BDC Series

Bulk Diesel Fuel Filter Cart

25 or 70 gpm

Model no. of filter in photograph is: BDCQ03VAVM

Description

Application Introduction:

The Reason for Better Bulk Fuel Filtration

The BDC provides exceptional single pass or kidney loop diesel particulate filtration and continuous water removal. All 3 filters combine HYDAC's synthetic media and patent-pending fuel water separation technology. The BDC is ideal for fuel maintenance operations.

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

Features

- Great for kidney loop clean-up of highly contaminated reservoirs and single pass transfer
- Incorporates a bag element pre-filter down to 5 micron, for gross removal of microbial bloom contamination and rust
- Fuel and water separation media technology in a three-phase element construction for high efficiency, single-pass removal of emulsified and free-water in Ultra-low Sulfur Diesel (ULSD) and blends
- Designed because prior generation coalescing products no longer provide high-efficiency separation in ULSD and Biofuels
- Pump motor is 115VAC with resettable overload and 7' power cord for 25 gpm models and available as 220V Single Phase, 230V Three Phase, or 460V Three Phase for 70 gpm models
- Helps protect expensive, vital engine components against failures caused by water contaminated fuel
- Manual water drains and up and downstream test points

Technical Specifications

Flow Rating	Up to 25 gpm (95 L/min) or 70 gpm (265 L/min) for ULSD15 & biodiesel blends	
Fluid Temp. Range	-20°F to 165°F (-29°C to 74°C) *(with heater option)* 32°F to 165°F (0°C to 74°C) *(standard, with sight gauge option, or with automatic water drain option)*	
Ambient Environment Temp. Range	-20°F to 104°F (-29°C to 40°C) 32°F to 165°F (0°C to 74°C) *(standard, with sight gauge option, or with automatic water drain option)*	
Bypass Indication	**Particulate Filter** 15 psi (1.03 bar)	**Coalescing Filter** 25 psi (1.7 bar)
Bypass Valve Cracking	**Particulate Filter** 20 psi (1.37 bar)	**Coalescing Filter** 30 psi (2 bar)
Materials of Construction	Porting Base: Anodized Aluminum Cap: Plated Steel Bag Housing: Stainless Particulate Filter Housing: Epoxy Paint with High-phos Electroless Nickel Plating Coalescing Filter Housing: Epoxy Paint with High-phos Electroless Nickel Plating	
Weight	25 gpm model - 785 lbs. (356 kg), 70 gpm model - contact factory	
Element Change Clearance	33.8" (858 mm)	
For 25 GPM Models:		
Operating Frequency	60 Hz	
Operating Phase	Single	
Full Load Amperage @ Operating Voltage	13.4 A @ 115 VAC 7.2-6.7 A @ 208-230 VAC	
Service Factor Amperage @ Operating Voltage	15.2 A @ 115 VAC 8.1-7.6 A @ 208-230 VAC	
For 70 GPM Models:		
Contact Factory		

PN#2208201 / 08.18 / FFD1702-1879

Model Code

BDC – Q03 – V – A – VM – AW – 70A

Filter Series
BDC = Bulk Diesel Cart

Filtration Rating
Q01 = 1 µm
Q03 = 3 µm

Sealing Material
V = Fluorocarbon Elastomer (FKM)

Bag Element Micron Rating
A = 5 µm
B = 25 µm
C = 50 µm
D = 100 µm

Element Change Indicator
VM = Visual Pop-Up w/ Manual Reset

Options
H = Sump Heater
AW = Automatic Water Drain w/ 5 gal Tank
70A = 70 gpm 230VAC Single Phase 60 Hz
70B = 70 gpm 230VAC Three Phase 60 Hz
70C = 70 gpm 460VAC Three Phase 60 Hz

Notes: AWD for use only >32°F (0°) For 50Hz applications, contact factory

Element Particulate Performance

Particulate Elements	DHC	Filtration Ratio Per ISO 16889 Using automated particle counter (APC) calibrated per ISO 11171	
		$ß_x(c) \geq 200$	$ß_x \geq 1000$
1.14.39D01ECON2 /-V	1259 grams	<4.0	<4.2
1.14.39D03ECON2 /-V	1293 grams	<4.0	<4.8

Element Water Coalescing Performance

Coalescing Element	Pressure Side Coalescing	
	Max Flow	Single Pass Water Removal Efficiency
C396Z5V	70 gpm	≥ 99.5%

Note: Based on ULSD15 with 27 Dyne/cm surface tension and 0.25% (2500 PPM) water injection

Coalescing Element
Flow Direction: Inside Out
Element Nominal Dimensions: 6.4" (163 mm) O.D. x 39.4" (1001 mm) long

Particulate Element
Flow Direction: Outside In
Element Nominal Dimensions: 6.0" (150 mm) O.D. x 37.8" (960 mm) long

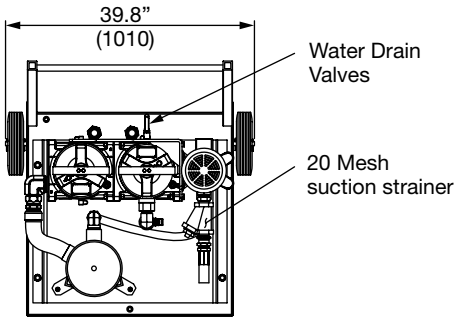
Fuel Oils

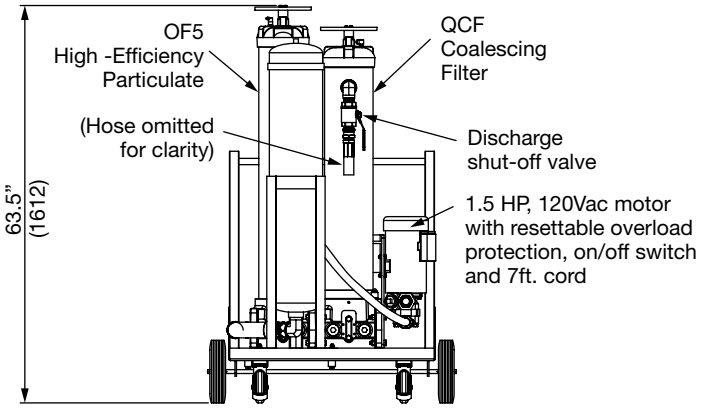
- ULSD15, low sulfur diesel and high sulfur diesel
- Biodiesel blends
- Synthetic diesel and blends
- No. 2 fuel oil and heating oil

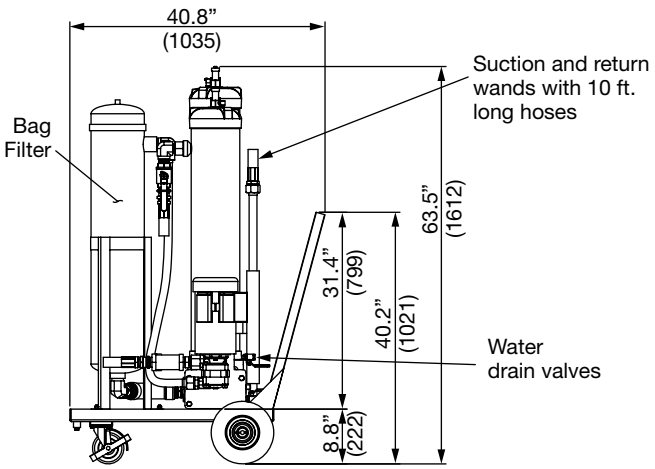
Replacement Elements

Part Number	Description	Micron Rating	Elements Per Case
C396Z5V	Coalescing Element	5 µm	1
1.14.39D01ECON2 /-V	Particulate Element	1 µm	1
1.14.39D03ECON2 /-V	Particulate Element	3 µm	1
PEF5P2PH	Bag Element	5 µm	50
PEF25P2PH	Bag Element	25 µm	50
PEF50P2PH	Bag Element	50 µm	50
PEF100P2PH	Bag Element	100 µm	50

Dimensions
BDC







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