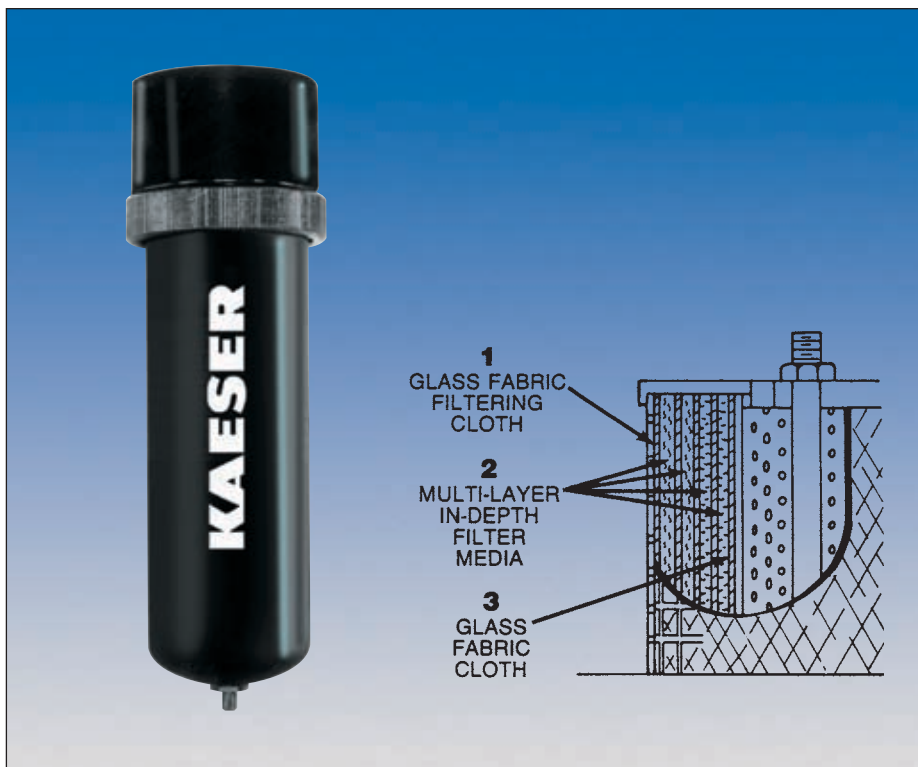


Specialty Compressed Air Filter

## High Temperature Afterfilter



### Operation

#### **Gravitational Settling**

Compressed air leaves a desiccant dryer containing dust concentrations typically in the range of up to .05 ppm by weight in heatless type dryers and up to 5 ppm by weight in heated type dryers. Particle size ranges from 200 microns to about 1 micron.

As the desiccant laden compressed air enters the filter housing, a reduction in air velocity and a sharp change of direction cause particles in the 200-20 micron range to drop to the bottom of the filter

housing. This results in a 30% reduction in the loading on the filter cartridge.

#### **Surface Filtration**

Compressed air then enters the outside of the filter cartridge and flows through a glass fabric filtering cloth with small diameter fibers. Dust collects on the outside of the cloth. As the dust continues to thicken it reaches a point where outer layers of dust shed off the cartridge into the bottom of the housing.

### Standard Features:

*The Kaeser High Temperature Afterfilter (HTA) is primarily designed as an after-filter for desiccant dryers.*

- Holds large amounts of desiccant fines without plugging
- Long cartridge life when installed downstream of heated desiccant dryers
- High dust loading capacity - utilizes gravitational settling plus surface and in-depth filtration to remove all desiccant fines 1 micron and larger.
- Suitable for temperatures to 450°F
- Can be used for any application where large amounts of solid particles are present in dry air.

### **In-depth Filtration**

Air next travels through a multi-layer, in-depth filter media which collects the dust penetrating the outside fabric cloth. The first two layers effectively remove all particles down to approximately 3 microns. The third and fourth layers remove all particles down to approximately 1 micron and even remove many submicronic particles.

The various layers within the media are glass, wrapped with a fabric cloth, which acts both as surface filter and as a support and stabilizer for the in-depth fiber bed. A final wrap of glass fabric cloth prevents fiber migration into the exiting air stream.

## Specifications

Model	Rated Capacity (psig)	In/Out Connection	Housing Bowl/ Vessel Type	Width (inlet & outlet) and Height (in.)	MWP @ 450°F (psig)	Weight (lb.)	Replacement Cartridge No.
HTA-100	100	1" NPTF	48 oz. Metal	4 <sup>1</sup> / <sub>4</sub> x 14 <sup>5</sup> / <sub>16</sub>	250	13	0740-1
HTA-200	200		100 oz. Metal	4 <sup>1</sup> / <sub>4</sub> x 23 <sup>13</sup> / <sub>16</sub>		19	0740-2
HTA-400	400	3" NPTM	5" Pressure Vessel	10 <sup>1</sup> / <sub>4</sub> x 39 <sup>9</sup> / <sub>16</sub>	165	95	0740-3
HTA-600	600					159	0740-4
HTA-1200	1200		8" Pressure Vessel	16 x 41 <sup>7</sup> / <sub>16</sub>		219	0740-4-2
HTA-1800	1800		10" Pressure Vessel	16 <sup>1</sup> / <sub>4</sub> x 43 <sup>1</sup> / <sub>4</sub>		236	0740-4-3
HTA-2400	2400	4" Flange	12" Pressure Vessel	20 x 54 <sup>11</sup> / <sub>16</sub>	165	239	0740-4-4
HTA-3000	3000					319	0740-4-5
HTA-4800	4800	6" Flange	16" Pressure Vessel	24 x 53		548	074v0-4-8
HTA-6600	6600		20" Pressure Vessel	28 x 62		558	0740-4-11
HTA-8400	8400		558	0740-4-14			
HTA-11400	11400	8" Flange	24" Pressure Vessel	33 x 68 <sup>3</sup> / <sub>16</sub>	772	0740-4-19	

\*Rated capacity: Based on operation at 100 psig.

- Maximum inlet air temperature: 450°F
- Maximum allowable working pressure: Models 100 and 200: 250 psig  
Models 400-11400: 165 psig

**Specifications are subject to change without notice.**

## Selecting the Proper Filter

To correct the Rated Capacity for actual operating conditions, refer to "Capacity Correction Factors for Operating Conditions" and find the capacity correction factor corresponding to the

inlet pressure. Multiply the capacity correction factor by any filter's rated capacity to determine its capacity at your operating conditions. Capacity correction factors for conditions not

shown may be interpolated. Contact the factory if assistance is needed.

## Capacity Correction Factors for Operating Conditions

Operating Pressure (psig)	60	80	90	100	110	125	145	150	160	175	190	215	230	250
Capacity Correction Factor	0.65	0.83	0.91	1.00	1.09	1.22	1.39	1.44	1.52	1.65	1.78	2.00	2.13	2.31

When ordering, do not choose by pipe size. Make selection by flow rate and operating pressure only.



**Built for a lifetime.™**

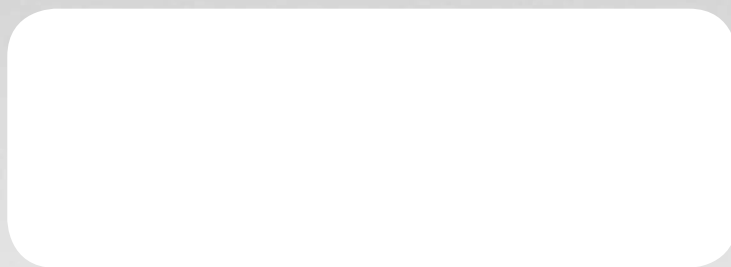
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