

OFX Series Filter Skids



Single OFX

Description

HYDAC's new OFX Series filtration skids are compact, self-contained filtration systems equipped with high efficiency, high capacity elements capable of removing particulate contamination and/or water quickly and economically. They supplement in-line filters whenever the existing filtration is incapable of obtaining the desired ISO cleanliness level.

It is not uncommon for viscosity to be overlooked when specifying an off-line filtration unit. The results of this oversight can severely affect system efficiency and longevity, and render the filtration system useless when high viscosity fluid causes the filter to be in constant bypass. HYDAC considers maximum fluid viscosity, (*at the minimum operating temperature*) in conjunction with flow to properly size the pump and motor.

Standard OFX Series OFX1 – OFX6 skids include a hydraulic pump, electric motor, and either a single or dual standard capacity or high capacity housing. Many different component combinations provide the flexibility to match specific system viscosity, flow, and cleanliness requirements. Multiple housing lengths give the option of adding additional dirt holding capacity.

HYDAC's high viscosity OFX Series skids, OFX7 & OFX8, are designed to handle fluids that have a viscosity as high as 25,000 SUS. The skids have 39" long high capacity filters to efficiently clean the viscous fluids. The filters have a high dirt-holding capacity, capable of holding almost 1000 grams of dirt depending on the element. OFX7 & OFX8 Series skids include a pump, motor, high capacity filter, suction strainer, and dirt indicator. Various options can account for specific user needs.

Features

- Protects and extends the life of expensive components
- Minimizes downtime and maintenance costs
- Designed to handle high viscosity oils up to 25,000 SUS (*see Skid Selection*)
- Many component combinations and variable starter options allow the flexibility to match specific user needs
- Four wheel cart option provides product portability
- Integral drip pan with drain plug prevents oil from spilling on ground
- Sample valves provided at filter base for fluid sampling
- Market leading HYDAC Betamicon® synthetic filtering media provides for quick, efficient clean up with maximum element life

Technical Details

| | |
|----------------------|--|
| Flow Rating | Up to 82 gpm (310 L/min) |
| Temp. Range | 0°F to 180°F (-17°C to 82°C) |
| Bypass Valve Setting | 50 psi (3.5 bar) for skid series OFX1, OFX2, OFX3, OFX4, OFX5, OFX7 & OFX8 40 psi (2.8 bar) for skid series OFX6 |
| Fluid Viscosity | Up to 25,000 SUS (<i>see Skid Selection</i>) |
| Compatibility | All petroleum based hydraulic fluids. Contact HYDAC for use with other fluids, including ester and skydrol |
| Pump | OFX1-OFX6: Continuous duty gear pump with integral 150 psi relief. Flow dependent on skid series and motor. (<i>Refer to Pump, Motor & Weight Data table</i>) OFX7-OFX8: Positive displacement rotary screw-pumps. |
| Motor | Horsepower dependent on skid series and flow. (<i>Refer to Pump, Motor & Weight Data table</i>) |
| Porting | Dependent on flow. (<i>Refer to Porting Data table</i>) |

Skid Selection

| Series | Viscosity Range | Filter Housing(s) | Maximum Flow |
|--------|------------------|--|------------------|
| OFX1 | 150 - 500 SUS | (1) High Capacity or Standard Capacity | 82 gpm (310 lpm) |
| OFX2 | 500 - 2000 SUS | (1) High Capacity or Standard Capacity | 82 gpm (310 lpm) |
| OFX3 | 2000 - 5000 SUS | (1) High Capacity or Standard Capacity | 37 gpm (140 lpm) |
| OFX4 | 150 - 500 SUS | (2) High Cap. or Stand. Cap. in series | 82 gpm (310 lpm) |
| OFX5 | 500 - 2000 SUS | (2) High Cap. or Stand. Cap. in series | 82 gpm (310 lpm) |
| OFX6 | 2000 - 5000 SUS | (2) High Cap. or Stand. Cap. in series | 37 gpm (140 lpm) |
| OFX7 | 100 - 25,000 SUS | (1) High Capacity | 6 gpm (23 lpm) |
| OFX8 | 100 - 25,000 SUS | (2) High Capacity in parallel | 30 gpm (114 lpm) |

Pump, Motor and Weight Data

| Skid Series | Flow (gpm) | Motor (hp) | Weight (lb)* | Skid Series | Flow (gpm) | Motor (hp) | Weight (lb)* |
|-------------|------------|------------|--------------|-------------|------------|------------|--------------|
| OFX1 | 09 | 1.5 | 238 - 357 | OFX5 | 09 | 2 | 301 - 442 |
| | 17 | 3 | 300 - 504 | | 17 | 5 | 396 - 684 |
| | 37 | 5 | 329 - 577 | | 37 | 10 | 497 - 849 |
| | 82 | 10 | 476 - 705 | | 82 | 15 | 947 - 1054 |
| OFX2 | 09 | 1.5 | 238 - 357 | OFX6 | 09 | 2 | 267 - 650 |
| | 17 | 3 | 311 - 504 | | 17 | 5 | 370 - 659 |
| | 37 | 5 | 348 - 577 | | 37 | 10 | 502 - 607 |
| | 82 | 10 | 597 - 705 | | | | |
| OFX3 | 09 | 1.5 | 238 - 479 | OFX7 | 06 | 2 | - |
| | 17 | 5 | 340 - 580 | | | | |
| | 37 | 10 | 461 - 566 | | | | |
| OFX4 | 09 | 2 | 372 - 442 | OFX8 | 30 | 15 | - |
| | 17 | 3 | 353 - 662 | | | | |
| | 37 | 5 | 398 - 791 | | | | |
| | 82 | 10 | 551 - 904 | | | | |

* Weight dependent on options chosen.

Porting Data

| Flow (gpm) | Inlet Port Sizes | Outlet Port Sizes with Standard Capacity Filters | Outlet Port Sizes with High Capacity Filters |
|------------|-------------------------------|--|--|
| 06 | 1" JIC | N/A | 1.625-12UN-2B SAE O-Ring Boss |
| 09 | 1.625-12UN-2B SAE O-Ring Boss | 1.312-12UN-2B SAE O-Ring Boss | 1.625-12UN-2B SAE O-Ring Boss |
| 17 | 1.875-12UN-2B SAE O-Ring Boss | 1.625-12UN-2B SAE O-Ring Boss | 1.625-12UN-2B SAE O-Ring Boss |
| 30 | 2" JIC | N/A | 1.625-12UN-2B SAE O-Ring Boss |
| 37 | 2" JIC | 1.875-12UN-2B SAE O-Ring Boss | 1.875-12UN-2B SAE O-Ring Boss |
| 82 | 2" JIC | 1.875-12UN-2B SAE O-Ring Boss | 2.500-12UN-2B SAE O-Ring Boss |

Model Code

OFX4 - 09 - H1 - BN - 3 - BN - 3 - B - N - N - B - G - N - C

Series _____
 OFX = Filter Skid

Size _____
 1, 2, 3, 4, 5, 6, 7, 8

Flow Rate _____
 06 = 6 gpm (22.7 lpm) (size 7 only)
 09 = 9 gpm (34 lpm) (size 1-6 only)
 17 = 17 gpm (64.3 lpm) (size 1-6 only)
 30 = 30 gpm (113.6 lpm) (size 8 only)
 37 = 37 gpm (140 lpm) (size 1-6 only)
 82 = 82 gpm (310.4 lpm) (size 1, 2, 4, 5 only)

Filter Designation _____
 Standard Capacity (S)
 S1 = 9 gpm (sizes 1 - 6), 17, 37 gpm (sizes 1 & 4)
 S2 = 9, 17 gpm (sizes 1 - 6), 37 gpm (sizes 1 & 4)
 S3 = 9, 17, 37 gpm (sizes 1 - 6), 82 gpm (sizes 1 & 4)
 High Capacity (H)
 H1 = 9 gpm (sizes 3 & 6), 17 gpm (sizes 1 - 6), 37, 82 gpm (sizes 1 & 4)
 H3 = 6 gpm (size 7), 9, 17 gpm (sizes 3 & 6), 30 gpm (size 8),
 37 gpm (sizes 1 - 6), 82 gpm (sizes 1, 2, 4, & 5)

Filter Media (first stage all sizes) _____
 BN = Betamicon® AM = Aquamicon® water removal

Filtration Rating (micron) (first stage all sizes) _____
 3, 5, 10, 20 (sizes 1, 2, 4, 5) 10 = AM
 5, 10, 20 (sizes 3 & 6)] = BN
 10, 20 (sizes 7 & 8)

Filter Media (second stage sizes 4, 5, 6, & 8) _____
 BN = Betamicon® AM = Aquamicon® water removal

Filtration Rating (micron) (second stage sizes 4, 5, 6, & 8) _____
 3, 5, 10, 20 (sizes 4 & 5) 10 = AM
 5, 10, 20 (size 6)] = BN
 10, 20 (size 8)

Seals _____
 B = Buna (standard)
 H = EPR
 V = Fluoroelastomer (FPM)

Voltage _____
 A = 115 VAC 1.5 hp (sizes 1-3 with 9 gpm only - includes switch, 10' cord & plug)
 N = 230 /460 VAC 3 ph (sizes 1-8)
 E = 575 VAC 3 ph (Built to CSA standards)

Motor _____
 N = TEFC W = Washdown (NEMA Design B)

Starter Control Options* _____
 N = None
 A = 230 VAC
 B = 460 VAC
 C = 230 VAC (with VFD)
 D = 460 VAC (with VFD)
 E = 575 VAC
 F = 575 VAC (with VFD)

Clogging Indicator _____
 N = Visual pop-up in cap (standard)
 G = Differential pressure gauge
 M = Electric with 12 ft. 4 in. conductor wire
 C = Differential pressure gauge with electric switch*

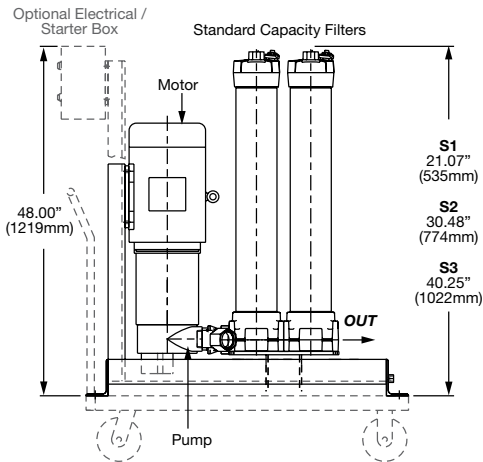
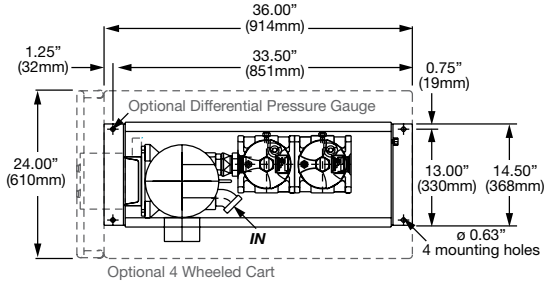
Vacuum Gauge _____
 N = None V = Vacuum gauge (sizes 7 & 8 only)

Options _____
 N = None
 S = Suction strainer (standard on sizes 7 & 8)
 C = 4 wheeled cart (sizes 1-6 only)
 B = Continuous bleed (for continuously aerated systems - includes cap vent port, valve and return line)
 P = Particle counter (sizes 1& 4 only)

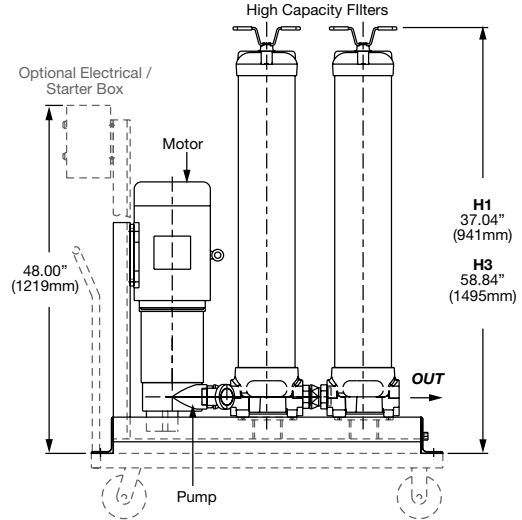
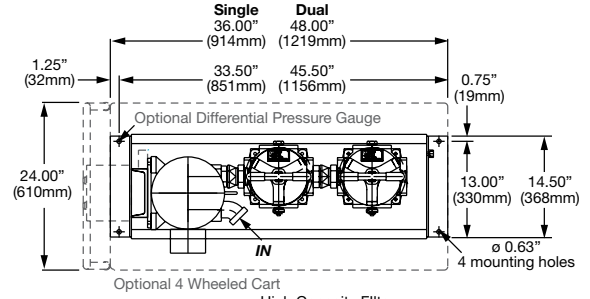
*Motor starter control option - C-series, non-disconnect shut-off, "motor on" light, electrical indicator "change element" light, and type 4x wash down enclosure.
 VFD control option - same as above but with enclosed variable frequency drive control and larger metal NEMA enclosure.
 For replacement element part numbers, please see page 69 of this catalog.

Dimensions

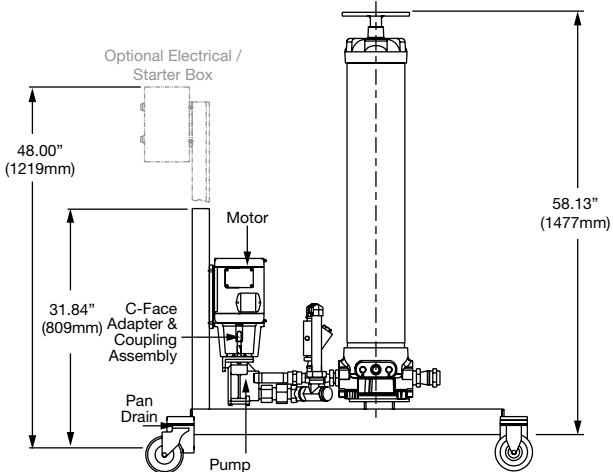
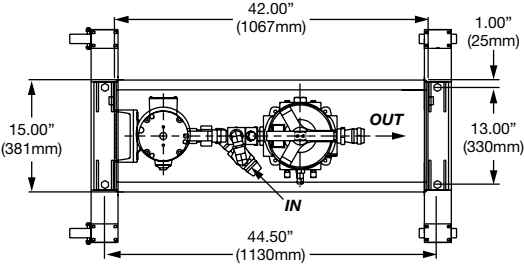
OFX4, OFX5 & OFX6 Series (Dual Standard Capacity Filter Version)



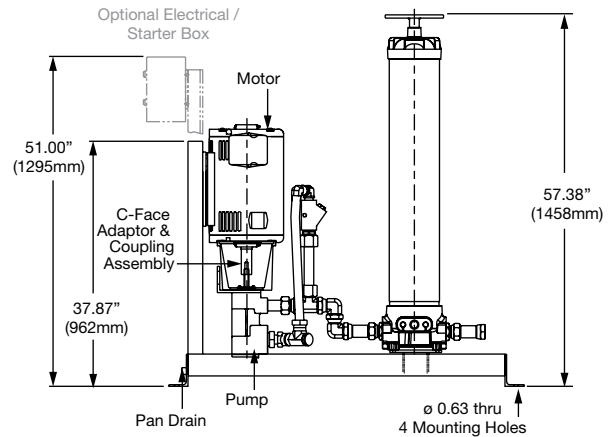
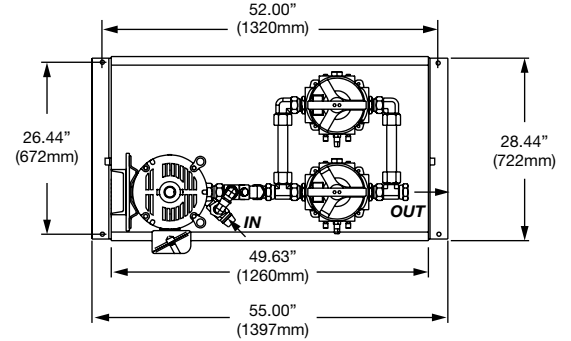
OFX4, OFX5 & OFX6 Series (Dual High Capacity Filter Version)



OFX7 Series - High Viscosity



OFX8 Series - High Viscosity



Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.