



**YQ series Filters for Compressed
Air-Instruction Manual**

Guangdong Epsea Industrial Co.,Ltd.

Dear Users:

Thank you for choosing our products- YQ series of compressed air filters, Please read the introduction carefully ,In order to avoid some unnecessary troubles when you operate.Please arrange competent and the authorized personnel before installing and maintaining the products.Thanks!

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A. Safety Notes

- **Risk of explosion due to filtration of oxygen**

Never use the filter described here to filter oxygen! The filter materials and lubricants are not resistant to oxygen. There is a serious risk of spontaneous ignition or explosion. If you wish to filter oxygen, you must install a special filter. For more information, please contact the manufacturer.

- **Hazard from filtration of critical media!**

Filters that have been designed for filtering non-critical gases of fluid must never be used for filtering explosive, flammable, or toxic gases of fluid.

- **Hazard due to a sudden release of pressure**

Never remove any parts of the filter, or manipulate the same in any way, for as long as the filter is still pressurised! A sudden escape of pressure may cause serious injuries. Before carrying out any work on the filter, first depressurise the filter.

- **Danger caused by high temperature surface**

The flowing media in the filter will make the filter shell reach a high temperature of 80°C. Please do not touch the high temperature shell. The operator should work according to the operation instructions.

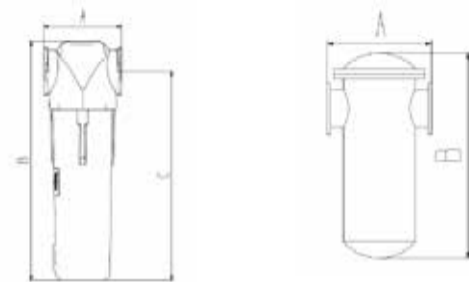
B. Technical Data

The following flow rate refers to 7bar g standard conditions, under other pressure work of flow, please refer to the fixed parameters.

Model	Inlet/outlet	Flow rate (m ³ /min)	Flow rate (m ³ /H)	Flow rate CFM	Mears.(mm)			Element	
					A	B	diameter	Model	Qty.
YQ001	Rc 3/4"	1.5	90	52.9	100	141	80	*-001	1
YQ003	Rc 1"	2.6	156	91.8	130	222	100	*-003	1
YQ004	Rc 1-1/2"	3.8	228	134.2	130	222	100	*-004	1
YQ007	Rc 1-1/2"	7.0	420	243.6	130	320	100	*-007	1
YQ010	Rc 2"	11.0	660	388.4	160	389	120	*-010	1
YQ014	Rc 2-1/2"	14.0	840	494.4	160	389	120	*-014	1
YQ018	Rc 2-1/2"	18.0	1080	635.66	215	590	170	*-018	1
YQ022	Rc 3"	22.0	1320	776.9	215	590	170	K430	1
YQ028	Rc 3"	28.0	1680	988.8	215	590	170	*-028	1
YQ033	DN80	33.0	1980	1165.3	513	1055	273	EP14+18	1+1
YQ038	DN100	38.0	2280	1341.9	513	1120	273	EP18	2
YQ046	DN100	46.0	2760	1624.4	513	1270	273	EP22	2

Model	Inlet/outlet	Flow rate (m ³ /min)	Flow rate (m ³ /H)	Flow rate CFM	Mears.(mm)			Element	
					A	B	diameter	Model	Qty.
YQ055	DN125	55.0	3300	1942.3	565	1100	325	EP14+18	1+2
YQ067	DN150	67.0	4020	2366.1	565	1225	325	EP18+22	1+2
YQ075	DN150	75.0	4500	2648.6	657	1200	377	EP22+18	1+3
YQ085	DN150	85.0	5100	3001.7	657	1350	377	EP22	4
YQ095	DN150	95.0	5700	3354.9	706	1290	426	EP22+18	2+3
YQ110	DN150	110.0	6600	3884.6	706	1460	426	EP22	5
YQ130	DN150	130.0	7800	4590.9	780	1320	480	EP22+18	3+4
YQ160	DN200	160.0	9600	5650.3	780	1500	480	EP22	7
YQ180	DN200	180.0	10800	6356.6	830	1440	530	EP22+18	6+3
YQ200	DN200	200.0	12000	7062.9	830	1600	530	EP22	9
YQ250	DN250	250.0	15000	8828.7	930	1520	630	EP22+18	8+4

Pressure	Barg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Pisg	15	29	44	59	73	87	100	116	131	145	160	174	189	203	218	232
Correction 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



For the correction factor corresponding to non-7barg (100psig) working pressure, please use the following formula

$$\text{For example: the correction factor under 9barg} = \sqrt{\frac{(\text{System working pressure})}{(\text{Nominal work pressure})}} = \sqrt{\frac{9\text{barg}}{7\text{barg}}} = 1.13$$

Therefore, the working pressure corresponding to 9 barg is the nominal working pressure multiplied by 1.13.

YQ series compressed air filter element

- C-grade Primary pre-filter element

Removal filter more than 3 micron dust particles, including water and oil mist.

- T-grade oil and particle filter element

Have the role of removing particle above 1um,water efficiency at 95%,residual oil are 0.5ppm @0.7Mpa,21 ℃.

- A/AA-grade oil removal filter element

Installed at the rear of T level filter filter out more than 0.01 um particles and water and oil vapor ,residual oil are 0.01um/0.001 PPM @ 0.7 Mpa 21℃

- TR/AR-grade dust filter element

Removal of dust particles than 1um/ 0.01 microns

- H-grade Activated carbon deodorizing filter

Using activated carbon filtration,compressed air can be filtered out residual oil and gas and other odor, commonly used in food and beverage industry,compressed air purification system and the human body. Respiratory system, at system configuration needs to be pre-installed in it's a/aa class filter.

- It is very important to replace the filter element frequently

It is very important to replace element frequently.If not replace the element frequently,which will lead to reduce the product quality and air quality,also increase the cost.

Under the normal usage,YOUQIAO brand element assure 6000hour.

Use YOUQIAO element to bring you:

- High quality compressed air.
- The sustainable protection on downstream equipment and process
- Lower operational costs
- 6000hours assurance
- Safety

C. Filter installation instructions

- As a rule, the filters should always be used in the pipe system at the point with the lowest temperature.
- For changing filter elements, sufficient free space underneath the filter must be provided
- A safety device for maintaining the maximum working pressure and the permissible fluid temperature must be available.
- Dust may escape from the cartridge. Protect the downstream compressed air network by installing a suitable downstream filter.

◆ Filter in painting work

Minute particles of silicone or grease penetrating the housing and the filter element might have a negative effect on the quality of the paintwork. Therefore, always wear protective gloves made of cotton or plastic that are free of silicone or grease when handling the filters.

1. Before fitting the filter the relevant section in the pipe system must be depressurised.
2. Check filter for possible transport damage. Do not fit a damaged filter.
3. If necessary, fit a bracket or pipe support. When selecting the mounting, take into account the weight of the filter and the weight of the possible condensate.
4. The filter must always be fitted vertically. The flow direction is marked by an arrow on the housing top section. A reversed air flow through a cartridge can damage the cartridge. Make sure the air always flows through the cartridge from bottom to top.
5. Fit filter in the pipe system
6. Re-pressurize pipe section and check for leaks.

◆ Installation diagram



Model YQ001-YQ007 can choose built-in drain or external HAD10B or EPS-20E.



YQ010-YQ250 model optional automatic drain EPS-20E or HAD20B.

D. Start up and Operation

Min.Working Pressure 0bar g(0 Psi g),Max.Working Pressure1.6Mpa (232Psig).

● Notes for filter operation

- 1.Only use the filter in accordance with the minimum and maximum operating conditions specified on the type plate.
- 2.Without prior approval by the manufacturer ,no conversions and modifications must be made to the filters!
- 3.Any non-approved modifications endanger the operational safety and may cause damage or personal injury.
- 4.Avoid sudden pressure fluctuations on pressure build up and depressurization.if the pressure builds up or drops ,too quickly this may cause damage to the filter.
- 5.Whilst the pressure unit is in operation ,the filter surfaces can become extremely hot.always remember this when working on the filter.
- 6.When using accessories with an external power supply,there is a hazard from electrical voltage therefore,work on electrical components must be carried out in a voltage-free condition.

E、Maintenance

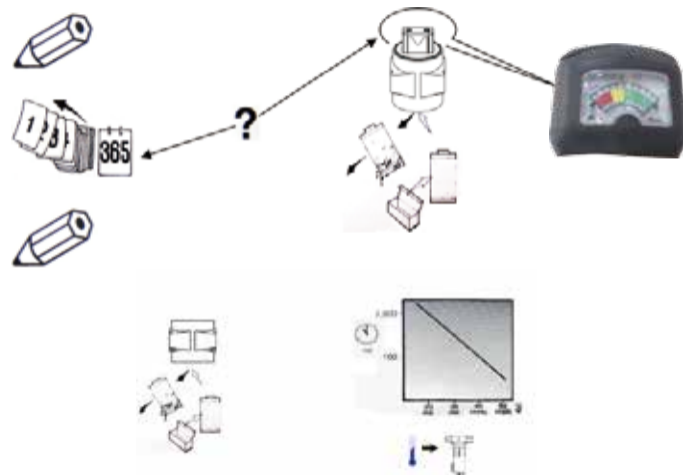
• Maintenance instructions

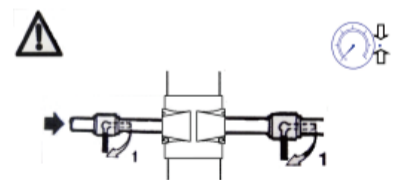
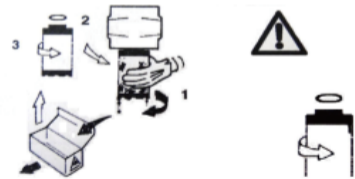
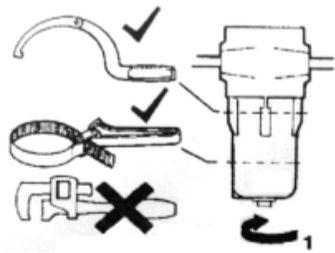
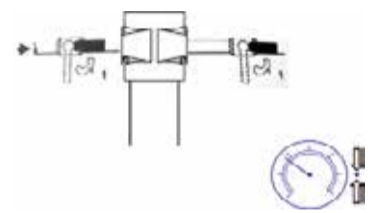
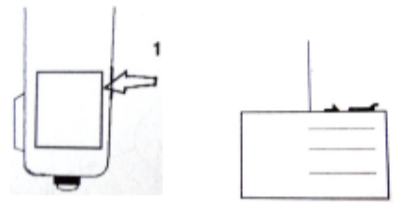
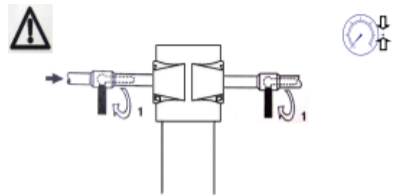
1. Always maintain the prescribed service intervals, if these are not complied with, the filter may not function correctly and the manufacturer does not accept any liability whatever for any possible consequences.
2. Repairs and maintenance should be carried out by specialist personnel only.

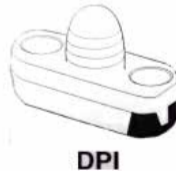
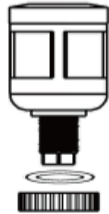
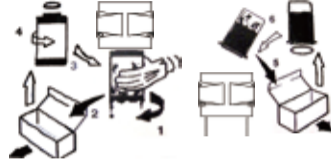
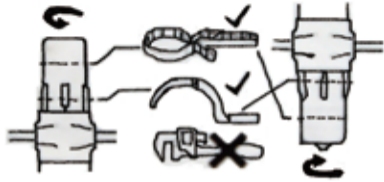
• Disassembly and assembly instructions

The filter housing and elements might be contaminated by substances held back in the filter, therefore always read the material safety data sheet of the respective fluid. Dispose of all components of the filter according to the applicable statutory regulations.

• Maintenance







Warranty Notes

When it appears the below things, the product is out of warranty:

1. the use is not accordance with the products function.
2. The maintenance don't accord to the product instruction notes.
3. The original parts are damaged or used.