

Flow rates up to 11 GPM, Max operating pressure 150 PSI, 10 Bar

The **SFP** will effectively remove free water while capturing particulate with high efficiency. Free and dissolved water in hydraulic and lube systems leads to accelerated abrasive wear, corrosion of metal surfaces, increased electrical conductivity, viscosity variance, loss of lubricity, fluid additive breakdown, bearing fatigue, and more. The **SFP series filter panel** includes a wide range of element combination options to tackle any challenge. The PFP75AT8B water removal element holds 23 ounces of water while controlling particles with a beta ratio of  $\beta$ 25 = 200,  $\beta$ 22[c] = 1000.

The **SFP** is also effective for conditioning fluids that are already in service. PFP's high efficiency elements can be used to enhance the filtration existing on the system without affecting system performance due to higher element differential pressures.

#### Filtering New Oil - Particulate & Water

New oil is typically not clean oil, and not suitable for use in hydraulic and lube systems. During the production and transportation process, new oil collects high levels of solid contaminant and water. A common ISO code for new oil is 24/22/19. New oil is one of the worst sources of particulate contaminant system ingression.

### Flushing & Conditioning - Existing Systems

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#### **Applications**

Ideal for Hydraulic Fluids (ISO VG22 ~ ISO VG68)

Filter New Fluids during Replenishment (top-off)

Enhance existing filtration (high efficiency elements)

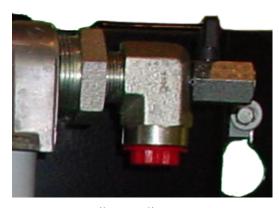
Remove Particle and Water Contaminant



SFP Filter Panel



Spin-On Filter Elements



Oil Sampling Port

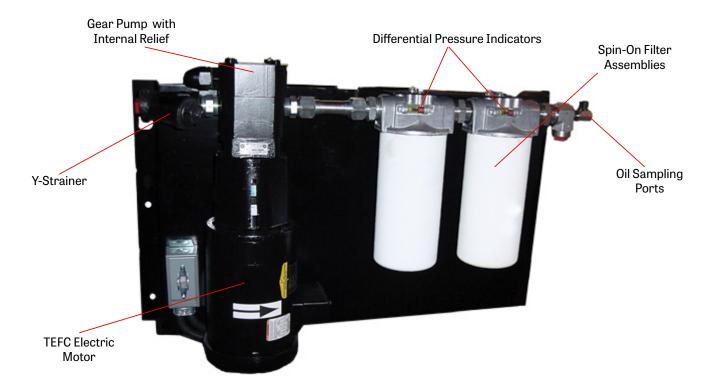








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#### **Materials of Construction**

Assembly Frame: Lightweight,

Aluminum Plate

Filter Assembly: Aluminum Head, Steel Canister, 25 PSID Bypass Valve, True Differential Pressure Indicator

#### **Operating Temperature**

Nitrile (Buna): -40°F to 150°F or

-40°C to 66°C

Fluorocarbon (Viton)\*: -15°F to 200°F or -26°C to 93°C (High Temperature/Phosphate Ester Design)

# Fluid Compatibility

Petroleum and mineral based fluids (standard). For polyolester, phosphate ester, and other specificed synthetics use Viton seal option or contact factory.

## Weight

**SFP 5 GPM:** 110 Lbs (49.90 kg)

approximate

**SFP 11 GPM:** 120 Lbs (54.43 kg)

approximate

# **Explosion Proof Option**

Class 1, Div 2, Group C/D **Explosion** (optional)

#### **Electrical Service**

115VAC 60Hz 1P (standard)

 Other electrical options available upon request

## **Electric Motor Specifications**

TEFC or ODP, 56C frame SFP 5 GPM: 1 HP, 1750 RPM, thermal overload reset SFP 11 GPM: 1 HP, 1750 RPM,

thermal overload reset

## **Recommended Viscosity Range**

**SFP 5 GPM\***: 28 SSU ∽ 2000 SSU, 6

cSt ∽ 400 cSt

**SFP 11 GPM\***: 28 SSU ∽ 1000 SSU, 6

cSt ∽ 200 cSt

At maximum viscosity clean element pressure drop with 3M media code < 12 psid/0.85 bar. Check maximum viscosity of oil in coldest condition. For high viscosity lubricating oils, consider our LCFC series.

# **Pump Specifications**

Gear Pump

- Internal relief full flow 100 PSI, 6 bar standard
- Pneumatic variable flow pump option available





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### **Cleaner Fluid, Greater Reliability**

When establishing a target ISO cleanliness code, first identify the most sensitive component. New oil added should be cleaner than the target ISO code for the system.

Figure 1 details the improvement in component life as the ISO cleanliness is improved for roller contact bearings. Improving and stabilizing fluid cleanliness codes can increase hydraulic component and bearing life exponentially.

Lab and field tests prove time and time again that our filters deliver lower ISO cleanliness codes, and do it with greater consistency

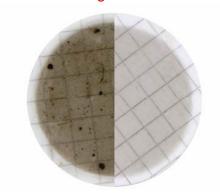
#### **The Right Element Combination**

Figure 2 illustrates some possible combinations to use on the SFP series panel. When water removal is desired, use the AV or AT media code as a prefilter. A finer media can be used on the second filter to capture smaller particulate and reduce the ISO code. When conditioning a tote or flushing a fluid already in use, the EN media code will yield the quickest result on particulate.

#### **Don't Put Dirty Oil In Your System**

Figure 3 shows the difference between unfiltered new fluid with an ISO Code of 24/22/19 and fluid that has been conditioned to an ISO Code of 16/14/11.

Figure 3



Prepared using a patch test kit.

### Figure 1

Current ISO Code	Target ISO Code	Target ISO Code	Target ISO Code	Target ISO Code
Start	2 x Life	3 x Life	4 x Life	5 x Life
28/26/23	25/22/19	22/20/17	20/18/15	19/17/14
27/25/22	23/21/18	21/19/16	19/17/14	18/16/13
26/24/21	22/20/17	20/18/15	19/17/14	17/15/12
25/23/20	21/19/16	19/17/14	17/15/12	16/14/11
25/22/19	20/18/15	18/16/13	16/14/11	15/13/10
23/21/18	19/17/14	17/15/12	15/13/10	14/12/9
22/20/17	18/16/13	16/14/11	15/13/10	13/11/8
21/19/16	17/15/12	15/13/10	13/11/8	-
20/18/15	16/14/11	14/12/9	-	-
19/17/14	15/13/10	13/11/8	-	-
18/16/13	14/12/9	-	-	-

# Figure 2

Current Condition	Pre-Filter	Main-Filter	
ISO 25/24/22 (New Oil) with High Water Content	PFP75AT8B β22[c] = 1000 + Water Removal	PFP75EE8B β5[c] = 1000	
ISO 25/24/22 (New Oil)	PFP75EV8B β12[c] = 1000	PFP75EN8B β2.5[c] = 1000	
ISO 21/19/16	PFP75EE8B β5[c] = 1000	PFP75EN8B β2.5[c] = 1000	

Cleaner Fluid

Longer Component & Fluid Life

More Uptime









