



300 psig Alloy High Pressure Filters

Models | 20HP0006 to 20HP1500

Flow Rates 6 SCFM (10 Nm³/hr) to 1500 SCFM (2550 Nm³/hr)

Introducing the 300 psig Alloy High Pressure Filter, Walker Filtration's latest range of market leading compressed air and gas filters. With enhanced housing features and a step change in element performance, the Alpha Series delivers a high quality filtration solution you can trust.

Offered in a range of 19 models with connection sizes ranging from 1/8" to 3", the Alpha Series has been tested to provide a saturated differential pressure of <1.8 psi across X1 and XA grades - proving to be our most advanced filter to date.

With class leading performance and exceptional results in oil aerosol and particle retention, the Alpha delivers significantly reduced pressure loss and optimum filtration efficiencies - to ensure continually low operational costs.

Differential pressure of <1.8 psi across X1 and XA grades



Modular Filter

Low cost connecting kits and new filter head design enables easy close coupling assembly



Filtration Technology

Alpha deep pleated media technology delivers a step change in performance



Product Safety in Mind

Lock indication arrows ensure effective sealing

- **Flow-Optimized Design** Advanced filter head design for optimized flow performance
- **Flexible Installation** Modular design and accessible fixings enable simple close coupling assembly
- **Market Leading Performance** Custom engineered filtration media delivers optimum performance in line with air quality standard ISO 8573-1: 2010
- **Simplified Serviceability** New externally accessible drain, profiled bowl design and unique push fit elements ensure quick and reliable maintenance
- **Corrosion Protection** Internal and external electrophoretic paint finish followed by a tough exterior polyester powder coating
- **Color Coded Element End Caps** Easy and accurate grade identification
- **Product Safety in Mind** Guaranteed safe housing closure with rotational safety stop

For further information please visit www.walkerfiltration.com





For further information please call: +1 814 836 2900

Technical Specification

Filter model	Pipe size inches	Inlet flow rate*		Dimensions inches (mm)				Weight		Element model
		SCFM	Nm/hr	A	B	C	D	lbs	kg	
20HP0006 (grade)	1/8	10	17	1.97 (50)	0.67 (17)	6.18 (157)	2.36 (60)	0.6	0.3	E30306 (grade)
20HP0015 (grade)	1/4	26	43	1.97 (50)	0.67 (17)	6.18 (157)	2.36 (60)	0.6	0.3	E30306 (grade)
20HP0025 (grade)	1/4	43	73	2.76 (70)	0.91 (23)	9.09 (231)	2.76 (70)	1.3	0.6	E30408 (grade)
20HP0032 (grade)	3/8	55	93	2.76 (70)	0.91 (23)	9.09 (231)	2.76 (70)	1.3	0.6	E30408 (grade)
20HP0050 (grade)	1/2	87	147	2.76 (70)	0.91 (23)	9.09 (231)	2.76 (70)	1.3	0.6	E30412 (grade)
20HP0070 (grade)	1/2	121	206	5.00 (127)	1.26 (32)	11.22 (285)	3.15 (80)	3.7	1.7	E30612 (grade)
20HP0085 (grade)	3/4	147	249	5.00 (127)	1.26 (32)	11.22 (285)	3.15 (80)	3.7	1.7	E30612 (grade)
20HP0105 (grade)	1	182	308	5.00 (127)	1.26 (32)	11.22 (285)	3.15 (80)	3.7	1.7	E30612 (grade)
20HP0125 (grade)	3/4	216	367	5.00 (127)	1.26 (32)	14.57 (370)	3.15 (80)	4.4	2.0	E30621 (grade)
20HP0175 (grade)	1	303	514	5.00 (127)	1.26 (32)	14.57 (370)	3.15 (80)	4.4	2.0	E30621 (grade)
20HP0280 (grade)	1 1/4	484	823	5.51 (140)	1.61 (41)	18.74 (476)	3.35 (85)	6.6	3.0	E30731 (grade)
20HP0320 (grade)	1 1/2	554	941	5.51 (140)	1.61 (41)	18.74 (476)	3.35 (85)	6.6	3.0	E30731 (grade)
20HP0400 (grade)	1 1/2	692	1176	6.69 (170)	2.08 (53)	20.00 (508)	3.94 (100)	10.8	4.9	E30831 (grade)
20HP0450 (grade)	2	779	1323	6.69 (170)	2.08 (53)	20.00 (508)	3.94 (100)	10.8	4.9	E30831 (grade)
20HP0700 (grade)	2	1211	2057	6.69 (170)	2.08 (53)	27.87 (708)	3.94 (100)	12.1	5.5	E30850 (grade)
20HP0850 (grade)	2 1/2	1471	2498	8.66 (220)	2.76 (70)	28.97 (736)	3.94 (100)	23.1	10.5	E31140 (grade)
20HP0900 (grade)	3	1557	2645	8.66 (220)	2.76 (70)	28.97 (736)	3.94 (100)	23.1	10.5	E31140 (grade)
20HP1250 (grade)	3	2163	3676	8.66 (220)	2.76 (70)	33.74 (857)	3.94 (100)	25.4	11.5	E31160 (grade)
20HP1500 (grade)	3	2595	4412	8.66 (220)	2.76 (70)	39.56 (1005)	3.94 (100)	27.6	12.5	E31175 (grade)

* Rated flow at 300 psig (20.7 barg), reference conditions at 14.7 psi(a) (1.014 bar(a)), 68°F (20°C)

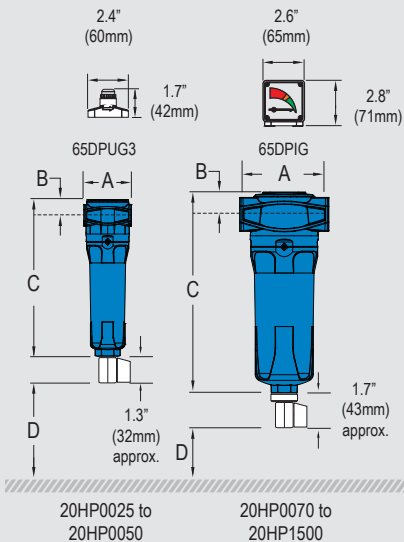
Grade	X5/RX5		X1/RX1		XA/RXA		AC/RAC	
Particle removal	5 micron		1 micron		0.01 micron		0.01 micron	
Maximum particle size class**	4		3		1		1	
Maximum oil content**	4		3		1		1	
Maximum oil carryover at 68°F (20°C)	5 ppm	5 mg/m³	0.3 ppm	0.3 mg/m³	0.01 ppm	0.01 mg/m³	0.003 ppm	0.003 mg/m³
Pressure loss - clean & dry	0.6 psi/0.6 psi	40 mbar/40 mbar	0.8 psi/1.1psi	55 mbar/75 mbar	1.2 psi/1.5 psi	85 mbar/100 mbar	1.7 psi/1.1 psi	115 mbar/75 mbar
Pressure loss - saturated	1.1 psi	75 mbar	1.8 psi	125 mbar	1.8 psi	125 mbar	N/A	N/A
Pressure loss - element change	12 mths	8000 hrs	12 mths	8000 hrs	12 mths	8000 hrs	at least every 6 mths	
Maximum temperature - automatic drain	176°F	80°C	176°F	80°C	176°F	80°C	122°F***	50°C***
Maximum working pressure - automatic drain	232 psig	16 barg	232 psig	16 barg	232 psig	16 barg	232 psig	16 barg
Maximum temperature - manual drain	248°F	120°C	248°F	120°C	248°F	120°C	122°F***	50°C***
Maximum working pressure - manual drain	300 psig	20.7 barg	300 psig	20.7 barg	300 psig	20.7 barg	300 psig	20.7 barg
Element end cap color	Green		Red		Blue		Black	

** to ISO 8573-1: 2010 *** Maximum recommended operating temperature 77°F (25°C)

Pressure correction factors	For maximum flow rate, multiply model flow rate by the correction factor corresponding to the minimum operating pressure									
	58 (4)	87 (6)	116 (8)	145 (10)	174 (12)	203 (14)	232 (16)	261 (18)	300 (20.7)	
Operating pressure psig (barg)	58 (4)	87 (6)	116 (8)	145 (10)	174 (12)	203 (14)	232 (16)	261 (18)	300 (20.7)	
300 psig - correction factor	0.45	0.55	0.63	0.71	0.77	0.84	0.9	0.95	1.00	

Technical Notes

- Direction of air flow is inside to out through the filter element for coalescing grades (X5, X1, XA, AC) and outside to in through the filter element for reverse flow grades (indicated by R in front of the grade).
- Pop Up Indicators (65DPUG3) are fitted to models 20HP0025 to 20HP0050 as standard. Differential Pressure Indicators (65DPIG) are fitted to models 20HP0070 to 20HP1500 as standard. Activated Carbon (AC) grade filters do not include DP equipment. Volt free contact options are available upon request.
- Coalescing Filters and reverse flow filters are fitted with a manual drain valve, including, Activated Carbon Filters. Filters with an automatic drain can operate at 232 psig (16 barg) at 176°F (80°C).
- Activated Carbon Filters must not operate in oil saturated conditions and will not remove certain types of gases including carbon monoxide (CO) and carbon dioxide (CO₂).
- Alpha Filters are manufactured from cast aluminum alloy and are PED 2014/68/EU compliant for group 2 gases.
- Threaded connections are RP (BSP Parallel) to ISO 7-1 as standard. NPT to ANSI/ASME B1.20.1 and Rc (BSP Taper) to ISO 7-1 also available upon request.
- Filters are suitable for use with mineral and synthetic oils plus oil-free compressed air applications.



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