



Hydrogen 550-1100Bar Filters

Models | 550H03700 to 550H07500, 1100H03700 to 1100H075000

Flow Rates 3050 Nm³/hr (250 Kg/hr) up to 6100 Nm³/hr (500 Kg/hr)

Walker Filtration's 550 and 1100 barg Hydrogen Filters provide a comprehensive range of high efficiency filters designed to meet the stringent requirements of Hydrogen applications.

Available in two filtration grades of 1 and 5 microns, our hydrogen gas filters provide low pressure drop and offer optimal contamination protection against particle ingress for pressure system components.

Suitable for use with dry hydrogen, these filters are available in a range of flows and pressures to protect the various stages of the developing hydrogen economy. Whatever your requirement, Walker Filtration can support your unique and custom hydrogen filtration solutions.



Flexible Installation
A range of port sizes utilising
standardised Medium Pressure Cone
& Thread connections are available.



Superior Filtration Performance
Specialist hydrogen element with
high efficiency particle removal
down to 1 micron

- Advanced Filtration Technology Optimum design and high efficiency filtration media provides low pressure losses and increased energy savings in line with air quality standard ISO 8573-1: 2010
- O-ring Sealing Push-fit element design and specialist hydrogen compatible O-ring seals eliminate risk of contaminant bypass.
- Stainless Steel Element Construction On all element models.
- Simplified Serviceability Hexagonal spanner locator coupled with the internal unique push fit element ensures a simple, quick and reliable servicing process.
- Quality Guaranteed All Hydrogen Filters are manufactured in an ISO 9001 certified factory and are PED compliant. Each filter is hydrostatic tested prior to despatch to guarantee quality and performance.





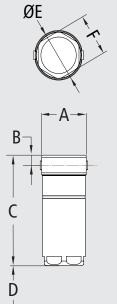
Technical Specification

Filter model	Fitting size inches	MAWP Barg (psig)	Hydrogen inlet flow rate*		Dimensions mm (inches)						Approximate weight		Element model	
			Nm³/hr	Kg/hr	A Face to Face	В	С	D	ØE	F A/F Hex	kg	lbs	Liementiniouei	
550 barg (7977 psig) maximum working pressure														
550H03700 (grade)	3/8"	550 (7977)	3050	250	102 (4.02)	22 (0.87)	227 (8.94)	160 (6.30)	106 (4.17)	80 (3.15)	9.5	20.9	ETGM00700 (grade)	
550H05600 (grade)	9/16"	550 (7977)	6100	500	102 (4.02)	22 (0.87)	227 (8.94)	160 (6.30)	106 (4.17)	80 (3.15)	9.5	20.9	ETGM00700 (grade)	
550H07500 (grade)	3/4"	550 (7977)	6100	500	102 (4.02)	22 (0.87)	227 (8.94)	160 (6.30)	106 (4.17)	80 (3.15)	9.5	20.9	ETGM00700 (grade)	
1100 barg (15954 psig) maximum working pressure														
1100H03700 (grade)	3/8"	1100 (15954)	3050	250	102 (4.02)	22 (0.87)	245 (9.65)	180 (7.09)	106 (4.17)	90 (3.54)	13.0	28.7	ETGM00700 (grade)	
1100H05600 (grade)	9/16"	1100 (15954)	6100	500	102 (4.02)	22 (0.87)	245 (9.65)	180 (7.09)	106 (4.17)	90 (3.54)	13.0	28.7	ETGM00700 (grade)	
1100H07500 (grade)	3/4"	1100 (15954)	6100	500	102 (4.02)	22 (0.87)	245 (9.65)	180 (7.09)	106 (4.17)	90 (3.54)	13.0	28.7	ETGM00700 (grade)	

^{*} Rated flow at maximum working pressure, reference conditions at 1 bar (a) 20°C

Grade	RX	5	RXI				
Particle removal	5 m	icron	1 micron				
Minimum Temperature	-40°C	-40°F	-40°C	-40°F			
Maximum Temperature	85°C	185°F	85°C	185°F			
Element end cap colour		Stainles	s Steel				

Pressure correction factors		For maximum flow rate, multiply model flow rate by the correction factor corresponding to the minimum operating pressure										
550 Bar Range	Operating pressure barg (psig)	7 (101)	10 (147)	15 (221)	20 (294)	25 (368)	30 (435)	35 (507)	40 (580)	45 (652)	50 (725)	
	Correction factor	0.16	0.22	0.31	0.41	0.51	0.61	0.71	0.80	0.90	1.0	
1100 Bar Range	Operating pressure barg (psig)	7 (101)	20 (290)	30 (435)	40 (580)	50 (725)	60 (870)	70 (1015)	80 (1160)	90 (1300)	100 (1450)	
	Correction factor	0.08	0.21	0.31	0.41	0.51	0.60	0.70	0.80	0.90	1.0	



XXXH03700 -XXXH07500

Technical Notes

- Direction of air flow is outside to in through the filter element.
- 2. All Hydrogen Filters are supplied without a drain port/plug.
- 3. Hydrogen Filters are manufactured from Stainless Steel Nitronic 50 and are PED 2014/68/EU compliant for group 1 gases.
- 4. Inlet & outlet ports utilise standard Medium Pressure Cone & Threaded connections...
- 5. Walker Filtration genuine spare and aftermarket parts must be used, failure to do so will void product warranty. Walker Filtration shall not be held liable for damages suffered by the customer if Walker Filtration genuine hydrogen rated spare and aftermarket parts are not used.
- 6. Filter elements should be changed every 12 months / 8000 hours (whichever comes first).





