

FEATURES

The compact WT15 in-tank filter provides a space saving solution to spin-on filters. Service elements are offered in glass and cellulose media. The bypass valve is integral with the element. An optional weld ring provides an easy solution to insure a positive seal between housing and reservoir. Four standard grades of media are offered down to 5.1μ(c).

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

Technical Data:

Maximum Working Pressure	100 psi (7 bar)
Rated Burst Pressure	250 psi max (17.2 bar)
Temperature Range	Operating
Buna N	-45°F to + 225°F (-45°C to + 107°C)
Viton	-20°F to + 250°F (-29°C to + 121°C)
Head and Cover Material	Aluminum
Canister Material	Steel
Weight	
Assembly	2.35 lbs. (1,1 kg.)

WT15 20 gpm (76 l/min)

Replacement elements are available in R-Pak[™] and P-Pak[™]

Available with reservoir mounting weld ring

Wide choice of gauges and switches

Easy to service slotted cover



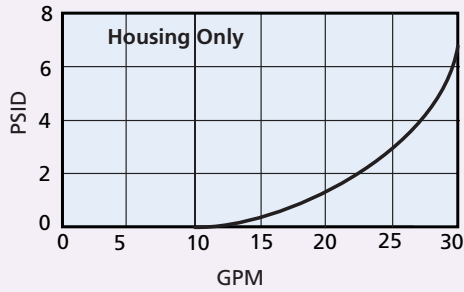
ACCESSORIES

Seal Kit -Buna N	P-233054-01
Seal Kit -Viton	P-233054-03
Weld Ring	P-233637

Housing and Filter Element

Flow versus Pressure Drop

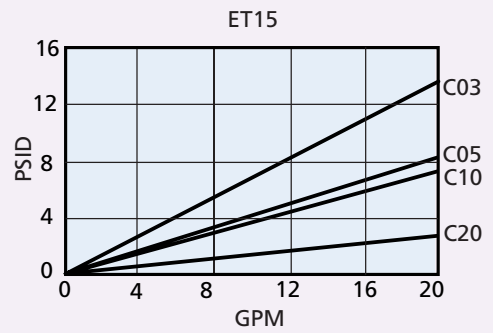
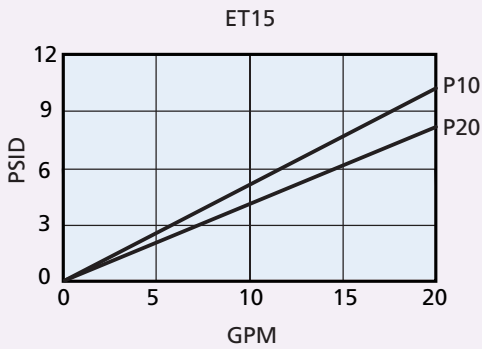
150 SUS (32 cSt.) oil with specific gravity ≤ 0.9



Viscosity Correction Formula

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

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

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


LOW PRESSURE SPIN-ON FILTERS

MEDIUM PRESSURE SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

Filter Assembly	WT15	1	A	3	4	V	1	C	10
	TABLE 1	TABLE 2	TABLE 3	TABLE 4	TABLE 5	TABLE 6	TABLE 7	TABLE 8	TABLE 9
Service Element	ET15	1	V	1	C	10			
	TABLE 1	TABLE 2	TABLE 6	TABLE 7	TABLE 8	TABLE 9			

Table 1

Filter Assembly / Service Element	
CODE	DESCRIPTION
WT15	Assembly
ET15	Element

Table 2

Element Collapse Options	
CODE	DESCRIPTION
1	150 psid

Table 3

Port Size Options	
CODE	PORT SIZE
A	1-1/16" - 12 UN (SAE-12)

Table 4

Bypass Setting Options	
CODE	BYPASS SETTING
3	25 psid

Table 5

Upstream Pressure Gauge and Switch Option	
CODE	INDICATOR STYLE & SETTING
1	Gauge ports drilled, tapped and plugged
4	0-60 psi pressure gauge*
6	Pressure switch 18 psi Brad Harrison (5-pin)
8	Pressure switch 18 psi Hirschmann (4-pin)

Table 6

Seal Options	
CODE	MATERIAL
B	Buna N
V	Viton

Table 7

Assembly & Element Length	
CODE (LGTH)	CANISTER LENGTH
1 (8.49")	5"

Table 8

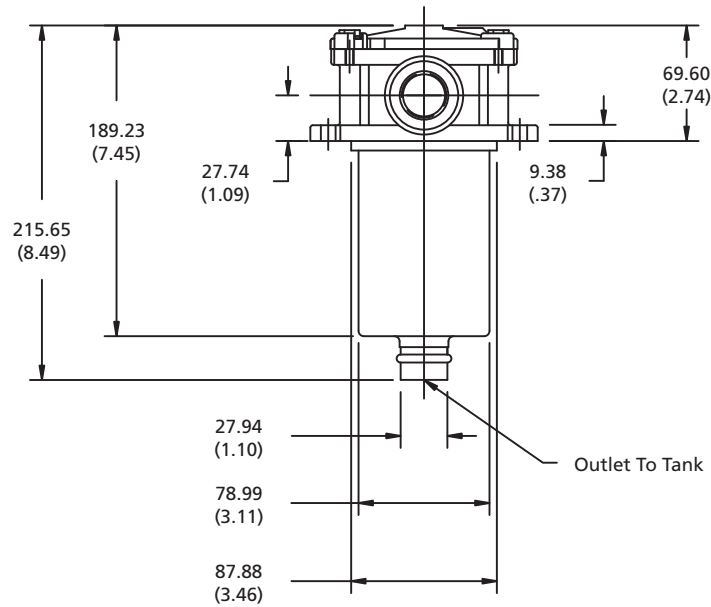
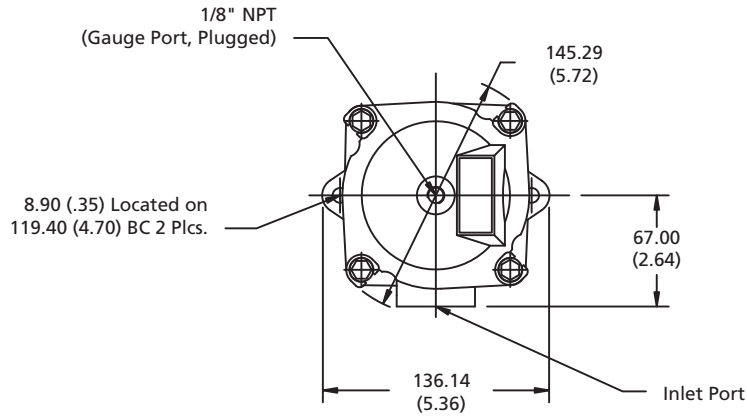
Element Code	
CODE	DESCRIPTION
C	(Glass) 03, 05, 10, 20
P	(Cellulose) 10, 20

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
20	22/19/16 or better

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

Dimensions: millimeters/(inches)



LOW PRESSURE
SPIN-ON FILTERS

MEDIUM PRESSURE
SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

FEATURES

WL16 in-tank meets the HF4 automotive standard. The E4051 service elements interchange with Schroeder K series and Zinga RE-409 series. An optional weld ring provides an easy solution to insure a positive seal between housing and reservoir. The quick disconnect cover facilitates for easy and efficient element change-outs. An optional secondary inlet port offers the use of a second return line. These units can be top or side reservoir mounted. Use the optional anti-backflow valve when installing this filter assembly to side of reservoir. Five standard grades of media are offered down to 4.0µ(c). Z-Pac™ stainless steel media is also available.

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

Options and configurations formerly offered in our WL15 Series have now been integrated into our WL16 Series as indicated on the following pages (Code length 3 and 9 with optional extension tube).

Technical Data:

Maximum Working Pressure	200 psi (14 bar)
Rated Burst Pressure	300 psi max (21 bar)
Temperature Range	Operating
Buna N	-45°F to + 225°F (-45°C to + 107°C)
Viton	-20°F to + 250°F (-29°C to + 121°C)
Head and Cover Material	Aluminum
Canister Material	Steel
Weight	
Assembly length 3	5.25 lbs. (2,3 kg.)
Assembly length 6	16 lbs. (7,3 kg.)
Assembly length 7	23 lbs. (10 kg.)
Assembly length 9	6.25 lbs. (2,8 kg.)

WL16

150 gpm (568 l/min)

Conforms to HF4 automotive specifications

Available with reservoir mounting weld ring

Replacement elements are available in C-Pak™, E-Pak™, W-Pak™ and Z-Pak™

Dual pressure gauge ports

Optional second inlet port

Optional check valve

Easy to service slotted cover



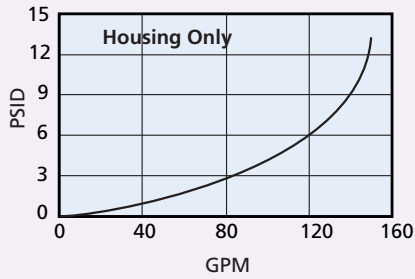
ACCESSORIES

Seal Kit - Buna N	P-233055-01
Seal Kit - E.P.R.	P-233055-02
Seal Kit - Viton	P-232964-03
Outlet Check Valve	P-137457
Outlet Diffusor	P-239290
Core tube assembly-Code length 3 & 9	PW451R3BN
Core tube assembly-Code length 6	PW451R6BN
Core tube assembly-Code length 7	PW451R7BN

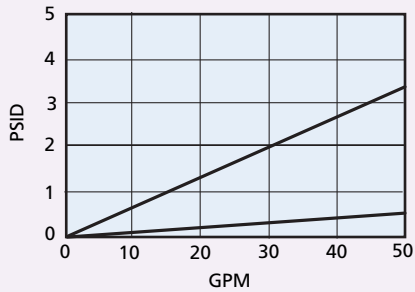
Housing and Filter Element

Flow versus Pressure Drop

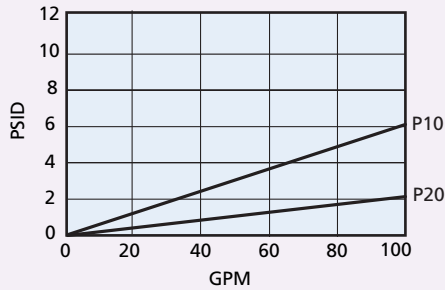
150 SUS (32 cSt.) oil with specific gravity ≤ 0.9



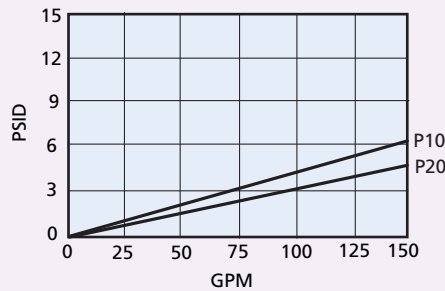
E405 - 9"



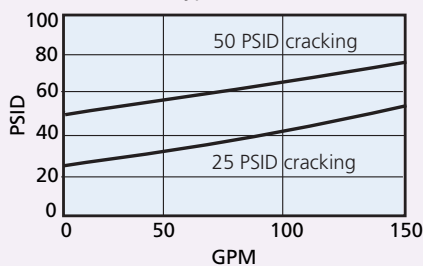
E405 - 18"



E405 - 27"



Bypass Valve



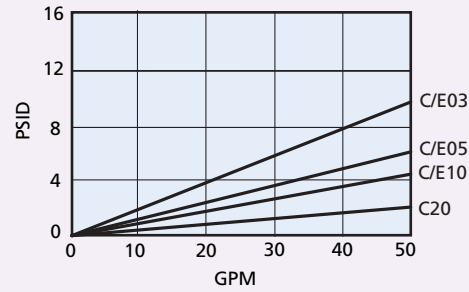
Viscosity Correction Formula

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

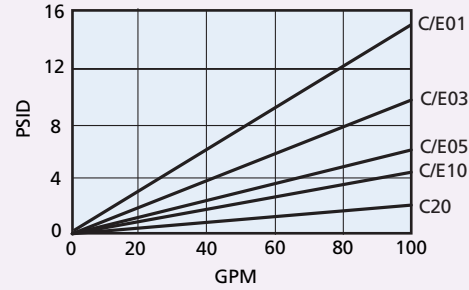
$$\Delta P \text{ Housing} = \text{psid from catalog} \times \frac{\text{New Specific Gravity}}{0.90}$$

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

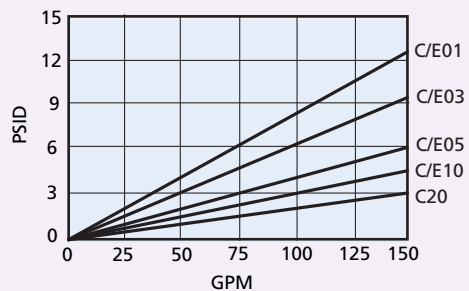
E405 - 9"



E405 - 18"



E405 - 27"



LOW PRESSURE
SPIN-ON FILTERS

MEDIUM PRESSURE
SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

Filter Assembly	WL16	1	D	4	2	6	N	B	C	10
	TABLE 1	TABLE 2	TABLE 3	TABLE 4	TABLE 5	TABLE 6	TABLE 7	TABLE 8	TABLE 9	TABLE 10
Service Element	E405	1	B	6	C	10				
	TABLE 1	TABLE 2	TABLE 8	TABLE 6	TABLE 9	TABLE 10				

Order model code WL161E346NBC10 for same day shipment.

Table 1

Filter Assembly / Service Element	
CODE	DESCRIPTION
WL16	Assembly
E405	Element

Table 2

Element Collapse Options	
CODE	DESCRIPTION
1	150 psid

Table 3

Port Size Options	
CODE	PORT SIZE
D	1-7/8" - 12 UN (SAE-24)
E	1-1/2" SAE 4 Bolt Flange Code 61
U	1-1/2" NPT

Table 4

Bypass Setting Options	
CODE	BYPASS SETTING
3	25 psid
4	50 psid

Table 5

Upstream Pressure Gauge and Switch Option	
CODE	INDICATOR STYLE & SETTING
1	No indicator
2	0-200 psi pressure gauge**
3	0-60 psi pressure gauge**
4	0-60 psi pressure gauge*
6	Pressure switch 18 psi Brad Harrison (5-pin)
7	Pressure switch 35 psi Brad Harrison (5-pin)
8	Pressure switch 18 psi Hirschmann (4-pin)
9	Pressure switch 35 psi Hirschmann (4-pin)

*Bypass setting option code 3 only
**Bypass setting option code 4 only

Table 6

Assembly & Element Length	
CODE (LGTH)	ELEMENT LENGTH
3 (12.76")	9"
6 (16.94")	18"
7 (26.31")	27"
9 (24.88")*	9"

*With 12" extension tube.

Note: Code length 6, 7 & 9 may be stacked using connector part # P-227567-01 and code length 3 elements

Table 7

Secondary Port Options	
CODE	PORT SIZE
T	1-7/8" - 12 UN (SAE-24)
Z	1-1/2" SAE 4 Bolt Flange Code 61
N	None
V	1-1/2" NPT

Table 8

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

Table 9

Element Code	
CODE	DESCRIPTION
C	(Glass) 01, 03, 05, 10, 20
E	(Coreless) 01, 03, 05, 10
P	(Cellulose) 10, 20
W	(Water removal) 10
Z	(Stainless Steel)* 60, 25, 260

*Only available in code 3 element length. Elements may be stacked for 18" and 27" assemblies.

Table 10

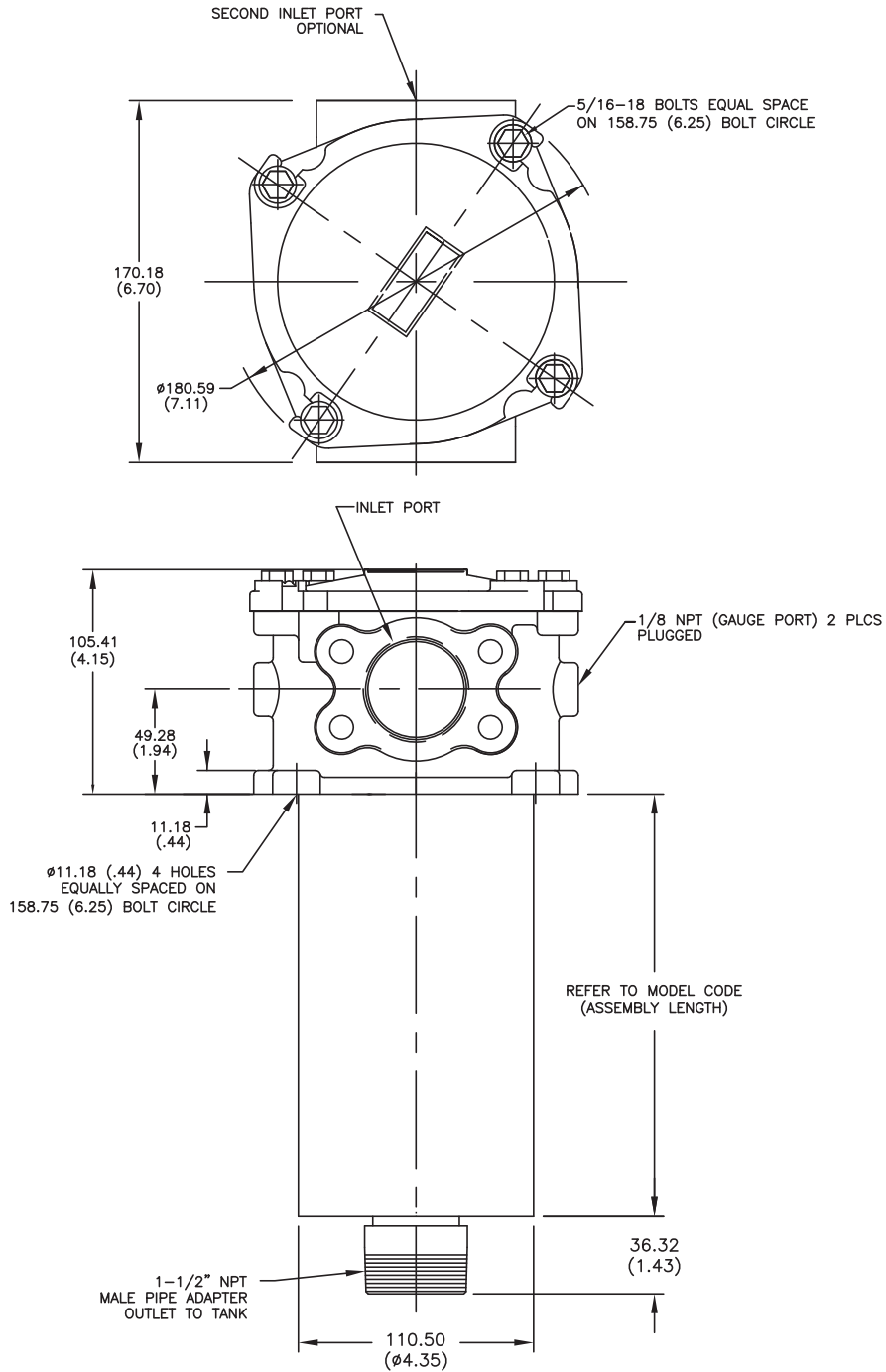
Media Rating	
CODE	TARGET FLUID CLEANLINESS LEVEL
01	Flushing only
03	16/14/12 or better
05	18/16/14 or better
10	20/18/15 or better
20	22/19/16 or better

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

Metric Porting Available

Change WL16 to GL16
Porting code D becomes 1-1/2" ISO 223 BSPP
Porting code E becomes 1-1/2" SAE 4 bolt flange with M12 threads

Dimensions: millimeters/(inches)



LOW PRESSURE
SPIN-ON FILTERS

MEDIUM PRESSURE
SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

FEATURES

The WL18 in-tank filter unit is an ideal choice for flows up to 200 gpm. The E018 service elements are interchangeable with Schroeder's 18L series elements. An optional weld ring provides an easy solution to insure a positive seal between housing and reservoir. The slotted cover makes for easy and efficient element change-outs. An optional secondary inlet port offers the use of a second return line or placement of a quick disconnect to add pre-filtered initial fill or make-up oil. These units can be top or side reservoir mounted. Use the optional anti-backflow valve when installing this filter assembly to side of reservoir. Five standard grades of media are offered down to 4.0µ(c).

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

Our WL18 Series is interchangeable with similar competitive units but is capable of higher flow rates by utilizing Western Filter's new high-flow bypass valve.

Technical Data:

Maximum Working Pressure	200 psi (14 bar)
Rated Burst Pressure	300 psi max (21 bar)
Temperature Range	Operating
Buna N	-45°F to + 225°F (-45°C to + 107°C)
Viton	-20°F to + 250°F (-29°C to + 121°C)
Head and Cover Material	Aluminum
Canister Material	Steel
Weight	
Assembly length	6 16 lbs. (7,3 kg.)

WL18

200 gpm (568 l/min)

Available with reservoir
mounting weld ring

Replacement elements
available in C-Pak™

Dual pressure gauge ports

Optional second inlet port

Wide choice of gauges
and switches

Optional check valve

Easy to service
slotted cover



ACCESSORIES

Seal Kit - Buna N	P-233055-01
Seal Kit - E.P.R.	P-233055-02
Seal Kit - Viton	P-233055-03
Weld Ring	P-232964-01
Check Valve	P-138761
Diffusor	P-239291

Housing and Filter Element

Flow versus Pressure Drop

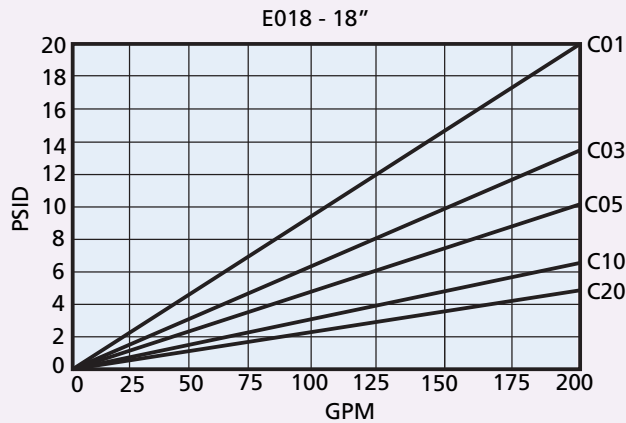
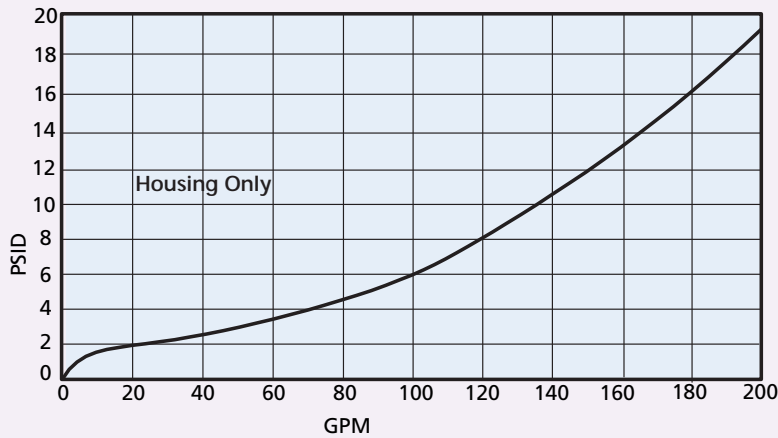
150 SUS (32 cSt.) oil with specific gravity ≤ 0.9

Viscosity Correction Formula

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

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

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



LOW PRESSURE SPIN-ON FILTERS

MEDIUM PRESSURE SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

Filter Assembly	WL18	1	D	4	3	6	N	B	C	10
	TABLE 1	TABLE 2	TABLE 3	TABLE 4	TABLE 5	TABLE 6	TABLE 7	TABLE 8	TABLE 9	TABLE 10
Service Element	E018	1	B	6	C	10				
	TABLE 1	TABLE 2	TABLE 8	TABLE 6	TABLE 9	TABLE 10				

Table 1

Filter Assembly / Service Element	
CODE	DESCRIPTION
WL18	Assembly
E018	Element

Table 2

Element Collapse Options	
CODE	DESCRIPTION
1	150 psid

Table 3

Port Size Options	
CODE	PORT SIZE
J	2" SAE 4 Bolt Flange Code 61

Table 4

Bypass Setting Options	
CODE	BYPASS SETTING
3	25 psid
4	50 psid

Table 5

Upstream Pressure Gauge and Switch Option	
CODE	INDICATOR STYLE & SETTING
1	No indicator
2	0-200 psi pressure gauge
3	0-60 psi pressure gauge**
4	0-60 psi pressure gauge*
6	Pressure switch 18 psi Brad Harrison (5-pin)
7	Pressure switch 35 psi Brad Harrison (5-pin)
8	Pressure switch 18 psi Hirschmann (4-pin)
9	Pressure switch 35 psi Hirschmann (4-pin)

*Bypass setting option code 3 only
**Bypass setting option code 4 only

Table 6

Assembly & Element Length	
CODE (LGTH)	ELEMENT LENGTH
6 (16.7")	18"

Table 7

Secondary Port Options	
CODE	PORT SIZE
N	None
J	2" SAE 4 Bolt Flange Code 61

Table 8

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

Table 9

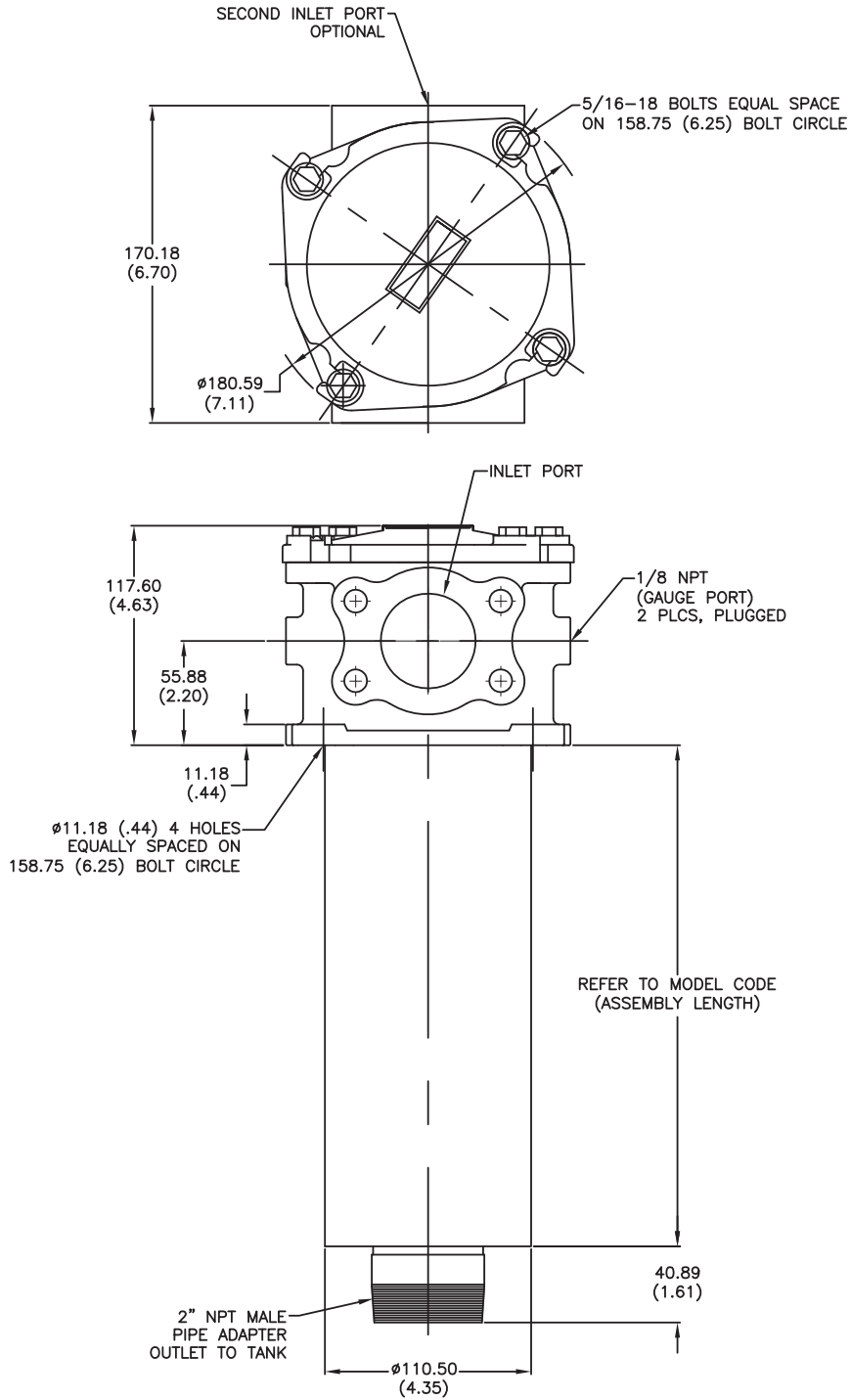
Element Code	
CODE	DESCRIPTION
C	(Glass) 01, 03, 05, 10, 20

Table 10

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.

Dimensions: millimeters/(inches)



LOW PRESSURE
SPIN-ON FILTERS

MEDIUM PRESSURE
SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

FEATURES

WR10 in-tank filters offer a space saving feature of combining a filter and breather. A compact and economical design made of aluminum head and glass filled plastic screw-on cover allows flows up to 40 GPM. Several port options are available. Two standard grades of media are offered, 10µ(c) and 20µ(c).

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

Technical Data:

Maximum Working Pressure	100 psi (6.9 bar)
Rated Burst Pressure	300 psi max (20.7 bar)
Temperature Range	Operating
Buna N	-15°F to + 230°F (-26°C to + 110°C)
Viton	-15°F to + 230°F (-26°C to + 110°C)
Head Material	Aluminum
Bowl and Cover	Glass filled plastic
Weight	
Assembly length 2	0.85 lbs. (0,84 kg.)

WR10

20 GPM (75.7 l/min)

Both electrical pressure switch and gauge available

Available with reservoir mounted weld ring

Built in air breather

Replacement elements available in C-Pak™ and P-Pak™

Easy to service threaded cover



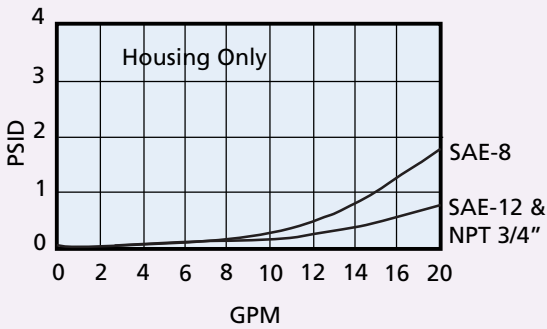
ACCESSORIES

Seal Kit - Buna N	P-236854-01
Seal Kit - E.P.R.	P-236854-02
Seal Kit - Viton	P-236854-03
Weld Ring	P-236926

Housing and Filter Element

Flow versus Pressure Drop

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

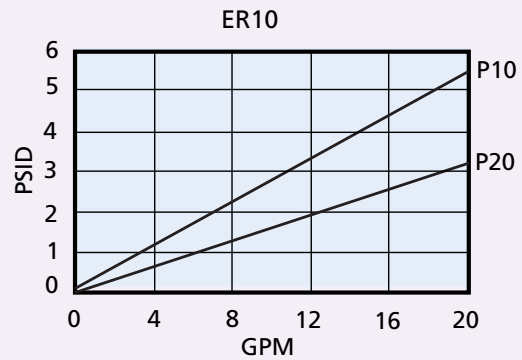
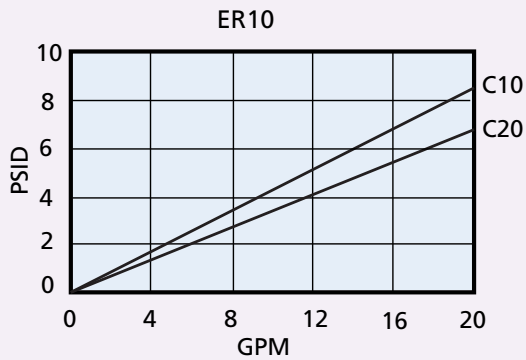


Viscosity Correction Formula

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

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

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



LOW PRESSURE SPIN-ON FILTERS

MEDIUM PRESSURE SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

Filter Assembly	WR10	1	A	3	4	B	2	C	10	C
	TABLE 1	TABLE 2	TABLE 3	TABLE 4	TABLE 5	TABLE 6	TABLE 7	TABLE 8	TABLE 9	TABLE 10
Service Element	ER10	1	B	2	C	10				
	TABLE 1	TABLE 2	TABLE 6	TABLE 7	TABLE 8	TABLE 9				

Table 1

Filter Assembly / Service Element	
CODE	DESCRIPTION
WR10	Assembly
ER10	Element

Table 2

Element Collapse Options	
CODE	DESCRIPTION
1	45 psid

Table 3

Port Size Options	
CODE	PORT SIZE
O	3/4" - 16 UNF (SAE-8)
A	1-1/16" - 12 UN (SAE-12)
I	3/4" NPT

Table 4

Bypass Setting Options	
CODE	BYPASS SETTING
3	25 psid

Table 5

Upstream Pressure Gauge and Switch Option	
CODE	UPSTREAM PRESSURE GAUGE AND SWITCH OPTIONS
1	No indicator
4	0-60 psi pressure gauge
6	Electrical switch 18 psi Brad Harrison (5-pin)
8	Electrical switch 18 psi Hirschmann (4-pin)

Table 6

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

Table 7

Assembly & Element Length	
CODE (LGTH)	ELEMENT LENGTH
2 (9.57")	8"

Table 8

Element Code	
CODE	MEDIA TYPE
C	(Glass media) 10, 20
P	(Cellulose) 10, 20

Table 9

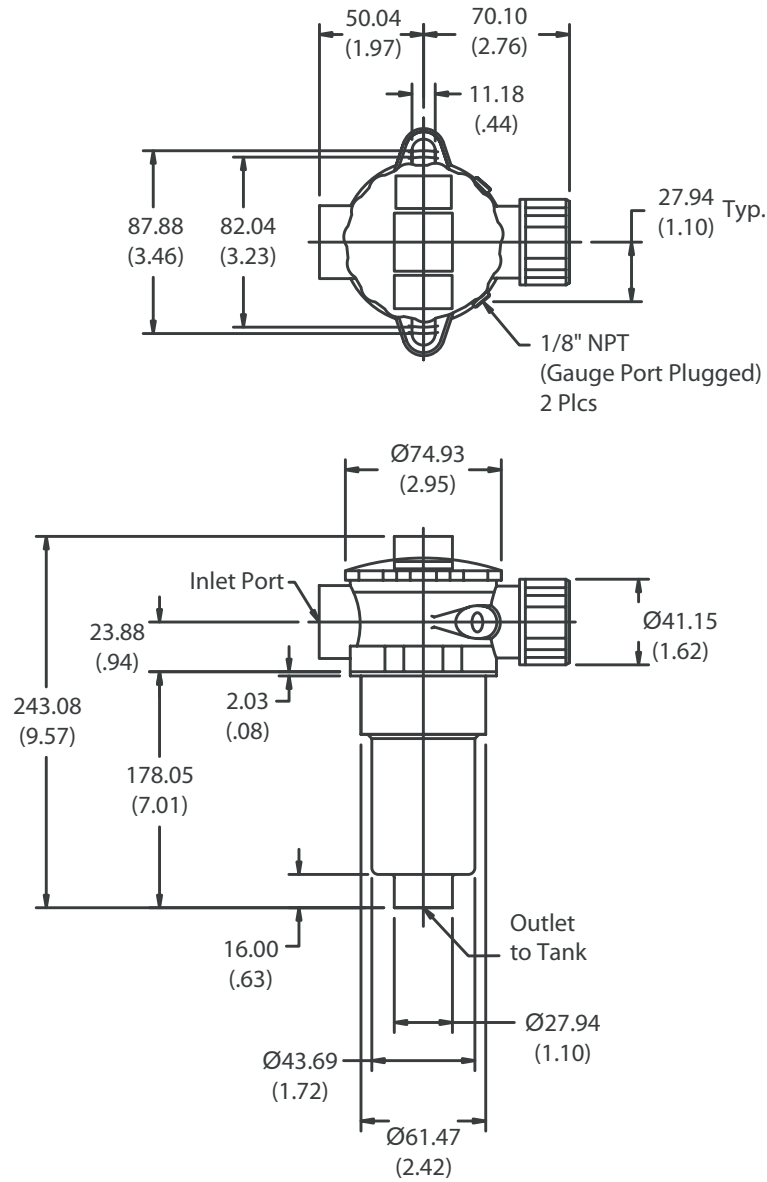
Media Rating	
CODE	TARGET FLUID CLEANLINESS LEVEL
10	20/18/15 or better
20	22/19/16 or better

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

Table 10

Accessories	
CODE	DESCRIPTION
OMIT	No accessories
C	7 micron air breather
D	40 micron air breather

Dimensions: millimeters/(inches)



LOW PRESSURE
SPIN-ON FILTERS

MEDIUM PRESSURE
SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

FEATURES

WR11 in-tank filters offer a space saving feature of combining a filter and breather. A compact and economical design made of aluminum head and glass filled plastic screw-on cover allows flows up to 40 GPM. Several port options and three bowl lengths are available. Two standard grades of media are offered.

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

Technical Data:

Maximum Working Pressure	100 psi (6.9 bar)
Rated Burst Pressure	300 psi max (20.7 bar)
Temperature Range	Operating
Buna N	-15°F to + 230°F (-26°C to + 110°C)
Viton	-15°F to + 230°F (-26°C to + 110°C)
Head Material	Aluminum
Bowl and Cover	Glass filled plastic
Weight	
Assembly length 1	1.78 lbs. (0,81 kg.)
Assembly length 2	1.84 lbs. (0,84 kg.)
Assembly length 3	1.94 lbs. (0,88 kg.)

WR11

40 gpm (151 l/min)

Reservoir can be filled through the filter

Replacement elements available in C-Pak™ and P-Pak™

Both electrical pressure switch and gauge available

Available with reservoir mounted weld ring

Built in air breather

Easy to service quick disconnect cover without tooling



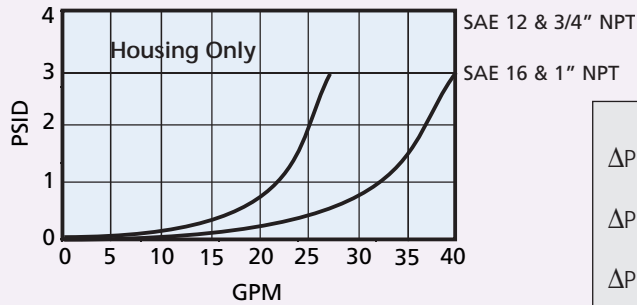
ACCESSORIES

Seal Kit - Buna N	P-236855-01
Seal Kit - E.P.R.	P-236855-02
Seal Kit - Viton	P-236855-03
Weld Ring	P-236927

Housing and Filter Element

Flow versus Pressure Drop

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

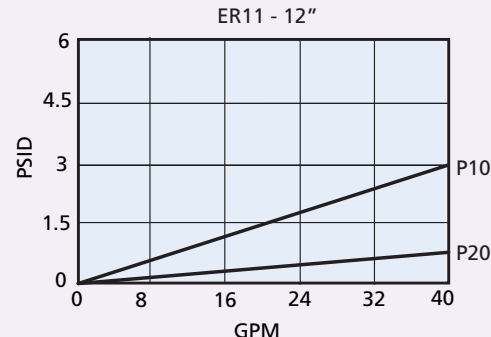
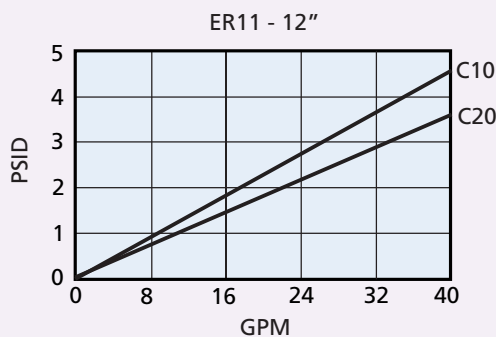
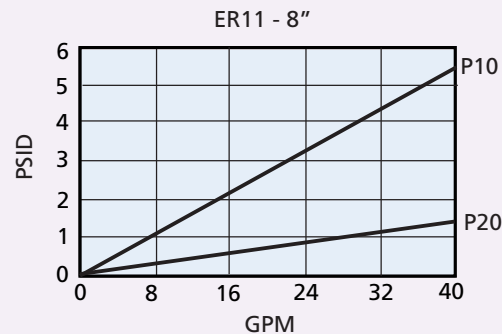
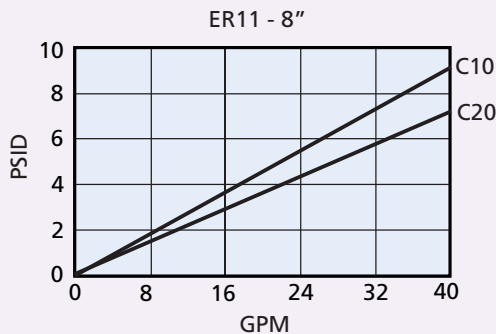
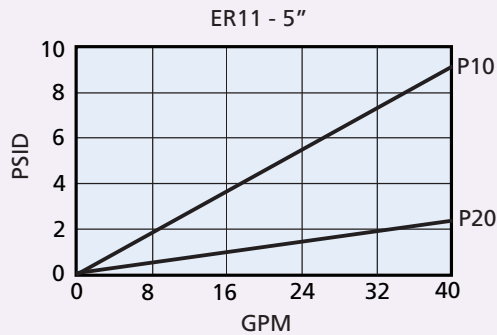
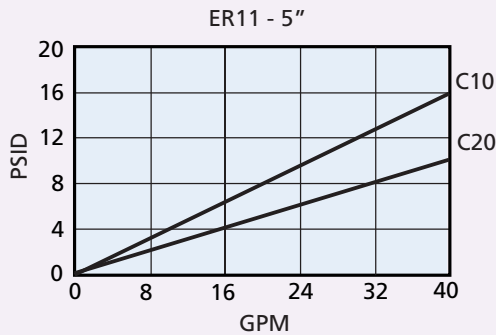


Viscosity Correction Formula

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

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

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



LOW PRESSURE
SPIN-ON FILTERS

MEDIUM PRESSURE
SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

Filter Assembly	WR11 TABLE 1	1 TABLE 2	A TABLE 3	3 TABLE 4	4 TABLE 5	6 TABLE 6	2 TABLE 7	C TABLE 8	10 TABLE 9	C TABLE 10
Service Element	ER11 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
WR11	Assembly
ER11	Element

Table 2

Element Collapse Options	
CODE	DESCRIPTION
1	45 psid

Table 3

Port Size Options	
CODE	PORT SIZE
A	1-1/16" - 12 UN (SAE-12)
B	1-5/16" - 12 UN (SAE-16)
I	3/4" NPT
Y	1" NPT

Table 4

Bypass Setting Options	
CODE	BYPASS SETTING
3	25 psid

Table 5

Upstream Pressure Gauge and Switch Option	
CODE	UPSTREAM PRESSURE GAUGE AND SWITCH OPTIONS
1	No indicator
4	0-60 psi pressure gauge
6	Electrical switch 18 psi Brad Harrison (5-pin)
8	Electrical switch 18 psi Hirschmann (4-pin)

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 (4.33")	5"
2 (6.89")	8"
3 (10.83")	12"

Table 8

Element Code	
CODE	DESCRIPTION
C	(Glass) 10, 20
P	(Cellulose) 10

Table 9

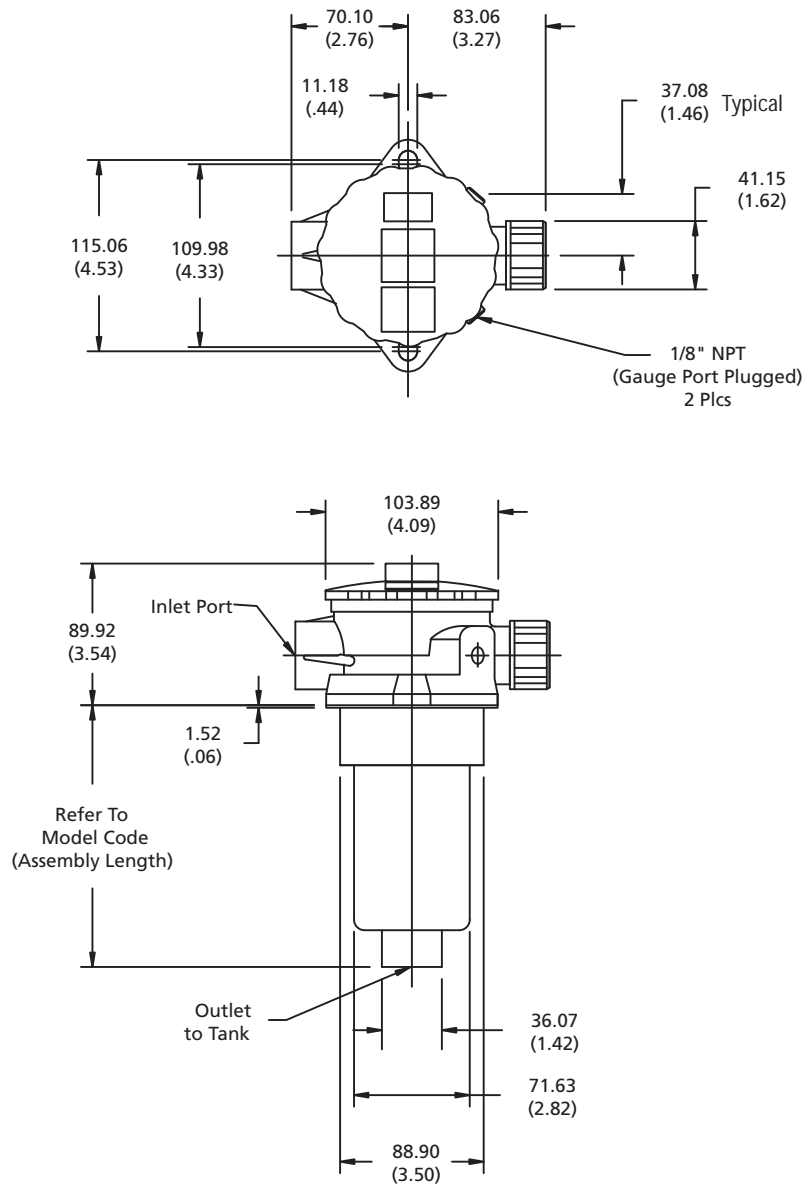
Media Rating	
CODE	TARGET FLUID CLEANLINESS LEVEL
10	20/18/15 or better
20	22/19/16 or better

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

Table 10

Accessories	
CODE	BREATHER
OMIT	No breather
C	7 micron air breather
D	40 micron air breather

Dimensions: millimeters/(inches)



LOW PRESSURE
SPIN-ON FILTERS

MEDIUM PRESSURE
SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

FEATURES

The WR series of in-tanks feature inside-to-out flow through the element, which means that dirt is collected inside the filter cartridge. This ensures that contamination is retained inside the cartridge when the element is serviced. A heavy duty magnetic core is attached to the element retention rod ensuring pre-filtration of ferrous particles entering the reservoir. An optional weld ring provides an easy solution to insure a positive seal between housing and reservoir. The slotted cover makes for easy and efficient element change-outs. Fluid aeration in large flow applications can be minimized by the use of our optional diffuser. Three standard grades of media are offered down to 6.4µ(c).

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

Technical Data:

Maximum Working Pressure	150 psi (10.3 bar)
Rated Burst Pressure	420 psi max (28.9 bar)
Temperature Range	Operating
Buna N	-15°F to + 230°F (-26 C to + 110°C)
Viton	-15°F to + 230 F (-26°C to + 110°C)
Head and Cover Material	Aluminum
Diffusor Material	Steel
Weight (without elements)	
Assembly length 1	2.6 lbs. (1,18 kg.)
Assembly length 2	3.1 lbs. (1,41 kg.)
Assembly length 3	3.3 lbs. (1,50 kg.)
Assembly length 4	3.7 lbs. (1,68 kg.)

WR14

160 gpm (606 l/min)

Diffusor helps prevent aeration of the fluid and may also eliminate reservoir baffle plate

Replacement elements available in C-Pak™ and P-Pak™

Wide choice of service gauges and switches

Four element lengths available

Return line application inside out flow

Magnetic "pre-filtration" of ferrous particles

Reservoir can be filled through the filter

Optional weld ring

Simplified bypass design prevents flushing previously collected contaminants back into the system



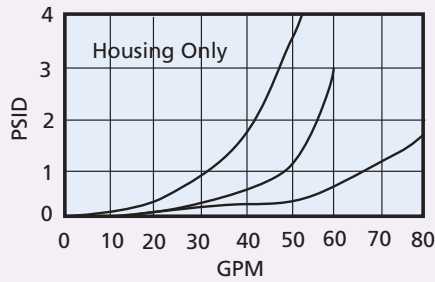
ACCESSORIES

Seal Kit - Buna N	P-236856-01
Seal Kit - E.P.R.	P-236856-02
Seal Kit - Viton	P-236856-03
Weld Ring	P-236928

Housing and Filter Element

Flow versus Pressure Drop

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



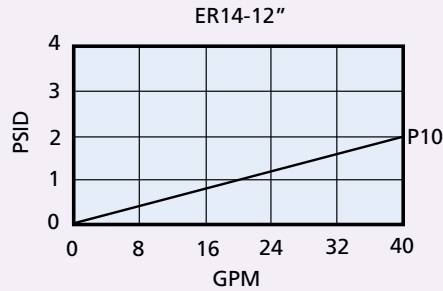
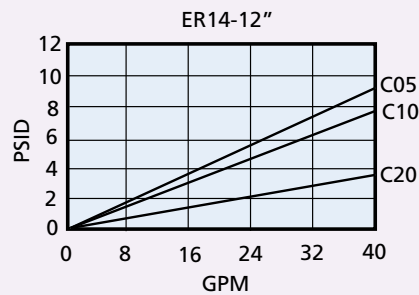
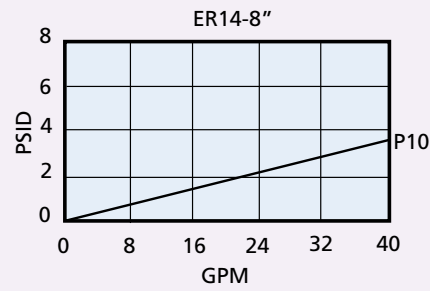
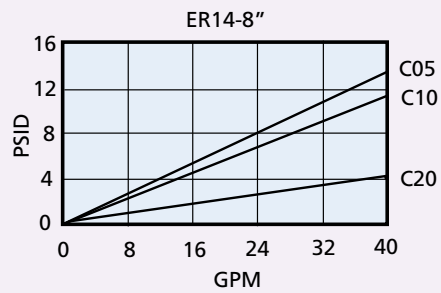
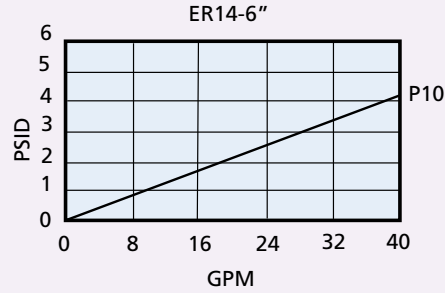
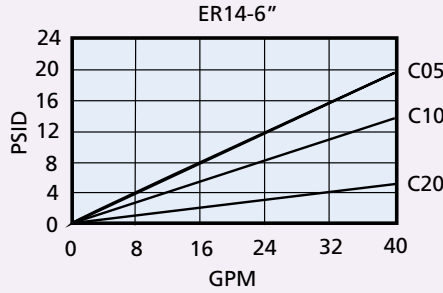
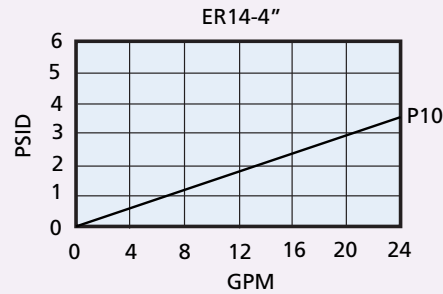
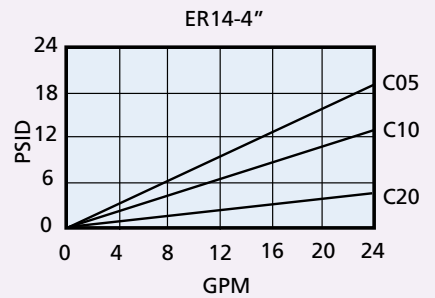
SAE-12/
3/4" NPT
SAE-16/
1" NPT
SAE-20/
1-1/4" NPT

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	WR14	1	A	3	4	B	1	C	10	F
	TABLE 1	TABLE 2	TABLE 3	TABLE 4	TABLE 5	TABLE 6	TABLE 7	TABLE 8	TABLE 9	TABLE 10
Service Element	ER14	1	B	2	C	10				
	TABLE 1	TABLE 2	TABLE 6	TABLE 7	TABLE 8	TABLE 9				

Table 1

Filter Assembly / Service Element	
CODE	DESCRIPTION
WR14	Assembly
ER14	Element

Table 2

Element Collapse Options	
CODE	DESCRIPTION
1	150 psid (10.3 BAR)

Table 3

Port Size Options	
CODE	PORT SIZE
A	1-1/16" - 12 UN (SAE-12)
B	1-5/16" - 12 UN (SAE-16)
C	1-5/8" - 12 UN (SAE-20)
I	3/4" NPT
P	1-1/4" NPT
Y	1" NPT

Table 4

Bypass Setting Options	
CODE	BYPASS SETTING
3	25 psid

Table 5

Upstream Pressure Gauge and Switch Option	
CODE	UPSTREAM PRESSURE GAUGE AND SWITCH OPTIONS
1	No indicator
2	0-200 psi pressure gauge
4	0-60 psi pressure gauge
6	Electrical switch 18 psi Brad Harrison (5-pin)
8	Electrical switch 18 psi Hirschmann (4-pin)

Table 6

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

Table 7

Assembly & Element Length	
CODE (LGTH)	ELEMENT LENGTH
1 (7.8")	4.0"
2 (7.8")	6.0"
3 (9.8")	8.0"
4 (13.8")	12.0"

Table 8

Element Code	
CODE	DESCRIPTION
C	(Glass) 05, 10, 20
P	(Cellulose) 10

Table 9

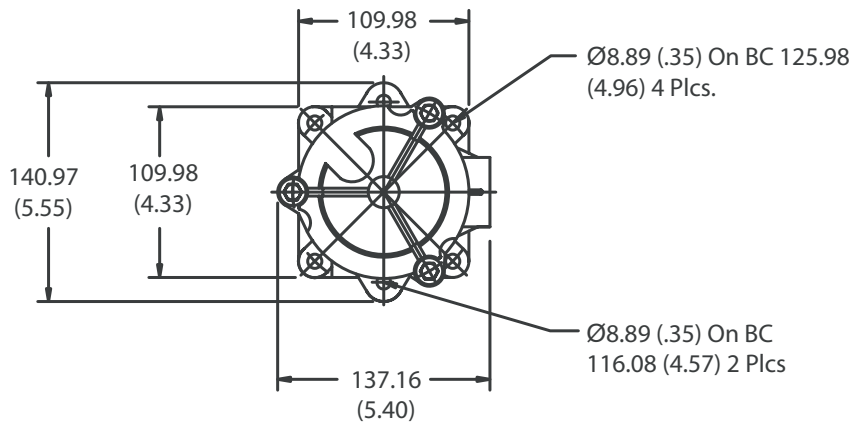
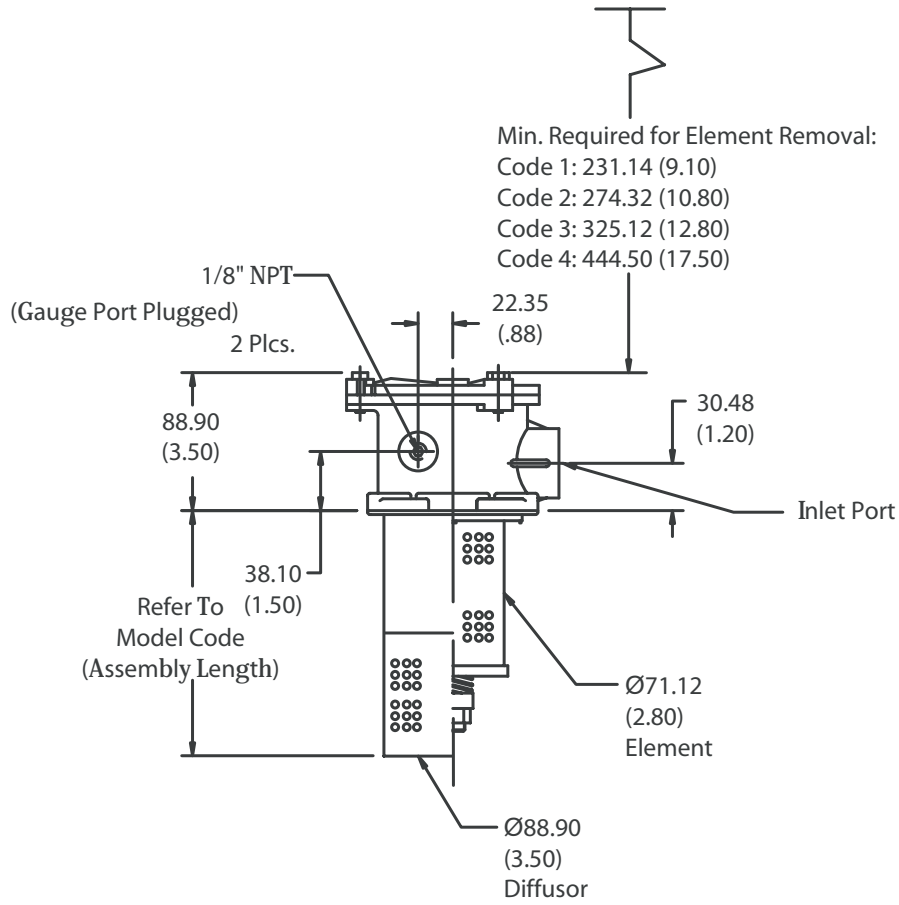
Media Rating	
CODE	TARGET FLUID CLEANLINESS LEVEL
05	18/16/14 or better
10	20/18/15 or better
20	22/19/16 or better

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

Table 10

Accessories	
CODE	DIFFUSOR
Omit	No diffusor
F	With diffusor

Dimensions: millimeters/(inches)



LOW PRESSURE
SPIN-ON FILTERS

MEDIUM PRESSURE
SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

FEATURES

The WR series of in-tanks feature inside-to-out flow through the element, which means that dirt is collected inside the filter cartridge. This ensures that contamination is retained inside the cartridge when the element is serviced. A heavy duty magnetic core is attached to the element retention rod ensuring pre-filtration of ferrous particles entering the reservoir. An optional weld ring provides an easy solution to insure a positive seal between housing and reservoir. The slotted cover makes for easy and efficient element change-outs. Fluid aeration in large flow applications can be minimized by the use of our optional diffuser. Three standard grades of media are offered down to 6.4µ(c).

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

Technical Data:

Maximum Working Pressure	150 psi (10.3 bar)
Rated Burst Pressure	420 psi max (28.9 bar)
Temperature Range	Operating
Buna N	-15°F to + 230°F (-26 C to + 110°C)
Viton	-15°F to + 230 F (-26°C to + 110°C)
Head and Cover Material	Aluminum
Diffusor Material	Steel
Weight (without elements)	
Assembly length 2	9.2 lbs. (4,18 kg.)
Assembly length 3	10.3 lbs. (4,68 kg.)
Assembly length 4	11.0 lbs. (5,00 kg.)

WR15

160 gpm (606 l/min)

Diffusor helps prevent aeration of the fluid and may also eliminate reservoir baffle plate

Replacement elements available in C-PakTM and P-PakTM

Wide choice of service gauges and switches

Three element lengths available

Return line application inside out flow

Magnetic "pre-filtration" of ferrous particles

Reservoir can be filled through the filter

Optional weld ring



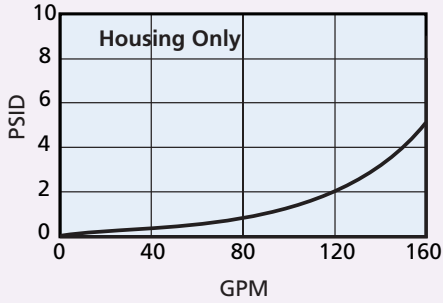
ACCESSORIES

Seal Kit - Buna N	P-236857-01
Seal Kit - E.P.R.	P-236857-02
Seal Kit - Viton	P-236857-03
Weld Ring	P-236929

Housing and Filter Element

Flow versus Pressure Drop

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

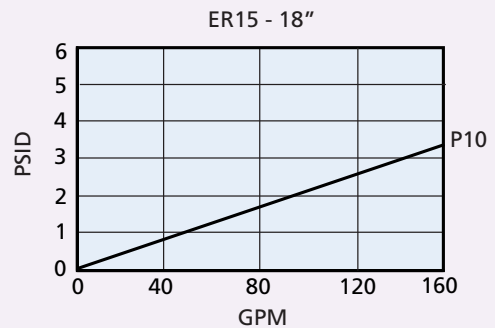
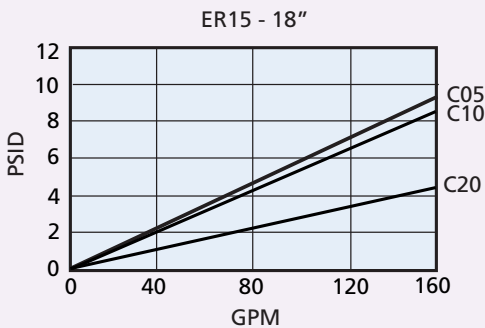
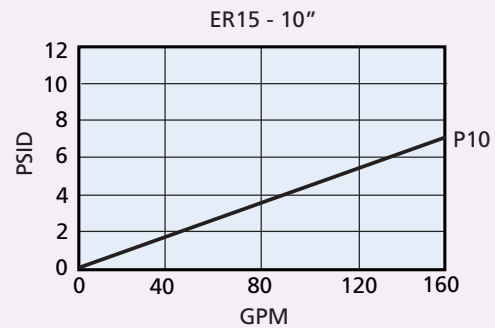
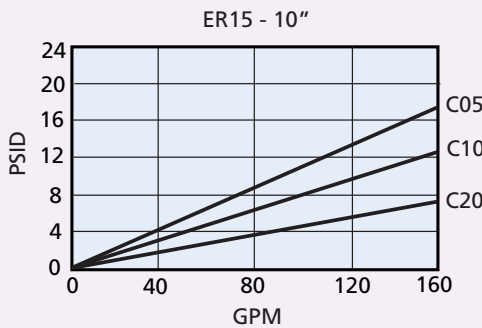
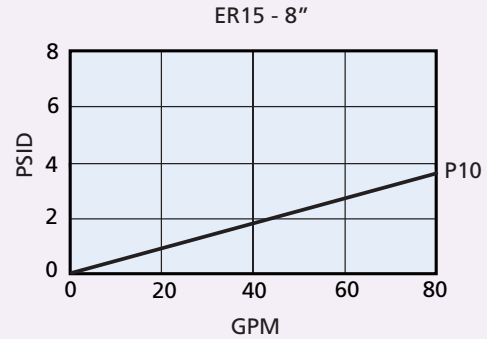
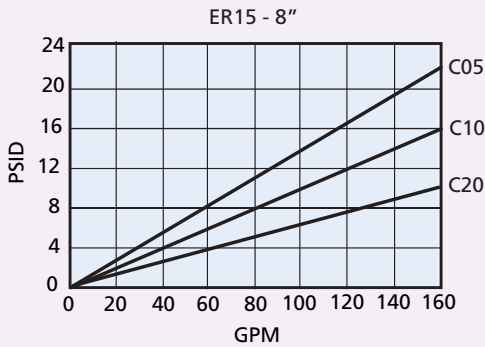


Viscosity Correction Formula

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

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

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



LOW PRESSURE
SPIN-ON FILTERS

MEDIUM PRESSURE
SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

Filter Assembly	WR15 TABLE 1	1 TABLE 2	D TABLE 3	3 TABLE 4	4 TABLE 5	B TABLE 6	2 TABLE 7	C TABLE 8	10 TABLE 9	F TABLE 10
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Service Element	ER15 TABLE 1	1 TABLE 2	B TABLE 6	2 TABLE 7	C TABLE 8	10 TABLE 9
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Table 1

Filter Assembly / Service Element	
CODE	DESCRIPTION
WR15	Assembly
ER15	Element

Table 2

Element Collapse Options	
CODE	DESCRIPTION
1	150 psid

Table 3

Port Size Options	
CODE	PORT SIZE
D	1-7/8" - 12 UN (SAE-24)
U	1-1/2" NPT
E	1-1/2" SAE 4 Bolt Flange Code 61

Table 4

Bypass Setting Options	
CODE	BYPASS SETTING
3	25 psid

Table 5

Upstream Pressure Gauge and Switch Option	
CODE	UPSTREAM PRESSURE GAUGE AND SWITCH OPTIONS
1	No indicator
2	0-200 psi pressure gauge
4	0-60 psi pressure gauge
6	Electrical switch 18 psi Brad Harrison (5-pin)
8	Electrical switch 18 psi Hirschmann (4-pin)

Table 6

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

Table 7

Assembly & Element Length	
CODE (LGTH)	ELEMENT LENGTH
2 (9.8")	8.0"
3 (12.6")	10.0"
4 (20.7")	18.0"

Table 8

Element Code	
CODE	DESCRIPTION
C	(Glass) 05, 10, 20
P	(Cellulose) 10

Table 9

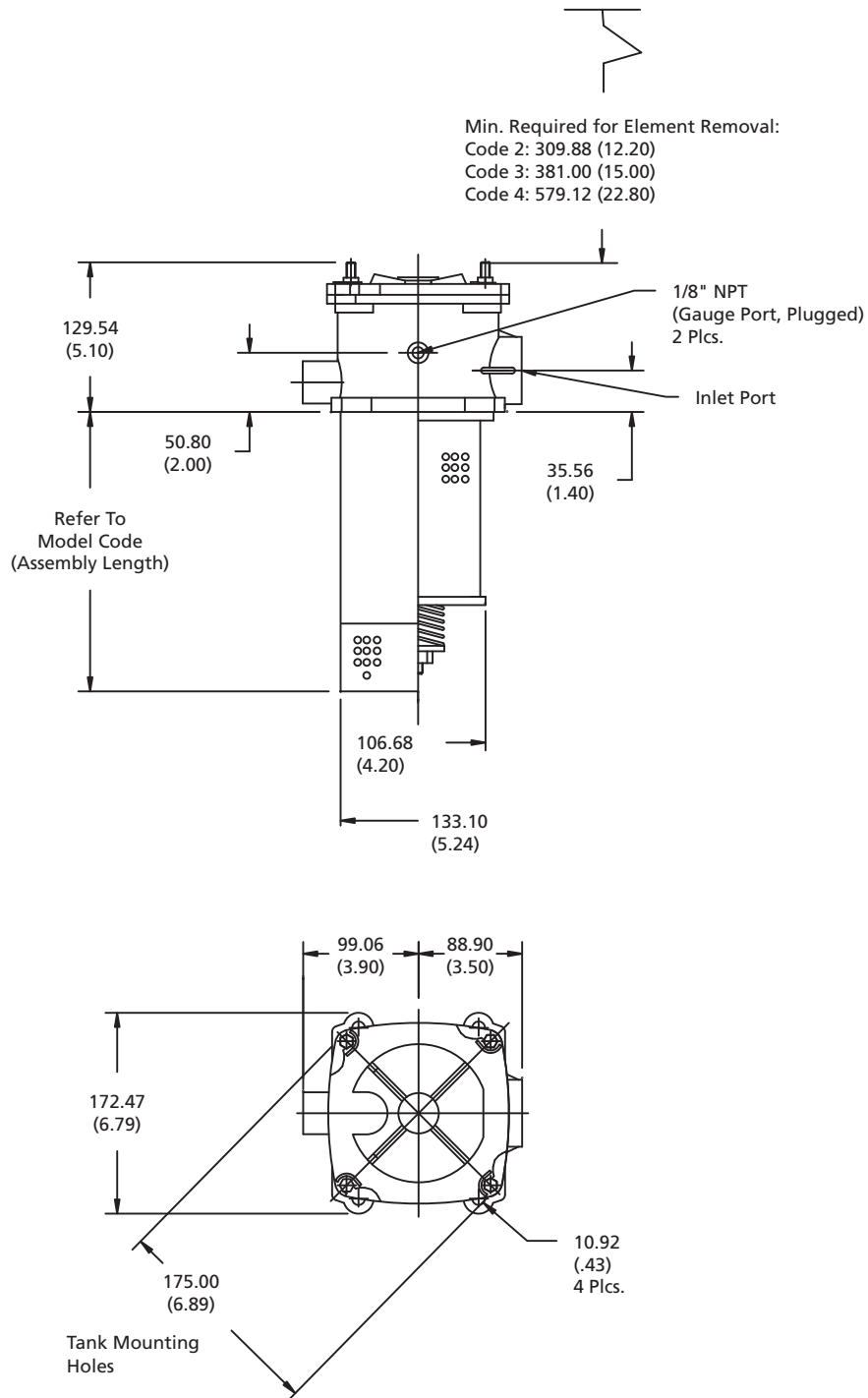
Media Rating	
CODE	TARGET FLUID CLEANLINESS LEVEL
03	16/14/12 or better
05	18/16/14 or better
10	20/18/15 or better
20	22/19/16 or better

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

Table 10

Accessories	
CODE	DIFFUSOR
Omit	No diffusor
F	With diffusor

Dimensions: millimeters/(inches)



LOW PRESSURE SPIN-ON FILTERS

MEDIUM PRESSURE SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

FEATURES

The WR17 series in-tank features inside-to-out flow through the element which means dirt is collected inside the filter cartridge. This ensures that contamination is retained inside the cartridge when the element is serviced. A heavy duty magnetic core is attached to the element retention rod ensuring pre-filtration of ferrous particles entering the reservoir. An optional weld ring provides an easy solution to insure a positive seal between housing and reservoir. The slotted cover makes for easy and efficient element change-outs. Fluid aeration in large flow applications can be minimized by the use of our optional diffusor. Three standard grades of media are offered down to 6.4µ(c).

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

Technical Data:

Maximum Working Pressure	150 psi (10.3 bar)
Rated Burst Pressure	420 psi max (28.9 bar)
Temperature Range	Operating
Buna N	-15°F to + 230°F (-26°C to + 110°C)
Viton	-15°F to + 230°F (-26°C to + 110°C)
Head and Cover Material	Aluminum
Diffusor Material	Steel
Weight (without elements)	
Assembly length 2	17.6 lbs. (8 kg.)
Assembly length 3	18.5 lbs. (8,4 kg.)
Assembly length 4	18.9 lbs. (8,6 kg.)
Assembly length 5	20.0 lbs. (9,1 kg.)

WR17

320 gpm (1211 l/min)

Simplified bypass design prevents flushing previously collected contaminants back into the system

Diffusor helps prevent aeration of the fluid and may also eliminate reservoir baffle plate

Replacement elements available in C-Pak™ and P-Pak™

Return line application inside out flow

Magnetic “pre-filtration” of ferrous particles

Reservoir can be filled through the filter

Wide choice of service gauges and switches

Four element lengths available



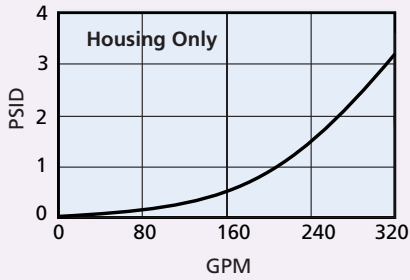
ACCESSORIES

Seal Kit - Buna N	P-236858-01
Seal Kit - E.P.R.	P-236858-02
Seal Kit - Viton	P-236858-03
Weld Ring	P-236930

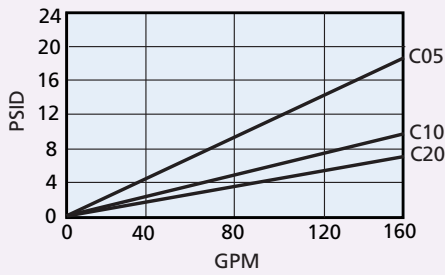
Housing and Filter Element

Flow versus Pressure Drop

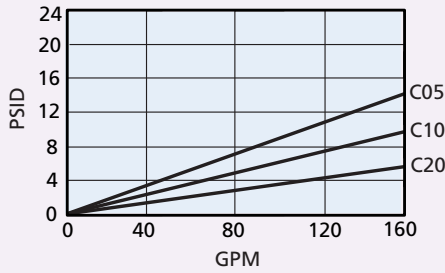
150 SUS (32 cSt.) oil with specific gravity ≤ 0.9



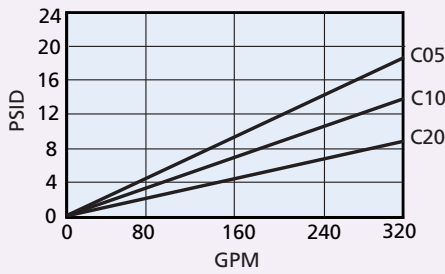
ER17 - 8"



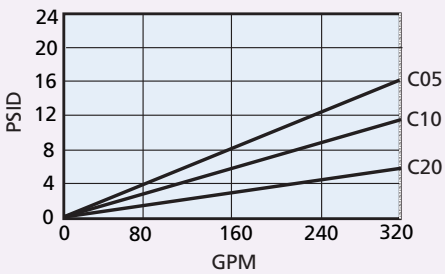
ER17 - 11"



ER17 - 15"



ER17 - 19"

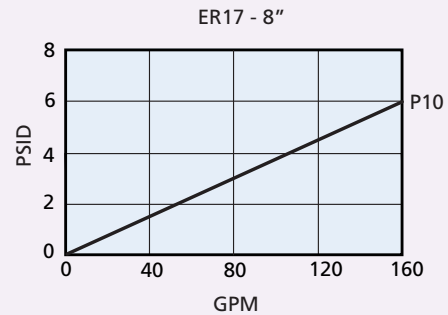


Viscosity Correction Formula

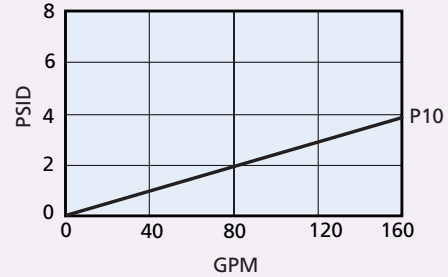
$$\Delta P \text{ Element} = \text{psid from catalog} \times \frac{\text{New Viscosity (SUS)}}{150} \times \frac{\text{New Specific Gravity}}{0.90}$$

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

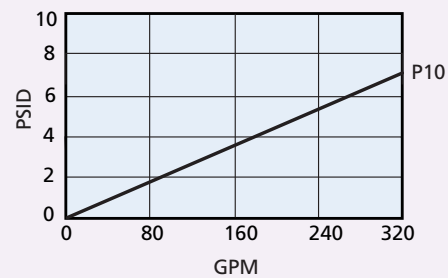
$$\Delta P \text{ Assembly} = \Delta P \text{ Element} + \Delta P \text{ Housing}$$



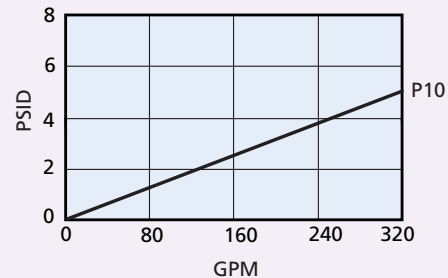
ER17 - 11"



ER17 - 15"



ER17 - 19"



LOW PRESSURE
SPIN-ON FILTERS

MEDIUM PRESSURE
SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS

Filter Assembly	WR17 TABLE 1	1 TABLE 2	K TABLE 3	3 TABLE 4	4 TABLE 5	B TABLE 6	2 TABLE 7	C TABLE 8	10 TABLE 9	F TABLE 10
	ER17 TABLE 1	1 TABLE 2	B TABLE 6	3 TABLE 7	C TABLE 8	10 TABLE 9				

Table 1

Filter Assembly / Service Element	
CODE	DESCRIPTION
WR17	Assembly
ER17	Element

Table 2

Element Collapse Options	
CODE	DESCRIPTION
1	150 psid

Table 3

Port Size Options	
CODE	PORT SIZE
K	2-1/2" SAE 4 Bolt Flange Code 61

Table 4

Bypass Setting Options	
CODE	BYPASS SETTING
3	25 psid

Table 5

Upstream Pressure Gauge and Switch Option	
CODE	UPSTREAM PRESSURE GAUGE AND SWITCH OPTIONS
1	No indicator
2	0-200 psi pressure gauge
4	0-60 psi pressure gauge
6	Electrical switch 18 psi Brad Harrison (5-pin)
8	Electrical switch 18 psi Hirschmann (4-pin)

Table 6

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

Table 7

Assembly & Element Length	
CODE (LGTH)	ELEMENT LENGTH
2 (11.4")	8.00"
3 (14.6")	11.00"
4 (18.5")	15.00"
5 (22.0")	19.00"

Table 8

Element Code	
CODE	DESCRIPTION
C	(Glass) 05, 10, 20
P	(Cellulose) 10

Table 9

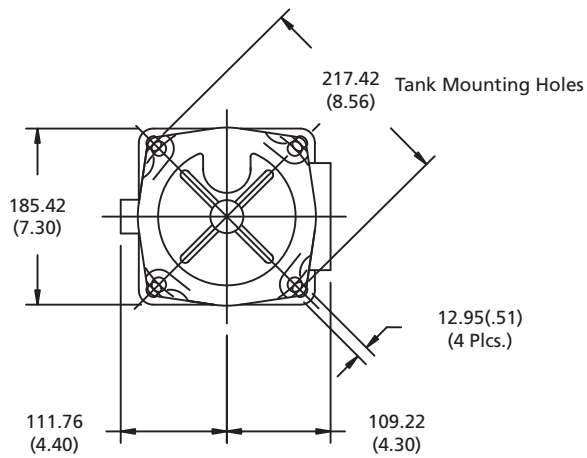
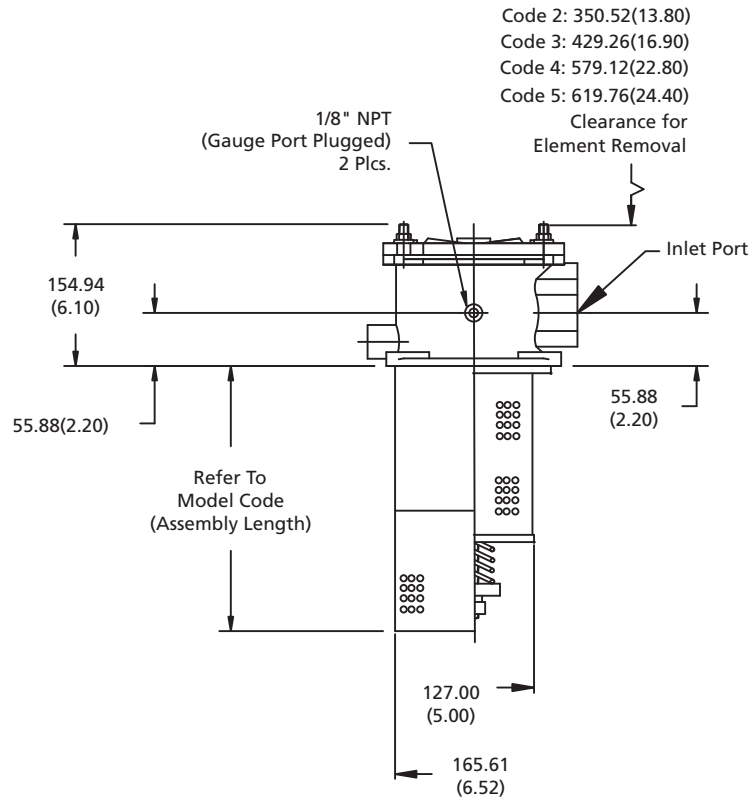
Media Rating	
CODE	TARGET FLUID CLEANLINESS LEVEL
03	16/14/12 or better
05	18/16/14 or better
10	20/18/15 or better
20	22/19/16 or better

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

Table 10

Accessories	
CODE	DIFFUSOR
Omit	No diffusor
F	With diffusor

Dimensions: millimeters/(inches)



LOW PRESSURE
SPIN-ON FILTERS

MEDIUM PRESSURE
SPIN-ON FILTERS

IN-TANK FILTERS

LOW PRESSURE FILTERS

MEDIUM PRESSURE FILTERS

HIGH PRESSURE FILTERS