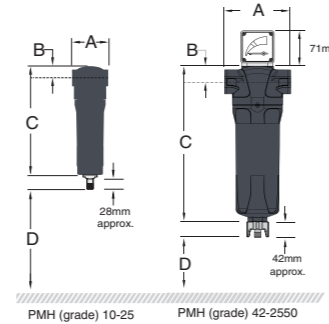
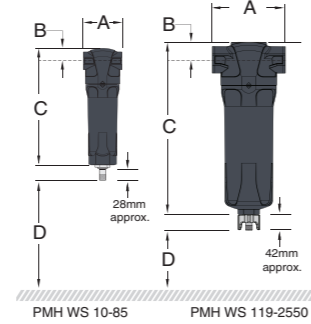


## Technical Specification

Filter Model	Pipe Size	Flow Rate		Dimension (mm)				Weight (Kg) Approx.	Element Model
		Nm³/h	SCFM	A	B	C	D		
PMH WS 10	1/8	10	6	50	17	157	60	0.25	-
PMH WS 25	1/4	25	15	50	17	157	60	0.25	-
PMH WS 42	1/4	42	25	70	24	231	70	0.6	-
PMH WS 59	3/8	59	35	70	24	231	70	0.6	-
PMH WS 85	1/2	85	50	70	24	231	70	0.6	-
PMH WS 119	1/2	119	70	127	32	285	80	1.7	-
PMH WS 212	3/4	212	125	127	32	285	80	1.7	-
PMH WS 297	1	297	175	127	32	285	80	1.7	-
PMH WS 476	1 1/4	476	280	140	40	475	80	3	-
PMH WS 545	1 1/2	545	321	140	40	475	80	3	-
PMH WS 1189	2	1189	700	170	53	508	100	4.9	-
PMH WS 1444	2 1/2	1444	850	220	70	420	100	8	-
PMH WS 2550	3	2550	1500	220	70	420	100	8	-
PMH (grade) 10	1/8	10	6	50	17	157	60	0.25	F(grade)-1
PMH (grade) 25	1/4	25	15	50	17	157	60	0.25	F(grade)-2
PMH (grade) 42	1/4	42	25	70	24	231	70	0.6	F(grade)-3
PMH (grade) 54	3/8	54	32	70	24	231	70	0.6	F(grade)-4
PMH (grade) 85	1/2	85	50	70	24	231	70	0.6	F(grade)-5
PMH (grade) 119	1/2	119	70	127	32	285	80	1.7	F(grade)-6
PMH (grade) 144	3/4	144	85	127	32	285	80	1.7	F(grade)-7
PMH (grade) 178	1	178	105	127	32	285	80	1.7	F(grade)-8
PMH (grade) 212	3/4	212	125	127	32	371	80	2	F(grade)-9
PMH (grade) 297	1	297	175	127	32	371	80	2	F(grade)-10
PMH (grade) 476	1 1/4	476	280	140	40	475	80	3	F(grade)-11
PMH (grade) 545	1 1/2	545	321	140	40	475	80	3	F(grade)-12
PMH (grade) 765	2	765	450	170	53	508	100	4.9	F(grade)-13
PMH (grade) 1189	2	1189	700	170	53	708	100	5.5	F(grade)-14
PMH (grade) 1444	2 1/2	1444	850	220	70	736	100	10.5	F(grade)-15
PMH (grade) 1529	3	1529	900	220	70	736	100	10.5	F(grade)-16
PMH (grade) 2125	3	2125	1250	220	70	857	100	11.5	F(grade)-17
PMH (grade) 2550	3	2550	1500	220	70	1005	100	12.5	F(grade)-18



Grade	P	G	S	C	D	V
Particle removal (micron) ■	5	-	1	-	0.01	-
Outlet oil aerosol concentration (mg/m³) ■	1	0.3	-	0.01	-	0.003
Total mass efficiency (%)	>90	>99.25	-	>99.9	-	-
Quality class of air at outlet (particles / oil) ▲	4 / 3	- / 3	3 / -	- / 2	1 / -	- / 1
Initial pressure drop over filter in dry applications (bar)	0.05	0.055	0.055	0.085	0.085	0.115
Initial pressure drop over filter in wet applications (bar) ★	0.08	0.125	-	0.125	-	-

■ Referred to an absolute pressure of 1 bar and temperature of 20° C  
 ▲ According to ISO 8573-1:2010 in a typical installation  
 ★ According to ISO 12500-1 at oil concentration upstream of the filter of 10 mg/m3 (Grade G = 40 mg/m3)

### Pressure correction factors

For maximum flow rate, multiply model flow rate by the correction factor corresponding to the minimum operating pressure

Operating pressure barg (psig)	4 (58)	5 (72)	6 (87)	7 (100)	8 (115)	10 (145)	12 (174)	14 (203)	16 (232)	20 (290)
7 barg – correction factor	0.76	0.84	0.92	1.00	1.07	1.19	1.31	1.41	1.51	1.6

## The ULTIMATE in Filtration Performance

Integrating into Pneumatech's compressed air filtration range, the new ULTIMATE Water Separator combines proven centrifugal technology with a new forward thinking housing design to deliver market leading water removal efficiencies – eliminating 99% bulk water with continuously low differential pressure.

The custom engineered centrifugal module features unique vanes to eliminate points of low efficiency, and a vortex arrestor to stop re-entrainment – ensuring minimal operating pressure loss and maintaining excellent liquid removal, even at low velocity.

Remove 99% of bulk water when tested in accordance with ISO 12500-4



## Water Separators

### Energy saving

Water separators operate with consistently low differential pressure at 50-60 mbar, reducing both energy consumption and operating costs

### Flexible Installation

Modular design and accessible fixings enable simple close coupling assembly

### Cost Effective

No replacement components required

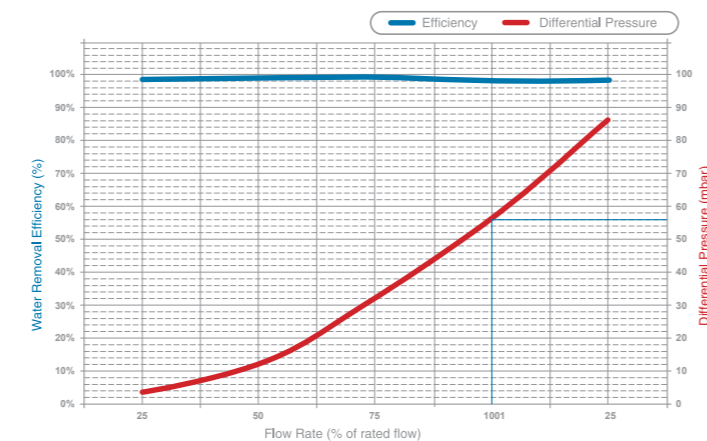
### Product Safety in Mind

Guaranteed safe housing closure with rotational safety stop

### Corrosion Protection

Internal and external electrophoretic painting followed by a tough polyester powder coating

### Tested performance



Unique Centrifugal Module Removes 99% of bulk water even at low velocities

With exceptional performance at any flow rate, the New ULTIMATE is perfect for use with variable speed compressors.



# Pneumatech ULTIMATE Filters & Water Separators

The most advanced filters to date

Literature number: 699900311 Filter and Water Separators ULTIMATE



## Pneumatech's New ULTIMATE Filters are market leading in the industry today.

With energy efficiency and low total cost of ownership the Pneumatech ULTIMATE Filter surpasses conventional filters in the market place, providing to be the most advanced filter yet.

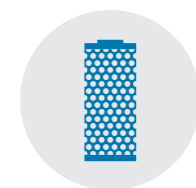
The expertly engineered ULTIMATE Series not only achieves the highest air purity standards in line with ISO 8573-1:2010, it also incorporates the latest in filtration technology. The new filter housing reduces differential pressure loss which, when combined with the new element design, significantly improves air flow and performance, making the ULTIMATE filter one of the most energy efficient filter housings available.

With a range that incorporates coalescence filters, dust filters, activated carbon filters and water separators, available in a wide range of port sizes suitable for installation worldwide.



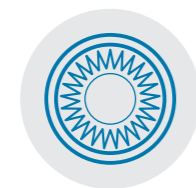
### Flow-Optimised Design

- Improved air flow characteristics
- Reduced energy consumption
- Reduced cost of ownership



### Increased Performance

- Significantly reduced differential pressure <125 mbar
- Up to 20.7 barg (300 psig) maximum working pressure
- Exceptional oil aerosol and particulate removal



### NEW Filtration Technology

- NEW deep pleated media
- NEW housing design for flexible installation and simplified serviceability
- NEW externally accessible drain



### Multiple Options

- Differential pressure gauge with/without potential free contact
- Manual drain
- Automatic drain
- Electronic drain
- Wall brackets
- Connection kits

## Pneumatech ULTIMATE Filters

### The most advanced filters to date

The new Pneumatech ULTIMATE Series provides a comprehensive range that protect downstream equipment from contaminants found in compressed air.



### Features and Benefits:

- ▶ Reliable filtration performance
- ▶ Tested and validated in accordance with ISO 12500-1 & ISO 8573-1: 2010
- ▶ Corrosion resistant color coded filter element end caps for easy and accurate filtration grade identification



### Robust Design & EP Corrosion Protection

The new range offers corrosion resistance and salt spray testing to ISO 9227: 2012. Durable and hard wearing electrophoretic coating on both internal and external faces of the filter housing followed by a tough polyester powder coating.

### Market Leading Performance

Introducing new deep pleated media technology is a step change in performance, combined with a custom engineered anti re-entrainment layer for exception oil coalescence, ensures low total cost of ownership.

### New Externally Accessible Drain

Unique, externally accessible automatic drain fitted to filter models PMH 119 – 2550. The drain supplied as standard with a plastic drain shield cover.

### Simplified Serviceability

Designed with servicing and maintenance in mind, the new profiled bowl design and hexagonal spanner locator coupled with the internal unique push fit element ensures a simple, quick and reliable process.

## Filter elements

### New Filtration technology

Pneumatech utilizes deep pleated media to deliver market leading filtration performance. The new forward thinking design delivers exceptional results in both oil aerosol removal and particulate retention; significantly reducing differential pressure and energy consumption

for low operational lifetime costs. Engineered to deliver a step change in performance, the new ULTIMATE element optimizes filtration efficiencies and produces compressed air in line with the highest standards of air purity, meeting the quality classes specified in ISO 8573-1: 2010.

### Features and Benefits:



• **Push Fit Pneumatech Filtration**  
Elements ensure perfect sealing within the filter housing and assist with easy removal

• **High quality stainless steel cylinders**  
provide corrosion resistance and deliver strength and stability to the element

• **Custom engineered**  
hydrophobic & oleophobic borosilicate media specifically developed to deliver consistently low pressure drop, combined with pleated element construction for high dirt holding capacity and an increased filtration surface area

• **Custom outer drainage layer**  
prevents oil carryover and improves coalescence performance

• **Unique Element end cap**  
colour coding system for quick and simple grade identification

### Extensive filter range

The new range of threaded filters is available from 1/8" to 3" with flow rates from 10 – 2550 Nm<sup>3</sup>/hr (6 – 1500 scfm) with a maximum operating pressure of 16 barg (232psig) resp. version with manual drain up to 20,7barg (300psig). Pneumatech ULTIMATE - The filter range with best in class performance and greatest flexibility.