

## FEATURES

Filter assembly W620 contains the popular HF3 filter element. The HF3 (E6021 series element) is offered throughout the product line. Western Filter's proprietary BetaPore™ 5 layer media is offered in a variety of Pak™ constructions. Five different media grades are offered down to 4.0µ(c). Element core collapse options range from 150 to 3000 PSI. Several reverse flow options are offered with our integrated valve options. The differential pressure indicator line is designed to work with the wide assortment of bypass valves. Thermal lockout and surge control are two key features incorporated in many of the valves.

Western Filter elements are compatible with petroleum oils, water glycol, oil-water, HWCF and synthetic fluids.

### Technical Data:

Maximum Working Pressure	6000 psi (414 bar)
Fatigue Pressure Rating	3000 psi max (207 bar)
Typical Burst Pressure	15000 psi max (1034 bar)
Temperature Range	Operating
Buna N	-45°F to + 225°F (-43°C to + 107°C)
Viton	-20°F to + 250°F (-29°C to + 121°C)
Head Material	Cast Iron
Bowl Material	Steel
Weight (without elements)	
Assembly length 1	19.80 lbs. (8,9 kg.)
Assembly length 2	24.30 lbs. (11,0 kg.)
Assembly length 4	29.70 lbs. (13,4 kg.)
Assembly length 5	39.78 lbs. (18,0 kg.)

## W620

150 gpm (568 l/min)

Conforms to HF3 specifications

High collapse H-Pak™ element available for use with non-bypass applications

Reverse flow bypass valve option available for hydrostatic applications

Accepts coreless elements with removable coretube

Wide range of indicator options

Flexible mounting capability with optional mounting brackets



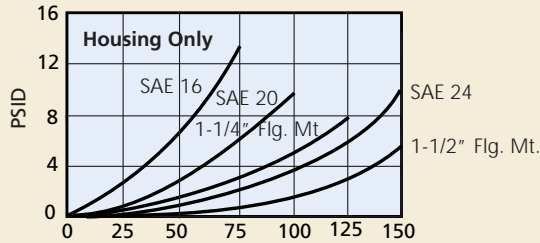
## ACCESSORIES

Seal Kit -Buna N	P-427466-10
Seal Kit -E.P.R.	P-427466-11
Seal Kit -Viton	P-427466-12
Mounting Bracket	P-426218-01
Core Tube Assembly-Code Length-1	PW620R1BN
Core Tube Assembly-Code Length-2	PW620R2BN
Core Tube Assembly-Code Length-4	PW620R4BN
Core Tube Assembly-Code Length-5	PW620R5BN

**Housing and Filter Element**

Flow versus Pressure Drop

150 SUS (32 cSt.) oil with specific gravity  $\leq 0.9$

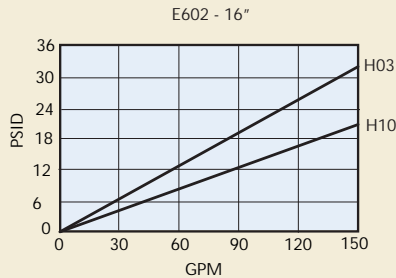
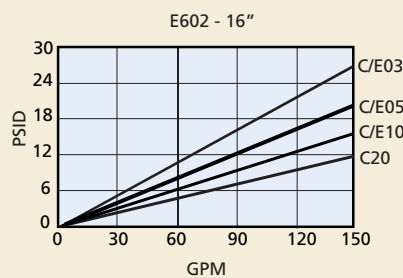
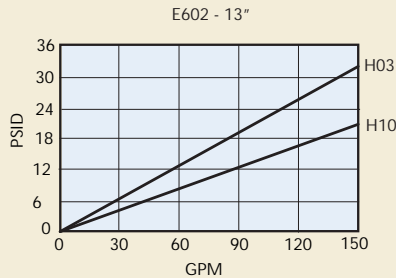
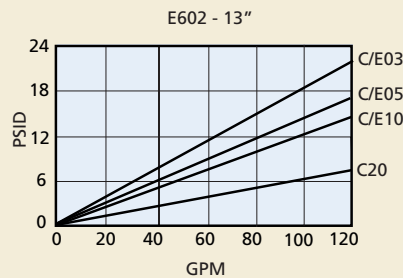
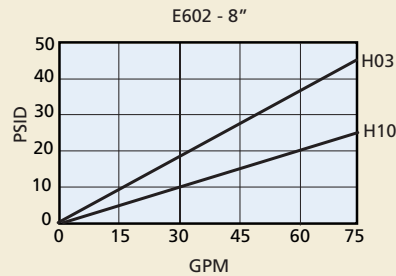
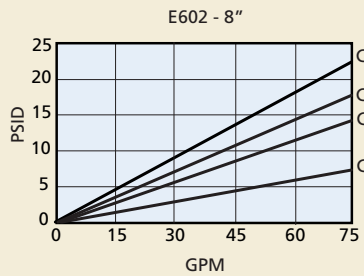
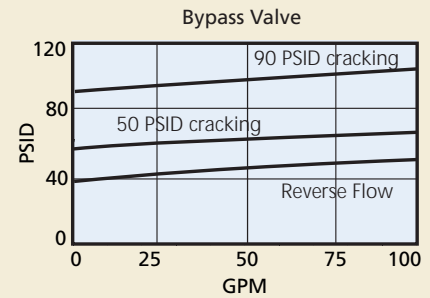
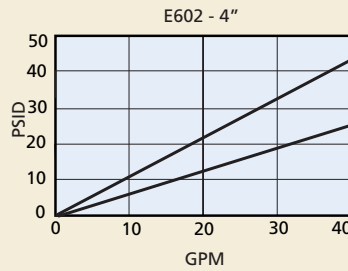
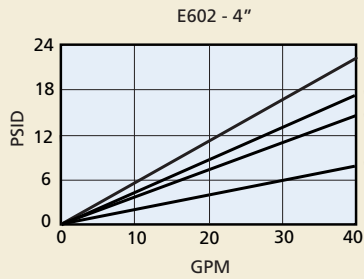


**Viscosity Correction Formula**

$$\Delta P \text{ Element} = \text{psid from catalog} \times \frac{\text{New Viscosity (SUS)}}{150} \times \frac{\text{New Specific Gravity}}{0.90}$$

$$\Delta P \text{ Housing} = \text{psid from catalog} \times \frac{\text{New Specific Gravity}}{0.90}$$

$$\Delta P \text{ Assembly} = \Delta P \text{ Element} + \Delta P \text{ Housing}$$



LOW PRESSURE SPIN-ON FILTERS

MEDIUM PRESSURE SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

Filter Assembly	W620 TABLE 1	1 TABLE 2	B TABLE 3	4 TABLE 4	L N TABLE 5	B TABLE 6	2 TABLE 7	C TABLE 8	10 TABLE 9
Service Element	E602 TABLE 1	1 TABLE 2	B TABLE 6	2 TABLE 7	C TABLE 8	10 TABLE 9			

**Table 1**

Filter Assembly / Service Element	
CODE	DESCRIPTION
W620	Assembly
E602	Element

**Table 2**

Element Collapse Options	
CODE	DESCRIPTION
1	150 psid for housing w/bypass valve
4	3000 psi for housing w/o bypass valve (H-Pak™ only)

**Note:** E-Pak™ elements rated at 100 psid collapse. If used in non-bypass housing, a differential pressure indicator (70 psid max.) should be used.

**Table 3**

Port Size Options	
CODE	PORT SIZE
B	1-5/16" - 12 UN (SAE 16)
C	1-5/8" - 12 UN (SAE 20)
D	1-7/8" - 12 UN (SAE 24)
E	1-1/2" 4 Bolt Flange Code 61
G	1-1/4" 4 Bolt Flange Code 61
Q	1-1/4" 4 Bolt Flange Code

**Table 4**

Bypass Setting Options	
CODE	BYPASS SETTING
1	Non-bypass
4	50 psid
6	90 psid
7	90 psid w/reverse flow valve
8	Non-bypass w/reverse flow valve
9	50 psid w/reverse flow valve

**Note:** Use option 1 & 8 only with 3000 psid collapse filter element.

**Table 5 (Primary)**

Indicator Style and Setting	
CODE	ΔP INDICATOR STYLE & SETTING
A	Visual indicator 70 psid w/TL & surge
B	Electrical/visual 70 psid w/TL & surge
D	Electrical/visual 35 psid
E	Electrical/visual 100 psid
G	Electrical/visual 35 psid w/TL
I	Visual indicator 70 psid
J	ΔP indicator plug
L	Visual indicator 35 psid
M	Visual indicator 35 psid w/ TL and surge
N	Electrical/visual 35 psid w/12" 3 wire flying lead
O	Visual indicator 100 psid
P	Visual indicator 100 psid w/TL and surge
R	Electrical switch 35 psid
S	Electrical/visual 100 psid w/12" 3 wire flying lead
T	Electrical switch 100 psid
U	Electrical switch 70 psid
V	Electrical/visual 70 psid w/TL
W	Electrical/visual 100 psid w/TL
Y	Electrical/visual 35 psid w/TL and surge
Z	Electrical/visual 100 psid w/TL and surge

TL (thermal lockout)

**Table 5 (Secondary)**

Receptacle Options	
CODE	ELECTRICAL STYLE
B	Brad Harrison (5-pin)
H	Hirschmann (4-pin)
N	None, for visual ΔP

**Table 6**

Seal Options	
CODE	MATERIAL
B	Buna N
E	E.P.R.
V	Viton

**Table 7**

Assembly & Element Length	
CODE (LGTH)	ELEMENT LENGTH
1 (9.0")	4.0"
2 (13.0")*	8.0"*
4 (18.0")	13.0"
5 (22.0")	16.0"

\*HF3

**Table 8**

Element Code	
CODE	DESCRIPTION
C	(Glass) 01, 03, 05, 10, 20
E	(Coreless) 01, 03, 05, 10
H	(Glass) 03, 10

**Table 9**

Media Rating	
CODE	TARGET FLUID CLEANLINESS LEVEL
01	Flushing only
03	16/14/12 or better
05	18/16/14 or better
10	20/18/15 or better
20	22/19/16 or better

*Note: Information concerning fluid cleanliness codes is on page 6, the Media Grade Selection Guide.*

**Metric Porting Available**

Change W620 to G620

Porting code B becomes 1" ISO 228 BSP

Porting code C becomes 1-1/4" ISO 228 BSP

Porting code D becomes 1-1/2" ISO 228 BSP

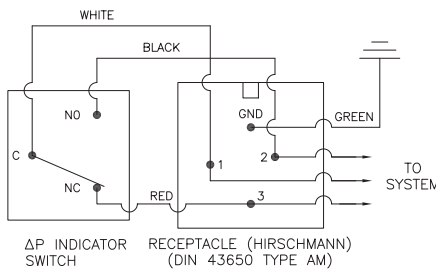
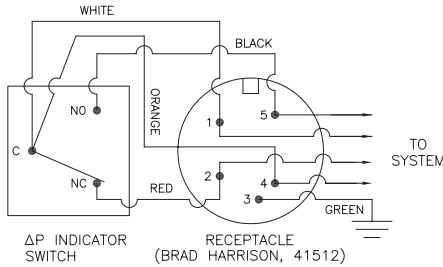
Porting code E becomes 1-1/2" SAE 4 bolt flange with M12 mounting threads

Porting code G becomes 1-1/4" SAE 4 bolt flange with M10 mounting threads

Porting code Q becomes 1-1/4" SAE 4 bolt flange with M14 mounting threads

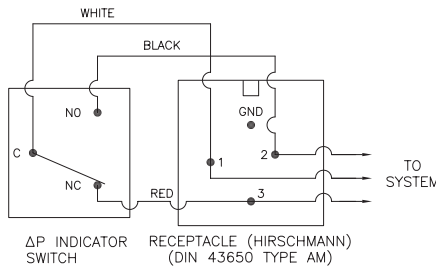
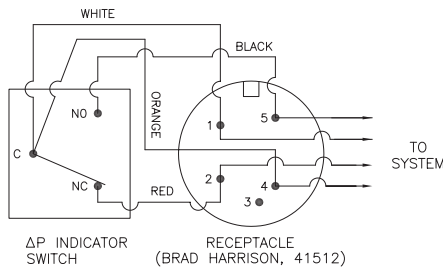
Indicator Switch Schematic Wiring Diagram

Aluminum Electrical Housings



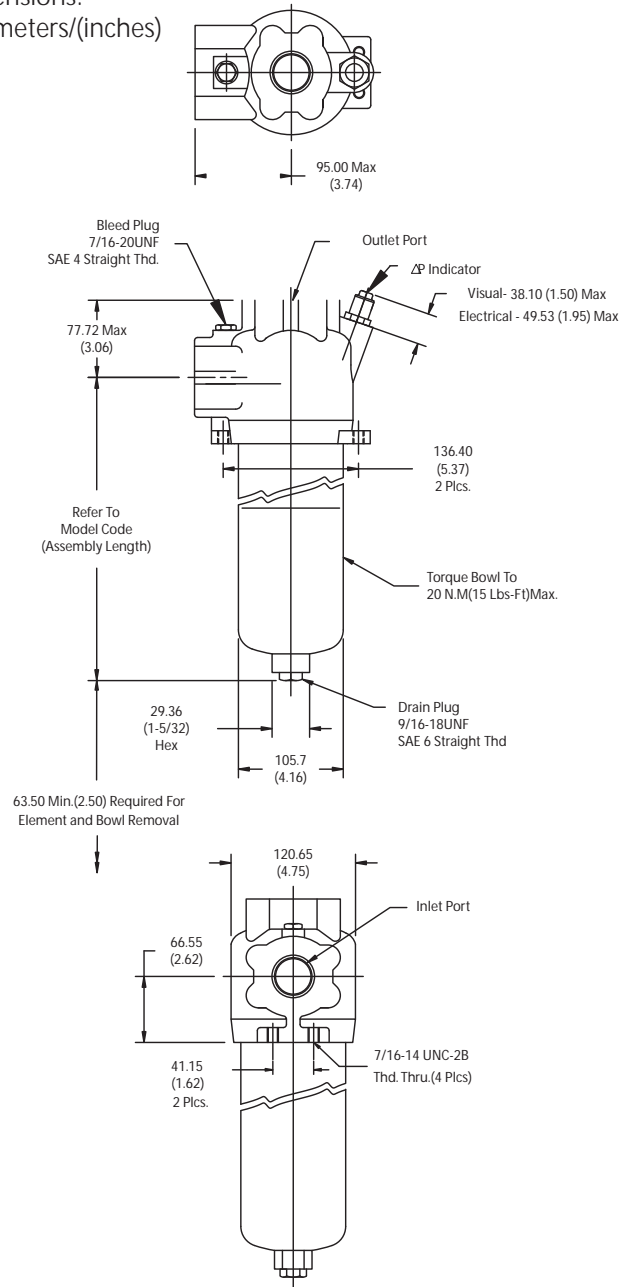
*Note: The female plug (connector) is to be furnished by customer.*

Plastic Electrical Housings



*Note: The female plug (connector) is to be furnished by customer.*

Dimensions:  
millimeters/(inches)



**Differential Indicators:** Indicators are designed to actuate at approximately 80% of bypass valve cracking pressure. It is recommended that an indicator with a bypass setting of 100 psid is used with a non-bypass housing.

**Surge Control:** This optional feature is used to dampen pressure surges or spikes to avoid premature actuation of the indicator. Surge control delays the indicator response.

**Thermal Lockout:** The Thermal Lockout prevents premature signaling of a bypass condition created by viscous fluid during cold start-ups. Normal indicator actuation capability is resumed once the operating temperature of the fluid reaches approximately 80 Deg. F.