



Graver Technologies

FILTRATION | SEPARATION | PURIFICATION



Aegis® TurboGuard® Pre-Filters

Subtitle goes here

Product Specifications

Media:

Pleated Proprietary Multi-Layer
Polypropylene

Inner core, end caps, cage:

Polypropylene

O-Rings:

EPDM, Quad Seal

Core (if required)

Polypropylene

Dimensions

Nominal lengths:

20", 40", 60"

(508, 1,016, 1,524 mm)

Outside diameter: 6" (152 mm)

Operating Parameters

Maximum operating temperature:

176°F (80°C)

Maximum Forward Operating

Differential Pressure:

75 psid @ 70°F (5.2 bar @ 21°C)

30 psid @ 176°F (2.0 bar @ 80°C)

Recommended Maximum

Changeout Differential Pressure:

35 psid (2.4 bar)

Graver Technologies, Aegis TurboGuard, is a technically improved 6 inch (152 mm) high-flow filter for the utility market.

Graver is the world's largest supplier of condensate system filters and components and has been manufacturing precoat and non-precoat septa for condensate systems for more than 50 years. Graver is the consistent technology innovator with more than 40 patents and numerous technical advances for condensate and high purity water applications.

Graver's family of TurboGuard High Flow Filters will provide superior CRUD removal upstream of deep bed demineralizers. Graver's TurboGuard line of filters are manufactured in the USA at Graver Technologies manufacturing plants, under an ISO registered quality system.

FEATURES & BENEFITS

- Flow is from the inside core to the outer pleats
- TurboGuard Filters are wrapped in a one-piece extruded outer cage preventing both media migration during inside out flow, and tearing during removal
- One-piece molded end caps, including molded-in bail for secure handling during installation and removal
- Thermally bonded construction and low pressure drop at specified flow rates
- Maximum Flow Rates (lower flow rates will affect performance)
 - 20" Element up to 175 gpm (663 lpm)
 - 40" Element up to 350 gpm (1,325 lpm)
 - 60" Element up to 500 gpm (1,893 lpm)
- TurboGuard's one-piece extruded outer cage allows for easier maintenance and removal
- Quad Seal gasket system to provide maximum sealing surfaces
- A complete line of ASME Code Section VIII Division 1 Housings are available
- Optimized media surface area allows the full use of installed media area — not blocked off by media "squeezing"

Graver's TurboGuard High Flow Filter integrates a number of improvements over currently available elements. With the most experience of any supplier in condensate applications, Graver can access more than 50 years of experience when improving fundamental filtration in condensate and high purity water applications.

Graver's TurboGuard High Flow Filter is designed specifically for use in combined cycle or high cycling plants with or without deep beds. TurboGuard should also be used in other critical utility applications

where substantial dirt holding and CRUD removal properties are essential. TurboGuard High Flow Filters are typically installed upstream of the condensate demineralizers to prevent ion exchange resin bead fouling. Unique media design is focused specifically on utility applications and the specific contaminants in condensate-type systems. Graver TurboGuard High Flow Filter will retro-fit competitive inside-out vessels designed for 6" diameter (152 mm) x 60" (1,524 mm) long filters.

TurboGuard HIGH FLOW NOMENCLATURE INFORMATION

Filter Type	Retention Rating (microns)		Nominal Length (inches)	Gasket or O-Ring	Internal Core (if required)
TurboGuard (TBG) High Flow Series	1	20	-20	-P EPDM	-C Polypropylene
	3	40	-40	-S Silicone	
	5	60	-60	-B Buna-N	
	10	100		-V Viton	
Example: TBG 5-60-P					
TBG	5		-60	-P	

Example: TBG 5-60-P = TurboGuard High Flow Filter, 5 microns, 60 inches, EPDM. / TBG-5-60-P-C (same as above) with center core.

TurboGuard HIGH FLOW ELEMENT PRESSURE DROP

Microns	Element Pressure Drop psid/gpm			Element Pressure Drop Mbar/M ³ /Hr		
	20"	40"	60"	20"	40"	60"
1	0.0200	0.0097	0.0065	6.0845	2.9395	1.9820
3	0.0167	0.0081	0.0054	5.0705	2.4495	1.6516
5	0.0076	0.0037	0.0025	2.3179	1.1198	0.7550
10	0.0046	0.0022	0.0015	1.3908	0.6719	0.4530
20	0.0021	0.0010	0.0007	0.6374	0.3079	0.2076
40	0.0017	0.0008	0.0006	0.5215	0.2520	0.1699
60	0.0015	0.0007	0.0005	0.4552	0.2199	0.1483
100	0.0010	0.0050	0.0003	0.3035	0.1466	0.0989

For chemical compatibility, flow rates, and temperature requirements please consult the factory or your local Graver distributor.

FOR MORE INFORMATION

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