

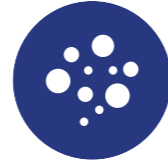
# Original AVG Product Technical Specifications





original AVG

EXPEL (an AVG filter) continually removes 99.999% of...  
 water • oil emulsion fluids • solid particulates



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The information provided in this publication is for guidance only. For the latest product information and full technical details, please refer to our website [www.originalavg.com](http://www.originalavg.com). Our kit manuals are available for you to download from our website.

# REDUCE COSTS

Expel 3 & 30 max. pressure bar drop is just 0.1 bar, which unlike traditional filters, never increases with use, saving energy.



Drastically REDUCES maintenance, repair and energy costs



NO replacement filter elements required



Robust and built to last



10 year guarantee



# REDUCE DOWNTIME & MAINTENANCE

Solves and prevents damage to equipment caused by liquid water



NEVER reduces in performance



Reduces maintenance of pneumatic equipment



## EFFICIENCY

Traditional filter  
EXPTEL

60-80%

99.9999%

Expel is a 3-in-1 filter

- Bulk water separator
- Particle filters to 1 micron
- Coalescent filters



**Expel** is a patented inline point-of-use compressed air filter that continually removes 99.999% of liquid water, oil emulsion fluids and solid particulates down to 1 micron all in a single unit.

Expel's unique design means there are no ongoing costs and you never need to change internal elements, simply fit and forget.

Exceptional compressed air quality guaranteed

**10 year guarantee**

## Features



### Performance

- Removes 99.999% of all liquid water, oil emulsion fluids and solid particulates down to 1 micron
- Guaranteed high performance over the lifetime of the filter
- No moving parts that can fail
- No small holes to block



### Installation / Maintenance

- Easy to install and maintain
- World's first cleanable, reusable compressed air filter
- All spare parts available
- Fully dismantlable



### Savings

- No element costs No ongoing consumable costs
- No power source required
- No increase in pressure drop



### Additional Features

- Tested to ISO 12500 standards
- Stainless steel body and head
- Optional pressure gauge
- 10 Year Guarantee



## Expel range



<b>EXPEL 3</b>	<b>Part Number: 6000-019</b>
Flow rate for a 7 bar (g) system	<b>1-9 cfm</b>
Operating pressure	<b>1-15 bar(g)   15-218 psi(g)</b>
Inlet/Outlet connection	<b>¼" BSPT</b>
Drain connection	<b>½" (m) BSPT</b>



<b>EXPEL 30</b>	<b>Part Number: 6000-003</b>
Flow rate for a 7 bar (g) system	<b>4-30cfm</b>
Operating pressure	<b>1-15 bar(g)   15-217 psi(g)</b>
Inlet/Outlet connection	<b>¾" BSPT – with ½" reducer</b>
Drain connection	<b>½" (m) BSPT</b>



<b>EXPEL 60M</b>	<b>Part Number: 6001-005</b>
Flow rate for a 7 bar (g) system	<b>4-60 cfm</b>
Operating pressure	<b>1-15 bar(g)   15-217 psi(g)</b>
Inlet/Outlet connection	<b>1" , 1½", 2" BSPT</b>
Drain connection	<b>½" (m) BSPT</b>
Note	<b>Units on a manifold</b>



<b>EXPEL 90M</b>	<b>Part Number: 6001-006</b>
Flow rate for a 7 bar (g) system	<b>4-90 cfm</b>
Operating pressure	<b>1-15 bar(g)   15-217 psi(g)</b>
Inlet/Outlet connection	<b>1" , 1½", 2" BSPT</b>
Drain connection	<b>½" (m) BSPT</b>
Note	<b>Units on a manifold</b>

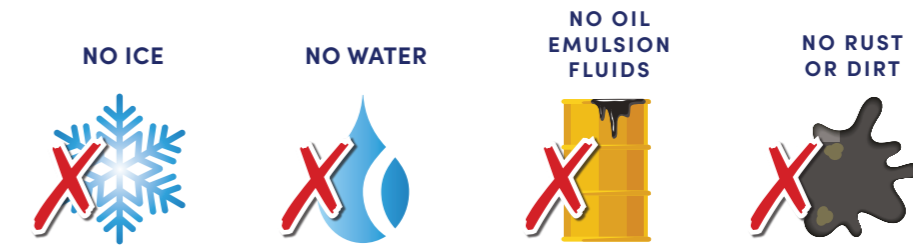
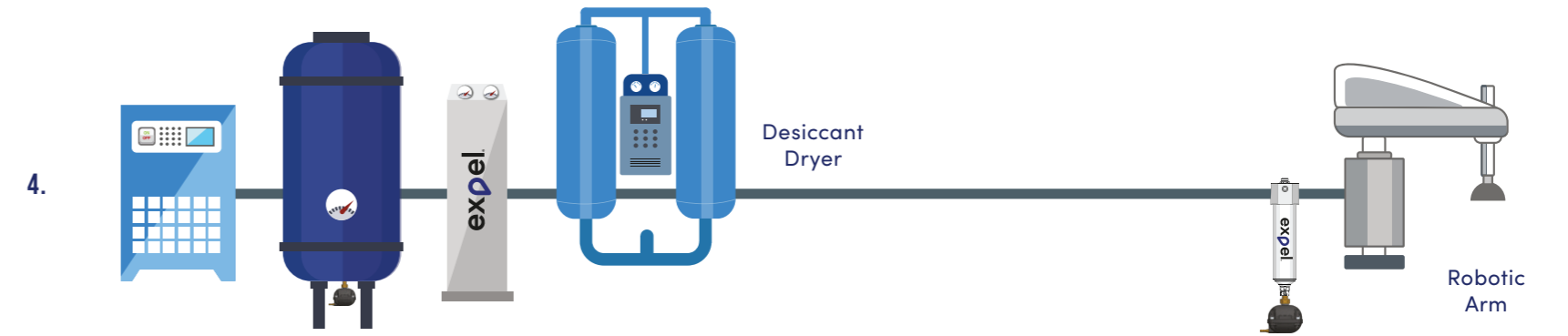
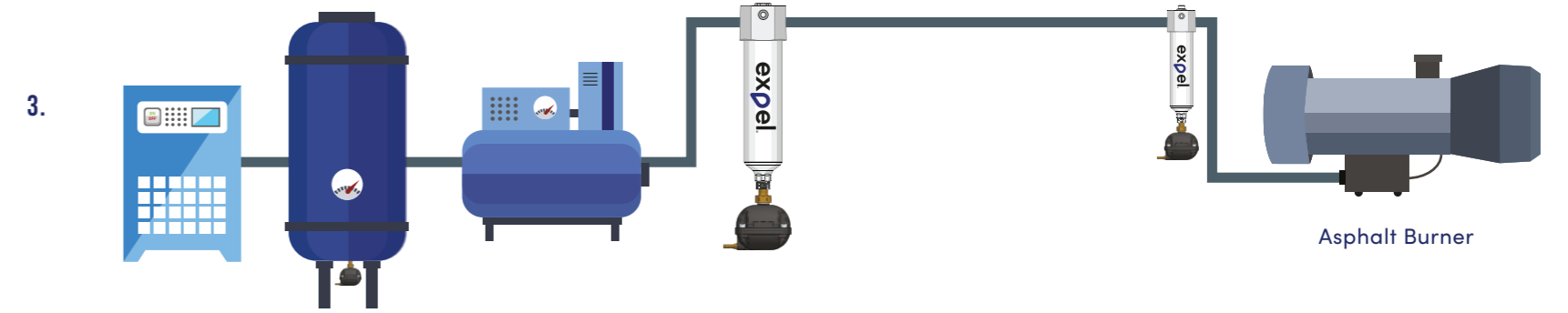
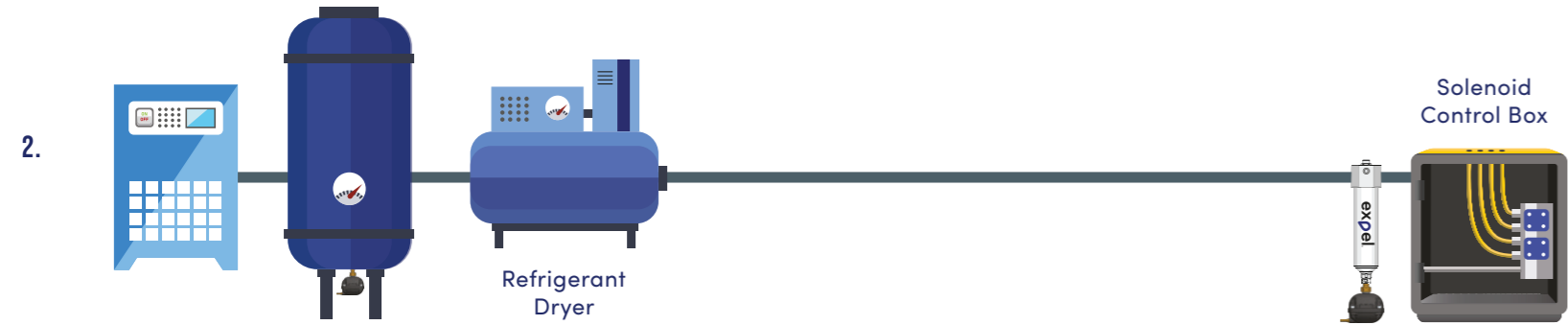


***Expel is on all of my plants, I would highly recommend it and I have been recommending it too!***

Steve Pointon - Operations manager - Aggregate Industries







# Where to Install Expel?



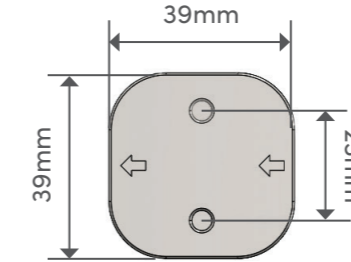
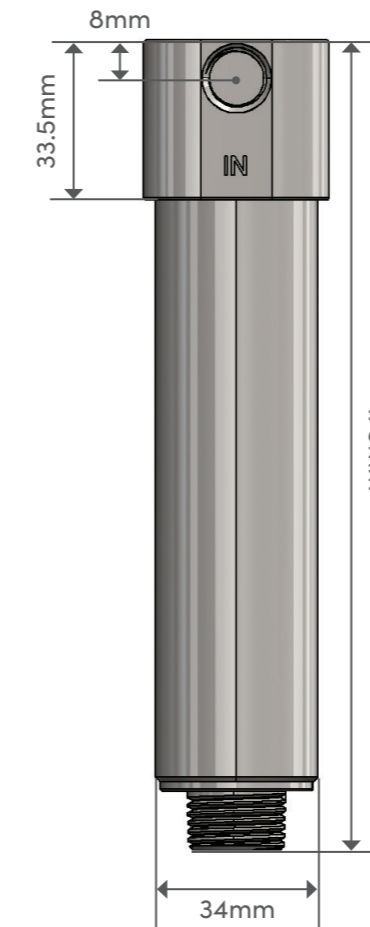
*Please note: The flow rate of your compressor and piping size will determine which size Expel unit you require. Please contact us for further information.*

# Technical Specifications

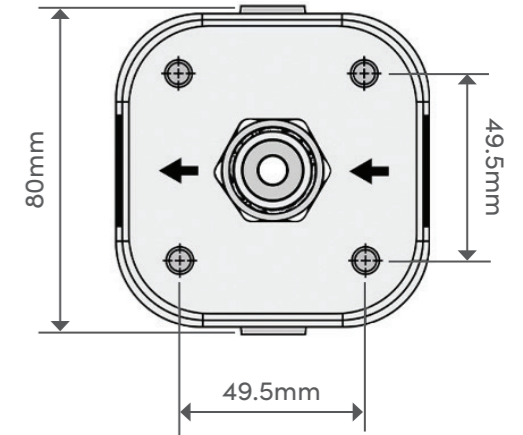
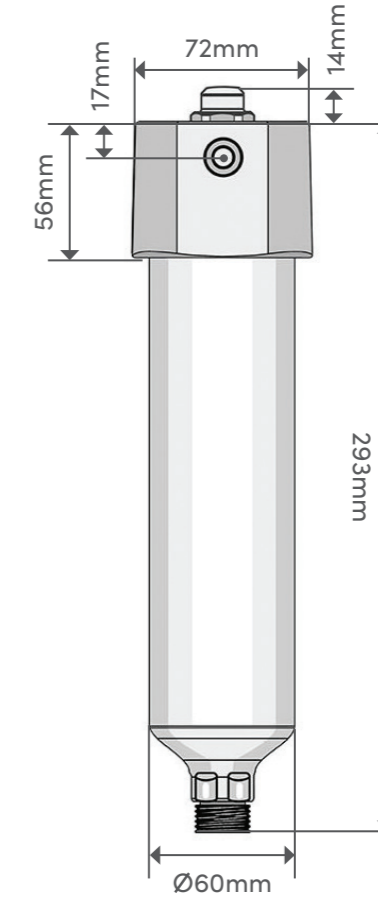
Model	Flow Rate	Inlet/Outlet Connection BSPT (F)	Operating Pressure	Operation Temperature	Drain Connection BSPT (M)	Material Housing	Material Internals	Manifold Unit	Qty. of Auto Drains Required	Weight Out of the Box
 Expel 3	1-9 cfm 28-255 l/min 1.7-15 m3/hr	1/4"	1-15 bar 15-217psi	0 to + 80 °C 32 to 176 °F	1/2"	SS 316	ABS	No	1	0.8 kg
 Expel 30	4-30 cfm 141-850 l/min 6.7-51 m3/hr	3/4" (with 1/2" reducer)	1-15 bar 15-217psi	0 to + 80 °C 32 to 176 °F	1/2"	SS 304	ABS	No	1	2.6 kg
 Expel 60M	4-60 cfm 141-1699 l/min 6.7-102 m3/hr	1", 1 1/2" or 2"	1-15 bar 15-217psi	0 to + 80 °C 32 to 176 °F	1/2"	SS 304	ABS	Yes	2	8 kg
 Expel 90M	4-90 cfm 141-2548 l/min 6.7-153 m3/hr	1", 1 1/2" or 2"	1-15 bar 15-217psi	0 to + 80 °C 32 to 176 °F	1/2"	SS 304	ABS	Yes	3	13 kg

# Technical Drawings

EXPEL 3



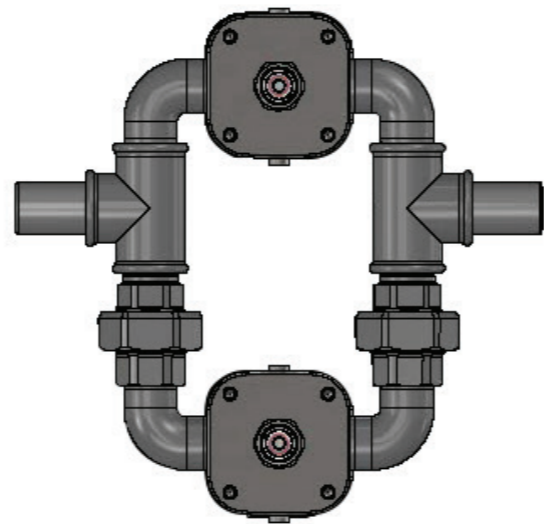
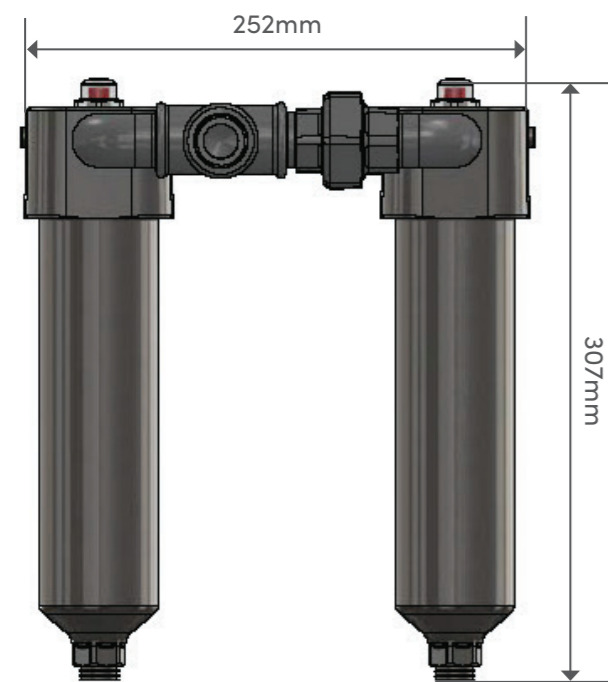
EXPEL 30



Not to scale (mm)

# Technical Drawings

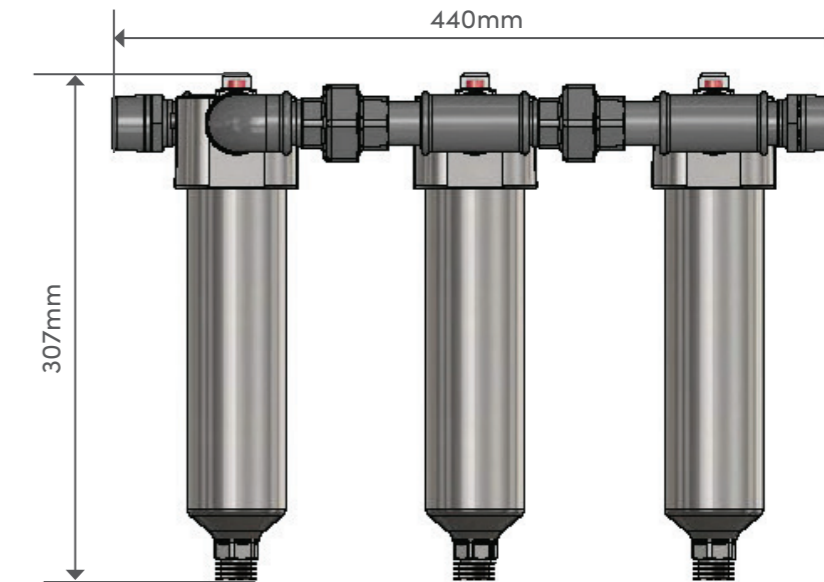
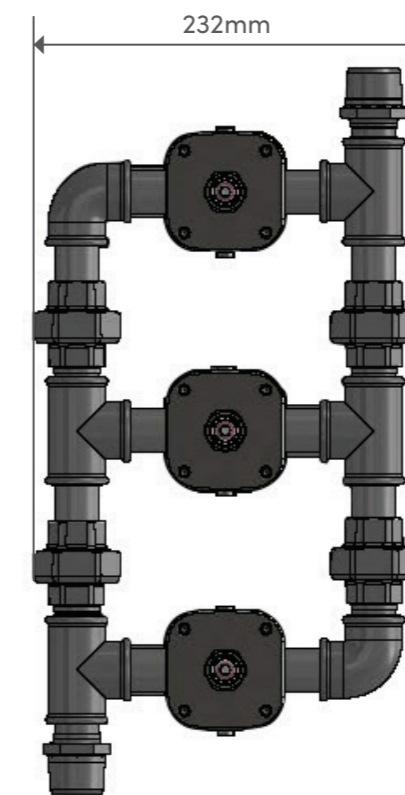
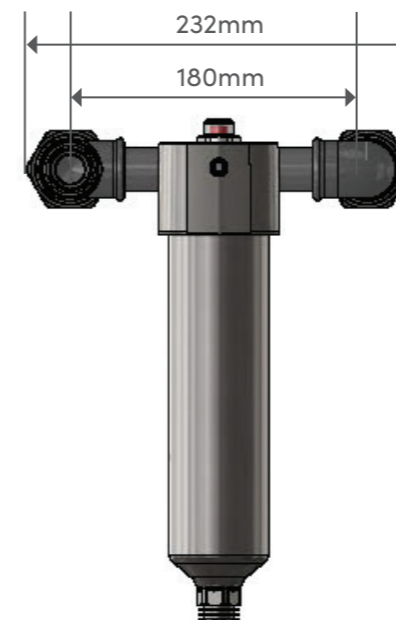
## EXPEL 60M



Not to scale (mm)

# Technical Drawings

## EXPEL 90M



Not to scale (mm)



## Box Contents

### EXPEL 3

Box Contents	Quantity
Expel 3	1
Mounting Bracket	1
Bolts	4
Fixing Screws	4
Plastic wall Plug	4

### EXPEL 30

Box Contents	Quantity
Expel 30	1
Mounting Bracket	1
Bolts	4
Fixing Screws	4
Plastic wall Plug	4

### Expel 60M: Plastic Manifold

Box Contents	Quantity
Expel 60M	1
Mounting Bracket	1

### Expel 90M: Plastic Manifold

Box Contents	Quantity
Expel 90M	1
Mounting Bracket	1

### Expel 60M: Galvanized Manifold

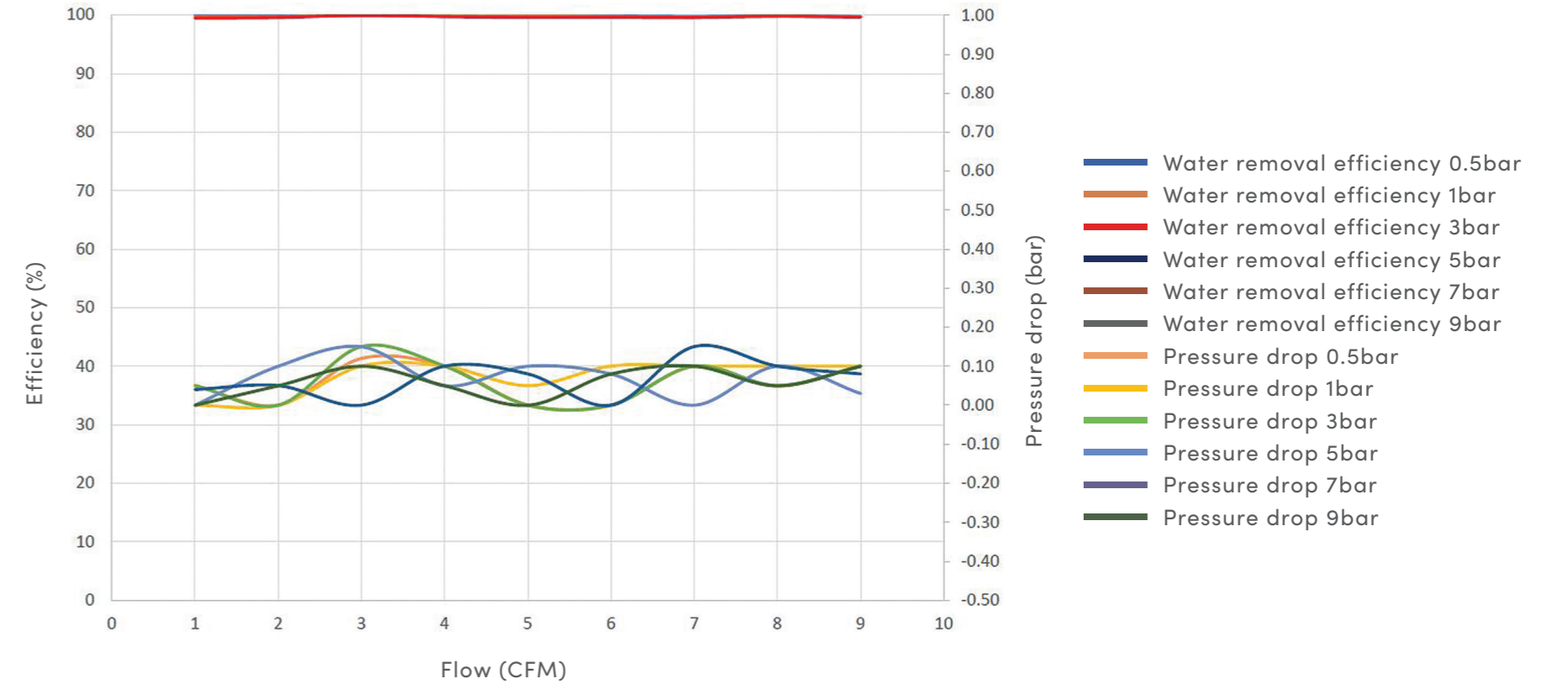
Box Contents	Quantity
Expel 60M	1

### Expel 90M: Galvanized Manifold

Box Contents	Quantity
Expel 90M	1

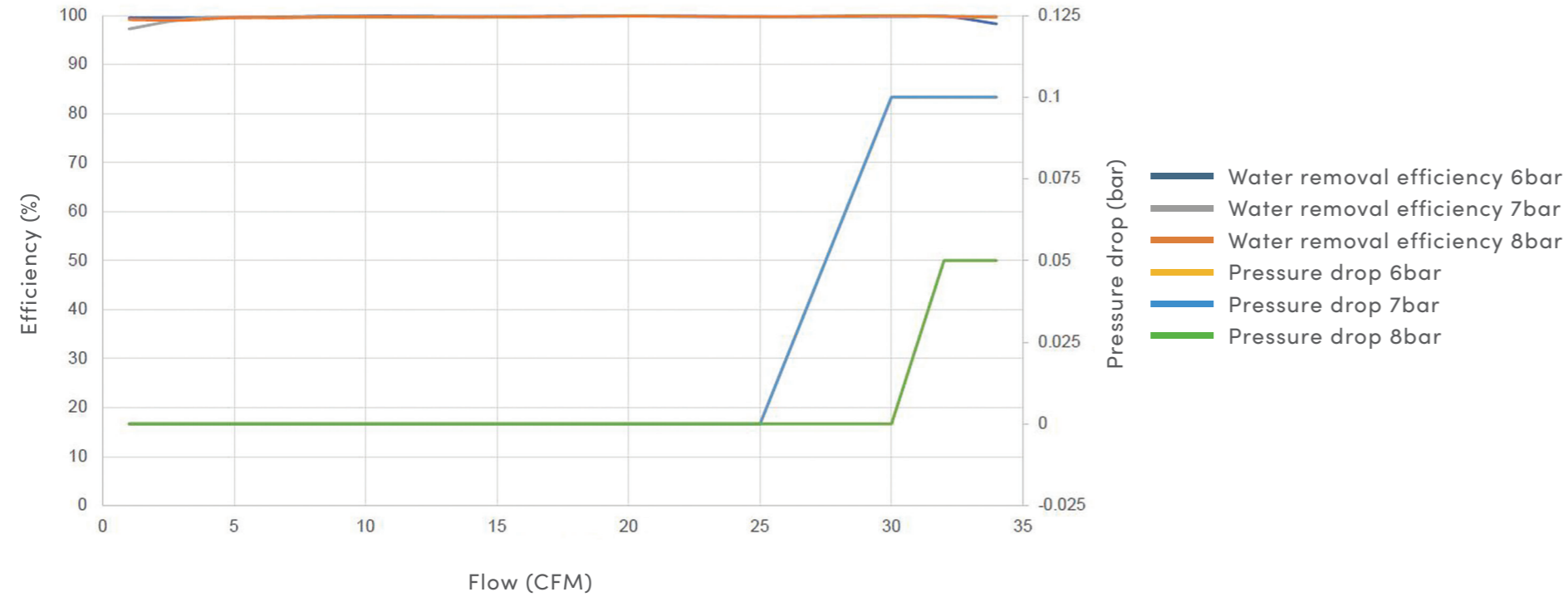
## Performance & Pressure Bar Drop

### EXPEL 3



# Performance & Pressure Bar Drop

## EXPEL 30



# Part Numbers

Model	Part Number	Manifold Unit	Manifold Piping	Portable Framed Unit	Connection Sizes	Quantity of Auto-drains Required
Expel 3	6000-019-AC				1/4"	1
Expel 30	6000-003-AA				3/4" (with 1/2" reducer)	1
Expel 60M	6001-005-AB	✓	Plastic		1"	2
Expel 60M	6001-005-AD	✓	Plastic		1 1/2"	2
Expel 60M	6001-005-AC	✓	Plastic		2"	2
Expel 60M	6001-004-AA	✓	Galvanized		1"	2
Expel 60M	6001-004-AB	✓	Galvanized		1 1/2"	2
Expel 60M	6001-008-AA	✓	Galvanized	✓	1"	2
Expel 90M	6001-006-AB	✓	Plastic		1"	3
Expel 90M	6001-006-AD	✓	Plastic		1 1/2"	3
Expel 90M	6001-006-AC	✓	Plastic		2"	3
Expel 90M	6001-007-AA	✓	Galvanized		1"	3
Expel 90M	6001-007-AB	✓	Galvanized		1 1/2"	3
Expel 90M	6001-009-AB	✓	Galvanized		2"	3
Expel 90M	6001-009-AA	✓	Galvanized	✓	1"	3

# AVG Auto Drains





AVG Auto Drains are essential for your Expel unit to function correctly.

Other applications include:

- Inter-coolers
- After-coolers
- Dryers
- Air receiver tanks
- Drip legs



## Range Comparison

AVG Auto Drain	Voltage / Part Number	Airline Condition	Drain type	Power Needed	Serviceable	Valve Orifice (mm)	Inlet Connection	Operating Pressure (Bar)
 <b>AVG 37</b>	4.5 V 24VCD (6100-079) 4.5 V 230VAC (6100-080) 4.5 V 115VAC (6100-081)	Extremely Dirty	Timer Drain	Yes	Yes	12	1/2" BSP	0-40
 <b>AVG Electronic Timer Drain</b>	4.5 V 380VAC (6100-078-AA) 4.5 V 230VAC (6100-073-AA) 4.5 V 115VAC (6100-074-AA) 4.5 V 24VAC (6100-075-AA) 4.5 V 24VDC (6100-076-AA) 4.5 V 12VDC (6100-077-AA)	Very Dirty	Timer Drain	Yes	Yes	4.5	1/2" BSP	0-16
 <b>AVG Float Drain</b>	6100-084	Dirty	Float Drain	No	Yes	3	1/2" RC	0-10
 <b>AVG Clear Plastic Auto Drain</b>	6100-023	Clean	Float Drain	No	Yes	6	1/2" BSPT	0-10

# AVG 37

## Technical Specifications

Type	Motorized Ball Valve Drain
Maximum compressor capacity	Any size
Pressure range	0-600 psi / 0-40 bar
Supply voltage options	24VDC, 115VAC and 230VAC 50/60hz. (Please indicate)
Medium temperature	34-140°f / 1-60°c
Ambient temperature	34-131°f / 1-55°c
Timer cycle range (on / off)	7 seconds to 15 minutes ON / 4 minutes to 24 hours OFF
Actuator PCB	SMD technology, ensuring consistency in production
Timer cycle indication	Bright LED illumination, LED program indicator
Test feature	Yes
Valve type	2/2 way, motorised ball valve
Valve orifice	12mm
Valve seals	FPM and Teflon
Inlet/outlet connections	1/2" BSP
Inlet connection height	0.4"
Serviceable valve	Yes
Valve housing material	Brass nickel plated, ball valve stainless steel
Power connection	Cable and plug
Environmental protection	Nema4 (IP65)
Remote switch option	Yes
California proposition 65	See manual
Battery backup	Yes



# AVG 37

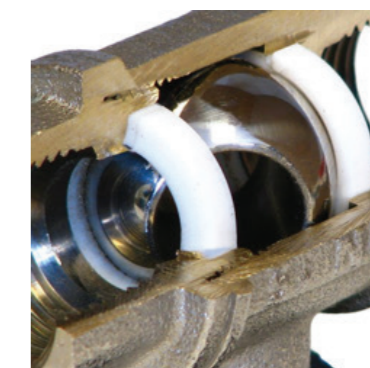
## Range & Features



Large (full bore) 12 mm orifice, offering you a drain that cannot block.



Digital cycle display, offering you a visual display of drain status.



Stainless steel ball valve, offering you crushing power.

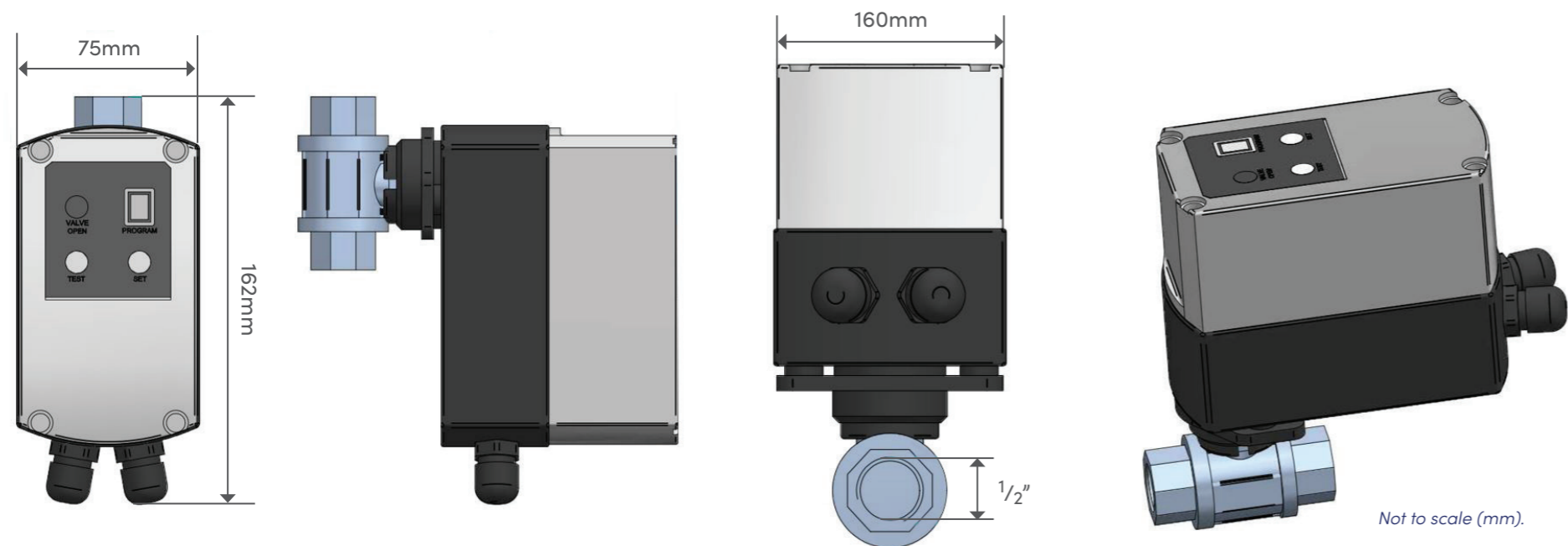


Remote switch option

Item Name	Part number	Port	Voltage	Valve Orifice
AVG 37	6100-079	G½	4.5 V 24VAC	12mm
AVG 37	6100-080	G½	4.5 V 230VAC	12mm
AVG 37	6100-081	G½	4.5 V 115VAC	12mm

# AVG 37

## Technical Drawing & Box Contents



Box Contents	Qty
AVG 37	1

# AVG Electronic Timer Drain

## Technical Specifications



<b>Maximum compressor capacity</b>	<b>Any size</b>
Pressure range	<b>0-16 bar</b>
Supply voltage options	<b>12-380VAC/DC</b>
Medium temperature	<b>1-55°C</b>
Ambient temperature	<b>1-55°C</b>
Timer cycle range (on/off)	<b>0.5-10 seconds / 0.5-45 minutes</b>
Timer PCB	<b>SMD technology, ensuring consistency in production</b>
Timer cycle indication	<b>Bright LED illumination</b>
Test feature	<b>Yes</b>
Valve type	<b>2/2 way, direct acting</b>
Valve orifice	<b>4.5 mm</b>
Valve seals	<b>FPM</b>
Inlet/outlet connections	<b>2/2" BSP</b>
Inlet connection height	<b>1cm</b>
Serviceable valve	<b>Yes</b>
Valve housing material	<b>Brass (Stainless steel available)</b>
Power connection	<b>DIN 43650-A</b>
Environmental protection	<b>IP65 (NEMA4)</b>

# AVG Electronic Timer Drain

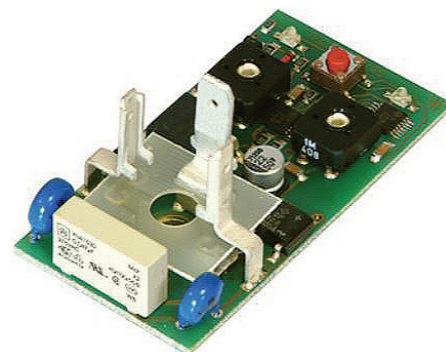
## Range & Features



TEST button feature



Serviceable valve, offering you annual maintenance revenues.



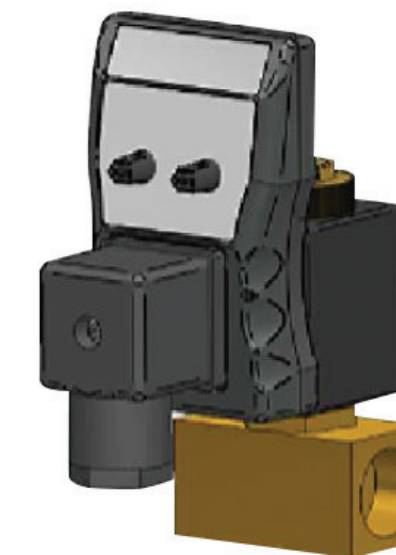
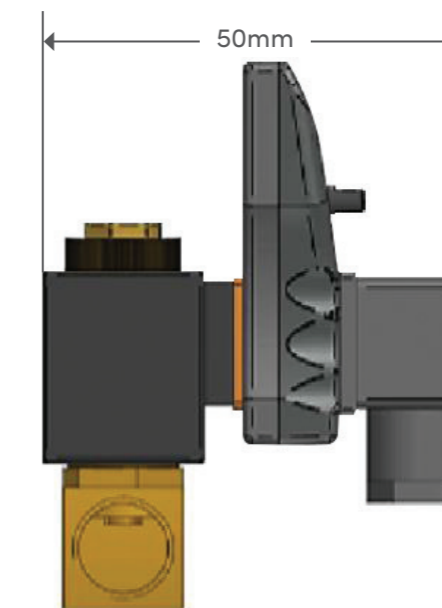
High-quality PCB components, offering you consistent quality.

Item Name AVG Electronic Timer Drain	Part number	Port	Voltage	Valve Orifice	Valve House Material
G½ 4.5 V 230VAC	6100-073	G½	4.5 V 230VAC	4.5 mm	Brass
G½ 4.5 V 115VAC	6100-074	G½	4.5 V 115VAC	4.5 mm	Brass
G½ 4.5 V 24VAC	6100-075	G½	4.5 V 24VAC	4.5 mm	Brass
G½ 4.5 V 24VDC	6100-076	G½	4.5 V 24VDC	4.5 mm	Brass
G½ 4.5 V 12VDC	6100-077	G½	4.5 V 12VDC	4.5 mm	Brass
G½ 4.5 V 380VAC	6100-078	G½	4.5 V 380VAC	4.5 mm	Brass

Stainless Steel and High Pressure versions are available contact our sales team [sales@originalavg.com](mailto:sales@originalavg.com)

# AVG Electronic Timer Drain

## Technical Drawing & Box Contents



Box Contents	Qty
AVG Electronic Timer Drain – Various voltages	1
Fitting – Brass Hosetail – ½" BSP x ½" hosetail	1
RPVC – Clear braided 12mm ID.	1
Jubilee Clip – 13-20mm	1
AVG – In-line Strainer	1

# AVG Float Drain

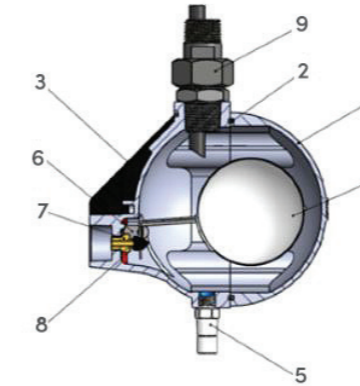
## Technical Specifications



Type	<b>Ball float type</b>
Ambient and fluid temperature	<b>1.5-65 °C</b>
Operating pressurer range	<b>0-10 bar</b>
Port size	<b>Rc 1/2"</b>
Drain port size	<b>Rc 1/2"</b>
Initial discharge value	<b>72-75ml</b>
Largest discharge capacity	<b>400L/h (6.67L/min)</b>
Bowl material	<b>Aluminium</b>
Valve seal material	<b>Nitrile rubber</b>
Serviceable	<b>Yes</b>
Valve orifice	<b>3mm</b>
Weight	<b>0.6kg</b>

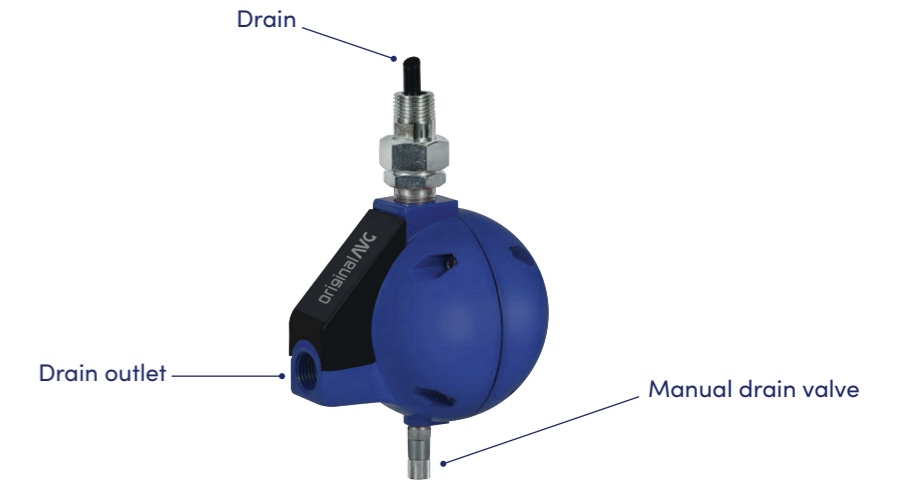
# AVG Float Drain

## Technical Drawing & Box Contents



Dimensions	<b>134 x 108 x 180mm</b>
------------	--------------------------

1. Drain body
2. Plum-shaped O-ring
3. Nameplate Plastic Cap
4. Stainless Steel Float Ball
5. Manual Drain Valve
6. Fixed Kit
7. Drain Nozzle
8. Colloid
9. Nipple



Box Contents	Qty
AVG Float Drain	<b>1</b>
Fitting – Brass Hosetail – 1/2" BSP x 1/2" hosetail	<b>1</b>
RPVC – Clear braided 12mm ID	<b>1</b>
Jubilee Clip – 13-20mm	<b>1</b>
Anti-air lock vent tube	<b>1</b>

# AVG Clear Plastic Auto Drain

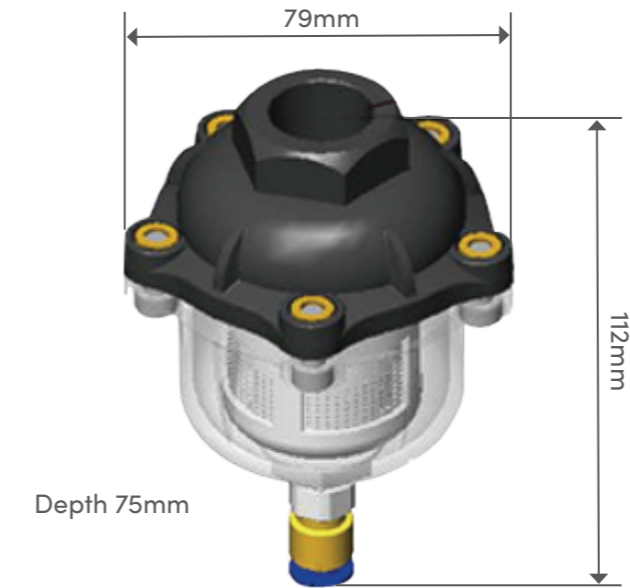
## Technical Specifications



Type	Float type
Ambient and fluid temperature	1.5-85°C
Operating pressure range	0-12 bar
Port size	1/2" BSPT (F)
Drain port size	Φ 6mm diameter
Initial discharge value	22ml
Largest discharge capacity	84 L/h (1.4 L/min) plastic
Bowl material	Plastic
Serviceable	Yes
Valve orifice	Φ 6mm diameter
Weight	0.6kg
Test option	Manual override for immediate condensate discharge

# AVG Clear Plastic Auto Drain

## Technical Specifications



Not to scale (mm)

Box Contents	Qty
AVG Clear Plastic Auto Drain	1
700mm Hose – MH – Clear PVC Tubing – ID 4mm, OD 6mm	1



# AVG Regulators

Pneumatic regulators maintain constant output pressure when installed in pneumatic lines.

Temperature range -5 to +70 °C

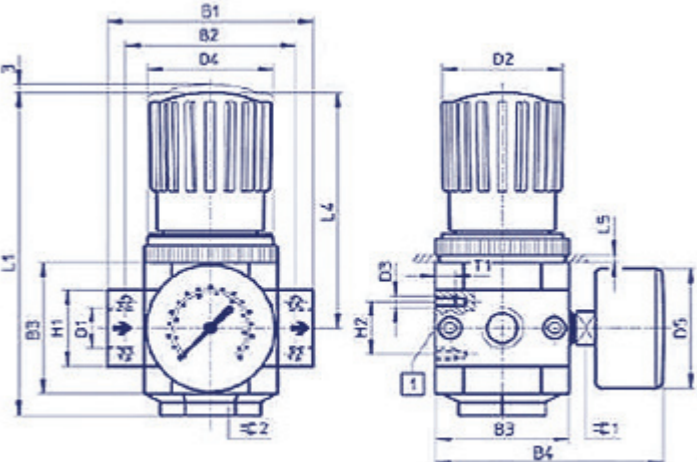


# AVG Regulators

## Technical Specifications



Not to scale (mm)



Item AVG Regulator	Part Number	Connection Size	Pressure Regulation Range	Housing Material	Temperature Range
0.25	2514-006	1/4"	0.5-12 bar	Zinc alloy	-5 to +70 °C
0.5	2514-003	1/2"	0.5-12 bar	Zinc alloy	-5 to +70 °C
0.75	2514-004	3/4"	0.5-12 bar	Zinc alloy	-5 to +70 °C
1	2514-007	1"	0.5-12 bar	Zinc alloy	-5 to +70 °C

# AVG Lubricators

Pneumatic lubricators deliver oil to air tools and equipment to improve performance and reduce wear.

The oil drip rate is controlled by the adjustable bolt. Normally, 1 to 12 drops/1000 or the air is sufficient.

Recommended lubricant ISO VG 32 / ISO VG 32 or equivalent.

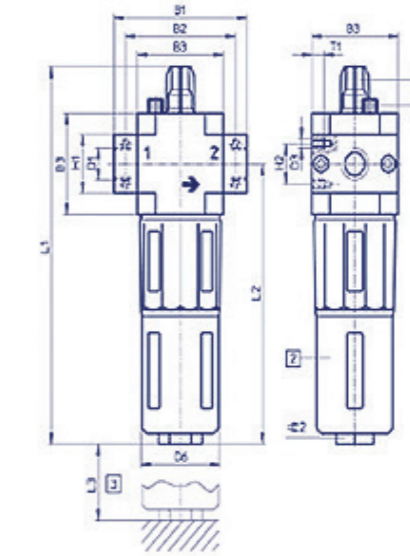


## AVG Lubricators

### Technical Specifications



Not to scale (mm)



Item AVG Lubricator	Part Number	Pressure Regulation Range	Housing Material	Temperature Range
1/4"	2515-004	0.5-16 bar	Zinc alloy	-5 to +70 °C
1/2"	2515-000	0.5-16 bar	Zinc alloy	-5 to +70 °C
3/4"	2515-001	0.5-16 bar	Zinc alloy	-5 to +70 °C
1"	2514-003	0.5-16 bar	Zinc alloy	-5 to +70 °C

# AVG Oil/Water Separators

Environmental regulations strictly prohibit disposing of oil contaminated condensate without proper treatment to remove the oil.

All of our AVG Oil/water Separators successfully remove:

- Mineral lubricants
- Synthetic lubricants
- Stable condensate emulsions
- Polyglycol, Roto-Inject and Sigma Mol



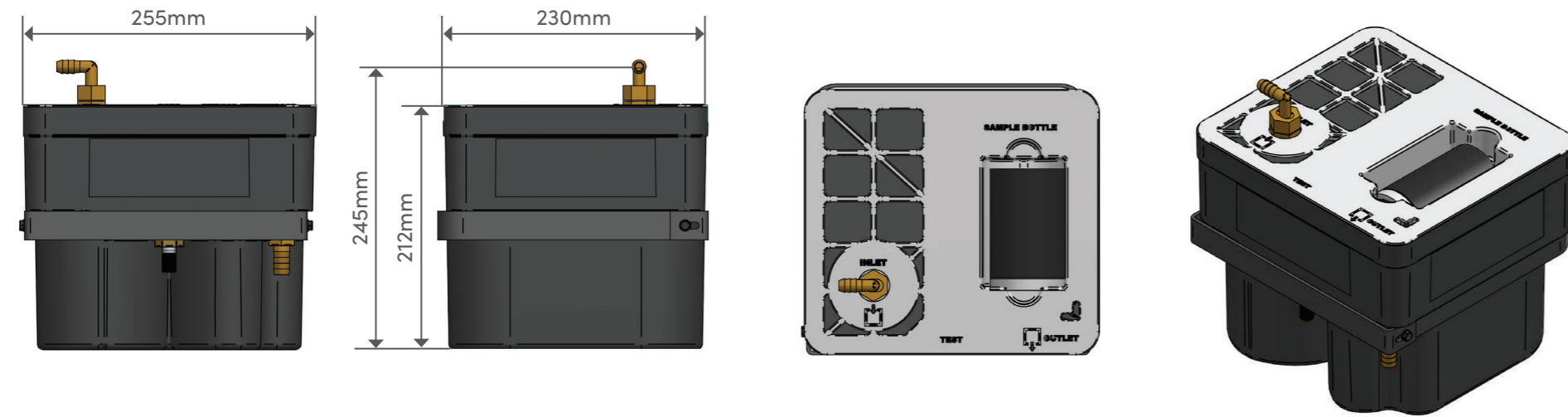
## AVG Oil/Water Separators

### Technical Specifications

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) m <sup>3</sup> /min	2	3.5	5	10	20	30	60
Max. Oil adsorption elements	2	4	5	10	15	25	50
Inlet connection	1/2"	1/2"	1/2" (2)	1/2" (2)	1/2" (2)	1/2" (2)	1/2" (2)
Outlet connection	1/2"	1/2"	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

## AVG Oil/Water Separators

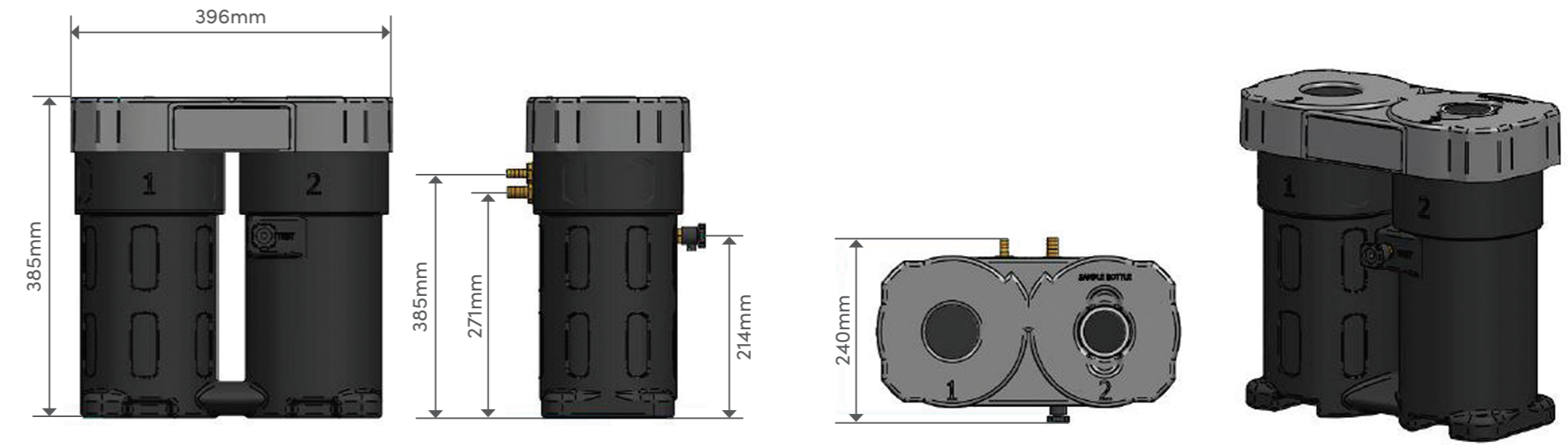
### AVG Oil / Water Separators 2 Technical Drawings



Not to scale (mm)

## AVG Oil/Water Separators

### AVG Oil / Water Separators 3.5 Technical Drawings



Not to scale (mm)

# AVG Oil / Water Separators 5-60

## Technical Drawings



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

For more info contact our sales team [sales@originalavg.com](mailto:sales@originalavg.com)



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