

# VORTEX

## COMPRESSOR



## Compressed Air Filters

G-POWER FILTER SERIES 24-2200 m<sup>3</sup>/h

### VORTEX Compressed Air Filters

Vortex Compressed Air Filters have been designed to answer the current requirements of compressed air filter world. It enables a more comfortable usage for end user a better endurance, higher efficiency with lower pressure drop and more port size options.

### Filtration

Due to the usage of deep pleating technique filtration area has increased remarkably which leads to a better filtration and higher dirt holding capacity.

Vortex Compressed Air Filters have been designed to remove airborne contamination in a compressed air stream, delivering energy efficient operation and reliable performance.

### Features

The air filters have 4 ranges of efficiencies, removing down to 0.01 micron at up to 235 psi (16barg) - 1/4" to 3" N P T / B S P pipe sizes. A protected auto float drain (2mm orifice) is standard for reliable removal of liquid contaminants. Zero-porosity aluminum and durable epoxy powder-coat finish, along with a corrosion-resistant internal coating gives long service life.

Filter combinations are configured to meet specific application requirements. Filters comply with PED and perform as per related I SO 8573 standards. These filters may be equipped with differential pressure gauges for easy maintenance and energy efficiency. Vortex compressed air filters are always recommended with this system.

### Types of Compressed Air Filters



**Y** Pre-Filter/ Particulate Filter  
(Filter/Element air flow direction  
is out side to inside)

**P** Coalescing Filter / Oil Removal  
(Filter/Element air flow direction  
is inside to outside)

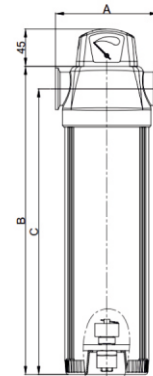
**X** General Purpose Filter / W a t e r Removal  
(Filter/Element air flow direction  
is inside to outside)

**A** Activated Carbon Filter / Odor Removal  
(Filter/Element air flow direction  
is outside to inside)

### Technical specifications of Aluminum Range

FILTERMODEL	PORTSIZE WTH	SCFM	DIMENSIONIN(mm)		
			A	B	C
G25	1/4"-3/8"-1/2"	25	102	218	196
G50	3/8"-1/2"	50	102	218	196
G100	3/8"-1/2"	100	102	257,5	235,5
G150	1/2"-3/4"-1"	150	123	304	276
G200	3/4"-1"	200	123	366,5	338,5
G250	1"	250	123	406,5	378,5
G300	1"-1 1/4"	300	123	464	427,5
G500	1 1/4"-1 1/2"	500	123	494	457,5
G600	1 1/2"	600	123	538	501,5
G851	1 1/4"-1 1/2"-2"	851	160	624	583,8
G1210	2"	1210	160	694	653,8
G1520	2"-2 1/2"-3"	1520	194	732	675
G1820	2 1/2"-3"	1820	194	872	815
G2220	3"	2220	194	923	866
G2620	3"	2620	194	1068	1011

All filters are in conformity with the Pressure Equipment Directive (97/23/EC)  
 Pop-up indicators supplied as standart to models G24, G48, G25, G50 and G100. Diff. Pressure Gauge type pressure indicators are fitted to models G150 to G2210 as standart. Also gauge type indicator can be fitted to G24, G48, G25, G50 and G100.



Specification	Pre Filtering	General Purpose	Oil Removal	Activated Carbon
Grade	P	X	Y	A
Partical Removal (Micron)	5	1	0,01	0,01
Max. Oil carryover at 21 C (mg/m )	5	0,5	0,01	0,003
Max. Working Tempreature ( C )	80	80	80	25
Initial Pressure Loss (mbar)	40	80	100	80
Pressure Loss for Element Change (mbar)	700	700	700	700
Max. Working Pressure (bar.g)	16	16	16	16
Element Colour Code	Green	Blue	Red	Metallic

#### Correction Table

Working Pressure (bar)	1	3	5	7	9	11	13	15	17	20
Working Pressure (psig)	15	44	73	100	131	160	189	218	247	290
Correction Factor	0,5	0,71	0,87	1	1,22	1,22	1,32	1,44	1,57	1,7

For maximum flow rate, multiply flow rate shown in the above table by the correction table corresponding to the working pressure.



- Grade A must not operate in oil saturated conditions.
- Grade A elements should be replaced periodically to suit the applications but must be changed at least every six months.
- Grade A will not remove certain gases including carbon monoxide and carbon dioxide. Please refer to works if in doubt.
- Flow rates are based on a 7 bar operating pressure, for flows at other pressures use correction factor given above.
- All filters are suitable for use with mineral and synthetic oils.
- Pop-up indicators supplied as standard to models. G24, G48, G25, G50 and G 100. Diff. Pressure Gauge type pressure indicators are fitted to models G150 to G2210 as standard. Also gauge type indicator can be fitted to G24, G48, G25, G50 and G100
- All filters are in conformity with the Pressure Equipment Directive (97/23/EC)

#### ORDERING

The complete filter model number contains the size and grade, example - 1" general purpose filter model G250MX with replacement filter element model M250X. 250 Represent 250m<sup>3</sup>/h capacity and x represents the general purpose element.