

Saving costs in the short term seems to be a costly mistake. Having determined the pollution problems of the compressed air system and the needs for purification equipment, you still choose the poor quality filter element, what are the consequences for enterprises?

Adsorbent cannot be replaced as planned for damaged adsorption drying bed.

Corrosion in compressed air storage and transport systems.

Plugging or freezing valves, pneumatic motors, and pneumatic tools.

Damaged machines cause production downtime increased.

The pollution of the valve and cylinder leads to unhealthy working condition, personal injury, employee absence and personal injury claims.

Inefficient production processes cause manufacturing costs increased.

Damaging reprocessed products.

#### It is very important to change the filter element often and choose original accessories

Please replace the filter elements with YUKA original products to ensure purified, dry and stable air. The element is constantly impacted by oil, acidic condensate and high velocity dust particulates during the whole operation process, it also has to filter and keep protecting your compressed air system. It will weaken the filter media and reduce the filtering performance if it passed the replacement period. Technically, these hidden and serious reductions cannot easily be detected by the differential pressure indicating instruments. To replace the filter element every year is very essential. Failed to replace them in time will lead to low product performance and air quality, as well as high production cost.



YUKA VS market ordinary material



### YFB Series High Efficiency Energy Saving Compressed Air Filters Air flow rate 1.0m<sup>3</sup>/min-48.0m<sup>3</sup>/min



Hongrijia Depurate Facility Science & Technology Co.,Ltd

# YFB Series Compressed Air Filter

This series is recommended for the industries in general automation equipment, pneumatic tools, printing, film production, etc.

## **Product Features**

- The filter housing is aluminum alloy die-casted, with tight and strong structure to ensure the safe use.
- All housings painted before cleaning, degreasing and special anti-corrosion treatment, which enhanced its durability and be applicable to ocean platform operation.
- Unique filter element design, the adoption of imported materials, the filtering performance up to 99% Filter element cover with different colors represents different filtration accuracy.
- The housings service life is 15 years, and filter element can be used for 6000 to 8000 hours under working condition from temperature 1.5 to 80°C, the maximum pressure is 1.6Mpa.
- The housing can bear pressure 3.2Mpa for 96hours, and the maximum burst pressure is 10.5Mpa.

# **Technical Specification**

The flow rate below is the treatment capacity of compressed air under rated working pressure 7barg(100psi g). For the application in other working pressure, please refer to the correction factors.

Madal	Pipe size	Flow rates			Qty.	Dimension (mm)						
Model		L/S	m³/min	scfm	(pcs)	W (Width)	D (Depth)	H (Height)	А	В	C(clearance for housing)	
YFB010	RC1/2"	16.7	1.0	35.5	1	96	79	252	29	223	118	
YFB020	RC3/4"	25.0	1.5	53.0	1	96	79	252	29	223	118	
YFB030	RC3/4"	30.0	1.8	63.6	1	96	79	286	29	257	153	
YFB040	RC1"	33.3	2.0	71.0	1	96	79	286	29	257	153	
YFB060	RC1"	60.0	3.6	127.0	1	138	111	357	37	320	208	
YFB070	RC1"	83.3	5.0	177.0	1	138	111	458	37	421	303	
YFB080	RC1-1/2"	125.0	7.5	265.0	1	138	111	458	37	421	303	
YFB090	RC2"	166.7	10.0	353.1	1	174	142	558	58	500	467	
YFB100	RC2-1/2"	216.7	13.0	459.0	1	174	142	558	58	500	467	
YFB110	RC2"	283.3	17.0	600.0	1	174	142	838	58	780	794	
YFB120	RC2-1/2"	316.7	19.0	671.0	1	174	142	838	58	780	794	
YFB130	RC3"	416.7	25.0	883.0	1	220	184	645	74	571	514	
YFB140	RC4"	466.7	28.0	989.0	1	220	184	645	74	571	514	
YFB150	RC3"	683.3	41.0	1448.0	1	220	184	902	74	828	764	
YFB160	RC4"	800.0	48.0	1695.0	1	220	184	902	74	828	764	
Technical requiremen	Maximum operating pressure: 16 barg Maximum operating temperature: 80 °C Minimum operating temperature:1.5 °C											



Droccure	Barg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pressure	Psig	15	29	44	59	73	87	100	116	131	145	160	174	189	203	219	232
Correction	n factor	0.38	0.53	0.65	0.76	0.85	0.93	1.00	1.07	1.13	1.19	1.23	1.31	1.36	1.41	1.46	1.51



#### Filter element filtration precision and performance for YFB series

PF	AO	AA	AX	ACS	AR	AAR
As a primary filter, particles whose diameter more than 5µm can be removed, the maximum residual oil content is negligible.	High efficiency general protection, dust particles, water mist and oil mist whose diameter more than 1µm can be removed,the residual content of oil mist does not exceed 0.6 mg/m³ (21°C), 1ppm(w).	High efficiency oil removal filtration, dust particles, water mist and oil mist whose diameter more than 0.01µm can be removed, the residual content of oil mist does not exceed 0.01 mg/m³ (21°C), 0.01ppm(w).	Ultra-efficient filtration, dust particles, water mist and oil mist whose diameter more than 0.01µm can be removed, the residual content of oil mist does not exceed 0.001mg/m³ (21°C),0.001ppm(w).	Dust particles whose diameter more than 0.01µm, oil vapor and odor can be removed, the maximum residual content of oil vapor does not exceed 0.003mg/m³ (21°C), 0.003ppm(w).	Dust particles whose diameter more than 1µm can be removed.	Dust particles whose diameter more than 0.01µm can be removed.

### International test and measurement standard ISO 12500

ISO 12500 has made clear a general test and definition method for the compressed air filter manufacturers. The main performance parameters are the air inlet oil content and the particle size distribution of the solid particles.

ISO 12500-1 specifies the test requirements for the filtration performance of oil aerosol in the coalescing filter.

ISO 12500-2 specifies the test requirements of adsorption filters for the removal performance of steam adsorption. ISO 12500-3 specifies the requirements for removal of particulate matter from solid pollutants.

Products are tested with the standard ISO8573.	ne internation	al advanced te	esting equipme	ent based on s	tandard ISO12	2500 which is	equivalent to
Filtration Grade	PF	AO	AA	AX	ACS	AR	AAR
Size of solid particles (ISO12500-3)	5µm	1µm	0.01µm	0.01µm	-	1µm	0.01µm
Filtration performance of solid particles(ISO12500-3)	-	99.999+%	99.999+%	99.999+%	99.999+%	99.999+%	99.999+%
Filtration performance of oil (ISO12500-1)	50%	80+%	99.9+%	99.99+%	-	-	-
Residual oil content(ISO12500-1)	5mg/m³	0.6mg/m³	< 0.01mg/m³	< 0.001 mg/m³	< 0.004 mg/m³	-	-