

FILTER SELECTION DATA SHEET

hi-E 40H HIGH TEMP PLEAT

Standard capacity, medium efficiency pleat

Purolator Filtration Systems

Introduction

Purolator Products Air Filtration Company's hi-E™ 40 High Temperature filter is a medium efficiency pleated filter specially constructed for use in systems involving elevated operating temperatures.

Media and Support

- The filter media is a special 1/4" thick, high density ultra-fine fiberglass reinforced by a woven fiberglass mesh.
- The wedge shaped pleats on Purolator's hi-E 40H High Temperature filter are formed and supported using corrosion resistant, electro-galvanized, expanded steel.
- The filter media is bonded to the expanded metal to prevent media sagging or oscillation during operation.
- Operating temperature range: Constructed to operate at 400°F continuously and may be subjected to temperatures up to 450° for short durations of no more than 10 minutes.
- The fiberglass media gives the hi-E 40H High Temperature filter a 30-35% average efficiency and a 90-93% average arrestance when tested in accordance with the ASHRAE 52.1-1992 test method.
- As indicated by its name, the hi-E 40H High Temperature filter is U.L. approved and tested. Testing on this product was performed in accordance with U.L. Standard 900 for Class 1 filters.

Construction features

- The perimeter frame on the Purolator hi-E 40H High Temperature filter is constructed of 24-gauge aluminized steel.
- The pleated element is supported downstream by a 24-gauge expanded aluminized steel face guard to ensure stability of the media pak at elevated temperatures.



Suggested Product Specifications

1. The filter shall be the hi-E 40H High Temperature as manufactured by Purolator Products Air Filtration Company.
2. Air filters shall be (2") and (4") deep, medium efficiency, pleated media filter specifically constructed for elevated temperature conditions.
3. Air filters shall be constructed to operate at 400°F continuously and to endure 450°F temperatures for short 10 minute durations.
4. The filter media shall be 1/4" thick, high density ultra-fine fiberglass reinforced by a woven fiberglass mesh.
5. The filter media shall be bonded to a corrosion resistant, expanded metal support grid with a 95% open face area.
6. The support grid shall be formed into a wedge configuration to optimize use of the filter media.
7. The filter shall be U.L. approved and tested. Testing shall be performed in accordance with U.L. Standard 900 for Class 1 filters.

Performance data: hi-E 40H High Temp

Series	Nominal (1) Size WxHxD	Actual Size WxHxD	hi-E 40H Model number	CFM (2) capacity med.	CFM (2) capacity high	Resist. " W.G. med.	Resist. " W.G. high	Resist. " W.G. final (3)	Sq. ft.	Media area/sq. ft. face area
2 <i>10 pleats per lineal foot of face area</i>	12x24x2	11 ³ / ₈ x 23 ³ / ₈ x 1 ³ / ₄	HE40H-2402	750	1000	.28	.36	1.00	5.5	3.1
	16x20x2	15 ¹ / ₂ x 19 ¹ / ₂ x 1 ³ / ₄	HE40H-6002	825	1100	.28	.36	1.00	6.7	3.1
	16x25x2	15 ¹ / ₂ x 24 ¹ / ₂ x 1 ³ / ₄	HE40H-6502	1050	1400	.28	.36	1.00	8.4	3.1
	20x20x2	19 ¹ / ₂ x 19 ¹ / ₂ x 1 ³ / ₄	HE40H-0002	1050	1400	.28	.36	1.00	8.2	3.1
	20x25x2	19 ¹ / ₂ x 24 ¹ / ₂ x 1 ³ / ₄	HE40H-0502	1300	1750	.28	.36	1.00	10.3	3.1
	24x24x2	23 ³ / ₈ x 23 ³ / ₈ x 1 ³ / ₄	HE40H-4402	1500	2000	.28	.36	1.00	12.0	3.1
4 <i>9 pleats per lineal foot of face area</i>	12x24x4	11 ³ / ₈ x 23 ³ / ₈ x 3 ³ / ₄	HE40H-2404	1000	1250	.33	.42	1.00	11.5	5.7
	16x20x4	15 ³ / ₈ x 19 ³ / ₈ x 3 ³ / ₄	HE40H-6004	1100	1400	.33	.42	1.00	12.7	5.7
	16x25x4	15 ³ / ₈ x 24 ³ / ₈ x 3 ³ / ₄	HE40H-6504	1400	1750	.33	.42	1.00	15.9	5.7
	20x20x4	19 ³ / ₈ x 19 ³ / ₈ x 3 ³ / ₄	HE40H-0004	1400	1750	.33	.42	1.00	15.9	5.7
	20x25x4	19 ³ / ₈ x 24 ³ / ₈ x 3 ³ / ₄	HE40H-0504	1750	2170	.33	.42	1.00	20.0	5.7
	24x24x4	23 ³ / ₈ x 23 ³ / ₈ x 3 ³ / ₄	HE40H-4404	2000	2500	.33	.42	1.00	23.0	5.7

- (1) Width and height dimensions are interchangeable. The hi-E 40H may be installed with pleats running vertical or horizontal.
- (2) Capacity ratings are recommended levels. Resistance to airflow data is based on ASHRAE 52.1-1992 Test Method. Performance tolerances conform to Section 7.4 of ARI Standard 850.93.
- (3) The recommended final operating resistance is typical of systems currently in operation. The hi-E 40H can be operated to higher or lower final resistance levels without materially affecting filter efficiency.



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