



18/28/38P Series

High Pressure Filters



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Applications for 18/28/38P series

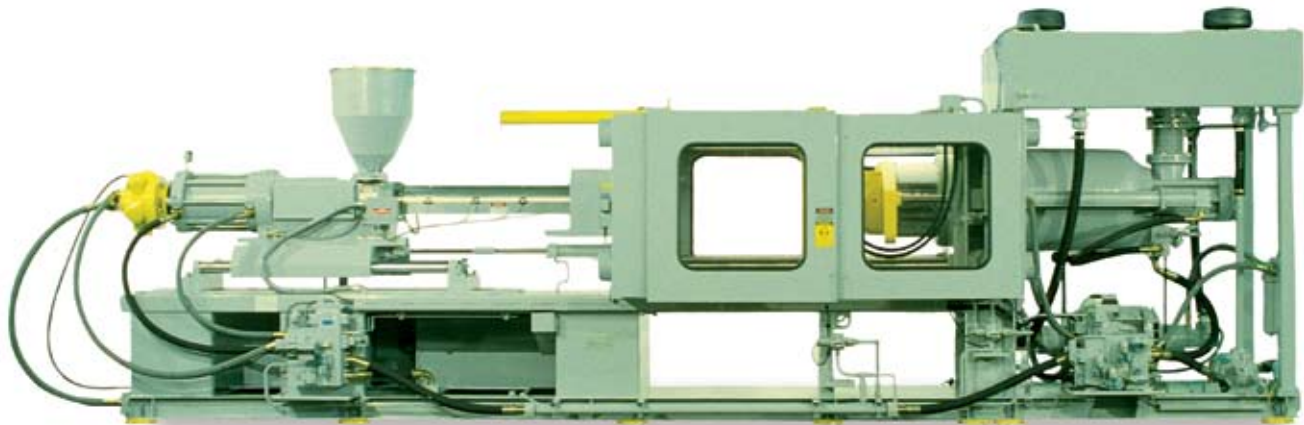
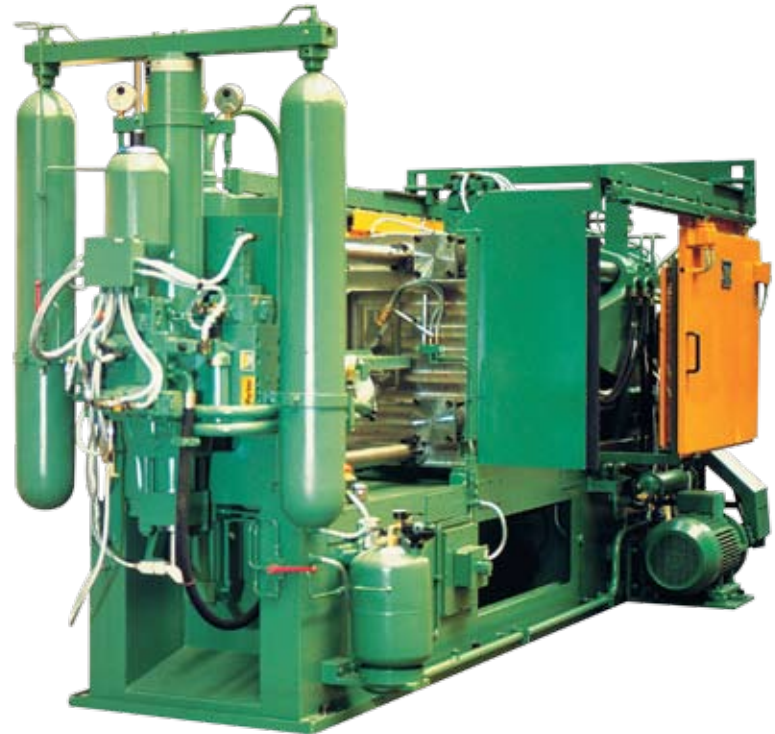
- Injection Molding
- Die Casting
- Servo Controls
- Machine Tools
- Mobile Equipment

Parker Filtration's Hydraulic Filter Division engineered the 18/28/38P series of high pressure filters to satisfy demanding applications in the mobile and industrial markets throughout the world. With metric mounting and optional ISO 6149 ports, this new series is truly a global design.

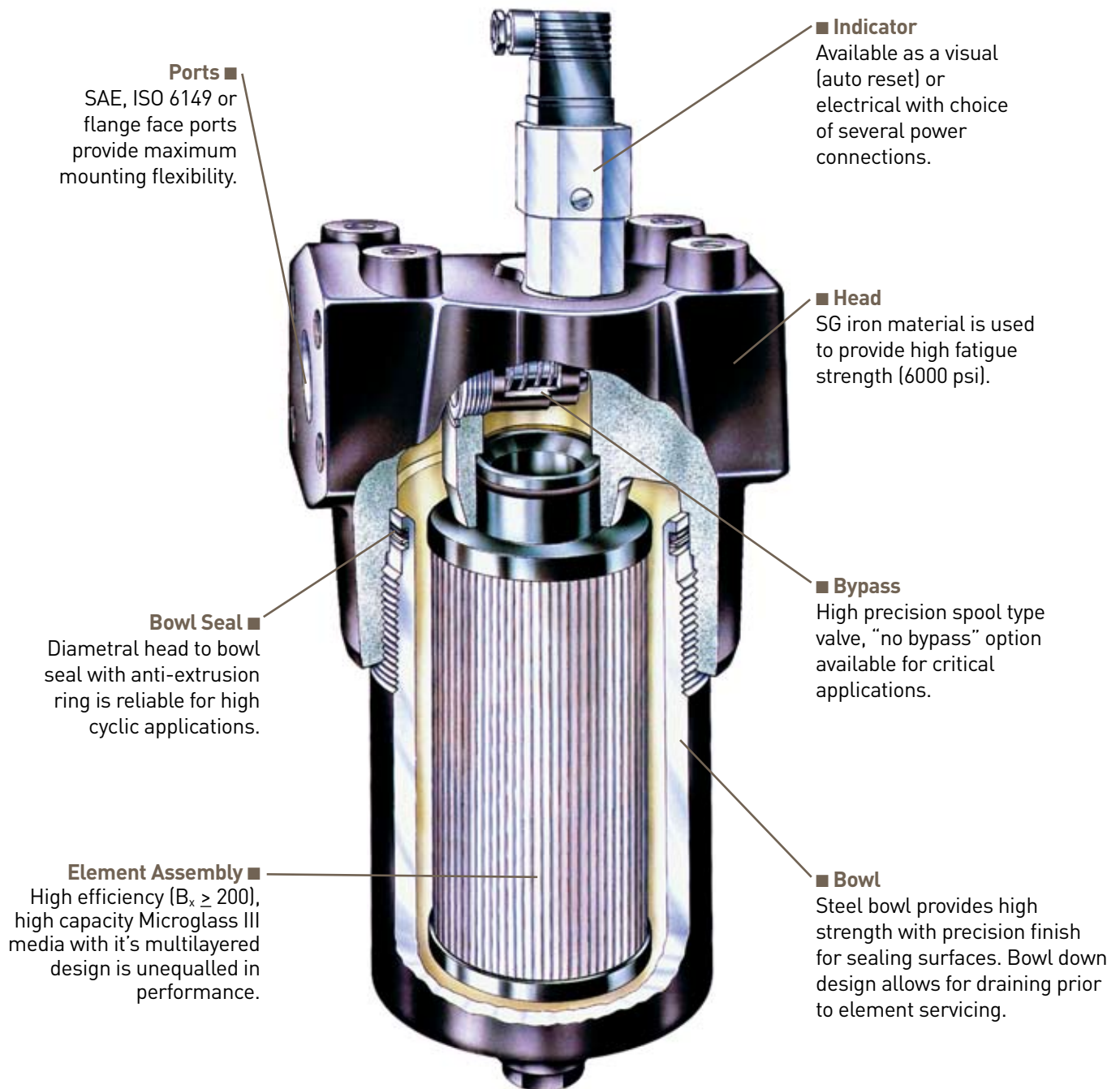
Installed downstream of the pump, this new series with their wide range of high capacity Microglass III elements, offer excellent protection to system components.

Standard filters come complete with industry proven spool type bypass valve. For more critical applications such as servo or proportional controls, a no bypass high strength element combination ensures maximum protection.

The modular low hysteresis differential pressure indicator fitted to this series is unrivaled in its performance. Tests prove it's accuracy and foolproof design to be a major advance in indicator technology.



Features



Ports ■
SAE, ISO 6149 or flange face ports provide maximum mounting flexibility.

■ Indicator
Available as a visual (auto reset) or electrical with choice of several power connections.

■ Head
SG iron material is used to provide high fatigue strength (6000 psi).

■ Bypass
High precision spool type valve, "no bypass" option available for critical applications.

Bowl Seal ■
Diametral head to bowl seal with anti-extrusion ring is reliable for high cyclic applications.

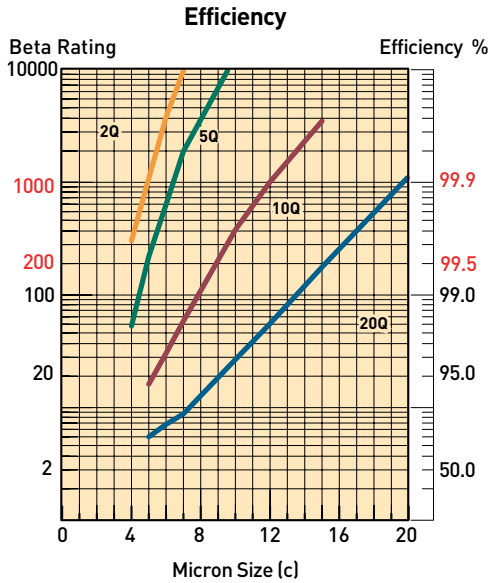
■ Bowl
Steel bowl provides high strength with precision finish for sealing surfaces. Bowl down design allows for draining prior to element servicing.

Element Assembly ■
High efficiency ($B_x \geq 200$), high capacity Microglass III media with its multilayered design is unequalled in performance.

High Pressure Filters

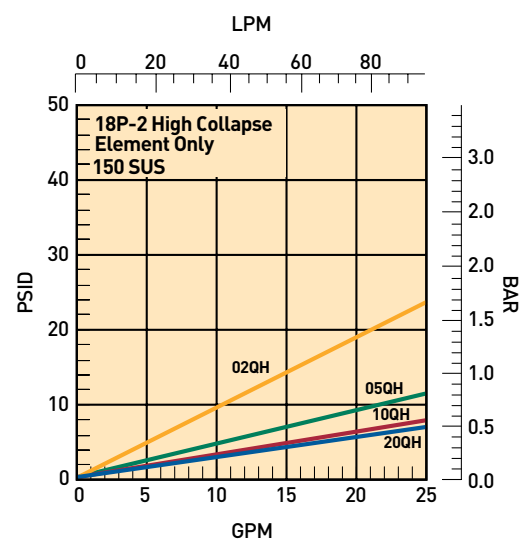
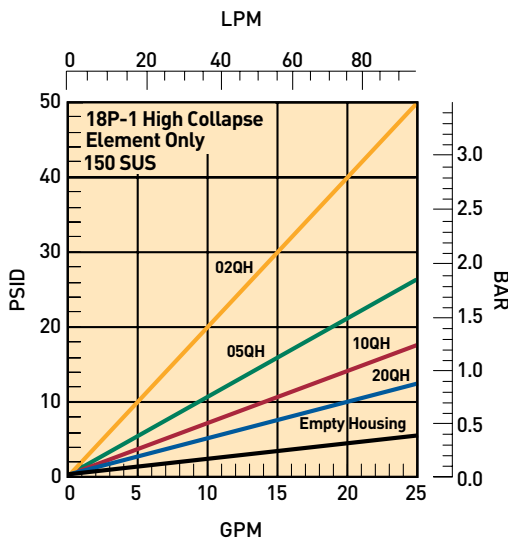
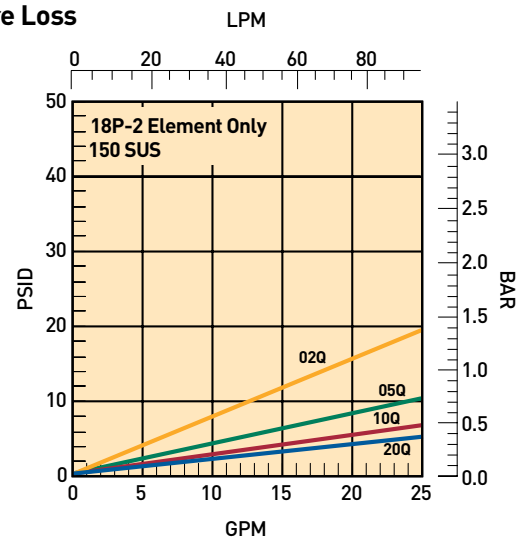
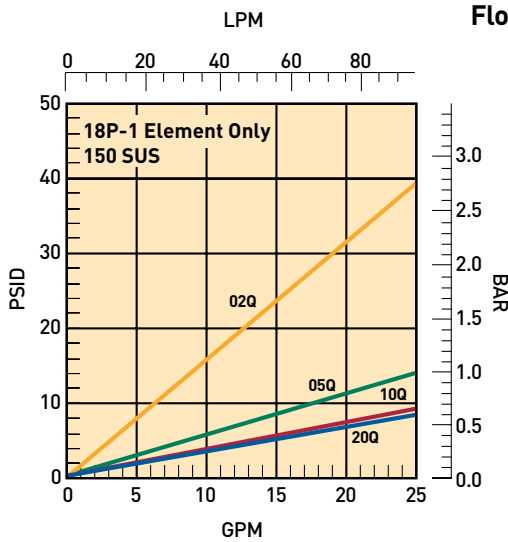
18/28/38P Series

18P Element Performance

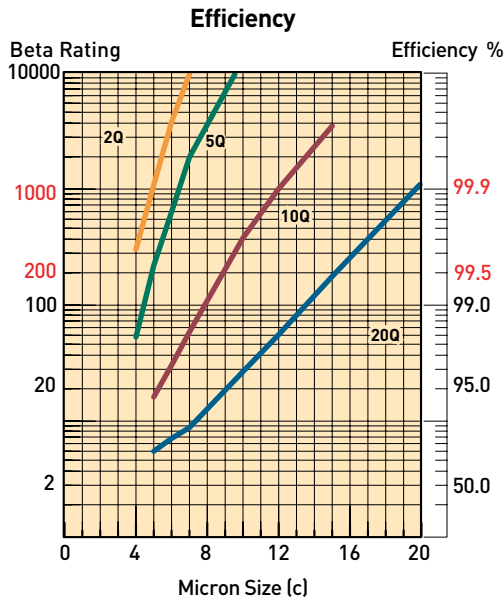


Capacity (grams)

MODEL				
Media Code	18P-1 (50 psid)	18P-1 (98 psid)	18P-2 (50 psid)	18P-2 (98 psid)
02Q	5.9	7.4	18.6	22.7
05Q	8.5	9.4	21.0	23.5
10Q	7.6	8.0	15.8	17.2
20Q	7.7	8.6	16.2	17.7
02QH	4.8	6.3	14.1	17.8
05QH	7.5	8.8	17.1	19.6
10QH	6.7	7.2	14.5	16.1
20QH	6.6	7.2	11.9	12.6

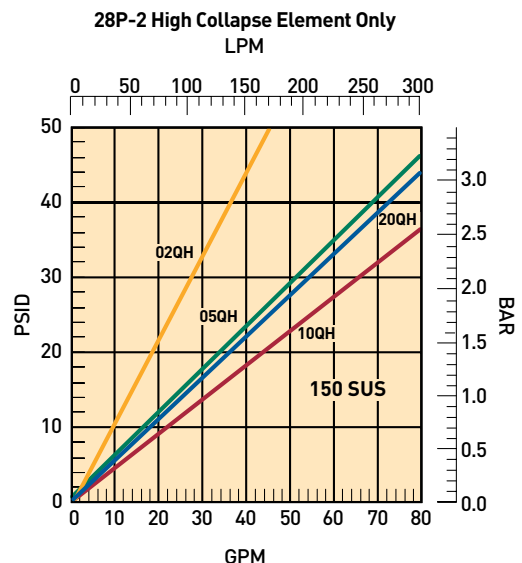
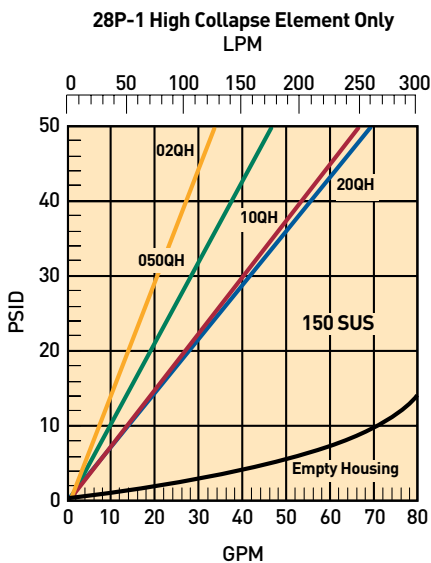
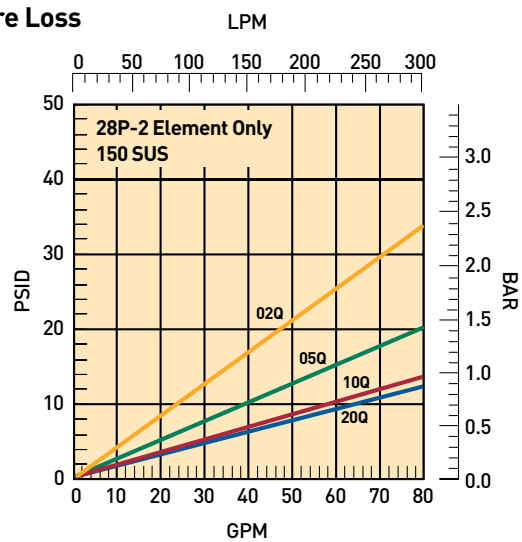
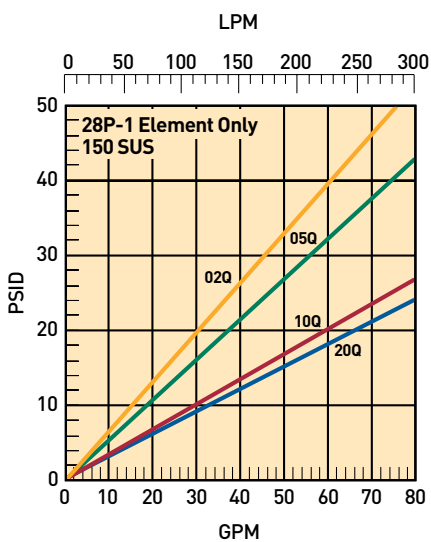


28P Element Performance



Capacity (grams)

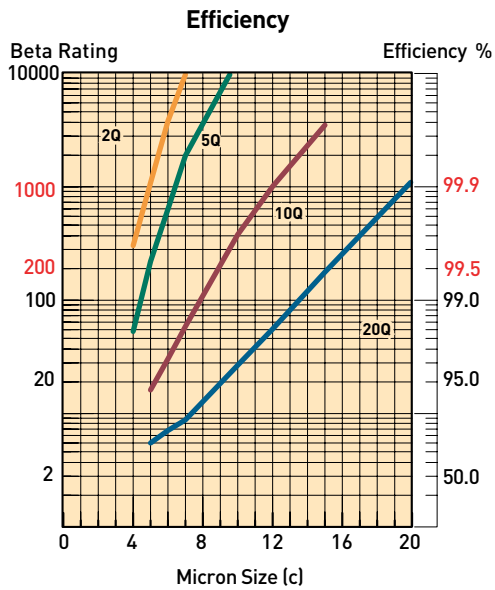
MODEL				
Media Code	28P-1 (50 psid)	28P-1 (98 psid)	28P-2 (50 psid)	28P-2 (98 psid)
02Q	23	28	40	48
05Q	25	28	43	50
10Q	22	24	45	48
20Q	21	24	44	48
02QH	21	24	32	38
05QH	24	27	35	38
10QH	21	23	35	38
20QH	20	22	34	37



High Pressure Filters

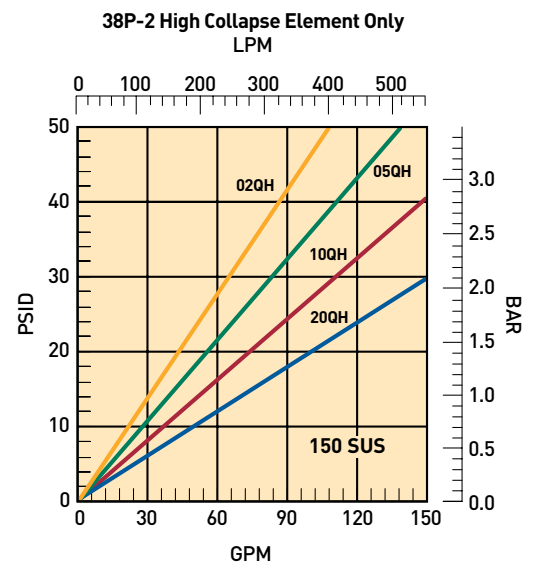
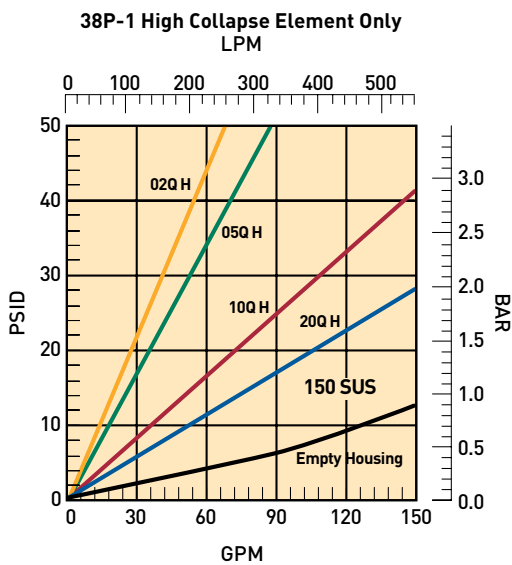
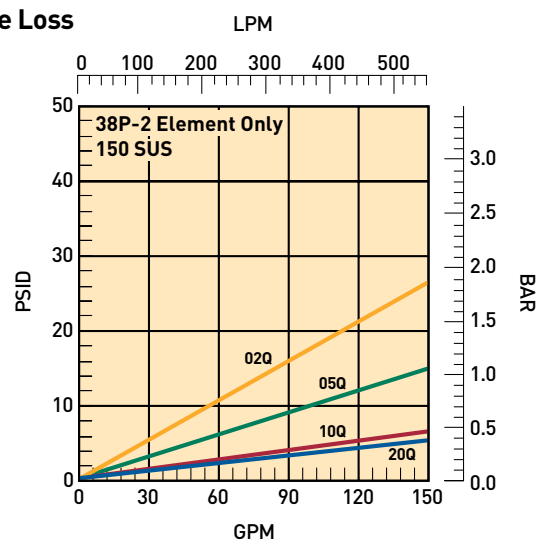
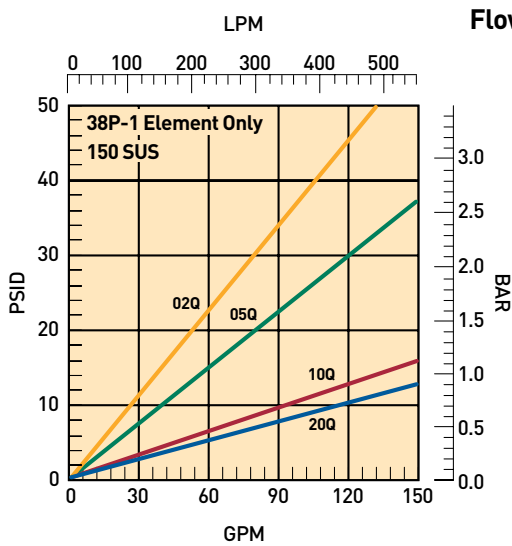
18/28/38P Series

38P Element Performance



Capacity (grams)

MODEL				
Media Code	38P-1 (50 psid)	38P-1 (98 psid)	38P-2 (50 psid)	38P-2 (98 psid)
02Q	63	74	94	111
05Q	70	78	98	105
10Q	60	67	94	101
20Q	53	60	93	100
02QH	48	57	69	87
05QH	55	61	76	88
10QH	50	56	72	80
20QH	49	54	72	78



Specifications: 18/28/38P Series

Pressure Ratings:

Maximum Allowable Operating Pressure (MAOP): 6000 psi (413.8 bar)
 Rated Fatigue Pressure: 6000 psi (413.8 bar)
 Design Safety Factor: 3:1

Operating Temperatures:

-30°F (-34°C) to 250°F (120°C)

Element Collapse Rating:

Standard: 300 psi (20.7 bar)
 High Collapse "H" option: 3000 psi (206.9 bar)

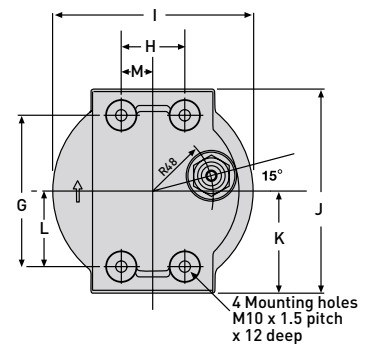
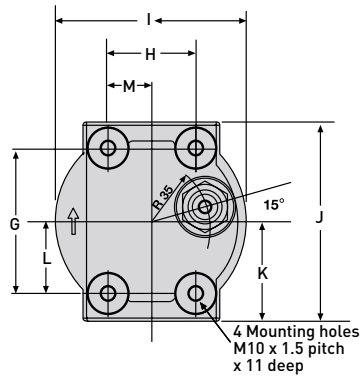
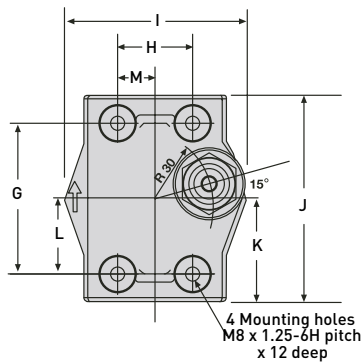
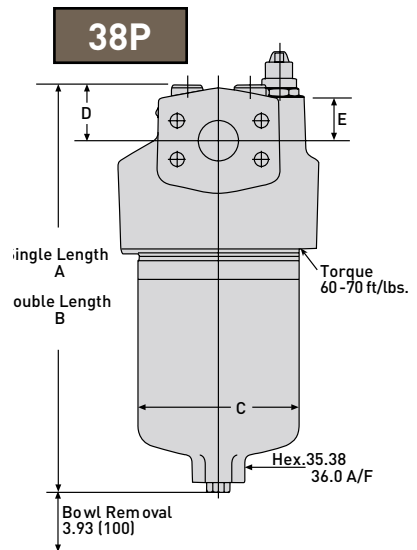
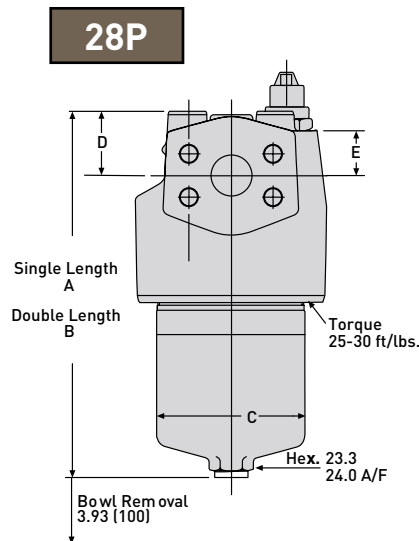
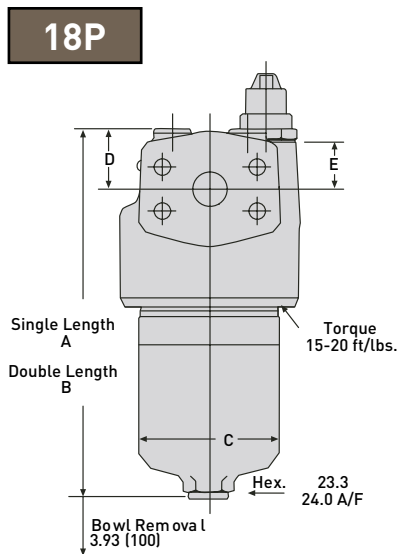
Materials:

Head: SG Iron
 Bowl: steel
 Indicator: stainless steel body, plastic connectors

Weights (approximate):

Model	Single length	Double length
18P	9.3 lbs. (4.2 kg)	12.6 lbs. (4.2 kg)
28P	14.8 lbs. (6.7 kg)	20.3 lbs. (9.2 kg)
38P	34.8 lbs. (15.8 kg)	44.8 lbs. (20.3 kg)

Dimensions are in (mm)	A	B	C	D	E	G	H	I	J	K	L	M
18P	7.79 (198)	11.53 (293)	2.95 (75)	1.26 (32)	102 (26)	3.15 (80)	1.57 (40)	3.86 (98)	4.33 (110)	2.17 (55)	1.57 (40)	.78 (20)
28P	9.29 (236)	13.58 (345)	3.66 (93)	1.57 (40)	1.14 (29)	3.54 (90)	2.17 (55)	4.72 (120)	4.88 (124)	2.44 (62)	1.77 (45)	1.08 (27.5)
38P	12.76 (324)	17.44 (443)	5.04 (128)	1.73 (44)	1.37 (35)	4.72 (120)	1.97 (50)	6.30 (160)	6.38 (162)	3.19 (81)	2.36 (60)	.98 (25)

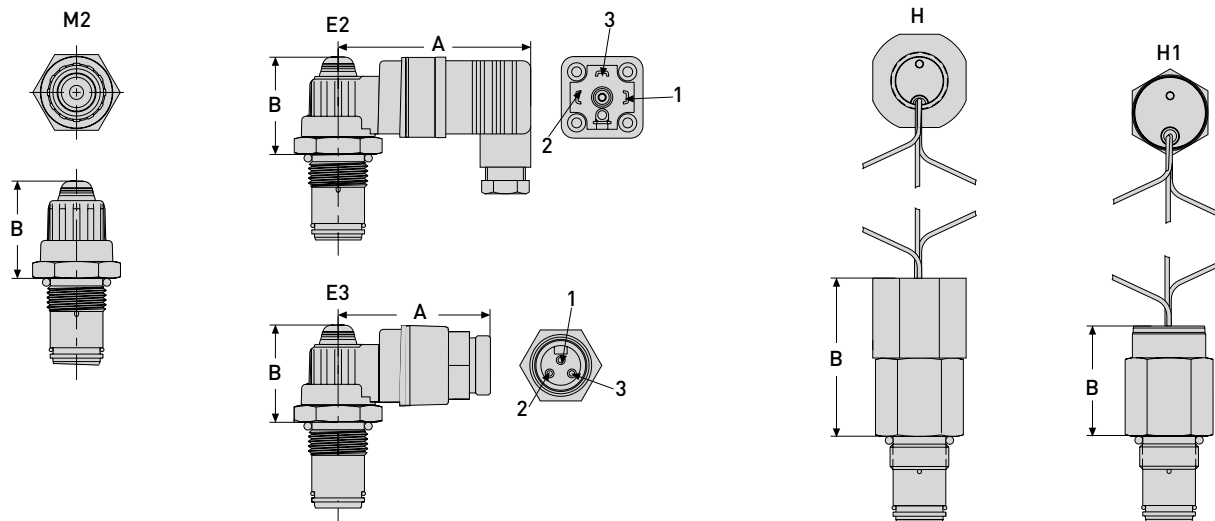


High Pressure Filters

18/28/38P Series

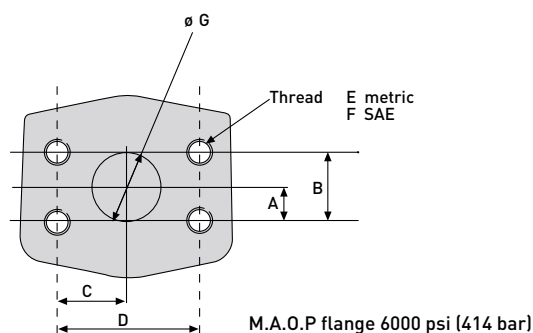
Specifications: 18P/28P/38P

Element Condition Indicators:



Option	Description	Connection/Power	Wiring	"A"	"B"
M2	Visual Auto Reset	N/A	N/A	N/A	1.44 (36.6)
E2	Electrical - Visual	Din 43650 3 Pole + Earth 5A@125/250 VAC, 3A@28VDC	Pin 1 - Common Pin 2 - Normally Closed Pin 3 - Normally Open	2.90 (73.7)	1.44 (36.6)
E3	Electrical - Visual	3 Pin ANSI/B93.55M 5A@125/250 VAC, 3A@28VDC	Pin 1 - Common Pin 2 - Normally Closed Pin 3 - Normally Open	2.32 (58.8)	1.44 (36.6)
H	Electrical - Heavy Duty	1/2" Conduit adapter w/24" leads .25A (resistive) Max 5 Watts 12 to 28 VDC & 110 to 175 VAC	Black - Normally Open Blue - Normally Closed White - Common	N/A	3.31 (84.1)
H1	Electrical - Heavy Duty	24" wire leads .25A (resistive) Max 5 Watts 12 to 28 VDC & 110 to 175 VAC	Black - Normally Open Blue - Normally Closed White - Common	N/A	2.58 (65.5)

Flange Face Details



Dimensions are in (mm)	A	B	C	D	E	F	G
18P	.47 (11.9)	.94 (23.8)	1.00 (25.4)	2.00 (50.8)	M10 x 1.5-6H x 18 DP	3/8-16 UNC-2B x 18 DP	.75 (19.0)
28P	.54 (13.9)	1.09 (27.8)	1.10 (28.0)	2.25 (57.1)	M10 x 1.75-6H x 20 DP	7/16-14 UNC-2B x 20 DP	1.00 (25.4)
38P	.62 (15.7)	1.25 (31.7)	1.30 (33.0)	2.63 (66.7)	M14 x 2-6H x 20 DP	1/2-13 UNC-2B x 20 DP	1.25 (31.8)

Element Service

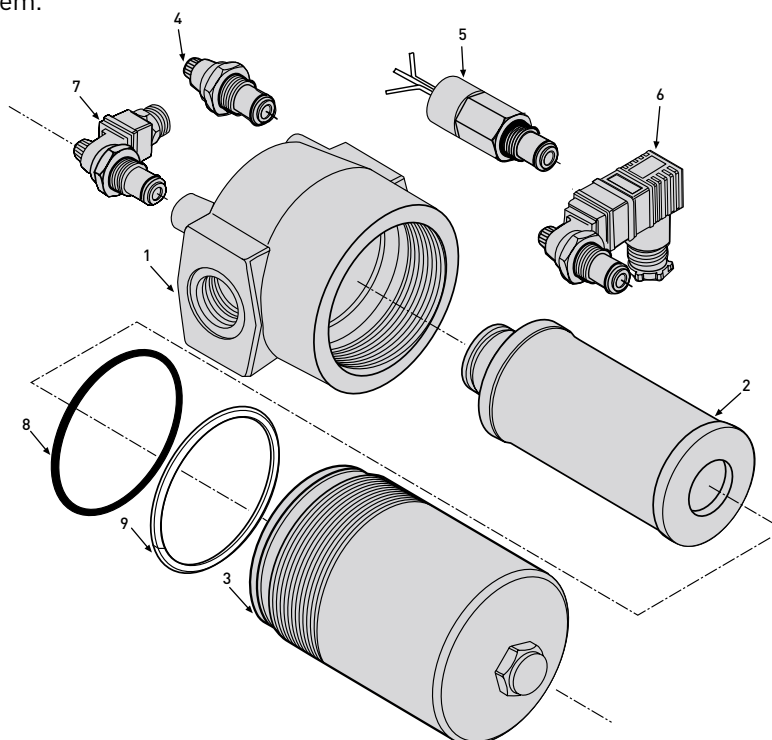
- A. Stop the system's power unit.
- B. Relieve any system pressure in the filter line.
- C. Drain the filter bowl if necessary.
- D. Loosen and remove bowl.
- E. Remove element by pulling downward with a slight twisting motion and discard.
- F. Discard used spiral back-up ring (white) and o-ring from filter bowl.
- G. Install new solid back-up ring (black). The top/bottom orientation is non-critical.
- H. Ensure the back-up ring is not twisted.
- I. Replace the bowl o-ring.
- J. Lubricate element o-ring with system fluid and place element on post in filter head.
- K. Lubricate bowl o-ring, install bowl and tighten to specified torque.
 - 18P - 15-20 ft. lbs.
 - 28P - 25-30 ft. lbs.
 - 38P - 60-70 ft. lbs.
- L. Confirm there are no leaks after powering the system.

Parts List

Index	Description	18P	28P	38P
1	Head Assembly	Consult Factory (See model code page)		
2	Element			
3	Bowl			
	Single length w/o drain	S04429	S04437	S04445
	Double length w/o drain	S04430	S04438	S04446*
Not Shown	Drain Plug (SAE-5)	—	—	927363
Not Shown	Drain Plug O-Ring			
	Nitrile	—	—	N93905
	Fluorocarbon	—	—	V93905
	Indicators			
Not Shown	P - Indicator plug kit,	933175	933175	933175
4	M2- Visual autoreset 50 psi	932026	932026	932026
	M2- Visual autoreset 98 psi	932027	932027	932027
5	H - Electrical w/conduit connection 50 psi	933130	933130	933130
	H - Electrical w/conduit connection 98 psi	933131	933131	933131
	H1- Electrical w/12" wire leads (50 psi)	933133	933133	933133
	H1- Electrical w/12" wire leads (98 psi)	933134	933134	933134
6	E2- Electrical/Visual w/ DIN connection (50 psi)	933145	933145	933145
	E2- Electrical/Visual w/ DIN connection (98 psi)	933146	933146	933146
7	E3- Electrical/Visual w/ 3-pin connection (50 psi)	934383	934383	934383
	E3- Electrical/Visual w/ 3-pin connection (98 psi)	934384	934384	934384
8	Bowl Seal	V92144	V92235	V92246
9	Bowl Anti-extrusion Ring	934798	934799	934800
	**Seal Kit- Nitrile	S04350	S04352	S04354
	**Seal Kit - Fluorocarbon	S04351	S04353	S04355

*Drain plug included

** (Includes bowl o-ring, bowl anti-extrusion ring, element o-ring and indicator o-rings.)



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HOW TO ORDER:

Select the desired symbol (in the correct position) to construct a model code.

Example:

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8
28P	2	10Q	V	M2	M	Y16	1

BOX 1: Filter Series	
Symbol	Description
18P	¾" nominal ports
28P	1" nominal ports
38P	1½" nominal ports

BOX 2: Element Length	
Symbol	Description
1	Single
1	Double

BOX 4: Media Code	
Symbol	Description
02Q	Microglass III, 2 micron
05Q	Microglass III, 5 micron
10Q	Microglass III, 10 micron
20Q	Microglass III, 20 micron

Note: For high collapse rated (2000 psid) elements, add "H" behind Q.

BOX 3: Seals	
Symbol	Description
B	Nitrile
E	EPR
V	Fluorocarbon

BOX 5: Indicator	
Symbol	Description
N	None
M2	Visual auto reset
H	Electrical indicator, w/conduit (no visual)
H1	Electrical/12" leads (no visual)
E2	Electrical/visual, DIN Connection
E3	Electrical/visual, 3-pin connection

BOX 6: Bypass	
Symbol	Description
K	50 PSI (3.5 bar) setting
M	98 PSI (7 bar) setting
X	No Bypass and no Indicator

BOX 7: Ports	
Symbol	Description
S12	18P SAE-12
M27	M27, ISO6149
Y12	¾" SAE flange face
S16	28P SAE-16
M33	M33, ISO6149
Y16	1" SAE flange face
S24	38P SAE-24
M48	M48, ISO6149
Y20	1¼" SAE flange face

BOX 8: Options	
Symbol	Description
1	With Bypass
11	No Bypass

Replacement Elements

Model	STANDARD COLLAPSE ELEMENTS				HIGH COLLAPSE ELEMENTS			
	02Q	05Q	10Q	20Q	02QH	05QH	10QH	20QH
18P-1	G04246	G04247	G04248	G04249	G04294	G04295	G04296	G04297
18P-2	G04254	G04255	G04256	G04257	G04302	G04303	G04304	G04305
28P-1	G04262	G04263	G04264	G04265	G04310	G04311	G04312	G04313
28P-2	G04270	G04271	G04272	G04273	G04318	G04319	G04320	G04321
38P-1	G04278	G04279	G04280	G04281	G04326	G04327	G04328	G04329
38P-2	G04286	G04287	G04288	G04289	G04334	G04335	G04336	G04337

Please note the bolded options reflect standard options with a reduced lead-time. Consult factory on all other lead-time options.



Global products as identified are offered worldwide through all Parker locations and utilize a common ordering code.