

VALUE THROUGH PERFORMANCE

DELTECH

TRIAD<sup>®</sup>

BREATHING AIR FILTERS  
FOR COMPRESSED AIR



*"Improving the quality of the air you breathe"*

# The Triad® Filter Represents The Simplest, Most Productive Filtration System On The Market Today



## Triad Breathing Air Filters

Deltech's Triad® filter represents the simplest and most productive filtration system on the market today. Its single multifunctional replacement cartridge effectively removes contaminants to exceed the performance of the multiple filters in conventional breathing air panels.

Triad filters remove particulates, oil and oil mists, water, and tastes and odors. In the proprietary design of the Triad filter, most particulates are removed before the coalescing stage. Clogging is reduced; the result is longer element life. The unique design of the Triad provides both maximum portability and unparalleled savings in operating and maintenance costs. Triad filters feature the following:

### Lower maintenance and operating costs

- Only one filter to install and monitor
- Only one element to replace, so there's less downtime and lower inventory costs

### Low pressure drop

- Multistage pre-cleaning reduces particulate loading on the element for less resistance to airflow, more compressed air power at point of use

### Long element life

- Pre-separation of particulates and packed bed of adsorption media extends service life, reduces maintenance costs

From the first name in compressed air purification, Deltech has been an innovator in coalescing filter design for over 30 years, and is the leading U.S. manufacturer of breathing air purifiers for compressed air systems. Deltech's Del-Monox® purifiers have been selected for thousands of applications in a variety of industries. The Triad filter offers a less costly alternative to the Del-Monox line for applications where the removal of carbon monoxide is not required.

Do not use a Triad filter for breathing air applications if the level of carbon monoxide in the compressed air exceeds limits set forth by OSHA. TRIAD FILTERS DO NOT REMOVE CARBON MONOXIDE.



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## How Do Triad Filters Meet Breathing Air Standards?

According to OSHA, compressed breathing air “shall meet at least the requirements of the specification for Grade D breathing air as described in the Compressed Gas Association Commodity Specification For Air, G-7.1-1989.” The maximum allowable contaminant levels for Grade D air are shown in Table 1.

The Triad filter will effectively reduce the liquid oil and the gaseous hydrocarbon levels below these limits. The optional digital carbon monoxide monitor will be factory set to provide visual alarm at 10 ppm.

The **Triad will not remove carbon monoxide**. For applications that require the removal of carbon monoxide request Deltech bulletin 212 (continuous-duty desiccant systems) and 299 (continuous-duty refrigeration systems).

Most ambient air and untreated compressed air fall within Grade D requirements for oxygen and carbon dioxide. **The Triad filter will not affect the oxygen or carbon dioxide content of the air.**

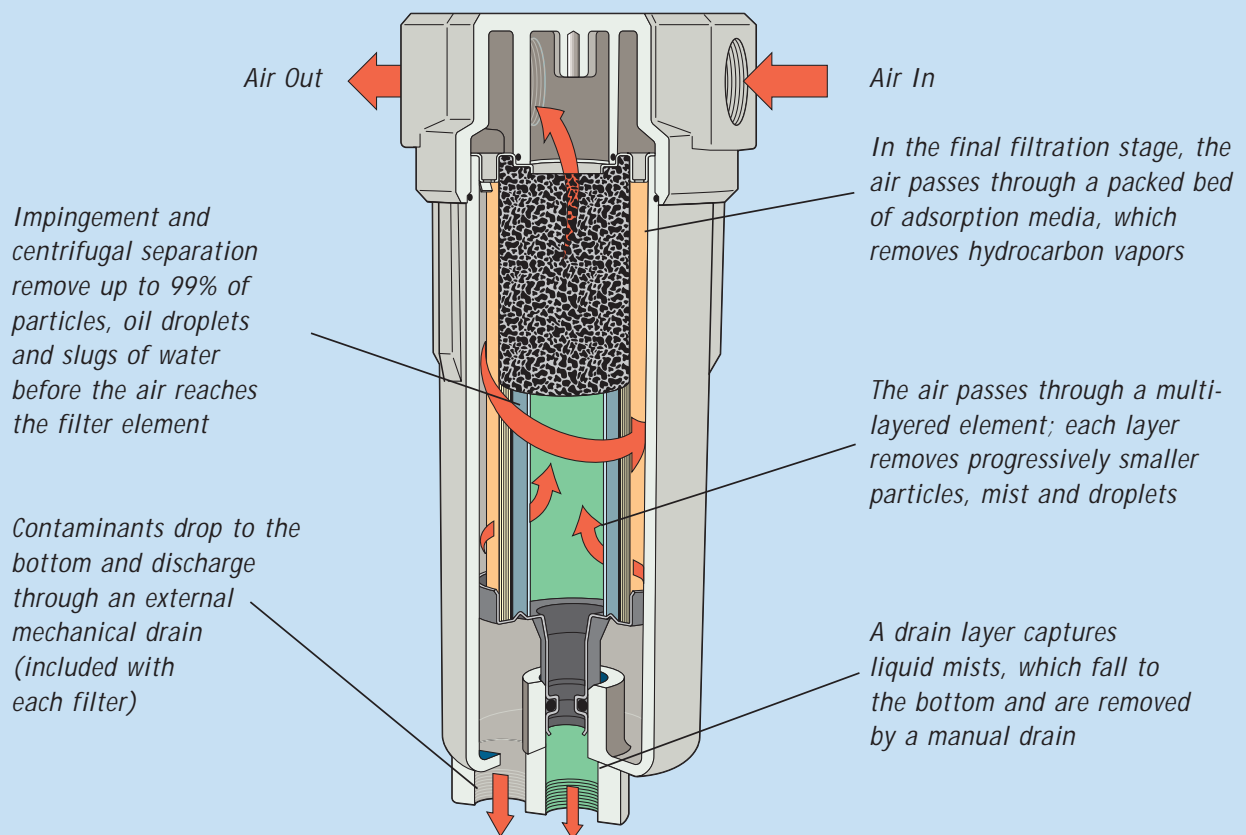
Table 1

Contaminant	Maximum Allowable Limit (OSHA)
Oxygen	19.5-23.5%
Carbon Monoxide	10 ppm
Carbon Dioxide	1000 ppm
Oil (Condensed)	5 mg/m <sup>3</sup>
Odor	No pronounced odor

Element replacement is required immediately if tastes or odors are detected by those breathing the air. However, the element should be replaced within the times shown below, regardless of whether tastes or odors are present.

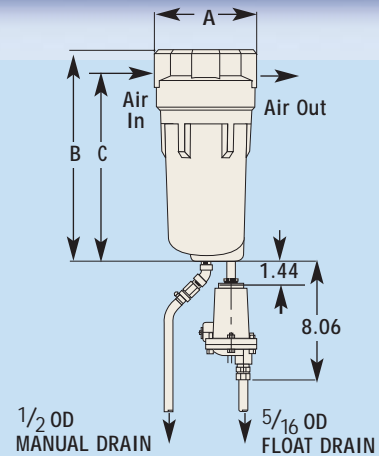
Compressor Type	Maximum Service Life	Maximum Time Between Element Replacements
lubricated	2000 hours	3 months
non-lubricated	8000 hours	12 months

### Triad® Filters



## Operating Conditions:

- Maximum recommended operating temperature: 120°F (49°C)
- Maximum operating pressure: 250 psig (17.2 barg)



## Specifications

Model	Maximum Inlet Air Flow (scfm)					Dimensions (inches)			Connections (inches NPT)		Charcoal Content (ozs.)	Approx. Ship. Wt. (lbs.)
	50 psig	100 psig	150 psig	200 psig	250 psig	A	B	C	Inlet	Outlet		
T15	8	15	21	24	27	3.6	11.2	10.4	1/2	1/2	0.5	5
T50	28	50	72	82	91	4.5	20.6	19.7	1	1	3	12
T125	70	125	179	204	227	6.1	34.2	32.7	1-1/2	1-1/2	14	20
T250	140	250	359	410	455	8.5	44.7	42.4	3	3	52	105

## Options

Description	Model			
	T15	T50	T125	T250
Electronic timer/solenoid drain <sup>1</sup> (Suffix D)	•	•	•	•
Pressure regulator and manifold (Suffix H) (Also requires option W or option C)	• <sup>2</sup>	• <sup>3</sup>	not available	not available
Wall mount enclosure (Suffix W)	•	•	not available	not available
Portable enclosure (Suffix C)	•	•	not available	not available
Duplex panel <sup>4</sup> (Suffix B)	not available	•	•	not available
CO monitor <sup>5</sup> (Suffix A)	•	•	•	•

<sup>1</sup> The standard filter is furnished with an external mechanical float drain. An electronic timer/solenoid drain is available as an option.

<sup>2</sup> One outlet port.

<sup>3</sup> Four outlet ports; Note: the Triad filter's capacity is based on flow and pressure. The number of usable outlet ports depends on the type and use of respirators and related equipment.

<sup>4</sup> Two filters plus bypass piping and valves mounted on backplate.

<sup>5</sup> Battery operated, digital, carbon monoxide monitor mounted on top of filter.



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