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AVG OIL/WATER SEPARATOR RANGE

ALL AVG OIL/WATER SEPARATORS ACHIEVE LESS THAN 10PPM RESIDUE VALUES AT OUTPUT STAGE

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OVERVIEW

The AVG Oil/Water Separator range separates the oil from the condensate which has been removed by your Expel compressed air filter.

This range of AVG Oil/Water Separators achieve efficient separation of oil from condensate by means of directing the condensate through various separation stages. As condensate flows into the separator, the oil is filtered out through various filtration elements.

The first oil adsorbing element has a clever saturation indicating feature, offering you a visual operating status of the separator at a distance. **The elements are designed to combine various types of adsorption technologies to achieve less than 10 ppm oil residue values at the output stage.**

Final separation stage includes an activated carbon element to polish out the remaining contaminants.

WHY INSTALL AN OIL/WATER SEPARATOR?

Condensate is a by-product of air compressors. It is a mixture of oil and water with particles and hydrocarbons that have been concentrated during the compression process.

This mixture of oil and water is classified as hazardous industrial waste. Environmental laws and regulations prohibit the discharge of untreated compressor condensate into foul sewers.

After the oily condensate has been efficiently removed from the compressed air system by Expel, it cannot be discharged directly to the foul sewer without first having the oil content reduced to within legal disposal limits.

Considering that compressor condensate consists of approximately 95% water, it makes financial sense to separate the oil from the condensate prior to the waste is disposed.

Every end-user that operates a compressed air system should have a (condensate) environmental management program (ISO 14000) in place not only to abide to laws and regulations but to also practice ecological responsibility. AVG Oil/Water Separators are a reliable, effective, efficient and above all an environmental solution.

All of our AVG Oil/Water Separators are compatible with ALL AVG Auto-Drains and are able to separate the following substances:

- Mineral lubricants
- Synthetic lubricants
- Stabile emulsions*
- Polyglycol, Roto-Inject, Sigma Mol*

**Special elements required for these substances and are available on request.*

AVG OIL/WATER SEPARATOR 2

COMMERCIAL BENEFITS

- Separation of all types of compressor lubricants.
- Compact design.
- The AVG Oil/Water Separator 2 does not incorporate a settling reservoir (no bacteria growth).
- Test valve and sample bottle to test oil ppm residue included as standard.

TECHNICAL ADVANTAGES

- High performance filtration materials applied.
- Simple, fast and clean installation and maintenance procedure.
- Successful separation of mineral oil, synthetic lubricants and stabile emulsions.
- Relevant fixings and installation bracket for wall mounting included.
- Brass hose connections for quick and easy installation.

FEATURES

- Test feature, offering you routine sampling of the output status.
- Quick and easy to service, offering you a clean exchange during maintenance activities.
- Very small footprint, offering you installation flexibility.

INSTALLING INSTRUCTIONS

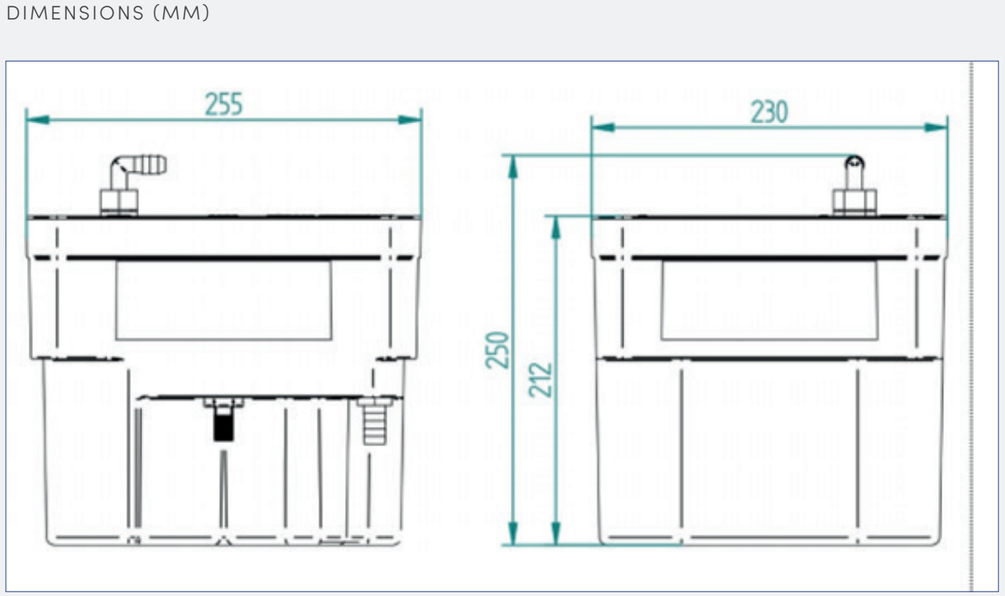
NOTICE: Before installing this product, make sure it complies with your request and that it suits your application!

1. Unpack the unit and visually inspect for any transport damage incurred after leaving our factory.
2. Depressurise the system before installation or maintenance is carried out.
3. Locate a suitable point in your compressor room to place your Condensate Cleaner. This point must be near a suitable sewage point. The unit is designed to easily fit against a wall or structure.
4. Screw the inlet nipple with rubber O-ring into its marked location using a 22mm wrench. Do not over tighten!
5. Mount the mounting bracket (back) against a wall or other suitable structure. Make sure the bracket is level.
6. After placing the mounting bracket (back) you can place the front bracket and screws, using a 5mm wrench. Do not tighten the screws. Make sure the front part of the bracket can be adjusted to fit the Condensate Cleaner.
7. Place the Condensate Cleaner and fix the bracket by tightening the screws.
8. Connect the condensate collection pipe to the inlet.
9. Connect the outlet from the Condensate Cleaner to a suitable sewage point. Make sure the condensate always flows down!
10. Fill the Condensate Cleaner with water until it is filled, and water flows out of the outlet point. Your Condensate Cleaner is ready for operation!

MAINTENANCE INSTRUCTIONS

1. Depressurise the system before installation or maintenance is carried out!
2. Remove the condensate supply hose from the inlet connection.
3. Remove the outlet hose from the outlet connection.
4. Unscrew the bracket screws and loosen the bracket.
5. Take the Condensate Cleaner out of the bracket.
6. Place a new Condensate Cleaner in the bracket.
7. Fix the bracket and Condensate Cleaner by tightening the screws.
8. Reconnect the condensate collection pipe to the inlet.
9. Reconnect the outlet hose to the outlet connection.
10. Fill the Condensate Cleaner with water until it is full, and water flows out of the outlet point. Your Condensate Cleaner is ready for operation!

DIMENSIONS (MM)



AVG OIL/WATER SEPARATOR 3.5

COMMERCIAL BENEFITS

- Separation of all types of compressor lubricants.
- Compact design and small footprint, offering easy handling and flexible installation benefits.
- Clothing kit included.

TECHNICAL ADVANTAGES

- High performance filtration materials applied.
- Simple, fast and clean installation and maintenance procedure.
- Successful separation of mineral oil, synthetic lubricants and stabile emulsions.
- Test bottle included for routine output testing schedules.
- Fixing bracket for wall mounting optionally available.
- Brass threaded inlet/outlet, ensuring a secure installation (hose barbs are included).

FEATURES

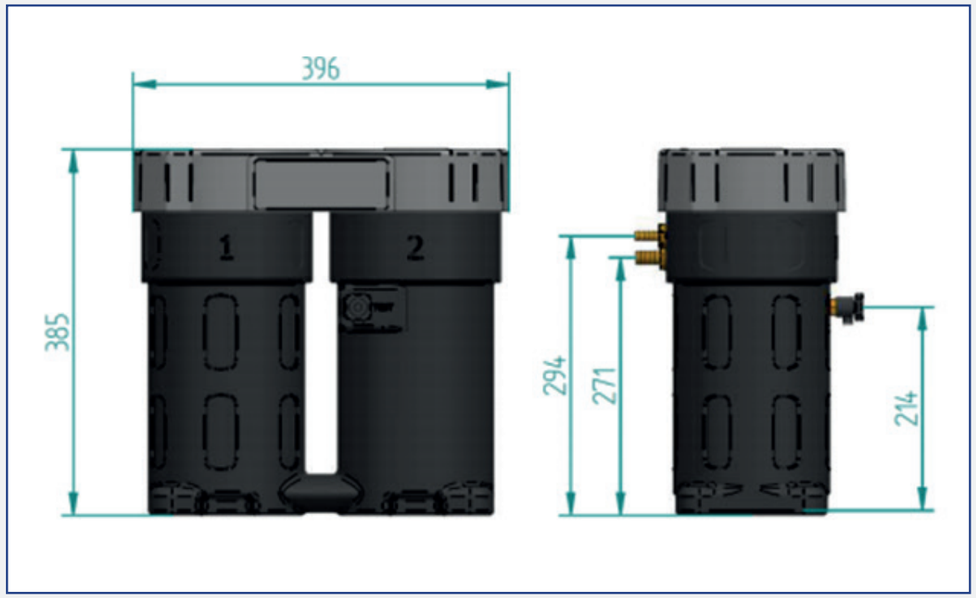
- As condensate flows into the separator, the oil is filtered out through various filtration elements.
- Versatile and compact.
- The elements are lightweight, and servicing is a quick and clean process.

INSTALLING INSTRUCTIONS

NOTICE: Before installing this product, make sure it complies with your request and that it suits your application!

1. Unpack the unit and visually inspect for any transport damage incurred after leaving our factory.
2. Depressurise the system before installation or maintenance is carried out!
3. Locate a suitable point in your compressor room to place your separator. This point must be near a suitable sewage point. The unit is designed to easily fit against a wall.
4. Remove the lid and take the installation kit out of the housing. You can use the clothing kit to protect your own clothing.
5. Screw the inlet and outlet nipples with rubber rings into their marked locations using a 22mm wrench.
6. Screw the test valve with ring into its marked location using a 17mm wrench. Make sure that the test valve is closed.
7. Connect the inlet nipple to the condensate collection pipe.
8. Connect the outlet nipple to a suitable sewage point. Make sure the condensate always flows down.
9. Fill the unit with water from tower 1 until both towers are filled and water flows out of the outlet point. Tip: spraying water over the black element in tower 2 before filling the housing prevents carbon dust from spreading. Push the black element down until all the trapped air has escaped out of the element.
10. Replace the lid and place the Test bottle in its location on top of the lid. Your Oil/ Water Separator is ready for operation! **We recommend that initially a daily check is made on the quality of the output from your condensate cleaner. After a day or so, the output should be clear when viewed using the test bottle.*

DIMENSIONS (MM)



AVG OIL/WATER SEPARATORS
5 / 10 / 20 / 30 & 60

COMMERCIAL BENEFITS

- Separates all types of compressor lubricants
- Five models covering up to 60 m3/ min. compressor capacity offering sizing flexibility.
- Small footprint.

TECHNICAL ADVANTAGES

- Element life indicator, offering you a visual indication of the element life status.
- Simple installation and maintenance procedures.
- Lighter and easier replacement of elements.
- Sectional service draining options during servicing.
- Multiple condensate inlets with brass inserts for hard piping installations.
- Large 1" output capacity.
- Test valve and sample bottle to test oil ppm residue included as standard.

FEATURES

- The first oil adsorbing element has a clever saturation indicating feature, offering you a visual indication of the elements' saturation level.
- Final separation stages include a second polypropylene element and specially selected activated carbon to polish out the remaining contaminants.
- All 5 models achieve efficient separation of oil from condensate by means of directing the condensate through various separation stages.

INSTALLING INSTRUCTIONS

NOTICE: Before installing this product, make sure it complies with your request and that it suits your application!

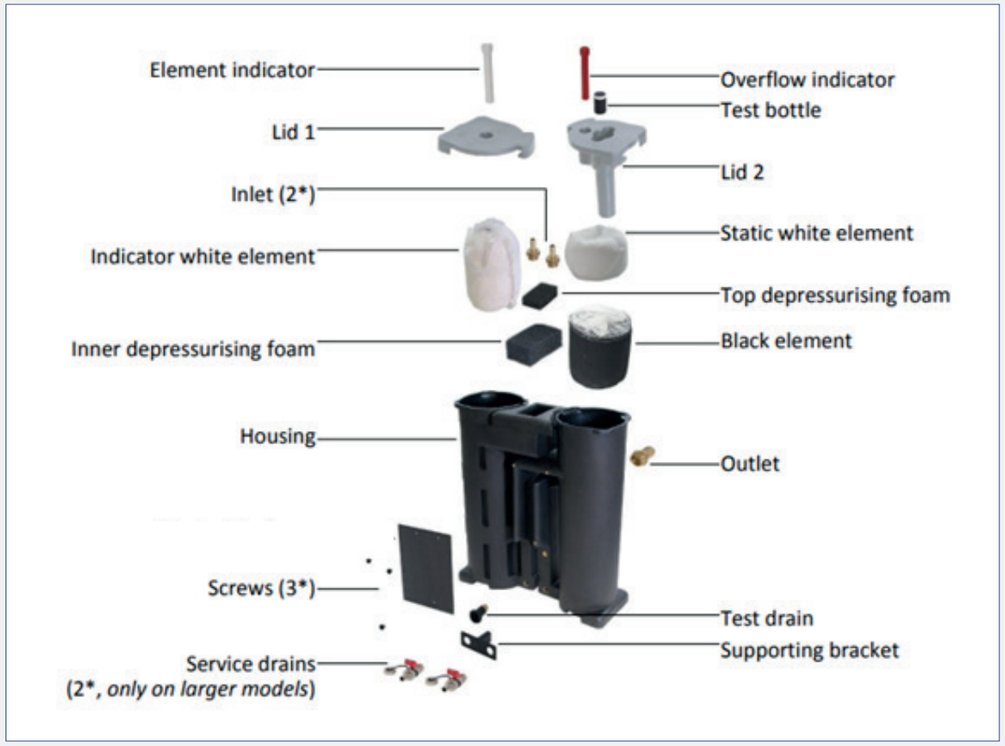
1. Unpack the unit and visually inspect for any transport damage incurred after leaving our factory.
2. Depressurise the system before installation or maintenance is carried out!
3. Locate a suitable point in your compressor room to place your separator. This point must be near a suitable sewage point. The unit is designed to easily fit against a wall.
4. Remove both lids and take the two white elements out of the housing. **You can use the clothing kit to protect your own clothing.*
5. Connect the outlet of the separator to a suitable sewage point. Make sure the condensate always flows down! *Do not reduce the 1" outlet size. Use the supplied 1" adapter and corresponding tube size!
6. Before filling the unit with water make sure that the test drain and service drains are closed.
7. Fill the unit with water from tower 1 until both towers are filled and water flows out of the outlet point. **During initial filling, dust may rise from the carbon element*; this is only displaced air and is entirely harmless. We recommend the active carbon element to be pre-soaked for 24 hrs. Any carbon dust in the outlet water is harmless.
8. Ensure the black element rests on the bottom of the tower by pushing (and holding) it down. **Push the element down until all the trapped air has escaped out of the element.*
9. When both towers are filled with water and the black element rests on the bottom of tower 2 you can replace both white elements. White indicator element in tower 1 and white static element in tower 2.
10. Replace both lids. The white static element will be pushed in place by lid 2. **Make sure both lids are placed and secured properly.*
11. Connect the condensate collection pipe to the inlet of the separator.
12. Your Oil/Water Separator is ready for operation! **We recommend that initially a daily check is made on the quality of the output from your condensate cleaner. After a day or so, the output should be clear when viewed using the test bottle.*

AVG OIL/WATER SEPARATORS
5 / 10 / 20 / 30 & 60 *continued*

DIMENSIONS (MM)

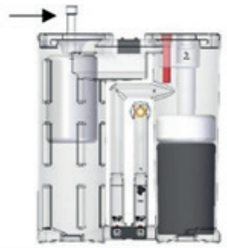
	5m³/min.	10m³/min.	20m³/min.	30m³/min.	60m³/min.
A	610	750	900	900	1040
B	580	650	780	970	1160
C	190	240	305	380	480

LABELLED DIAGRAM



DEVICE OPERATION

1. After installing the condensate cleaner, the white element indicator is up indicating the elements are clean and ready to perform.



2. The white indication element and white indicator will go down, as soon as the element starts to saturate.

3. When the white indicator is all the way down, all elements should be replaced immediately.

4. The red overflow indicator will be up to indicate the elements are completely saturated and an overflow can occur due to blockage of the elements caused by saturation, or that the outlet is blocked.

TECHNICAL SPECIFICATIONS

AVG Oil/Water Separator Model	2	3.5	5	10	20	30	60
Part number	6100-036-AA	6100-037-AA	6100-038-AA	6100-039-AA	6100-040-AA	6100-041-AA	6100-042-AA
Max. Compressor capacity (based on an 8h. Shift)	2m³/min	3.5m³/min	5m³/min	10m³/min	20m³/min	30m³/min	60m³/min
Max. Oil adsorption elements	2 litres	4 litres	5 litres	10 litres	15 litres	25 litres	50 litres
Inlet connection	½", 10mm hose connection	½" (hose barb included)	½" (2)	½" (2)	½" (2)	½" (2)	½" (2)
Outlet connection	½", 13 mm hose connection	½" (hose barb included)	1"	1"	1"	1"	1"
Test valve	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Service drain	No	No	No	Yes	Yes	Yes	Yes
Overflow indicator	No	No	Yes	Yes	Yes	Yes	Yes
Element life indicator	No	No	Yes	Yes	Yes	Yes	Yes
Housing material	ABS	PE	PE	PE	PE	PE	PE
Total recyclable	Yes	Yes	Yes	Yes	Yes	Yes	Yes

TEST BOTTLE INSTRUCTIONS

1. Take the Sample Bottle out of its container and screw off the lid.

2. Hold the Sample Bottle under the test valve and open the test valve.

3. Fill the Sample Bottle to just above the top sticker and close the test valve. Screw the lid back on the Sample Bottle.

4. By comparing the cloudiness of the condensate with the shaded area of the labels on the Sample Bottle, you can visually determine the potential oil content in the condensate.

How to perform the check

(a) Turn your Sample Bottle 90° and rotate the bottle until you have a part of the labels above and a part of the labels in the condensate level. This way you can compare the shaded area of the labels and the clarity of the condensate simultaneously.

(b) If the cloudiness of the condensate is more than the background shaded area of the 20PPM label, and you can no longer see a difference between the shaded area of the label background and the cloudiness of the condensate, your elements may be saturated and may need replacing.

Note: This test is a visual "indication only" test. To determine the exact oil content in your condensate sample, a laboratory test is required.

5. Screw off the lid and pour the condensate back into tower 1 of the oil/water separator.

6. Clean and dry the sample bottle with a cloth and screw the lid back on the Sample Bottle.

7. Place the sample bottle back into its container and back in the lid of the oil/water separator.

You can use the same Sample Bottle for future checks.

SAFETY AND PROPER USAGE

To ensure safe and enduring performance of this product, you must comply strictly with the instructions enclosed. Non-compliance with instructions or improper handling of the product will void your warranty! Usage of this product in conditions not specified in this manual or in contrary to the instructions hereby provided is considered IMPROPER. The manufacturer will not be held liable for any damages resulting from improper use of the product.

SAFETY & WARNING INSTRUCTIONS

- Observe valid and generally accepted safety rules when planning, installing and using this product.
- Take proper measures to prevent unintentional operation of the product or damage.
- Do not attempt to disassemble this product or lines in the system while they are under pressure.
- Always depressurise the compressed air system before working on the system.

It is important that personnel use safe working practices and observe all regulations and legal requirements for safety when operating this product. When handling, operating, or carrying out maintenance on this product, personnel must employ safe engineering practices and observe all local health & safety requirements & regulations. International users refer to regulations that prevail within the country of installation. Most accidents, which occur during the operation and maintenance of machinery, are the result of failure to observe basic safety rules or precautions. An accident can often be avoided by recognising a situation that is potentially dangerous. Improper operation or maintenance of this product could be dangerous and result in an accident, causing injury or death. The manufacturer cannot anticipate every possible circumstance, which may represent a potential hazard.

The WARNINGS in this manual cover the most common potential hazards and are therefore not all-inclusive. If the user employs an operating procedure, an item of equipment or a method of working which is not specifically recommended by the manufacturer he must ensure that the product will not be damaged or made unsafe and that there is no risk to persons or property.

NEVER CHANGE ORIGINAL COMPONENTS WITH ALTERNATIVES.

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