

Precision Filtration Products

YOUR ONE  FOR FILTERS

SFP Spin-On Filter Panel

Flow rate up to 11 gpm (41 lpm), Max operating pressure 150 psi, 10 bar

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.



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
-40°C to 66°C

Fluorocarbon (Viton)* -15°F to 200°F
-26°C to 93°C

*High temperature / phosphate ester design

Fluid Compatibility

Petroleum and mineral based fluids (standard).
For polyolester, phosphate ester, and other
specified 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 the LCFC series.

Pump Specifications

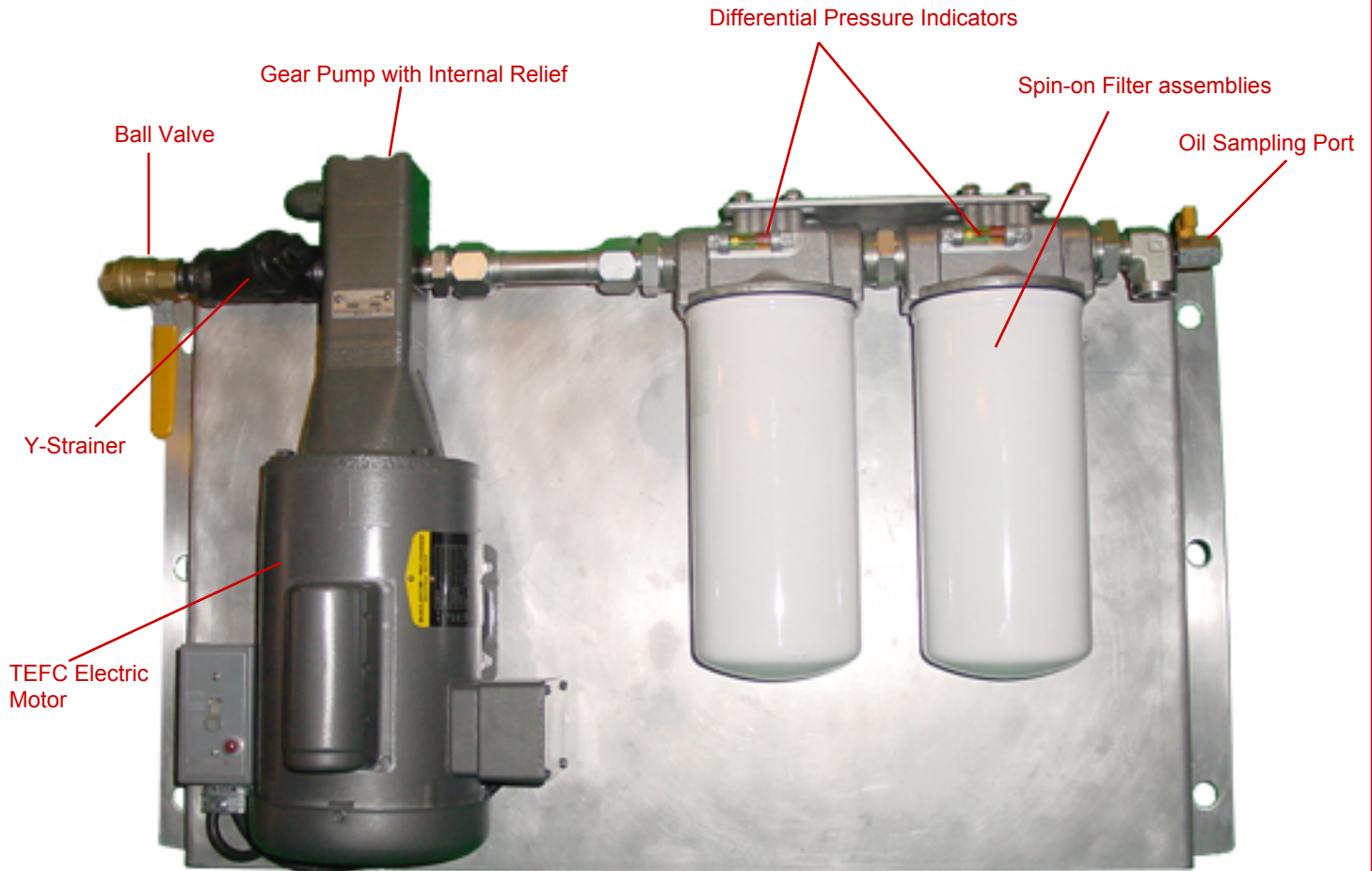
Gear pump
Internal relief full flow 100 psi, 6 bar standard
Pneumatic Variable Flow Pump Option Available

Proudly Made



In The U.S.A.

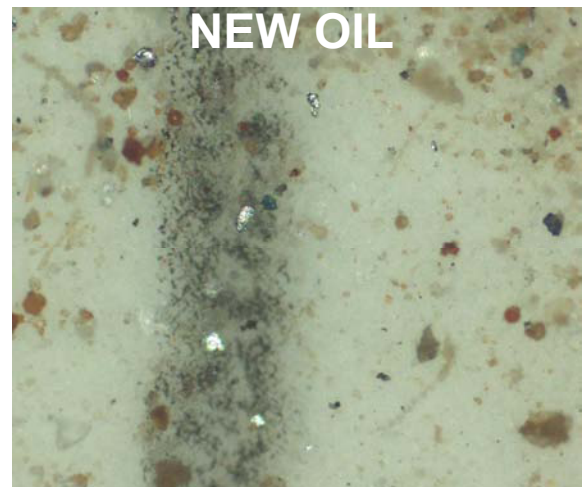
SFP FILTER PANEL APPLICATION INFO



Filtering New Oil - Particulate and 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 ingress.

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 $\beta_{25} = 200$, $\beta_{22[c]} = 1000$.



Flush and Condition Existing Systems

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.

SFP FILTER PANEL APPLICATION INFO

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.

Figure 2

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	-	-	-

The Right Element Combination

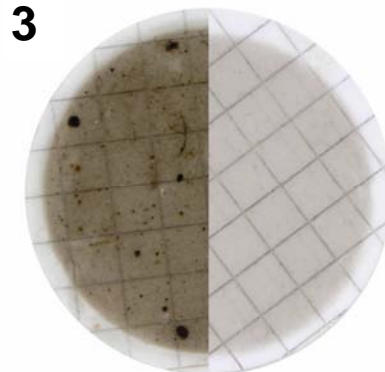
Figure 2 illustrates some possible combinations to use on the SFP series panel. When water removal is desired use the AV or AT media code as a pre-filter. A finer media can be used on the second filter to capture smaller particulate and reduce the ISO code. When conditioning a tote or flushing a fluid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

Figure 2

Current Condition	Pre-Filter	Main-Filter
ISO 25/24/22 (New oil) with High water content	PFP75AT8B β ₂₂ [c] = 1000 + water removal	PFP75EE8B β ₅ [c] = 1000
ISO 25/24/22 (New oil)	PFP75EV8B β ₁₂ [c] = 1000	PFP75EN8B β _{2.5} [c] = 1000
ISO 21/19/16	PFP75EE8B β ₅ [c] = 1000	PFP75EN8B β _{2.5} [c] = 1000

Don't Put Dirty Oil Into Your System

Figure 3 shows the difference in particulate contamination 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.



Prepared using a patch test kit