

FPL Spin-On Filter Panel

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



- Permanent Mounted Solution for Hydraulic and Lube Oil Contamination
- 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
- Can Utilize DFN, DFH, MF3 and PFH assemblies*

*Contact Factory

Materials of Construction

Assembly Frame: Painted Steel
 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 polyol ester, phosphate ester, and other specified synthetics use Viton seal option or contact factory.

Weight

FPL1: 110 Lbs (49.90 kg) approximate
 FPL2: 120 Lbs (54.43 kg) approximate

Explosion Proof Option

Class 1, Div 2, Group C/D explosion optional.

Electrical Service

115VAC 60Hz 1P (standard)
 see options table for other selections

Electric Motor Specifications

TEFC or ODP, 56C frame
 FPL1: 1 HP, 1750 RPM, thermal overload reset
 FPL2: 1 HP, 1750 RPM, thermal overload reset

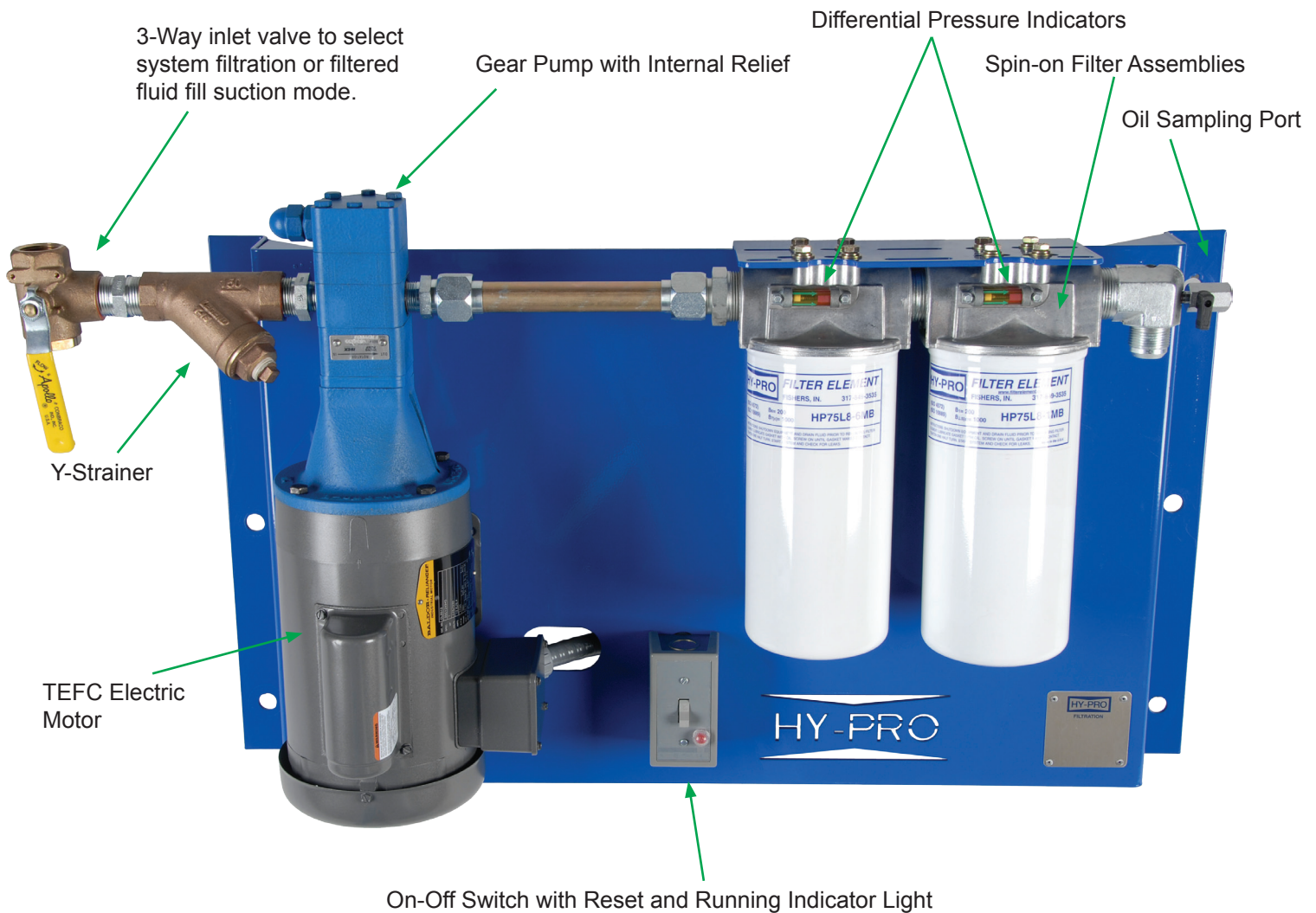
Recommended Viscosity Range

FPL1*: 28 SSU ~ 2000 SSU, 6 cSt ~ 400 cSt
 FPL2*: 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 FCL series or call Hy-Pro.

Pump Specifications

Gear pump
 Internal relief full flow 100 psi, 6 bar standard



3-Way inlet valve to select system filtration or filtered fluid fill suction mode.

Gear Pump with Internal Relief

Differential Pressure Indicators

Spin-on Filter Assemblies

Oil Sampling Port

Y-Strainer

TEFC Electric Motor

On-Off Switch with Reset and Running Indicator Light

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.

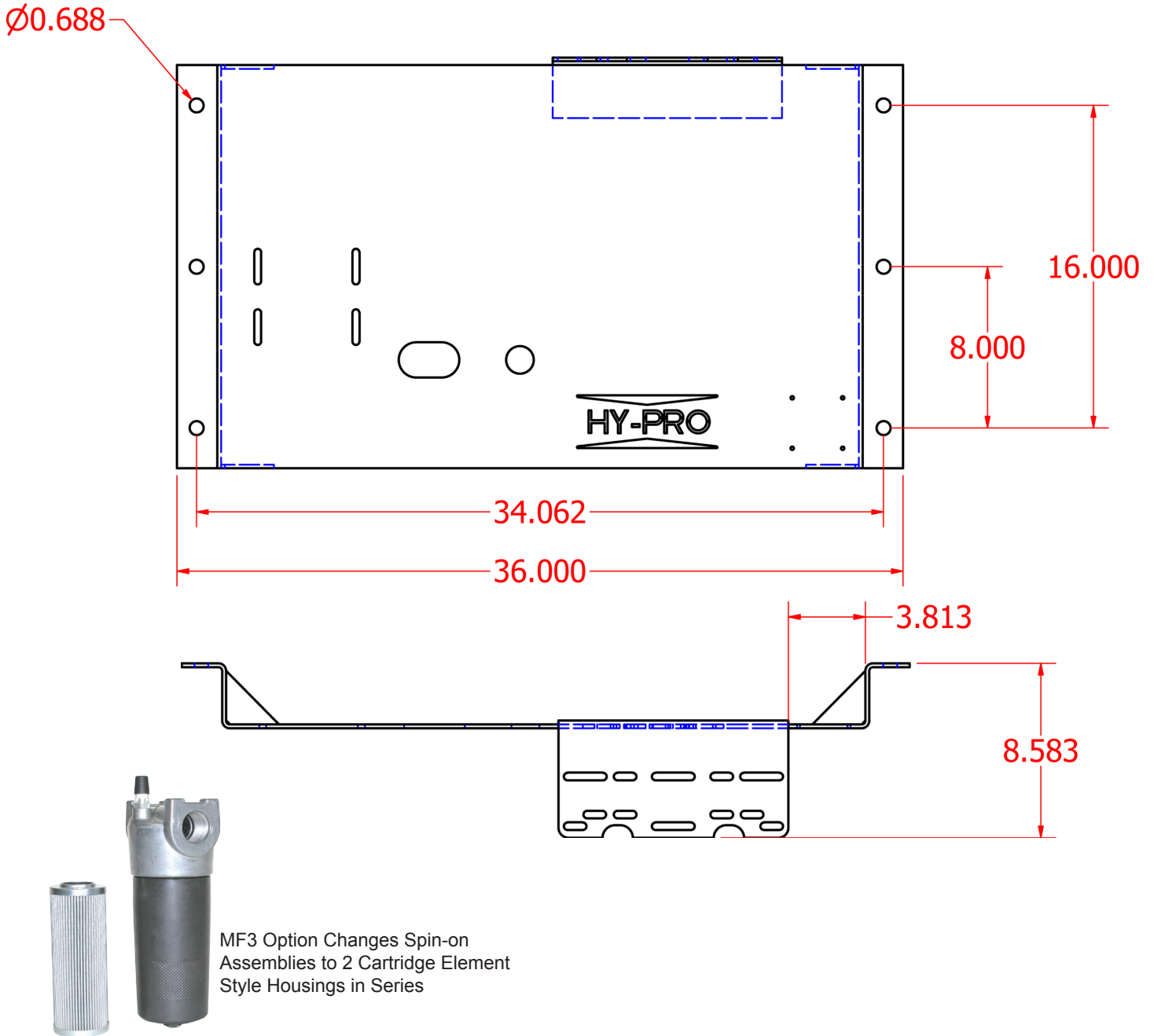
Figure 1 details the improvement in component life as the ISO cleanliness is improved for roller contact bearings. Improving and stabilizing fluid cleanliness codes can increase hydraulic component and bearing life exponentially.

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

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
22/22/19	20/18/15	16/16/13	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 FPL series panel. When water removal is desired use the 12A or 25A 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 1M 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	HP75L8-25AB $\beta_{22_{[C]}} = 1000$ + Water Removal	HP75L8-3MB $\beta_{5_{[C]}} = 1000$
ISO 25/24/22 (New Oil)	HP75L8-12MB $\beta_{12_{[C]}} = 1000$	HP75L8-1MB $\beta_{2.5_{[C]}} = 1000$
ISO 21/19/16	HP75L8-3MB $\beta_{5_{[C]}} = 1000$	HP75L8-1MB $_{[C]} = 1000$