Compressed Air Filters

Drytec Compressed Air Filters

Drytec Compressed Air Filters have been designed to answer the current requirements of compressed air filters They enable a more comfortable use for the user. They also provide a better endurance, higher efficiency with lower pressure drop and more port size options.

Filtration

Due to the use of specially selected microfiber material Drytec filters lead to a better filtration and higher dirt holding capacity. Drytec compressed air filters have been designed to remove airborne contamination in compressed air stream, delivering energy efficient operation and reliable performance

Features

The air filters have 4 ranges of efficiencies. A protected auto float drain 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. These filters are equipped with differential pressure gauges for easy maintenance and energy efficiency. Drytec compressed air filters are always recommended with this system.

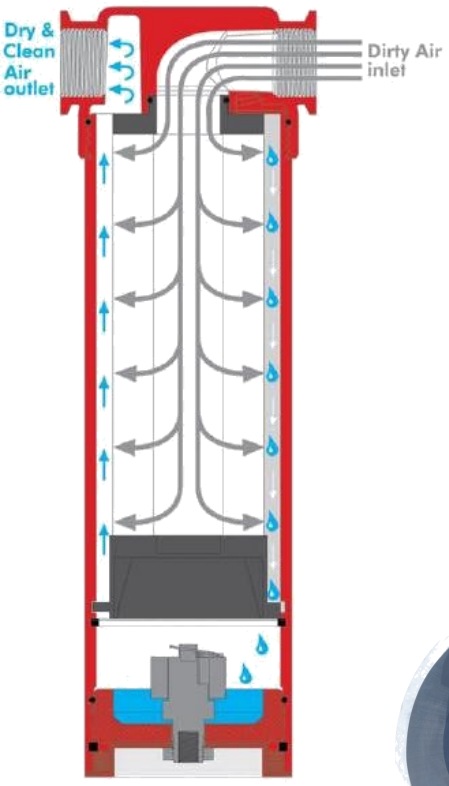
Types of Compressed Air Filters

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

X General Purpose Filter / Water Removal
(Filter/Element air flow direction is inside to outside)

Y Coalescing Filter / Oil 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)



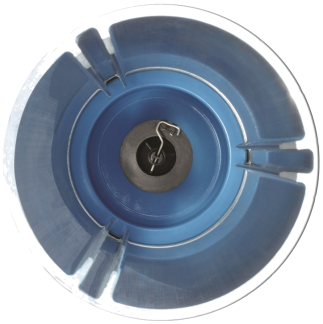
Head Clamping

Head Clamping provides serial connection of fibers without any extra

Drainage Ribs

Drainage ribs favors the

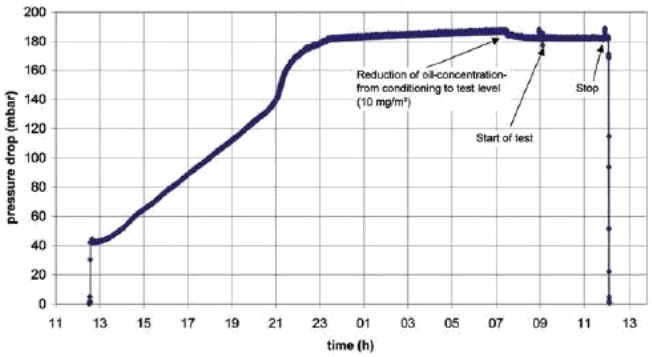
humidity flow.



Independent test report as per ISO 12500—1

Filterelement:		M50Y	
Element		002	
Standard parameters and measuring results			
Measuring parameters	**unit**	**standard**	**Test**
Calendar date of test			28./29.09.10
Inlet temperature	°C	20 ± 5	18,5 ± 0,5
Inlet pressure	bar (e)	7	7
Ambient temperature	°C	20 ± 5	17,5 ± 0,5
Inlet dew point	°C	≤ 10 °C	0 - 4
Main flow through the test filter	**m³/h**		**50**
Partial flow	m³/h		5,1
Time of conditioning	h		20,38
Measuring time	h		2,75
Inlet oil concentration at conditioning	mg/m³		23 ± 1
Inlet oil concentration at test	mg/m³	10 ± 10%	10 ± 1
Residual oil concentration	**mg/m³**		**0,01**
Pressure drop filter element	**mbar**		**183**
Remarks			mouth of probe oil-free
Test carried out by			
Signature			

Drytec M50Y-2 at 50m³/h ANR—7 bar(e)



Anodizing

Anodizing provides supreme corrosion resistance. Anodized surface treatment is far better than other surface treatment methods.

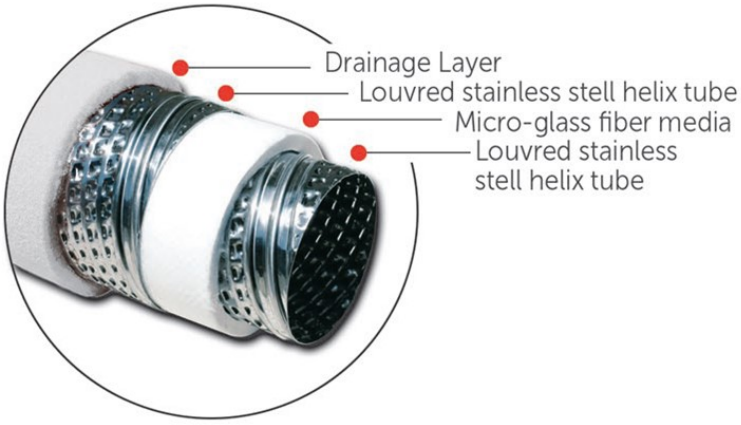
With Anodizing

Without Anodizing

Air Filter Elements

Micro—Glass Fiber

High efficiency Micro-Glass Nano fiber media (80 times finer than Cellulose Fiber) delivers higher targeted efficiencies, longer service life, wide chemical and synthetic lubricant working temperatures.



Helix Tubes for Strength

Drytec Compressed Air Filters have louvered stainless steel helix tubes providing strength and protection against severe pressure drops while improving performance by forcing air to pass diagonally through the element.

Element 4 Levels

Drytec offers 4 levels of superior protection from 1 micron to 0.01 micron. Durable Element construction and an efficient drain layer ensures continued performance after optimal element change periods.

Synthetic compatibility & Durable epoxy

Drytec Compressed Air Filters are compatible with synthetic lubricants on the market. Durable Epoxy securely bonds end caps to the filter tubes and will not be affected by synthetic lubricants in compressed air.

Test

Due to a long time experience, Drytec is able to manufacture one of the best performing replacement elements to the industry. Drytec assures the customers that the replacement elements are the same or better performing compared to the original elements. All of the replacement elements have been designed by making performance tests in the test laboratories.

Our labs are capable of making following tests :

- Differential pressure at given flow rates
- Particle efficiency tests
- Oil aerosols measurements

Tests are conducted as per relevant ISO 12500 standards

Technical specifications

Model	Connection Size	Flow Rate		Max. working pressure (barg)	Element Model	Housing Dimensions (mm)				
		(m³/h)	(scfm)			A	B	C	D	E
G20	1/4''	20	12	16	M20	75	45	193	175	100
G40	3/8''	40	24	16	M40	75	45	193	175	100
G25	1/4''	25	15	16	M25	102	45	219,5	197,5	125
G50	3/4''	50	30	16	M50	102	45	219,5	197,5	125
G100	1/2''	100	58	16	M100	102	45	257,5	235,5	165
G150	3/4''	150	88	16	M150	123	45	302,5	275,5	205
G200	3/4''	200	117	16	M200	123	45	366,5	339,5	265
G250	1''	250	147	16	M250	123	45	406,5	379,5	315
G300	1 1/4''	300	176	16	M300	123	45	463	427,5	365
G500	1 1/4''	500	294	16	M500	123	45	493	457,5	395
G600	1 1/2''	600	353	16	M600	123	45	538	502,5	440
G851	2''	851	500	16	M851	160	45	625,5	583,8	495
G1210	2''	1210	712	16	M1210	160	45	695,5	653,8	565
G1520	2 1/2''	1520	930	16	M1520	194	45	730	672	445
G1820	3''	1820	1140	16	M1820	194	45	870	813	565
G2220	3''	2220	1380	16	M2220	194	45	924	867	615
G2620	3''	2620	1541	16	M2620	194	45	1068	1011	695

Specifications	Pre Filtering	General Purpose	Oil Removal	Activated Carbon
Grade	**P**	**X**	**Y**	**A**
Particle Removal (Micron)	5	1	0,01	0,01
Max. Oil carryover at 21°C (mg/m³)	5	0,5	0,01	0,003
Max. working temperature (°C)	80	80	80	25
Initial pressure loss (mbar)	40	80	100	80
Pressure loss for element change (mbar)	700	700	700	700
Element colour code	WHITE	WHITE	WHITE	METAL SS

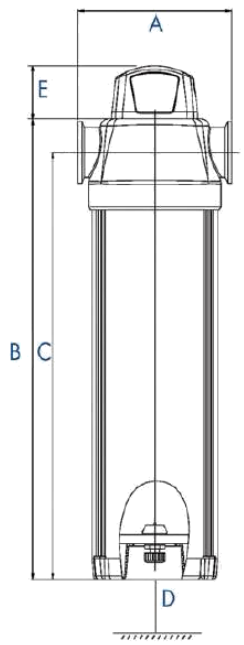
INDICATOR TYPE
Gauge with or without electrical contact

DRAIN TYPE
Electro - adjustable
External float type
Zero-loss Drain
Manual

Correction Factor

Operating Pressure (barg)	1	3	5	7	9	11	13	15	16
PSIG	15	44	73	100	131	160	189	218	247
Correction Factor	0,5	0,71	0,87	1	1,12	1,22	1,32	1,44	1,57

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



Notes :

1) Grade A must not operate in oil saturated conditions.
2) Grade A elements should be replaced at least every 6 months
3) Grade A will not remove certain gases including carbon monoxide and carbon dioxide.
4) Flow rates are based on a 7 bar operating pressure.
5) All filters are suitable for use with mineral and synthetic oils.
6) Gauge type differential pressure indicators are fitted as standard
7) All filters are in conformity with PED 97/23/EC