



# 20 Barg Alloy High Pressure Filters

Models | 20HP0006 to 20HP1500

Flow Rates 6 SCFM (10 Nm<sup>3</sup>/hr) to 1500 SCFM (2550 Nm<sup>3</sup>/hr)

**Introducing 20 Barg Alloy High Pressure Filters, Walker Filtration's latest range of market leading compressed air and gas filters. With enhanced housing features and a step change in element performance, our Alpha Series 20 Barg Coalescing and Particulate (dust) filters deliver 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 <125 mbar 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, Alpha filters deliver significantly reduced pressure loss and optimum filtration efficiencies to ensure continually low operational costs.

Differential pressure of <125 mbar across X1 and XA grades



**Modular Filter**

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



**NEW Filtration Technology**

Alpha deep pleated media technology delivers a step change in performance



**Product Safety in Mind**

Lock indication arrows ensure effective sealing

- **Flow-Optimised Design** Advanced filter head design for optimised 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** 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
- **Colour 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](http://www.walkerfiltration.com)



For further information please call: +44 (0) 191 417 7816

# Technical Specification

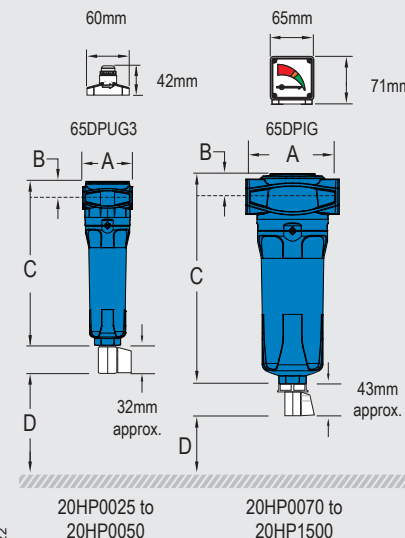
Filter model	Pipe size inches	Inlet flow rate*		Dimensions mm				Weight Kg	Element model
		Nm/hr	SCFM	A	B	C	D		
20HP0006 (grade)	1/8	17	10	50	17	157	60	0.3	E30306 (grade)
20HP0015 (grade)	1/4	43	26	50	17	157	60	0.3	E30306 (grade)
20HP0025 (grade)	1/4	73	43	70	23	231	70	0.6	E30408 (grade)
20HP0032 (grade)	3/8	93	55	70	23	231	70	0.6	E30408 (grade)
20HP0050 (grade)	1/2	147	87	70	23	231	70	0.6	E30412 (grade)
20HP0070 (grade)	1/2	206	121	127	32	285	80	1.7	E30612 (grade)
20HP0085 (grade)	3/4	249	147	127	32	285	80	1.7	E30612 (grade)
20HP0105 (grade)	1	308	182	127	32	285	80	1.7	E30612 (grade)
20HP0125 (grade)	3/4	367	216	127	32	370	80	2.0	E30621 (grade)
20HP0175 (grade)	1	514	303	127	32	370	80	2.0	E30621 (grade)
20HP0280 (grade)	1 1/4	823	484	140	41	476	85	3.0	E30731 (grade)
20HP0320 (grade)	1 1/2	941	554	140	41	476	85	3.0	E30731 (grade)
20HP0400 (grade)	1 1/2	1176	692	170	53	508	100	4.9	E30831 (grade)
20HP0450 (grade)	2	1323	779	170	53	508	100	4.9	E30831 (grade)
20HP0700 (grade)	2	2057	1211	170	53	708	100	5.5	E30850 (grade)
20HP0850 (grade)	2 1/2	2498	1471	220	70	736	100	10.5	E31140 (grade)
20HP0900 (grade)	3	2645	1557	220	70	736	100	10.5	E31140 (grade)
20HP1250 (grade)	3	3676	2163	220	70	857	100	11.5	E31160 (grade)
20HP1500 (grade)	3	4412	2595	220	70	1005	100	12.5	E31175 (grade)

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

Grade	X25 / RX25		X5 / RX5		X1 / RX1		XA / RXA		AC / RAC	
Particle removal	25 micron		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 20°C (68°F)	10 mg/m <sup>3</sup>		5 mg/m <sup>3</sup>		0.3 mg/m <sup>3</sup>		0.01 mg/m <sup>3</sup>		0.003 mg/m <sup>3</sup>	
Pressure loss - clean & dry	30 mbar	0.4 psi	40 mbar	0.6 psi	55 mbar	0.8 psi	85 mbar	1.2 psi	115 mbar	1.7 psi
Pressure loss - saturated	50 mbar	0.7 psi	75 mbar	1.1 psi	125 mbar	1.8 psi	125 mbar	1.8 psi	N/A	N/A
Pressure loss - element change	12 mths	<sup>8000</sup> hrs	12 mths	<sup>8000</sup> hrs	12 mths	<sup>8000</sup> hrs	12 mths	<sup>8000</sup> hrs	at least every 6 mths	
Maximum temperature - manual drain	120°C	248°F	120°C	248°F	120°C	248°F	120°C	248°F	50°C***	122°F***
Maximum working pressure - manual drain	20.7 barg	300 psig	20.7 barg	300 psig	20.7 barg	300 psig	20.7 barg	300 psig	20.7 barg	300 psig
Element end cap colour	Black		Green		Red		Blue		Black	

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

Pressure correction factors	For maximum flow rate, multiply model flow rate by the correction factor corresponding to the minimum operating pressure								
	4 (58)	6 (87)	8 (116)	10 (145)	12 (174)	14 (203)	16 (232)	18 (261)	20.7 (300)
Operating pressure barg (psig)									
20 barg - 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 (X25, X5, X1, XA, AC) and outside to in through the filter element for Particulate (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.
- 20 Barg Alpha Series Coalescing and Particulate filters are fitted with a manual drain valve, including Activated Carbon Filters.
- 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 (CO<sub>2</sub>).
- Alpha Filters are manufactured from cast aluminium 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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