

FEATURES

Five separate port options provide for maximum design flexibility in the W080 filter series. Quick filter change outs are accomplished with the use of our serviceable bowl ring assembly. The size and material configuration are well suited for todays demanding proportional and servo applications. Our standard bowl drain plug helps relieve system pressure during filter change outs. Western Filter’s proprietary BetaPore™ 5 layer media is offered in a variety of Pak™ and meets the HF3 automotive standard. Three different media grades are offered down to 5.1µ(c). WF elements core collapse options range from 150 to 3000 PSI. 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.

W080

70 gpm (265 l/min)

Assembly length code 2 conforms to HF3 specifications

Easy service with ring assembly

Wide selection of indicator options



Technical Data:

Maximum Working Pressure	800 psi (55 bar)	
Typical Burst Pressure	2,000 psi max (138 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	Aluminum	
Bowl & Notched Ring Material	Steel	
Weight (without elements)		
Assembly length 2	9.2 lbs.	(4,2 kg.)
Assembly length 4	10.1 lbs.	(4,6 kg.)

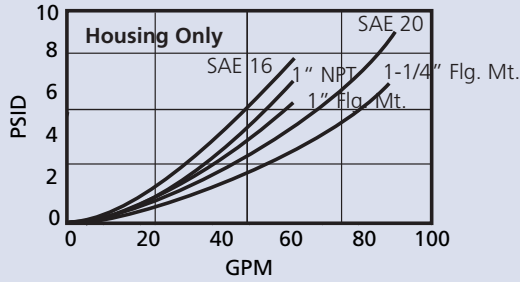
ACCESSORIES

Seal Kit - Buna N	P-238967-01
Seal Kit - Viton	P-238967-03
Notched Ring Holder	P-233492
Bowl Kit - 4"	P-133233-01B
Bowl Kit - 8"	P-133233-02B
Bowl Kit - 13"	P-133233-04B

Housing and Filter Element

Flow versus Pressure Drop

150 SUS (32 cst.) oil with specific gravity ≤ 0.9

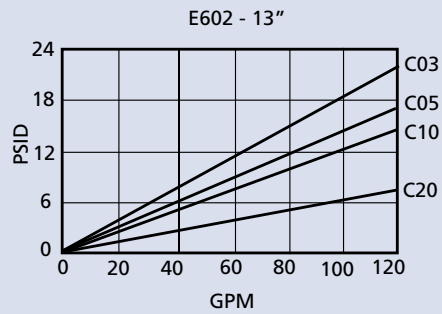
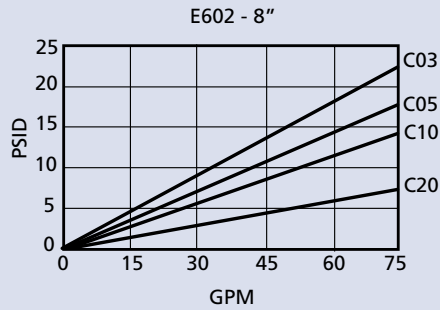


Viscosity Correction Formula

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

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

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



SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS



Filter Assembly	W080 TABLE 1	1 TABLE 2	B TABLE 3	4 TABLE 4	M 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
W080	Assembly
E602	Element

Table 2

Element Collapse Options	
CODE	DESCRIPTION
1	150 psid

Table 3

Port Size Options	
CODE	PORT SIZE
B	1-5/16" - 12 UN (SAE-16)
C	1-5/8" - 12 UN (SAE-20)
F	1" SAE 4 Bolt Flange Code 61
G	1-1/4" SAE 4 Bolt Flange Code 61
Y	1" NPT
P	1-1/4" NPT

Table 4

Bypass Setting Options	
CODE	BYPASS SETTING
4	50 psid

Table 5 (Primary)

Indicator Style and Setting	
CODE	INDICATOR STYLE & SETTING
D	Electrical/visual 35 ± 5 psid
E	Electrical/visual 100 ± 12 psid
G	Electrical/visual 35 ± 5 psid w/TL
J	No indicator
L	Visual indicator 35 ± 5 psid
M	Visual indicator 35 ± 5 psid w/TL and surge
N	Electrical/visual 35 ± 5 psid w/12" 3-wire flying lead
O	Visual indicator 100 ± 12 psid
R	Electrical switch 35 ± 5 psid
N	Electrical/visual 35 ± 5 psid
S	Electrical/visual 100 ± 12 psid w/12" 3-wire flying lead
T	Electrical switch 100 ± 12 psid
W	Electrical/visual 100 ± 12 psid w/TL
Y	Electrical/visual 35 ± 5 psid w/TL and surge
Z	Electrical/visual 100 ± 12 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 indicator

Table 6

Seal Options	
CODE	MATERIAL
B	Buna N
V	Viton

Table 7

Assembly & Element Length	
CODE (LGTH)	ELEMENT LENGTH
2 (11.43")*	8.0"
4 (16.15")	13.0"

*HF3

Table 8

Element Code	
CODE	DESCRIPTION
C	(Glass) 03, 05, 10

Table 9

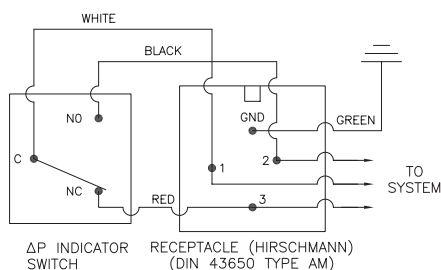
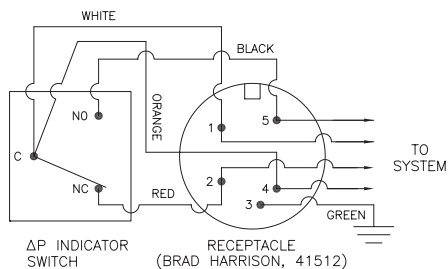
Media Rating	
CODE	TARGET FLUID CLEANLINESS LEVEL
03	16/14/12 or better
05	18/16/14 or better
10	20/18/15 or better

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

Indicator Switch Schematic Wiring Diagram

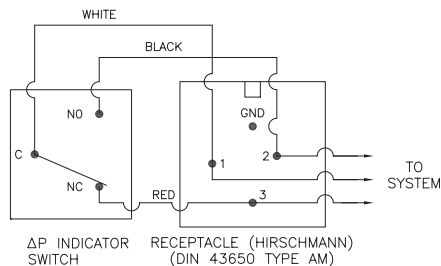
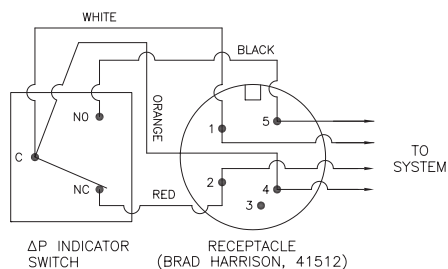
Dimensions:
millimeter/inch

Aluminum Electrical Housings

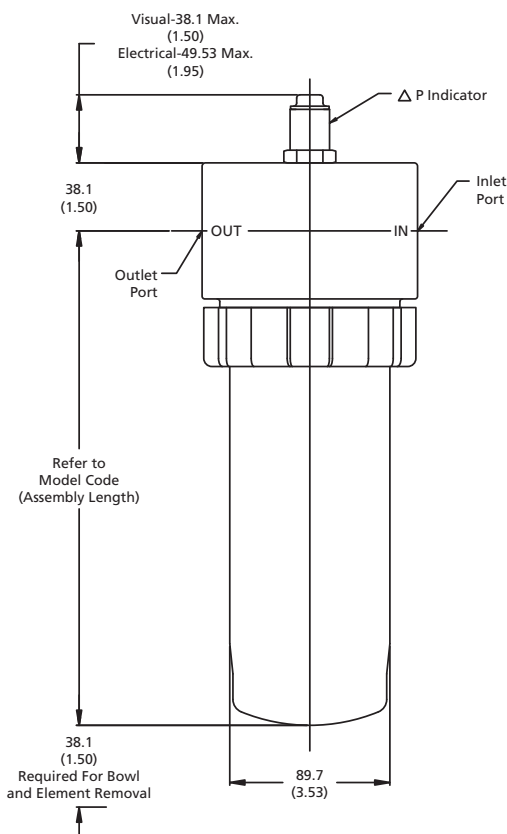
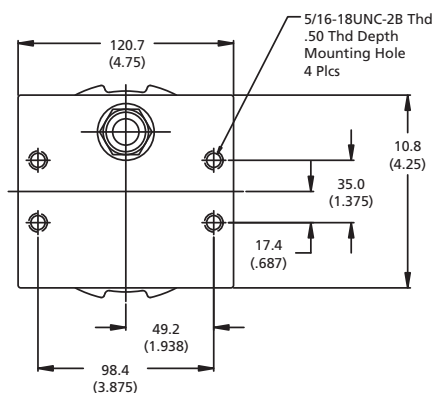


Note: The female plug (connector) is to be furnished by customer.

Plastic Electrical Housings



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



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:

Thermal Lockout (TL), prevents actuation below 60°F and allows actuation above 100°F system operating temperature. It's purpose is to avoid false actuations during periods of high fluid viscosity such as experienced during cold start.