

# 18/28/38P Series

High Pressure Filters

Max 700 l/min - 414 bar



## The all-round high pressure filter solution

### Robust housing for heavy duty applications

The 18/28/38P Series features a range of head and bowl sizes and connection options. Microglass III glassfibre media is standard. Maximum pressure 414 bar. Maximum flow 700 l/min. A globally proven filter with optimized sizing for a wide range of industrial applications.



## Contact Information:

Parker Hannifin  
Hydraulic Filter Division Europe

European Product  
Information Centre  
Freephone: 00800 27 27 5374  
(from AT, BE, CH, CZ, DE, EE, ES,  
FI, FR, IE, IT, PT, SE, SK, UK)  
filtrationinfo@parker.com

[www.parker.com/hfde](http://www.parker.com/hfde)

## Product Features:

- Multiple bypass settings up to 7 bar.
- 18/28/38P features a range of head and bowl sizes and connection options.
- Microglass III glassfibre media is standard.
- Maximum pressure 414 bar. Maximum flow 700 l/min.
- A proven filter solution for 'heavy duty' hydraulic systems.



# 18/28/38P Series

## High Pressure Filters

### Features & Benefits

| Features   | Advantages  | Benefits   |
|--|---|--|
| Fatigue tested to full pressure rating                 | Strong and robust housing for heavy duty applications             | Reliable and continuous operation both in mobile and industrial applications |
| Several head sizes                                     | Optimised sizing  | Efficient filtration<br>Covers wide flow range                               |
| Several connection options                             | Easy mounting   | Global design, global acceptance<br>Right filter for each application        |
| Microglass III replacement elements                    | Multi-layered design produced high capacity and efficiency        | Great performance value<br>Reliable performance throughout element life      |
|  | Wire support reduces pleat bunching, keeps performance consistent | Reduces downtime, maximises element life                                     |
| Visual, electrical and electronic indicators available | Check element condition at a glance                               | Optimises element life, prevents bypassing                                   |
|  | Right style for the application                                   | Matches your system electrical connections                                   |

### Typical Applications

- Injection moulding
- Die casting
- Servo controls
- Machine tools
- Mobile equipment

### The Parker Filtration 18/28/38P Series High Pressure Filters

Parker Filtration 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 its accuracy and foolproof design to be a major advance in indicator technology.



## Specification

### Pressure ratings:

Maximum allowable operating pressure 414 bar.  
Filter housing pressure pulse fatigue tested: 10<sup>6</sup> pulses 0 - 414 bar.

### Connections:

Inlet and outlet connections are threaded internally or flange faced.

| Connection style   | Model | 28P | 38P            |
|--------------------|-------|-----|----------------|
| BSPF(G)            | 18P   | 1"  | 1 1/4", 1 1/2" |
| SAE                | 12    | 16  | 20, 24         |
| ISO 6149           | M27   | M33 | M42, M48       |
| Flange SAE 6000    | 3/4"  | 1"  | 1 1/4"         |
| Flange SAE 6000-M* | 3/4"  | 1"  | 1 1/4"         |

\*6000-M is a SAE style with appropriate metric fixing threads.

### Filter housing:

Head material cast iron (GSI).  
Bowl material steel.

### Seal material:

Nitrile or Fluoroelastomer.

### Operating temperature range:

Seal material Nitrile: -40 °C to +100 °C.  
Seal material Fluoroelastomer: -20 °C to +120 °C.

### Bypass valve & indicator settings:

Table below gives bypass valve and corresponding indicator setting.

| Bypass  | Indicator |
|---------|-----------|
| 3.5 bar | 2.5 bar   |
| 7.0 bar | 5.0 bar   |

### Filter element:

#### Degree of filtration:

Determined by multipass-test according to ISO 16889.

#### Flow fatigue characteristics:

Filter media is supported so that the optimal fatigue life is achieved (ISO 3724).

#### Microglass III:

Supported with epoxy coated metal wire mesh, end cap material reinforced composite and metal inner core. Collapse rating 20 bar (ISO 2941).

#### High collapse elements:

(To be used when no bypass function in filter housing).  
Microglass III media supported with epoxy coated metal wire mesh on upstream and stainless steel on downstream, end cap material steel. Strong metal inner core. Collapse rating 210 bar (ISO 2941).

#### Indicator options:

Indicating differential pressure: 2.5 ± 0.3 bar or 5.0 ± 0.5 bar.

- visual M3.
- electrical T1.
- electronic F1 (PNP).
- electronic F2 (NPN).

For indicator details see catalogue section 6.

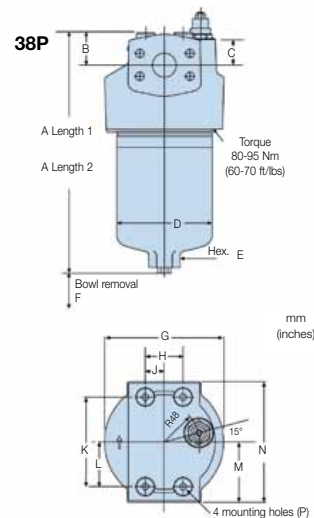
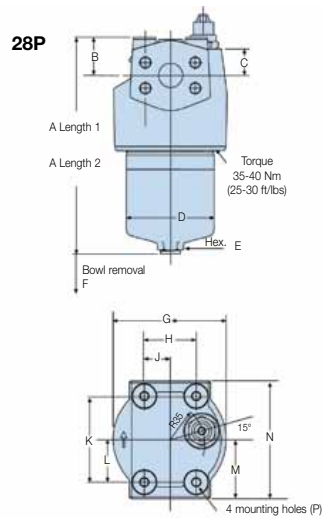
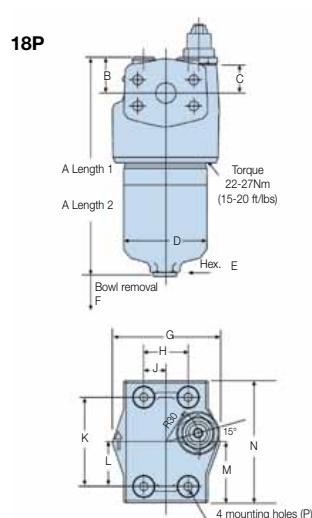
#### Weights (kg):

| Model | Length 1 | Length 2 |
|-------|----------|----------|
| 18P   | 4.2      | 5.7      |
| 28P   | 6.7      | 9.2      |
| 38P   | 15.8     | 20.3     |

#### Fluid compatibility:

Suitable for use with mineral and vegetable oils, and some synthetic oils.  
For other fluids, please consult Parker Filtration.

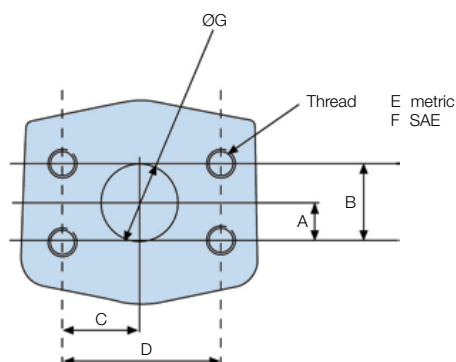
| Model        | A              | B            | C            | D             | E<br>(A/F)   | F             | G             | H            | J              | K             | L            | M            | N             | P                        |
|--------------|----------------|--------------|--------------|---------------|--------------|---------------|---------------|--------------|----------------|---------------|--------------|--------------|---------------|--------------------------|
| <b>18P-1</b> | 198<br>(7.79)  | 32<br>(1.26) | 26<br>(1.02) | 75<br>(2.95)  | 24<br>(0.94) | 100<br>(3.94) | 98<br>(3.86)  | 40<br>(1.57) | 20<br>(0.79)   | 80<br>(3.15)  | 40<br>(1.57) | 55<br>(2.16) | 110<br>(4.33) | M8 x 1.25<br>x12<br>deep |
| <b>18P-2</b> | 293<br>(11.53) |              |              |               |              |               |               |              |                |               |              |              |               |                          |
| <b>28P-1</b> | 228<br>(8.97)  | 40<br>(1.57) | 29<br>(1.14) | 93<br>(3.66)  | 24<br>(0.94) |               | 120<br>(4.72) | 55<br>(2.16) | 27.5<br>(1.07) | 90<br>(3.54)  | 45<br>(1.77) | 62<br>(2.44) | 124<br>(4.88) | M10 x 1.5<br>x11<br>deep |
| <b>28P-2</b> | 337<br>(13.26) |              |              |               |              |               |               |              |                |               |              |              |               |                          |
| <b>38P-1</b> | 329<br>(12.95) | 44<br>(1.73) | 35<br>(1.38) | 128<br>(5.04) | 36<br>(1.42) |               | 160<br>(6.30) | 50<br>(1.97) | 25<br>(0.98)   | 120<br>(4.72) | 60<br>(2.36) | 81<br>(3.19) | 162<br>(6.38) | M10 x 1.5<br>x12<br>deep |
| <b>38P-2</b> | 448<br>(17.64) |              |              |               |              |               |               |              |                |               |              |              |               |                          |



# 18/28/38P Series

## High Pressure Filters

### Flange Face Details



| Model<br>mm (inches) | A              | B              | C              | D              | E                       | F                        | G              |
|----------------------|----------------|----------------|----------------|----------------|-------------------------|--------------------------|----------------|
| <b>18P (3/4")</b>    | 11.9<br>(0.47) | 23.8<br>(0.94) | 25.4<br>(1.00) | 50.8<br>(2.0)  | M10 x 1.5-6H x 18 Deep  | 3/8-16 UNC-2B x 18 deep  | 19.0<br>(0.75) |
| <b>28P (1")</b>      | 14<br>(0.55)   | 27.8<br>(1.09) | 28.0<br>(1.10) | 57.1<br>(2.25) | M12 x 1.75-6H x 20 Deep | 7/16-14 UNC-2B x 20 deep | 25.4<br>(1.0)  |
| <b>38P (1 1/4")</b>  | 15.7<br>(0.62) | 31.7<br>(1.25) | 33.0<br>(1.30) | 66.7<br>(2.62) | M14 x 2-6H x 20 Deep    | 1/2-13 UNC-2B x 20 deep  | 31.8<br>(1.25) |

## Pressure Drop Curves

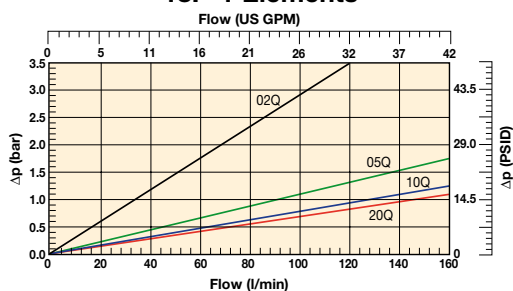
With 3.5 bar bypass the recommended initial pressure drop is max 1.2 bar.

With 7.0 bar bypass the recommended initial pressure drop is max 2.3 bar.

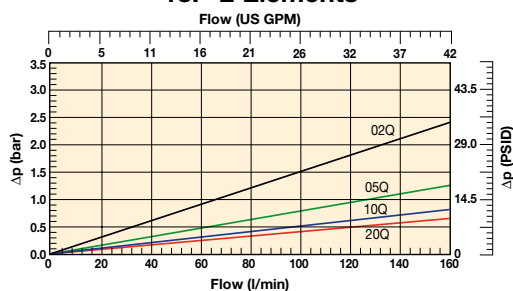
If the medium used has a viscosity different from 30 cSt, pressure drop over the filter can be estimated as follows:

The total  $\Delta p$  = housing  $\Delta p_h$  + (element  $\Delta p_e \times \text{working viscosity}/30$ ).

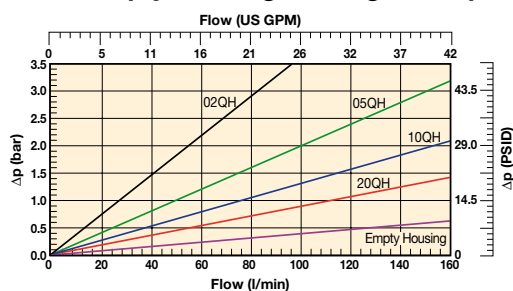
### 18P-1 Elements



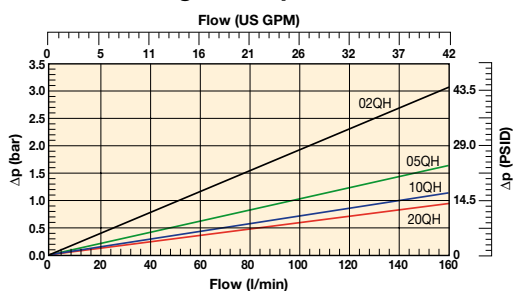
### 18P-2 Elements



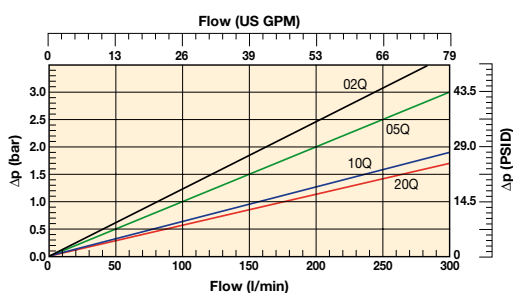
### 18P-1 Empty Housing and High Collapse



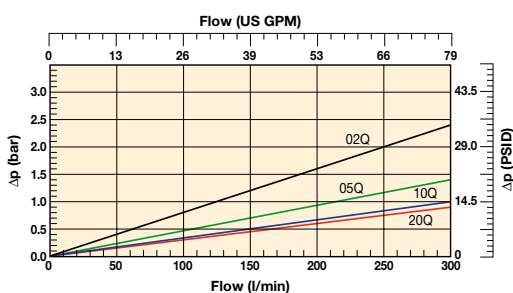
### 18P-2 High Collapse Elements



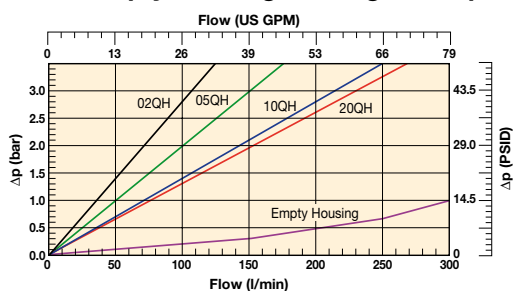
### 28P-1 Elements



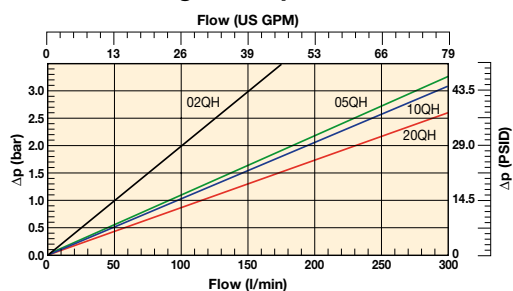
### 28P-2 Elements



### 28P-1 Empty Housing and High Collapse



### 28P-2 High Collapse Elements

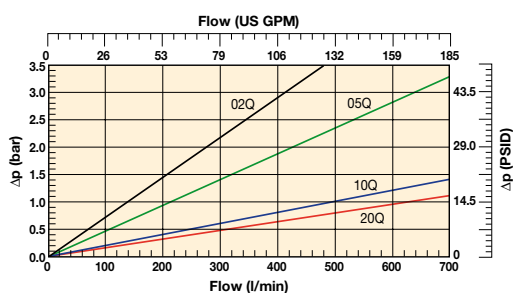


# 18/28/38P Series

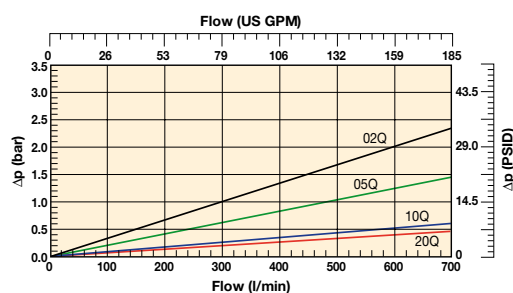
## High Pressure Filters

### Pressure Drop Curves (cont.)

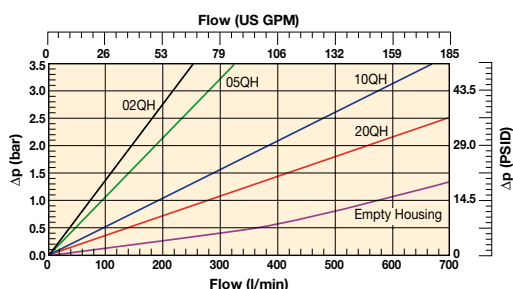
#### 38P-1 Elements



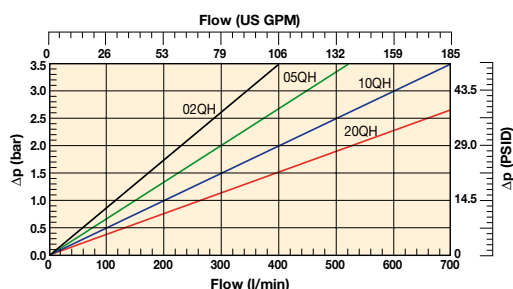
#### 38P-2 Elements



#### 38P-1 Empty Housing and High Collapse



#### 38P-2 High Collapse Elements



### Element Service

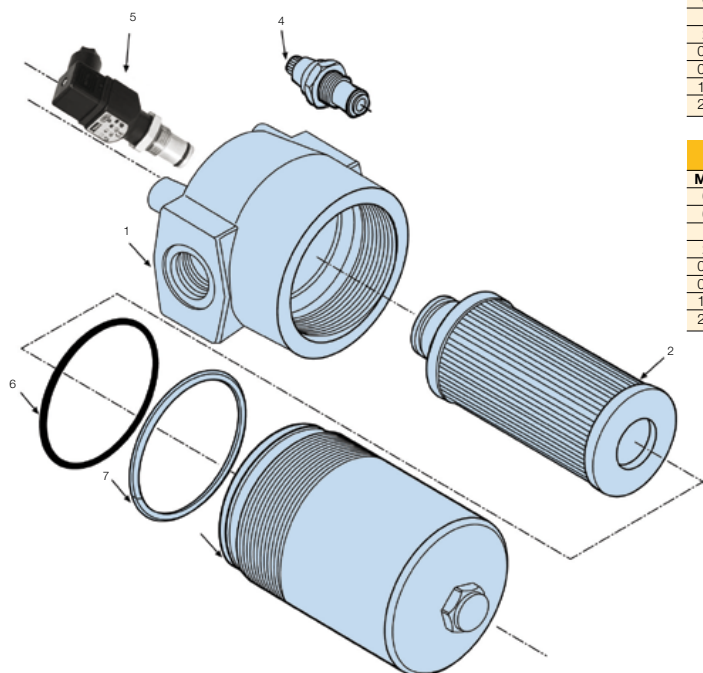
- A. Stop the system's power unit.
- B. Relieve any system pressure in the filter line.
- C. Drain the filter bowl if drain port option is provided.
- D. Rotate the bowl clockwise (left) and remove.
- E. Remove element by pulling downward with a slight twisting motion and discard.
- F. Check bowl o-ring and anti-extrusion ring for damage and replace if necessary.
- G. Lubricate element o-ring with system fluid and locate element in filter head.
- H. Install bowl by rotating counter-clockwise (right) and tighten to specified torque.
  - 18P - 22-27 Nm (16-20 ft. lbs.)
  - 28P - 35-40 Nm (25-30 ft. lbs.)
  - 38P - 80-95 Nm (60-70 ft. lbs.)
- I. Confirm there are no leaks after powering the system.

### Parts List

| Index | Description                                       | Part number            |
|-------|---|------------------------|
| 1     | <b>Head Assembly</b>                              |                        |
| 2     | <b>Element</b>                                    | see table on next page |
| 3     | <b>Bowl</b>                                       |                        |
|       | <b>Indicators</b>                                 |                        |
| 4     | M3 – Visual auto reset; 2.5 bar                   | FMUM3KVMU14H           |
|       | M3 – Visual auto reset; 5.0 bar                   | FMUM3MVMU14H           |
| 5     | T1 – Electrical; 2.5 bar with DIN 43650 Connector | FMUT1KVMU14H           |
|       | T1 – Electrical; 5.0 bar with DIN 43650 Connector | FMUT1MVMU14H           |
|       | F1 – Electronic PNP; 2.5 bar with 4 LED           | FMUF1KVMU14H           |
|       | F2 – Electronic NPN; 2.5 bar with 4 LED           | FMUF2KVMU14H           |
|       | F1 – Electronic PNP; 5.0 bar with 4 LED           | FMUF1MVMU14H           |
|       | F2 – Electronic NPN; 5.0 bar with 4 LED           | FMUF2MVMU14H           |
| 6     | <b>Bowl Seal</b>                                  |                        |
| 7     | <b>Bowl Anti-extrusion Ring</b>                   |                        |
|       | <b>Seal Kits</b>                                  |                        |
|       | Seal kit 18P (std) – Nitrile                      | S04350                 |
|       | Seal kit 18P (F3) – Fluoroelastomer               | S04351                 |
|       | Seal kit 28P (std) – Nitrile                      | S04352                 |
|       | Seal kit 28P (F3) – Fluoroelastomer               | S04353                 |
|       | Seal kit 38P (std) – Nitrile                      | S04354                 |
|       | Seal Kit 38P (F3) – Fluoroelastomer               | S04355                 |



## Element Service (cont.)



### Replacement element part numbers

| Elements with Nitrile seals |        |        |        |        |        |        |
|-----------------------------|--------|--------|--------|--------|--------|--------|
| Model                       | 18P-1  | 18P-2  | 28P-1  | 28P-2  | 38P-1  | 38P-2  |
| 02Q                         | G04242 | G04250 | G04258 | G04266 | G04274 | G04282 |
| 05Q                         | G04243 | G04251 | G04259 | G04267 | G04275 | G04283 |
| 10Q                         | G04244 | G04252 | G04260 | G04268 | G04276 | G04284 |
| 20Q                         | G04245 | G04253 | G04261 | G04269 | G04277 | G04285 |
| 02QH                        | G04290 | G04298 | G04306 | G04314 | G04322 | G04330 |
| 05QH                        | G04291 | G04299 | G04307 | G04315 | G04323 | G04331 |
| 10QH                        | G04292 | G04300 | G04308 | G04316 | G04324 | G04332 |
| 20QH                        | G04293 | G04301 | G04309 | G04317 | G04325 | G04333 |

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

## Ordering Information

### Standard products table

| Part number     | Supersedes              | Flow (l/min) | Model number | Element length | Media rating (μ) | Seals   | Indicator  | Bypass settings | Ports              | Replacement elements |
|-----------------|-------------------------|--------------|--------------|----------------|------------------|---------|------------|-----------------|--------------------|----------------------|
| 18P110QBT1MG121 | 18P-1-10Q-TW6-98-B2B2-1 | 80           | 18P          | Length 1       | 10               | Nitrile | Electrical | 7.0 bar         | G $\frac{1}{2}$ "  | G04244               |
| 18P110QBM3MG121 | 18P-1-10Q-M2-98-B2B2-1  | 80           | 18P          | Length 1       | 10               | Nitrile | Visual     | 7.0 bar         | G $\frac{1}{2}$ "  | G04244               |
| 18P120QBT1MG121 | 18P-1-20Q-TW6-98-B2B2-1 | 100          | 18P          | Length 1       | 20               | Nitrile | Electrical | 7.0 bar         | G $\frac{3}{4}$ "  | G04245               |
| 18P120QBM3MG121 | 18P-1-20Q-M2-98-B2B2-1  | 100          | 18P          | Length 1       | 20               | Nitrile | Visual     | 7.0 bar         | G $\frac{3}{4}$ "  | G04245               |
| 18P210QBT1MG121 | 18P-2-10Q-TW6-98-B2B2-1 | 130          | 18P          | Length 2       | 10               | Nitrile | Electrical | 7.0 bar         | G $\frac{1}{2}$ "  | G04252               |
| 18P210QBM3MG121 | 18P-2-10Q-M2-98-B2B2-1  | 130          | 18P          | Length 2       | 10               | Nitrile | Visual     | 7.0 bar         | G $\frac{1}{2}$ "  | G04252               |
| 18P220QBT1MG121 | 18P-2-20Q-TW6-98-B2B2-1 | 150          | 18P          | Length 2       | 20               | Nitrile | Electrical | 7.0 bar         | G $\frac{3}{4}$ "  | G04253               |
| 18P220QBM3MG121 | 18P-2-20Q-M2-98-B2B2-1  | 150          | 18P          | Length 2       | 20               | Nitrile | Visual     | 7.0 bar         | G $\frac{3}{4}$ "  | G04253               |
| 28P110QBT1MG161 | 28P-1-10Q-TW6-98-C2C2-1 | 120          | 28P          | Length 1       | 10               | Nitrile | Electrical | 7.0 bar         | G1"                | G04260               |
| 28P110QBM3MG161 | 28P-1-10Q-M2-98-C2C2-1  | 120          | 28P          | Length 1       | 10               | Nitrile | Visual     | 7.0 bar         | G1"                | G04260               |
| 28P120QBT1MG161 | 28P-1-20Q-TW6-98-C2C2-1 | 150          | 28P          | Length 1       | 20               | Nitrile | Electrical | 7.0 bar         | G1"                | G04261               |
| 28P120QBM3MG161 | 28P-1-20Q-M2-98-C2C2-1  | 150          | 28P          | Length 1       | 20               | Nitrile | Visual     | 7.0 bar         | G1"                | G04261               |
| 28P210QBT1MG161 | 28P-2-10Q-TW6-98-C2C2-1 | 250          | 28P          | Length 2       | 10               | Nitrile | Electrical | 7.0 bar         | G1"                | G04268               |
| 28P210QBM3MG161 | 28P-2-10Q-M2-98-C2C2-1  | 250          | 28P          | Length 2       | 10               | Nitrile | Visual     | 7.0 bar         | G1"                | G04268               |
| 38P110QBT1MG201 | 38P-1-10Q-TW6-98-D2D2-1 | 340          | 38P          | Length 1       | 10               | Nitrile | Electrical | 7.0 bar         | G1 $\frac{1}{2}$ " | G04276               |
| 38P110QBM3MG201 | 38P-1-10Q-M2-98-D2D2-1  | 340          | 38P          | Length 1       | 10               | Nitrile | Visual     | 7.0 bar         | G1 $\frac{1}{2}$ " | G04276               |
| 38P120QBT1MG201 | 38P-1-20Q-TW6-98-D2D2-1 | 420          | 38P          | Length 1       | 20               | Nitrile | Electrical | 7.0 bar         | G1 $\frac{1}{2}$ " | G04277               |
| 38P120QBM3MG201 | 38P-1-20Q-M2-98-D2D2-1  | 420          | 38P          | Length 1       | 20               | Nitrile | Visual     | 7.0 bar         | G1 $\frac{1}{2}$ " | G04277               |
| 38P210QBT1MG201 | 38P-2-10Q-TW6-98-D2D2-1 | 560          | 38P          | Length 2       | 10               | Nitrile | Electrical | 7.0 bar         | G1 $\frac{1}{2}$ " | G04284               |
| 38P210QBM3MG201 | 38P-2-10Q-M2-98-D2D2-1  | 560          | 38P          | Length 2       | 10               | Nitrile | Visual     | 7.0 bar         | G1 $\frac{1}{2}$ " | G04284               |
| 38P220QBT1MG201 | 38P-2-20Q-TW6-98-D2D2-1 | 700          | 38P          | Length 2       | 20               | Nitrile | Electrical | 7.0 bar         | G1 $\frac{1}{2}$ " | G04285               |
| 38P220QBM3MG201 | 38P-2-20Q-M2-98-D2D2-1  | 700          | 38P          | Length 2       | 20               | Nitrile | Visual     | 7.0 bar         | G1 $\frac{1}{2}$ " | G04285               |

Note: Filter assemblies ordered from the product configurator on the next page are on extended lead times. Where possible, please make your selection from the table above.



# 18/28/38P Series

## High Pressure Filters

### Ordering Information (cont.)

#### Product configurator

|            |          |            |          |           |          |            |          |
|------------|----------|------------|----------|-----------|----------|------------|----------|
| Box 1      | Box 2    | Box 3      | Box 4    | Box 5     | Box 6    | Box 7      | Box 8    |
| <b>38P</b> | <b>1</b> | <b>10Q</b> | <b>B</b> | <b>M3</b> | <b>M</b> | <b>G20</b> | <b>1</b> |

#### Box 1

| Code                                     |            |
|--|------------|
| Model                                    | Code       |
| Small size high pressure filter, T-port  | <b>18P</b> |
| Medium size high pressure filter, T-port | <b>28P</b> |
| Large size high pressure filter, T-port  | <b>38P</b> |

#### Highlights Key (Denotes part number availability)

|            |                               |
|------------|-------------------------------|
| <b>123</b> | Item is standard              |
| <b>123</b> | Item is standard green option |
| <b>123</b> | Item is semi standard         |
| 123        | Item is non standard          |

#### Box 2

| Filter type |          |
|-------------|----------|
| Length      | Code     |
| Length 1    | <b>1</b> |
| Length 2    | <b>2</b> |

#### Box 3

| Degree of filtration   |             |             |             |             |
|------------------------|-------------|-------------|-------------|-------------|
| Element media          | Glass fibre |             |             |             |
|                        | Media code  |             |             |             |
| Microglass III element | <b>02Q</b>  | <b>05Q</b>  | <b>10Q</b>  | <b>20Q</b>  |
| High collapse element  | <b>02QH</b> | <b>05QH</b> | <b>10QH</b> | <b>20QH</b> |

#### Box 4

| Seal type       |          |
|-----------------|----------|
| Seal material   | Code     |
| Nitrile         | <b>B</b> |
| Fluoroelastomer | V        |

#### Box 5

| Indicator                   |           |
|-----------------------------|-----------|
| No indicator port           | <b>N</b>  |
| Visual indicator            | <b>M3</b> |
| Electrical indicator        | <b>T1</b> |
| Plugged with steel plug     | P         |
| Electronic 4 LED, PNP, N.O. | F1        |
| Electronic 4 LED, NPN, N.O. | F2        |
| Electronic 4 LED, PNP, N.C. | F3        |
| Electronic 4 LED, NPN, N.C. | F4        |

#### Box 6

| Bypass and indicator settings |              |          |
|-------------------------------|--------------|----------|
| Bypass valve                  | Indicator    | Code     |
| 3.5 bar                       | 2.5 bar      | <b>K</b> |
| 7.0 bar                       | 5.0 bar      | <b>M</b> |
| No bypass                     | 5.0 bar      | <b>M</b> |
| No bypass                     | No indicator | <b>X</b> |

+ Box 8: code 2  
+ Box 8: code 2

When filter includes a bypass valve but not an indicator, code denotes bypass setting.

#### Box 7

| Filter connection        |            |
|--------------------------|------------|
| Ports                    | Code       |
| 18P: Thread G 3/4        | <b>G12</b> |
| Thread SAE 12            | S12        |
| Thread M27, ISO 6149     | M27        |
| SAE flange 1/2" 6000-M   | H12        |
| SAE flange 3/4" 6000     | F12        |
| 28P: Thread G 1          | <b>G16</b> |
| Thread SAE 16            | S16        |
| Thread M33, ISO 6149     | M33        |
| SAE flange 1" 6000-M     | H16        |
| SAE flange 1" 6000       | F16        |
| 38P: Thread G 1 1/4      | <b>G20</b> |
| Thread G 1 1/2           | <b>G24</b> |
| Thread SAE 20            | S20        |
| Thread SAE 24            | S24        |
| Thread M42, ISO 6149     | M42        |
| Thread M48, ISO 6149     | M48        |
| SAE flange 1 1/2" 6000-M | <b>H20</b> |
| SAE flange 1 1/4" 6000   | F20        |

#### Box 8

| Options                                |          |
|--|----------|
| Options                                | Code     |
| Standard                               | <b>1</b> |
| No bypass                              | <b>2</b> |
| ATEX certified*                        | EX       |
| (Category 2, non-electrical equipment) |          |

Note 1\*: For ATEX classified filters add EX after the code. ATEX certified filters with electrical indicator are available on request. Visual indicators are classified as Category 2, non electrical equipment. Filter assemblies with EX code will be supplied with a dedicated name plate. Pls consult Parker Filtration for any questions related to the classification of our products.

#### Nominal flow (l/min) at viscosity 30 cSt

| Filter model | 02Q | 05Q | 10Q | 20Q |
|--------------|-----|-----|-----|-----|
| 18P-1        | 35  | 60  | 80  | 100 |
| 18P-2        | 70  | 110 | 130 | 150 |
| 28P-1        | 80  | 100 | 120 | 150 |
| 28P-2        | 140 | 200 | 250 | 300 |
| 38P-1        | 140 | 220 | 340 | 420 |
| 38P-2        | 320 | 440 | 560 | 700 |

#### 18/28/38P Series Seal Kits

| Part Number   | Description                  |
|---------------|------------------------------|
| <b>S04350</b> | NITRILE SEAL KIT 18P         |
| <b>S04351</b> | FLUOROELASTOMER SEAL KIT 18P |
| <b>S04352</b> | NITRILE SEAL KIT 28P         |
| <b>S04353</b> | FLUOROELASTOMER SEAL KIT 28P |
| <b>S04354</b> | NITRILE SEAL KIT 38P         |
| <b>S04355</b> | FLUOROELASTOMER SEAL KIT 38P |

| Degree of filtration  |                 |                 |                  |                  |                   | Code                         |
|---|-----------------|-----------------|------------------|------------------|-------------------|------------------------------|
| Average filtration beta ratio $\beta$ (ISO 16889) / particle size $\mu\text{m}$ [c] |                 |                 |                  |                  |                   |                              |
| $\beta_x(c)=2$  | $\beta_x(c)=10$ | $\beta_x(c)=75$ | $\beta_x(c)=100$ | $\beta_x(c)=200$ | $\beta_x(c)=1000$ |                              |
| % efficiency, based on the above beta ratio ( $\beta_x$ )                           |                 |                 |                  |                  |                   | Disposable<br>Microglass III |
| <b>50.0%</b>  | <b>90.0%</b>    | <b>98.7%</b>    | <b>99.0%</b>     | <b>99.5%</b>     | <b>99.9%</b>      |                              |
| N/A   | N/A             | N/A             | N/A              | N/A              | 4.5               | <b>02Q</b>                   |
| N/A   | N/A             | 4.5             | 5                | 6                | 7                 | <b>05Q</b>                   |
| N/A   | 6               | 8.5             | 9                | 10               | 12                | <b>10Q</b>                   |
| 6   | 11              | 17              | 18               | 20               | 22                | <b>20Q</b>                   |
|   |                 |                 |                  |                  |                   | High collapse<br>element     |
|   |                 |                 |                  |                  |                   | <b>02QH</b>                  |
|   |                 |                 |                  |                  |                   | <b>05QH</b>                  |
|   |                 |                 |                  |                  |                   | <b>10QH</b>                  |
|   |                 |                 |                  |                  |                   | <b>20QH</b>                  |

Note 1: Part numbers featured with bold highlighted codes will ensure a 'standard' product selection.

Note 2: Alternate displayed part number selection will require you to contact Parker Filtration for availability.

