

PARTICULATE & COALESCING

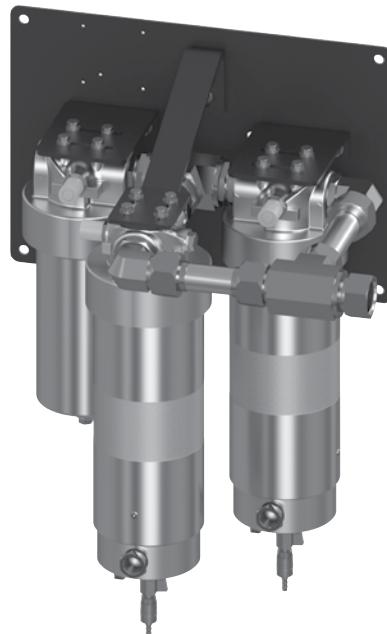
BDF1 & BDF2 Series

Bulk Diesel Filter

150 psi • up to 25 - 50 gpm



Model no.
BDF1G03CG5VVM



Model no.
BDF2G03CG5VVM

Features and Benefits

- Designed with integrated particulate removal pre-filtration for maximum coalescing filter element life in the down stream housing
- Updated BDF design incorporates GHPF and GHCF filter housings for a reduced cost, improved function, and increased capacity
- Fuel dispensing and transfer filtration solution with choice of integral or blocked bypass to suit application
- Routine element change is only needed on the particulate filter which saves time and money
- Particulate filtration at 1 or 3 microns utilizing element for contamination control
- Optional electrical with amber colored particulate element change indicator light
- Patented, three-phase, particulate and fuel/water separation media technology and GeoSealR element sealing interface ensure quality performance with every element replacement
- A revolutionary element designed for the highest single-pass water and particulate removal efficiencies in today's ultra-low sulfur diesel (ULSD) fluids
- Protects expensive engine components against failures caused by particulate and water transferred from the bulk fuel tank to the vehicle
- Allows users to achieve or exceed the particulate and water removal specifications of the injection system OEMs
- Previously acceptable industry standard products no longer provide the high-efficiency separation needed in today's ULSD fluids
- HYDAC Stat-Free media is standard for all coalescing elements
- Bypass indication at 35 psi, with bypass cracking at 40 psi, allows for early indication before bypass of filter for advanced time for maintenance
- Complete automation is achievable with a HYDAC Stat-Free® media sensor and auto-drain feature using a remote 5 gallons (18L) or 20 gallons (75L) sump with alarm and auto shutdown, in application >32°F (0°C)
- Easy mounting and element service

Technical Specifications

Flow Rating	BDF1: up to 25 gpm (95 L/min) BDF2: up to 50 gpm (189 L/min)	
Inlet/Outlet Connection	-24 (ORB) SAE J1926	
Max. Operating Pressure	150 psi (10 bar)	
Temperature Range	-20°F to 225°F (-29°C to 107°C) w/ optional water sump heater 32°F to 225°F (-29°C to 107°C) standard with AWD options	
	Particulate Filter	Coalescing Filter
Bypass Indication	35 psi (2.4 bar)	36 psi (2.5 bar)
Bypass Valve Cracking	40 psi (2.8 bar)	40 psi (2.8 bar)
Materials of Construction	Porting Head: Cast Aluminum, Anodized Element Case: Aluminum, Anodized	Porting Head: Cast Aluminum, Anodized Element Case: Aluminum, Anodized Sump: Cast Aluminum, Anodized
Element Change Clearance	2" (51 mm)	4.5" (114 mm)
Weight	BDF1: 46.5 lbs; BDF2: 89 lbs	
Optional Water Sump Heater	120VAC, BDF1: 1 x 74W / BDF2: 2 x 74W	
Optional Remote Mount Visual Electrical Indicator	120VAC	

Applications

- Point of use fuel dispensing
- Fleet fill/bulk fuel transfer
- Bulk fuel unloading
- Protection for high-flow fuel injection systems
- Bulk tank kidney loop/recirculation

Markets

- Industrial
- Mobile Vehicles
- Marine
- Mining Technology
- Agriculture
- Power Generation
- Common Rail Injector Systems
- Fleet
- Railroad
- Bulk Fuel Filtration

Model Code

Filter Series

BDF = Bulk Diesel Filter

Flow Rate

- 1 = 25 gpm
- 2 = 50 gpm

Particulate Filtration

- G01 = 1 μ m
- G03 = 3 μ m

Particulate Bypass

- (omit) = 40 psi
- X = Blocked Bypass

Coalescing Filtration

- CG5 = C125GZ5V Coalescing Element

Coalescing Bypass

- (omit) = 40 psi
- X = Blocked Bypass

Sealing Material

- V = Fluorocarbon Elastomer (FKM)

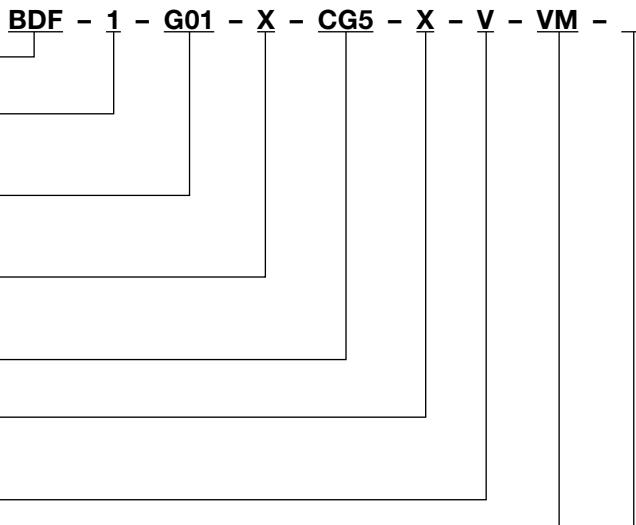
Particulate Element Change Indicator

- VM = Visual Pop-Up w/ Manual Reset (standard)

Options

- (omit) = Included sight glass and manual water drain valves
- U = Downstream test point
- T = Water-In-Fuel (WIF) (sensor only)
- I = WIF sensor w/ remote mount light indicator
- H = Coalescing sump heater
- S5 = 5 gal. remote tank
- S20 = 20 gal. remote tank
- AWD5 = Auto water drain w/ 5 gal. remote tank
- AWD20 = Auto water drain w/ 20 gal. remote Tank

Note: Unless automatic drain option is specified, BDF units will come standard with manual drain.



Element Particulate Performance

Element	DHC (gm)	Filtration Ratio Per ISO 16889 Using APC calibrated per ISO 11171	
		$\beta_x(c) \geq 200$	$\beta_x(c) \geq 1000$
5.40.11 D 01 BN4 /-V-G	172	<4.0	4.5
5.40.11 D 03 BN4 /-V-G	148	4.6	5.8

Element Water Coalescing Performance

Element	Pressure Side Coalescing	
	Recommended Flow	Single Pass Water Removal Efficiency
C125GZ5	25 gpm	$\geq 95\%$

Particulate Element

Flow Direction: Outside In
Element Nominal Dimensions: 5.0" (27 mm) O.D. x 11" (279 mm) L

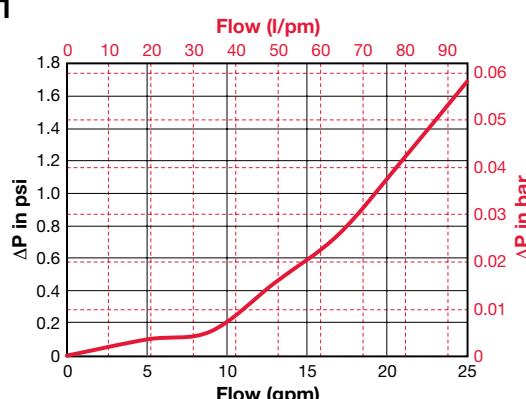
Coalescing Element

Flow Direction: Inside Out
Element Nominal Dimensions: 5.0" (27 mm) O.D. x 12" (305 mm) L

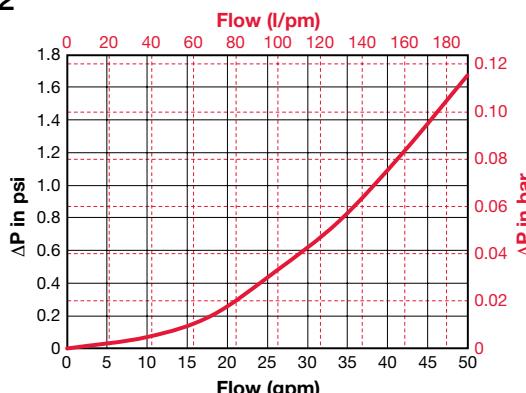
Fuel Oils

- ULSD15 and similar petroleum diesels
- Biodiesel and blends
- Synthetic diesel and blends

Pressure Drop BDF1

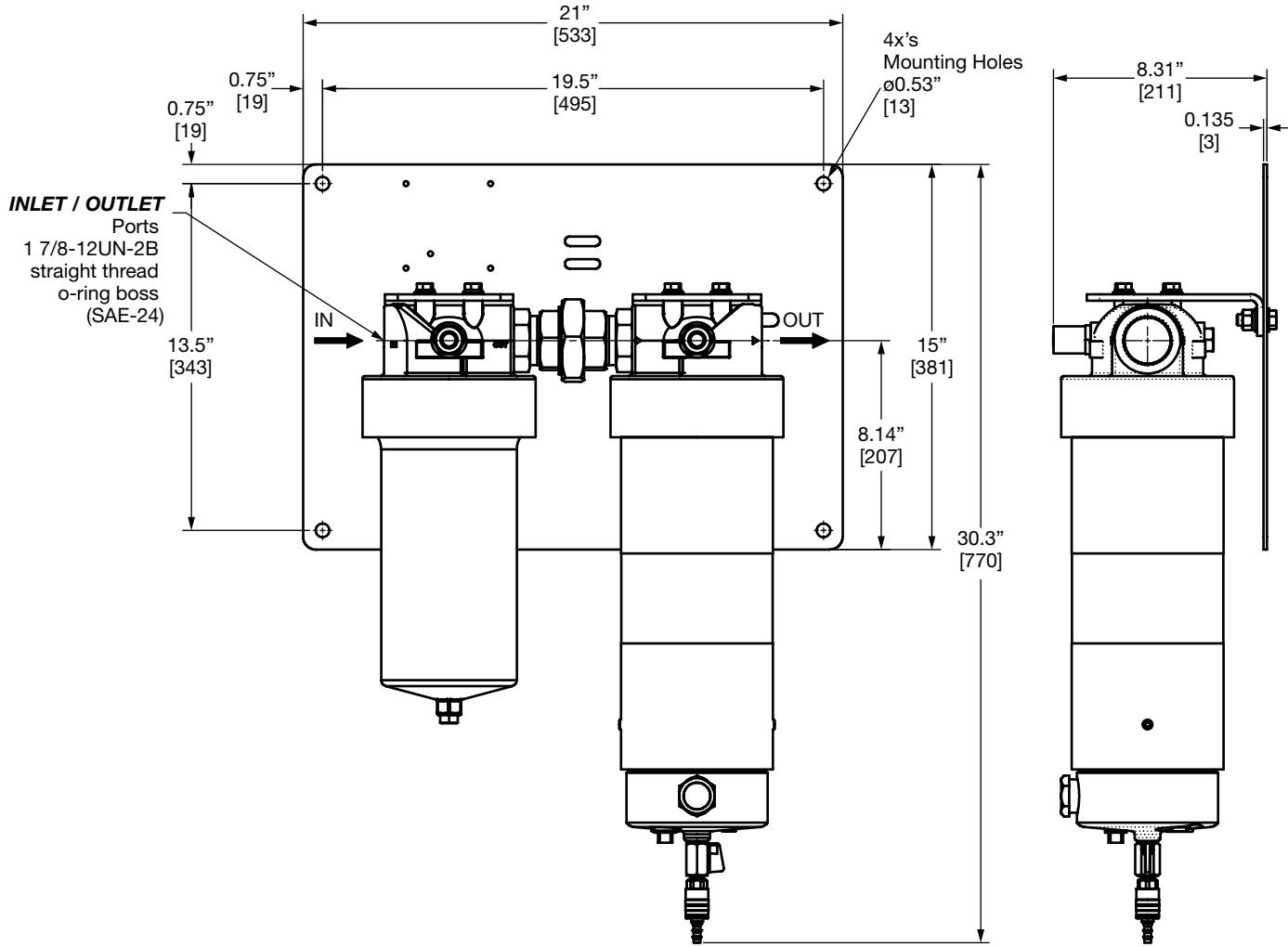
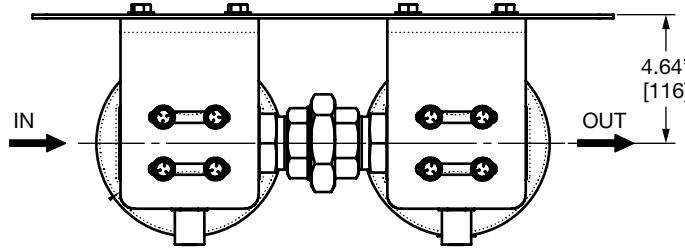


BDF2



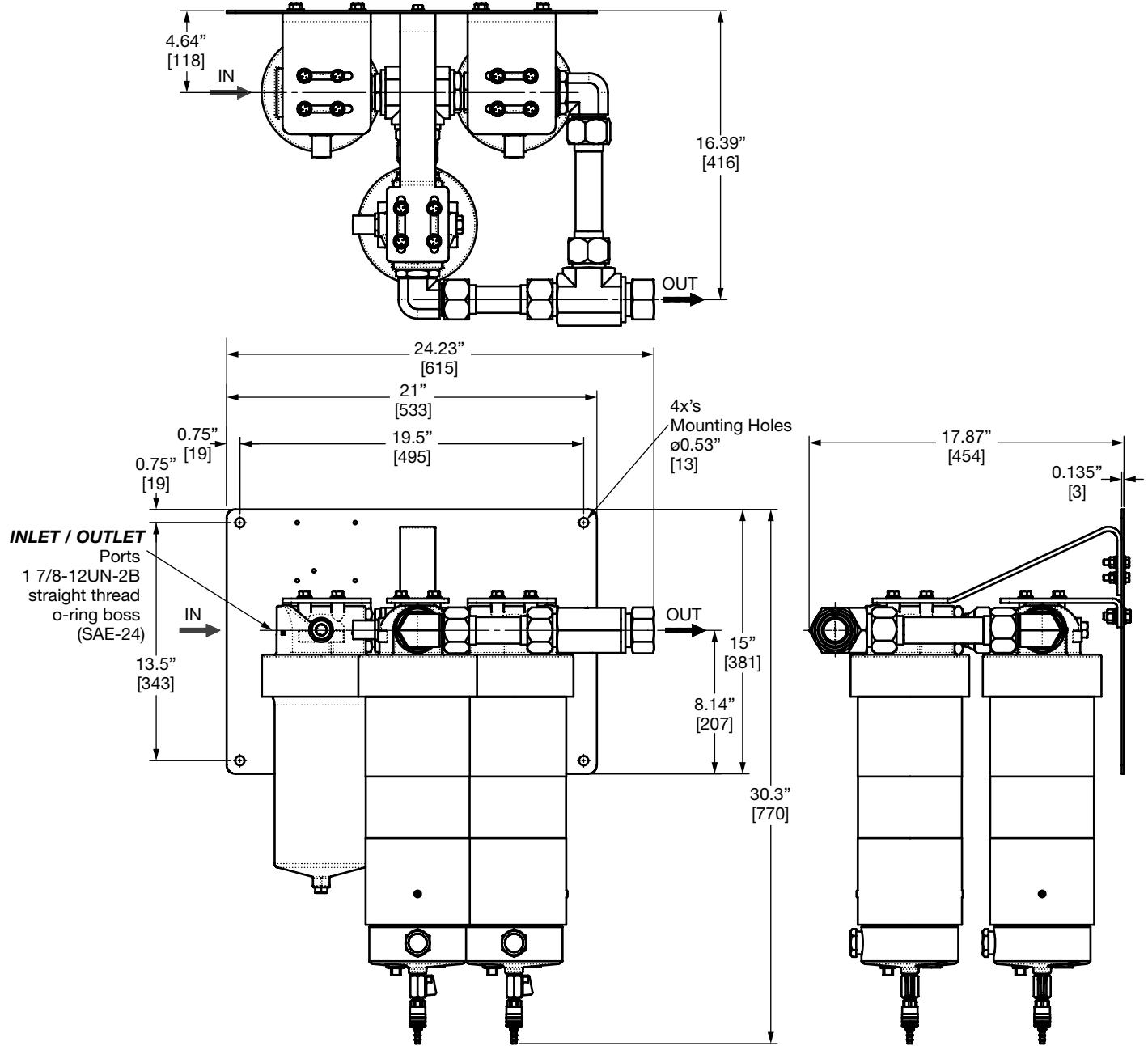
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Dimensions
BDF1



Dimensions shown are inches [millimeters] and for general information only. For complete dimensions please contact HYDAC to request a certified print.

Dimensions BDF2



Dimensions shown are inches [millimeters] and for general information only. For complete dimensions please contact HYDAC to request a certified print.