	2.48	2.99	4.33	4.84	2.68	0.08	0.35	5.31	7.60	8.46	0.20	0.39	1.18	G 3/4 NPT 3/4
75	6.33 lbs	21.18	15.67	2.48	2.99	4.33	4.84	2.68	0.08	0.35	5.31	7.60	8.46	0.20	0.39	1.18	G 1 NPT 1
110	11.20 lbs	23.23	16.91	3.33	4.06	5.63	6.44	3.62	0.10	0.33	6.89	9.96	10.83	0.20	0.39	1.65	G 1 1/2 NPT 1 1/2
145	12.35 lbs	25.98	19.67	3.33	4.06	5.63	6.44	3.62	0.10	0.33	6.89	9.96	10.83	0.20	0.39	1.65	G 1 1/2 NPT 1 1/2
180	13.49 lbs	28.74	22.42	3.33	4.06	5.63	6.44	3.62	0.10	0.33	6.89	9.96	10.83	0.20	0.39	1.65	G 1 1/2 NPT 1 1/2
240	20.59 lbs	31.69	23.62	3.86	5.31	6.73	7.62	4.25	0.16	0.45	8.74	11.81	13.07	0.39	0.35	1.48	G 2 NPT 2
300	22.89 lbs	35.35	27.28	3.86	5.31	6.73	7.62	4.25	0.16	0.45	8.74	11.81	13.07	0.39	0.35	1.48	G 2 NPT 2
	G 2 1/2 NPT 2 1/2																
360	22.49 lbs	35.35	27.28	3.86	5.31	6.73	7.62	4.25	0.16	0.45	8.74	11.81	13.07	0.39	0.35	1.48	G 2 1/2 NPT 2 1/2
430	30.83 lbs	40.47	31.40	4.33	6.10	7.52	8.48	4.72	0.16	0.45	9.84	12.91	14.17	0.39	0.35	1.97	G 3 NPT 3
525	33.78 lbs	45.04	35.96	4.33	6.10	7.52	8.48	4.72	0.16	0.45	9.84	12.91	14.17	0.39	0.35	1.97	G 3 NPT 3
630	42.42 lbs	54.41	45.33	4.33	6.10	7.52	8.48	4.72	0.16	0.45	9.84	12.91	14.17	0.39	0.35	1.97	G 3 NPT 3



3
Modification Notes:

- Thread values in Manual Drain and EWD Option Kit added.
- Recommended Torque values updated.

All Dimensions are in Imperial System

Designation	Recommended Torque
Indicator / Pressure Gauge	8.9 lb-in
Automatic Drain	Handtight
Manual Drain	35.4 lb-in

Ed	Position	Modified from	Date	Intr./Appd.
3		See modification notes		

Tolerances, if not indicated, according to: ATLAS COPCO STANDARD CLASS

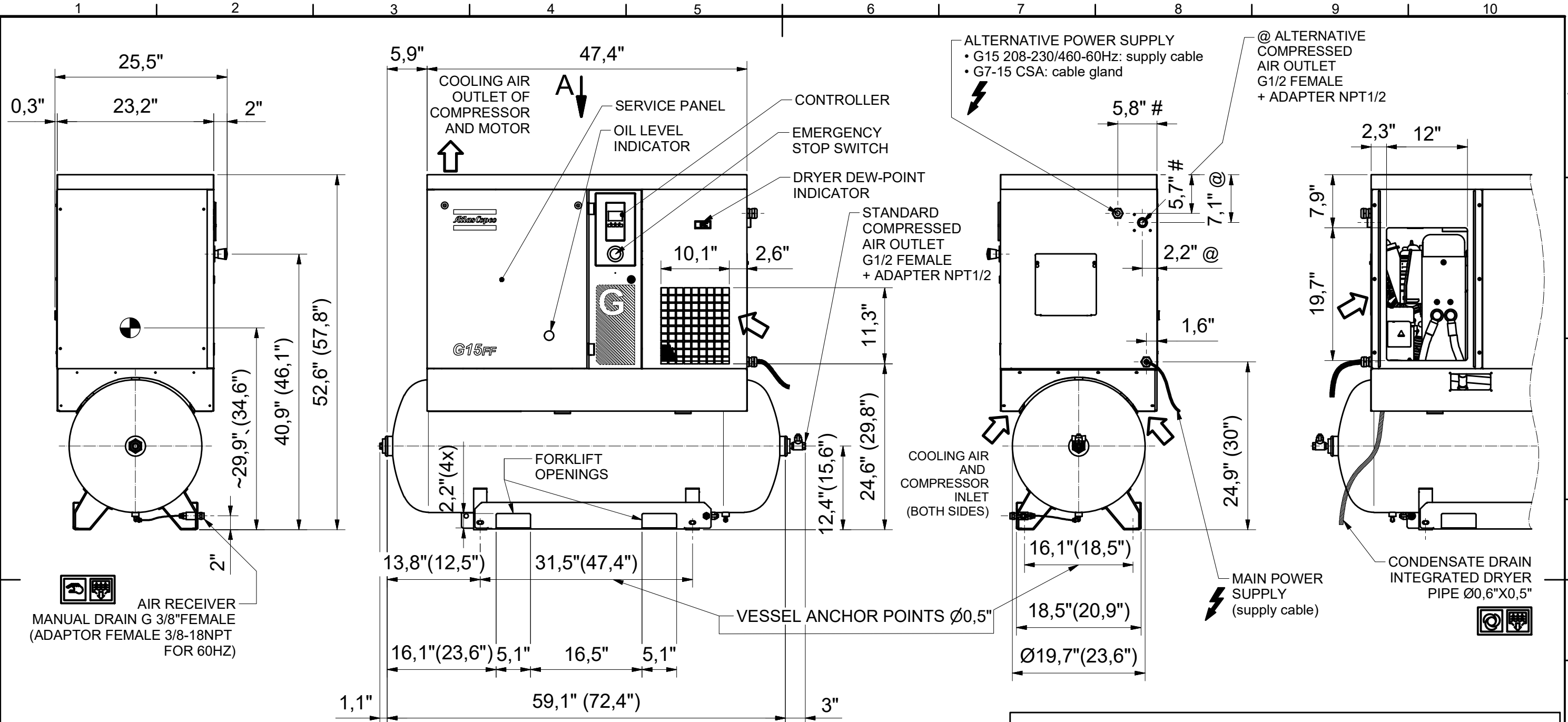
Name	DIMENS. DRWG	DIMENS. DRWG (NO BYPASS)	Confidentiality Class acc. to 1102 K
Material	See Drawing		Confidential
Treatment	See Drawing		INV
Scale	1 : 2	Family	A2 Compare
Drawn by	AIR27282	Blank nr.	Replaces
Version Drwg		Kg	NA
Des checked.	Prod checked.	Approved.	Date
STATUS			9827928800-01
Pending			1/03/2022

Parent 3D model: 9827928800-M1 | Ed. Version 3D

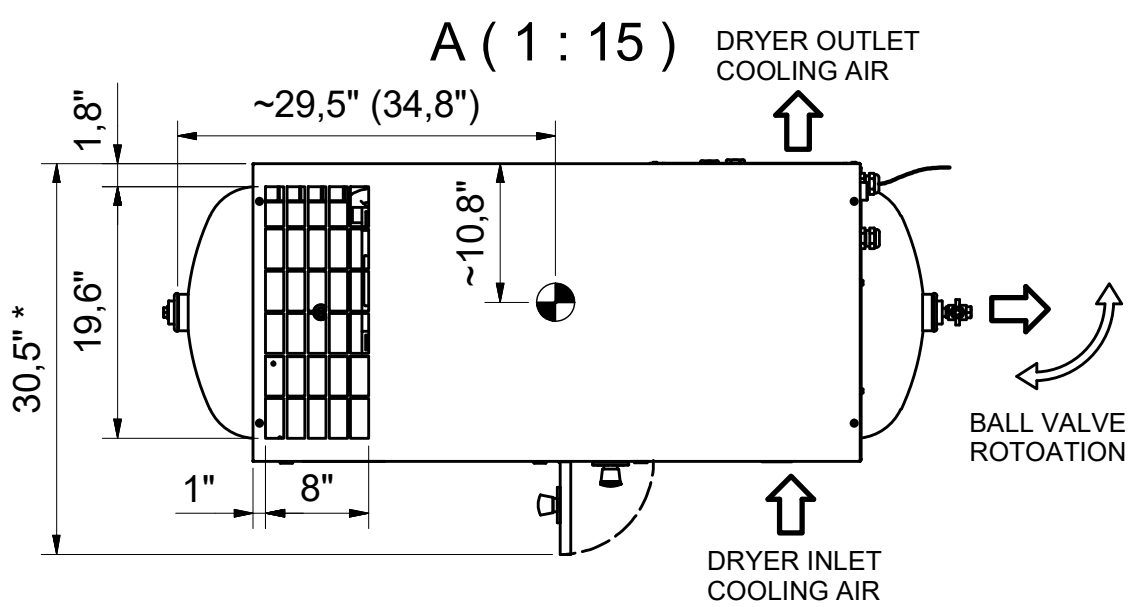
Drawing owner: API | Sheet 2 / 2

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AIR RECEIVER MANUAL DRAIN G 3/8" FEMALE (ADAPTOR FEMALE 3/8-18NPT FOR 60HZ)



NOTES:

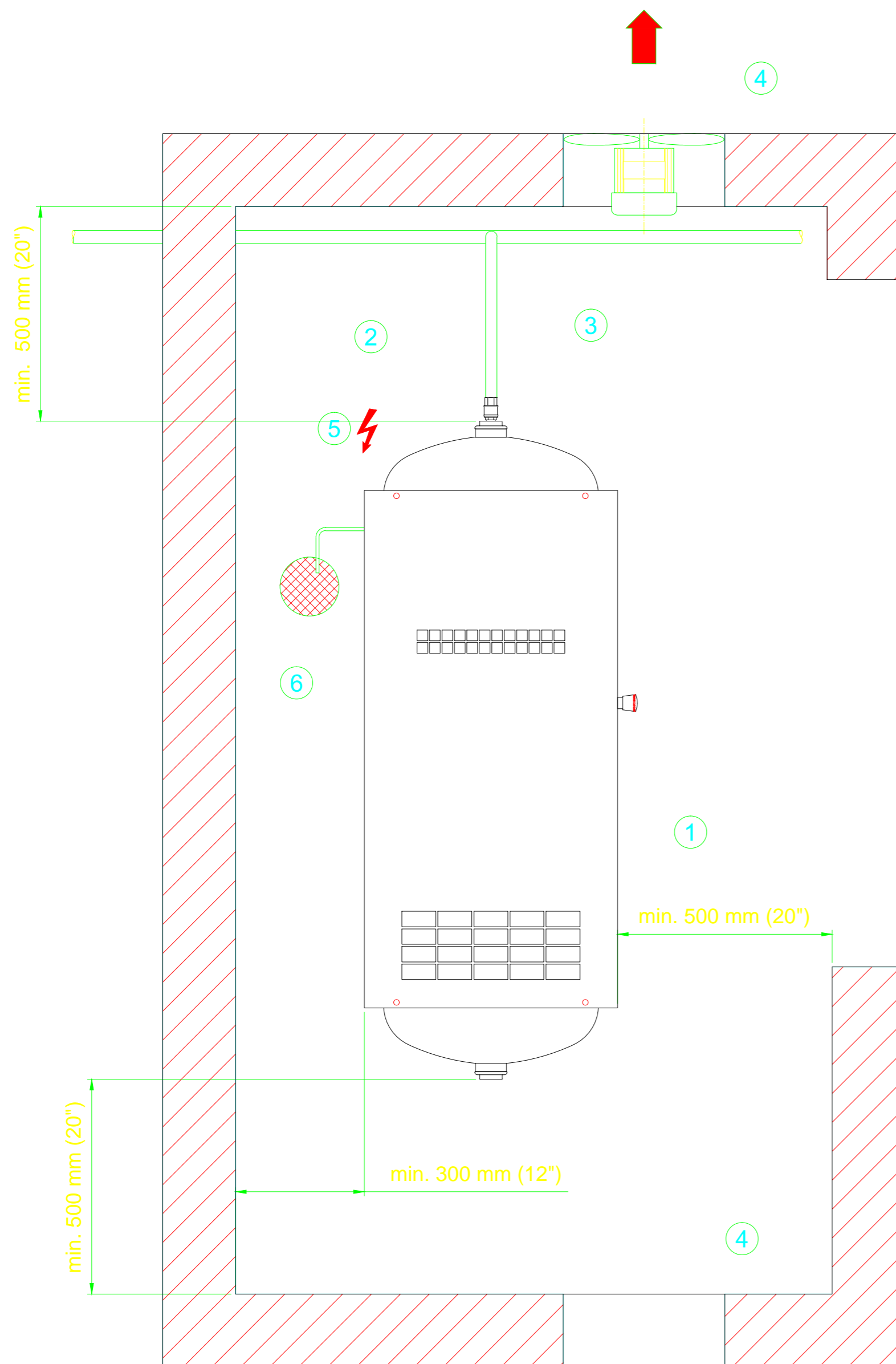
- CENTER OF GRAVITY
- * - CUBICLE DOOR FULLY OPEN
- # - UL/CSA VARIANTS
- @ - OPTION DDx/PDx FILTER

500L/125GAL VESSEL DIMENSIONS WITHIN BRACKETS

Tolerances, if not indicated, according to:							
ATLAS COPCO STANDARD CLASS							
Name	DIMENSION DRAWING G7-15 FF TANKMOUNTED			Confidentiality Class	acc. to 1102 K		
Material	Not Applicable			Confidential			
Treatment	Not applicable			INV			
	Scale	1:15	Family	G7-15	Compare		
	Drawn by	CAIgraser	Blank nr.		Replaces		
STATUS	Drawing format	Blank wt	Kg	Fini wt.	348,849 kg	Designation	Sheet 1 / 1
Approved	Des checked.	Prod checked.	Approved.	Date	16/12/2015	9828083239	

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01	Update roof grid dimension, from 6,4" to 8". CID 27156/14-02-19 - DN 190620 00	14/02/2019	sgraser	9828083239	00.01
Ed	Position	Date	Intr./Appd.	Parent 3D model	Edition 3D



Ref	Action
1	Install the compressor on a solid, level floor suitable for taking its weight. The recommended minimum distance between the top of the unit and the ceiling is 900 mm (35 in). The air receiver must not be bolted to the floor. The minimum distance between the wall and the back of the compressor is 500 mm (20 in).
2	Position of the compressed air outlet valve. Close the valve. Connect the air net to the valve.
3	The pressure drop over the delivery pipe can be calculated from the following formula: $dp = (L \times 450 \times Qc^{1.85}) / (d^5 \times P)$ dp = pressure drop (recommended maximum = 0.1 bar / 1.5 psi) L = length of delivery pipe in m d = inner diameter of the delivery pipe in mm P = absolute pressure at the compressor outlet in bar(a) Qc = free air delivery of the compressor in l/s
4	Ventilation: The inlet grids and ventilation fan should be installed in such a way that any recirculation of cooling air to the compressor or dryer is avoided. The air velocity to the grids must be limited to 5 m/s (200 in/s). The required ventilation capacity to limit the temperature of the compressor room can be calculated from the following formula: $Qv = 0.92 N / dT$ Qv = required ventilation capacity in m ³ /s N = nominal motor power of compressor in kW dT = temperature increase in compressor room
5	Position of the mains cable entry.
6	The drain pipes to the drain collector must not dip into the water of the drain collector.

Dit document is een afbeelding van een tekening die is vervaardigd met behulp van een CAD-programma. Het is niet bedoeld als een tekening die is vervaardigd met behulp van een tekenmachine. Het is niet bedoeld als een tekening die is vervaardigd met behulp van een tekenmachine. Het is niet bedoeld als een tekening die is vervaardigd met behulp van een tekenmachine.

00	ISSUED - CID 23064/29-10-07. DN 070512 50	2007-10-31	CAD
Nota	Gewijzigd van	Datum	Ingev./Goedg.
Note	Modified from	Date	Intr./Appd.

Parent 3D Model	Ed. Version 3D
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Toleranties, indien niet aangegeven, zijn volgens: Tolerances, if not indicated, according to:							
ATLAS COPCO STANDARD/Klasse/Class							
Benaming Name		DIMENS. INSTALL.		DIMENS. INSTALL. PROPOS.GX7-11		Geheim.klasse Secrecy Class	
Materiaal Material		SEE DRAWING				1102 K/ Confidential	
Behandeling Treatment		See Drawing				CAD	
Schaal Scale		1:10		Familie Family		GX7-11	
Getekend Drawn by		sgraser		Ruw nr. Blank nr.		A2	
Version Drwg		00		Ruw gew. Blank wt.		0 Kg	
STATUS		Approved		Afg gew. Fini wt.		0 Kg	
Des gez./chd.		Prod gez./chd.		Goedg./Appd.		Datum/Date	
						2007-10-31	
Identificatie/Designation						Blad/Sheet () 01 01	
						9828492700	

ATLAS COPCO COMPRESSORS

Model: G7L (100-175 psi)	Q	125 psi	150 psi	175 psi	Unit
Inlet conditions					
1. Barometric pressure	14.5	14.5	14.5	14.5	psi(a)
2. Ambient air temperature	68	68	68	68	°F
3. Relative humidity	0	0	0	0	%
Performance⁽¹⁾					
1. Discharge pressure ¹	100	125	150	175	psi(g)
2. Capacity delivered	45.1	39.2	34.3	28.4	CFM
3. Package power input, loaded Pack	10.6	10.8	10.5	10.4	kW
4. Package power input, unloaded Pack	5.0	4.7	4.3	3.9	kW
5. Package power input, loaded FF	11.2	11.3	11.0	10.6	kW
6. Package power input, unloaded FF	5.2	4.9	4.5	4.1	kW
7. Sound level ⁽²⁾	65	65	65	65	dB(A)
8. Minimum ambient temperature	32	32	32	32	°F
9. Maximum ambient temperature	115	115	115	115	°F
10. Maximum altitude	3281	3281	3281	3281	ft
Cooling data					
1. Cooling air flow Pack	742	742	742	742	CFM
3. Discharge air temp Pack(ambient+°F)	16	16	16	16	°F
2. Cooling air flow Integrated Dryer	230	230	230	230	CFM
4. Discharge air temp FF(ambient+°F)	9	9	9	9	°F
Electrical data					
1. Motor	10	10	10	10	HP
2. Motor type	IE3 Prem. Eff.	IE3 Prem. Eff.	IE3 Prem. Eff.	IE3 Prem. Eff.	
3. Enclosure	TEFC	TEFC	TEFC	TEFC	
4. Efficiency	90.3	90.3	90.3	90.3	%
5. Starter type	DOL	DOL	DOL	DOL	
Physical data					
1. Dimensions(L x W x H)/Weight(lbs)					
- Floor-mounted Pack	34x29x43 / 408	34x29x43 / 408	34x29x43 / 408	34x29x43 / 408	In/lbs
- 71G Tank-mounted Pack	63x26x53 / 540	63x26x53 / 540	63x26x53 / 540	63x26x53 / 540	In/lbs
- 120G Tank-mounted Pack	77x26x58 / 798	77x26x58 / 798	77x26x58 / 798	77x26x58 / 798	In/lbs
- Floor-mounted Full Feature	48x29x43 / 551	48x29x43 / 551	48x29x43 / 551	48x29x43 / 551	In/lbs
- 71G Tank-mounted Full Feature	63x26x53 / 739	63x26x53 / 739	63x26x53 / 739	63x26x53 / 739	In/lbs
- 120G Tank-mounted Full Feature	77x26x58 / 891	77x26x58 / 891	77x26x58 / 891	77x26x58 / 891	In/lbs
2. Air discharge size	0.5	0.5	0.5	0.5	NPT
3. Condensate drain size	0.375	0.375	0.375	0.375	NPT
4. Oil sump capacity	0.8	0.8	0.8	0.8	gal

1. Performance (free air delivery) measured according to ISO1217.

2. Operating Sound Level: Operating sound levels for machines equipped with recommended standard motors and enclosures are guaranteed ±3 dB(A) when measured in free field conditions at a distance of 1 meter according to CAGI PNEUROP Test Code.