# 272/372 Series

Reverse Flow Pressure Filters

# Reverse Flow Pressure Filters

272/372 Series

## Features/Applications for High Pressure Hydraulic Filters 272 Series

- Pressures to 6,000 PSI
- Flows to 65 GPM
- Microglass Elements - 3 to 20 Micron Absolute
- Disposable or Recleanable Elements
- Reverse Flow

## Specifications

### High Prssure Hydraulic Filters - 200 Series

**Flow Rating:** 65 GPM

**Pressure Rating:**

| | |
|---|---|
| Operating Pressure (Maximum) | 6000 PSI |
| Proof Pressure | 9000 PSI |
| Burst Pressure | 12000 PSI |
| Fatique Pressure (Maximum) | 0-4000-0 PSI @3,000,000 Cycles |

**Fluid Temperature:** -40°F to +212°F

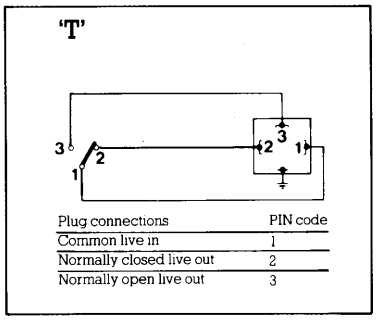
**Construction:**

| | |
|---|---|
| Head | Nodular Iron |
| Bowl | Extruded Steel |
| Indicators | Consult Factory |
| Elements | Consult Factory |

**Weight:**

| | S.A.E. or Flange Ports | Manifold Ports |
|---|---|---|
| Length 1 | 20 Lbs. | 24 Lbs. |
| Length 2 | 22 Lbs. | 26 Lbs. |

**Wiring Diagrams:**




| Plug connections | PIN code |
|---|---|
| Common live in | 1 |
| Normally closed live out | 2 |
| Normally open live out | 3 |

**Electrical Ratings:**

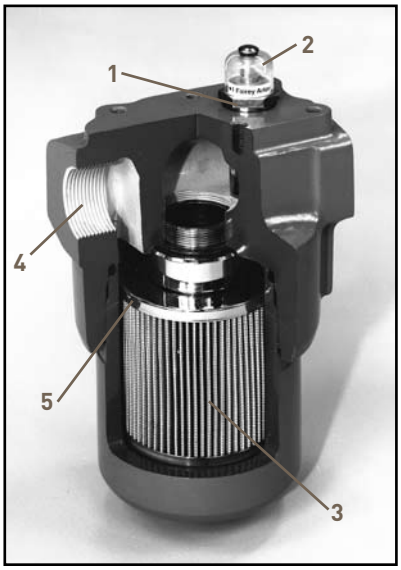
Hirschman Connector without Lamps:

**T** - 250 or 110 VAC or 28 VDC Max.



**Parker Hannifin Corporation**
Hydraulic Filter Division
Metamora, OH

## High Performance New Generation 272 Series Filters




A rugged modular design for applications to 6000 PSI and 65 GPM. Parker's high pressure filters are specified worldwide for industrial, mobile, marine and mining applications.

Parker's high pressure filters are the finest you can buy. Here is why:

**TruTell combined bypass valve and indicator.**

1. High performance, low hysteresis bypass valve assures quick return to the closed position following cold starts or other short-term bypass conditions. Result: the best filter performance and protection for your system. The location of the bypass valve is 90° to the flow stream, which prevents unwanted valve operation and helps cushion the effect of system shocks (when compared with in-line valve location).
2. The bypass condition is indicated by the appearance of a red band under the transparent dome. The indicator has 360° visibility for easy viewing. Several other indicator options are shown below.

**Microglass Media Offering**

3. Microglass III represents a leap forward in the performance obtainable in hydraulic and lube filter elements. The unique multi-layer design combines high efficiencies with exceptional dirt holding capacities for performance that is unequalled in the industry today. With Microglass III, you do not have to make a compromise between efficiency and capacity; you can have both.

**Other Features**

4. Port options include SAE straight thread, SAE 3000 or 6000 PSI flanges or manifold mount.
5. Bowl-into-head assembly provides positive sealing and easier servicing.
6. A rugged, low pressure drop reverse flow valve is available.
7. For complete information, see design features section.

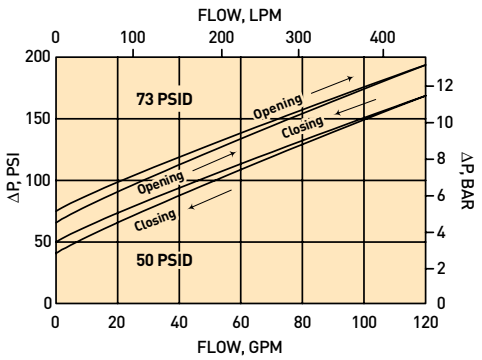

(A) 272 Series length 2
(B) 272 Series length 2 manifold mounting
(C) 272 Series length 1 with visual latching indicator
(D) 272 Series length 1 with dual electrical and visual indicators

## TrueTell Bypass Valve/Clogging Indicator

Over 30 years of testing valves of different configurations led to the combined TruTell bypass valve and indicator. This design produces the best all around characteristics for stability, low hysteresis, minimal leakage and reliability.

**A bypass valve that closes quickly and completely is important because a filter in bypass offers no system protection, especially from large particles that can cause catastrophic failure.**

The TruTell bypass valve and indicator assembly is a precision machined design from which hysteresis effects have been virtually eliminated. See curve.







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Metamora, OH

# Reverse Flow Pressure Filters

## 272/372 Series

**Point 1**
Competitive bypass valve designs with significantly different areas between the open and closed position or high friction sliding seals have high hysteresis. As a result these bypass valves do not close as quickly as they should and a large percentage of the fluid continues to bypass the filter element completely after a cold start up (usually anything below 68°F).

**Point 2**
Most competitive bypass valves dramatically limits filter assembly performance even with a good element in the filter housing.The TruTell design forces as much fluid as possible through the element even when partially open.

**Point 3**
The TruTell bypass valve location is very important. Our valve and indicator combination is situated near the outlet port at right angles to the flow path. In this position it monitors only element differential pressure. Undesirable leakage and premature bypass associated with in line valve locations are eliminated. This location also helps cushion the effect of system shocks that pass through in-line bypass valves virtually unaffected.

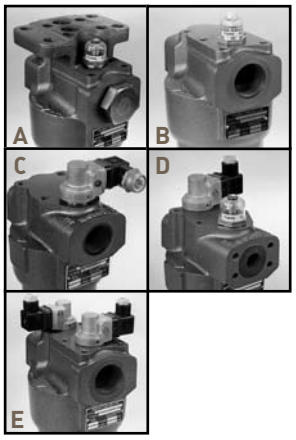
**Point 4**
Our TruTell Bypass valve is magnetically coupled to the indicator. This assures no false warning that element bypass will ever occur. If the indicator actuates, an impending or bypass condition exists period. Unless the indicator is coupled to the bypass valve, it is impossible to accurately indicate bypass valve position under all operating conditions.

**Point 5**
Parker offers the widest selection of indicator types in the industry.

Visual types include:
A. A 360° visibility non-latching type
B. A 360° visibility latching type (For remote locations or flow on demand systems, or where systems must be shut down to inspect the filter.)

Electrical indicators include:
C. Visual electrical
D. Electrical and Visual
E. Dual electrical

For electrical indicator connector options see Box 4 on page 126.




## Microglass Media High Performance

### Multi-Pass Test Results to ISO 4572 (Time Weighted Average)

| Filter Type | | Media | Code | Filtration Rating | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $\beta_x$>200 | $\beta_3$ | $\beta_6$ | $\beta_{10}$ | $\beta_{12}$ | $\beta_{20}$ | $\beta_{25}$ |
| 5 | 300psi High Collapse | 02QX | FF | 3 | ≥200<br>99.5 | >1000<br>99.9 | >3000<br>99.97 | >5000<br>99.98 | INF | INF |
| | | 10QX | 10 | 15 | 3<br>66.66 | 12<br>91.66 | 50<br>98.0 | 75<br>98.67 | >2000<br>99.95 | >5000<br>99.98 |
| **Filter Type** | | **Media** | **Code** | **Filtration Rating** | | | | | | |
| | | | | **$\beta_x$>200** | $\beta_3$ | $\beta_6$ | $\beta_{10}$ | $\beta_{12}$ | $\beta_{20}$ | $\beta_{25}$ |
| 7 | 290psi Collapse | GDH3 | 20 | 3 | ≥100<br>99.0 | >300<br>99.67 | >1500<br>99.93 | >2000<br>99.95 | >5000<br>99.98 | INF |
| | | GDH6 | 21 | 6 | 12<br>91.7 | ≥100<br>99.0 | >1000<br>99.9 | >2000<br>99.95 | >5000<br>99.98 | INF |
| | | GDH10 | 22 | 10 | 8<br>87.5 | 22<br>95.4 | 100<br>99.0 | ≥200<br>99.5 | >5000<br>99.98 | INF |
| | | GDH20 | 23 | 20 | - | 2<br>50.0 | 8<br>87.5 | 20<br>95.0 | ≥100<br>99.0 | ≥200<br>99.5 |

Element efficiency in percent
Element Beta ratio $B_x$



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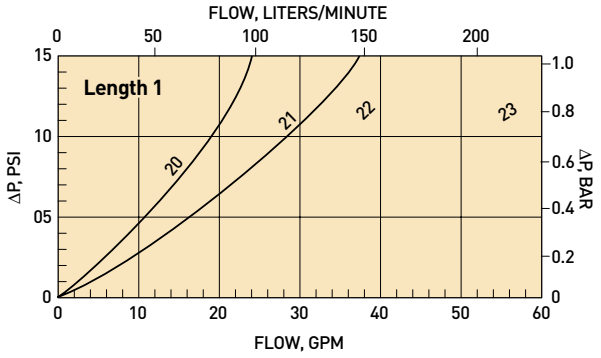
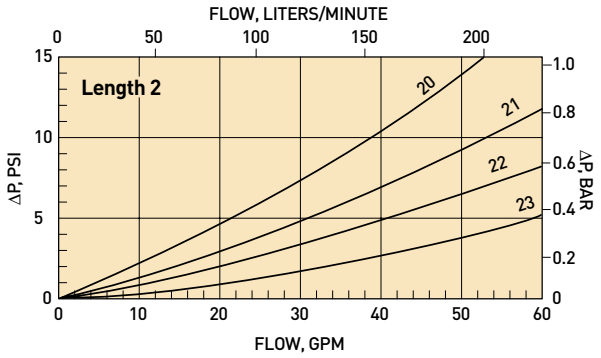
Metamora, OH

## Flow/Pressure Drop Curves

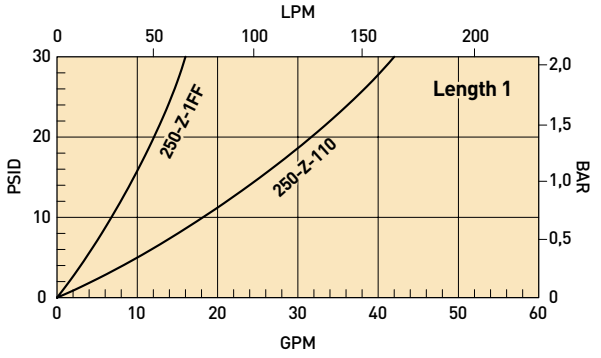
**Disposable Elements - 272 Series**

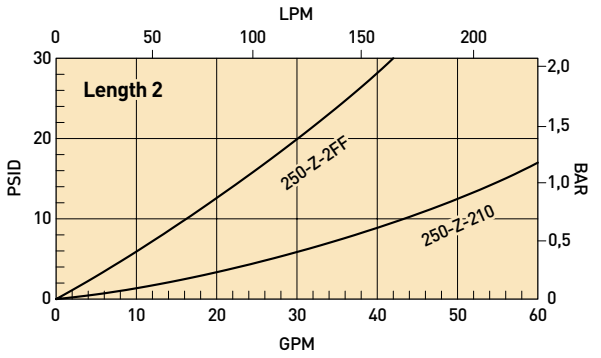
**For Bypass Equipped Housings (290 psid min. collapse)**




**For Non-bypass Housings (3000 psid min. collapse)**




**Fluid Conditions:** Viscosity 140 SSU (30 cSt) and SP. Gr. 0.88

**Note:** Element ΔP is directly proportional to viscosity.

## Find Filter Assembly Pressure Drop

Filter assembly ΔP is equal to the sum of element and housing pressure drops taken from the appropriate curves and adjusted for operating viscosity and specific gravity.

**Example:**

**Filer Model:** 272A-BV50-JZ222

**Flow:** 50 GPM

**Viscosity:** 225 SSU, Sp. Gr.: 1.0

**Step 1.** **Correct element ΔP for viscosity.**
Element ΔP = 6 psi x 225SSU/140SSU = 9.6psi

**Step 2.** **Correct housing ΔP for specific gravity.**
Housing ΔP = 15 psi x 1.0/0.88 = 17.0 psi

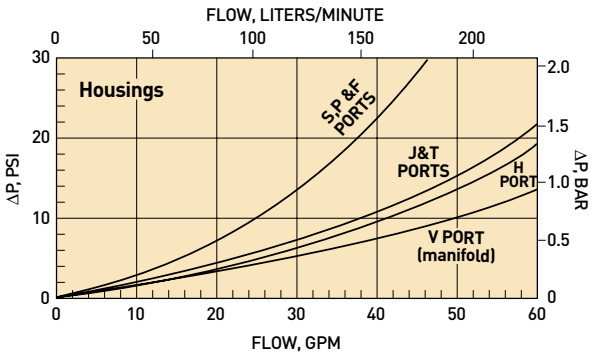
**Step 3.** **Correct reverse flow**

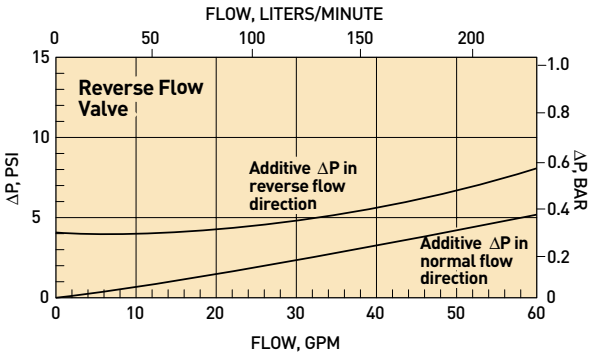
Valve ΔP for specific gravity

RFV ΔP = 4 psi x 1.0/0.88 = 4.5 psi

**Step 4.** **Calculate assembly**
**ΔP = 9.6 psi + 17.0 psi + 4.5 psi = 31.1 psi**

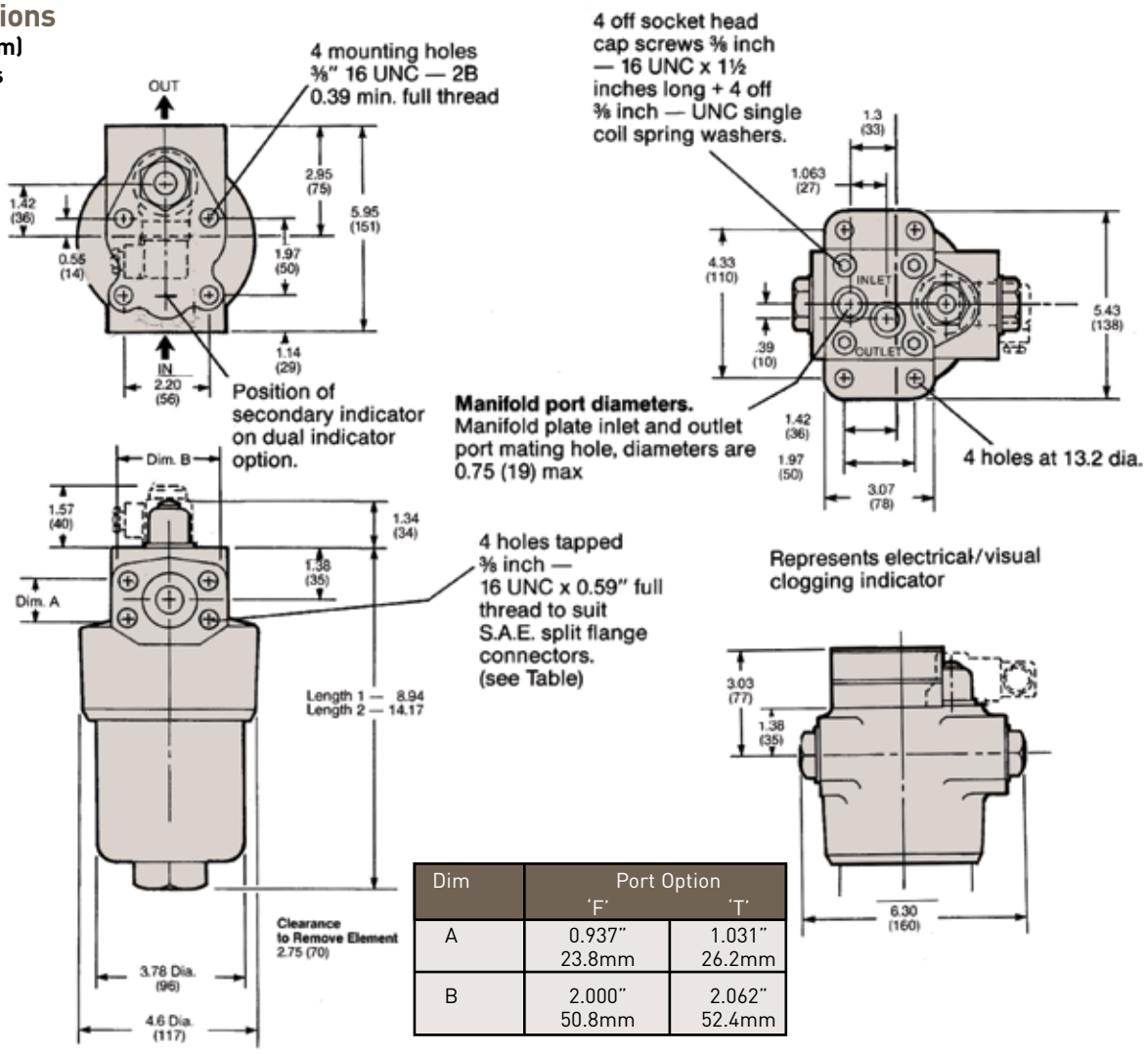
**NOTE:** Housing and reverse flow valve ΔP are directly proportional to specific gravity.



## Dimensions

**Inches (mm)**
**272 Series**

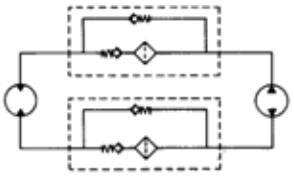



| Dim | Port Option 'F' | Port Option 'T' |
|---|---|---|
| A | 0.937" 23.8mm | 1.031" 26.2mm |
| B | 2.000" 50.8mm | 2.062" 52.4mm |

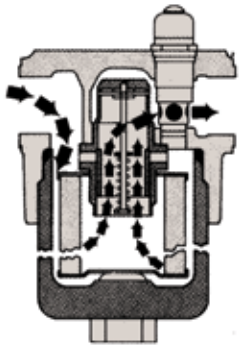
## Reverse Flow Valve Better Three Ways

For hydrostatic drives and other systems where reverse flow is required a valve is incorporated which allows fluid to pass through the element in one direction but to bypass the element when flow is reversed. (See diagrams).

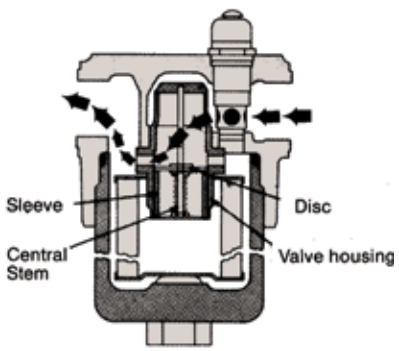
1. Rugged one piece steel body design that is built to last. Unlike stamped metal or aluminum designs. Parker's Reverse Flow Valve (RFV) is a spool/ disc valve caged in a high strength machined steel body. This greatly reduces the risk of valve failure and resultant filter or component damage.
2. Low pressure drop the spool/disc design keeps system pressure losses at a minimum without sacrificing reliability.
3. Our modular design means easy change over or replacement. The reverse flow valve threads directly into the filter head, replacing the standard element adapter. For customers with more that one application or for system conversions, multiple applications from the dame hardware means less inventory.



**Normal Flow Condition**



**Reverse Flow Condition**







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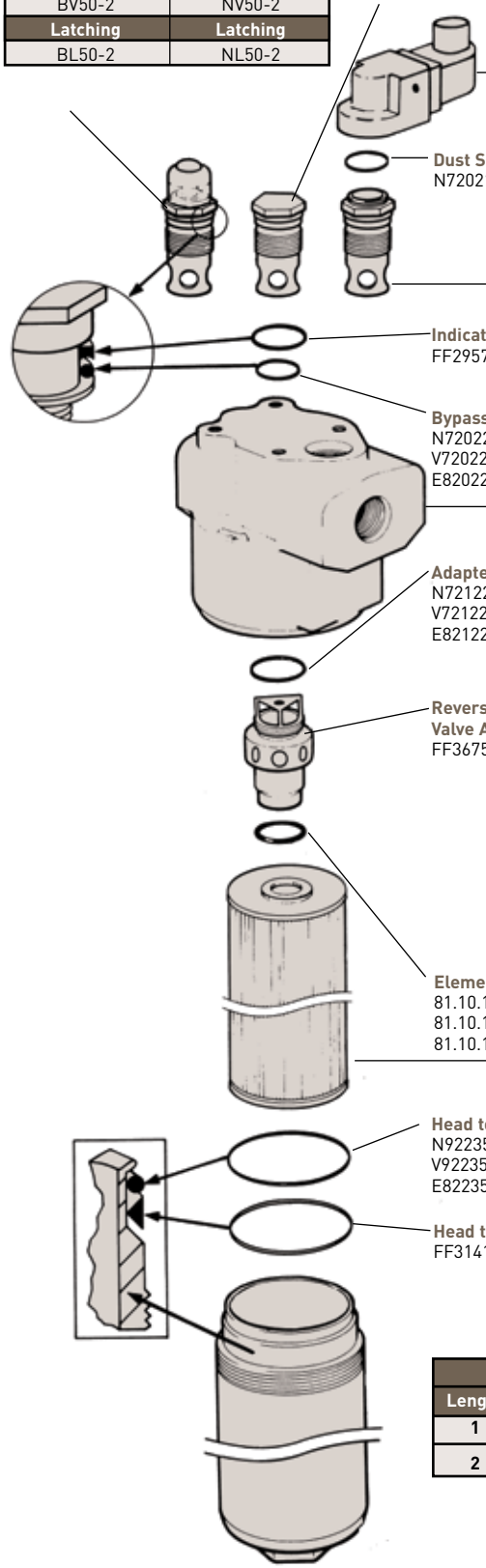
Hydraulic Filter Division
Metamora, OH

## Parts Breakdown
### 272 Series Filter

| Visual Indicator Assembly | |
|---|---|
| Bypass Valve | No Bypass Valve |
| BV50-2 | NV50-2 |
| Latching | Latching |
| BL50-2 | NL50-2 |

| Non-Indicator Assembly | |
|---|---|
| Non-Bypass Plug | Bypass Assy. |
| "—" | BN50-2 |



**Dust Seal**
N72021 Nitrile

| Electrical Actuator Assembly<br>Hirschmann Connector | | |
|---|---|---|
| Code | Part Number | Voltages Available |
| T | FF3468 | 28 VDC, 250 VAC Max. |

| Electrical Subassembly | |
|---|---|
| Bypass Valve | Non-Bypass |
| 90.34.000.29 (73 psid) | 90.34.000.27 (73 psid) |
| 90.34.000.28 (50 psid) | 90.34.000.26 (50 psid) |

**Indicator Back-Up Ring**
FF2957

**Bypass Housing to Head Seal***
N72022 Nitrile
V72022 Fluorocarbon
E82022 EPR

| HEAD | |
|---|---|
| Description | Part Number |
| SAE-12 (1 1/16" 12 Thread) | 204-S |
| SAE-16 (1 5/16" 12 Thread) | 204-J |
| SAE-20 (1 5/8" 12 Thread) | 204-H |
| SAE 6000 PSI 3/4" Flange, Code 62 | 204-F |
| SAE 3000 PSI 1" Flange, Code 61 | 204-T |
| Manifold Adapter | 204-V |

**Adapter to Head Seal***
N72122 Nitrile
V72122 Fluorocarbon
E82122 EPR

**Reverse Flow Valve Assembly**
FF3675

**Element to Adapter Seal**
81.10.150.92 Nitrile
81.10.152.92 Fluorocarbon
81.10.161.92 EPR

| Element Kit | | | | |
|---|---|---|---|---|
| Length | Disposable All Fluids | | | |
| | 3 µm abs. | 6 µm abs. | 10 µm abs. | 20 µm abs. |
| 1 | 270-Z-120 | 270-Z-121 | 270-Z-122 | 270-Z-123 |
| 2 | 270-Z-220 | 270-Z-221 | 270-Z-222 | 270-Z-223 |
| | High Collapse Disposable (3000 psid) | | | |
| | 3 µm absolute | | 15 µm absolute | |
| 1 | 250-Z-1FFH | | 250-Z-110H | |
| 2 | 250-Z-2FFH | | 250-Z-210H | |
| | High Collapse Cleanable (3000 psid) | | | |
| | 6 µm absolute | | 20 µm absolute | |
| 1 | 240-Z-101 | | 240-Z-110 | |
| 2 | 240-Z-201 | | 240-Z-210 | |
| | Cleanable | | | |
| | 40 µm absolute | | 75 µm absolute | |
| 1 | 290-Z-140 | | 290-Z-175 | |
| 2 | 290-Z-240 | | 290-Z-275 | |

**Head to Bowl Seal***
N92235 Nitrile
V92235 Fluorocarbon
E82235 EPR

**Head to Bowl Back-Up Ring**
FF3141

| Bowl | |
|---|---|
| Length | Part Number |
| 1 | FF4282 |
| 2 | FF4283 |

*Included in Seal Kit: 936057 Nitrile
936058 EPR
936059 Fluorocarbon

# Reverse Flow Pressure Filters

272/372 Series

## HOW TO ORDER 272 Series Filters:

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

**Assembly Example:**

| STD | BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 | BOX 8 |
|---|---|---|---|---|---|---|---|---|
| 2 | 7 | 2 | A | BV50 | S | Z | 1 | 23 |

**Element Example:**

| STD | BOX 1 | STD | BOX 6 | BOX 7 | BOX 8 | BOX 3 |
|---|---|---|---|---|---|---|
| 2 | 7 | 0 | Z | 1 | 23 | A |

**BOX 1: FILTER/ELEMENT TYPE**

| Symbol | Description |
|---|---|
| **7** | Microglass Inorganic disposable |
| **5** | High Strength Disposable |

**BOX 2: FILTER FLOW**

| Symbol | Description |
|---|---|
| **2** | With Reverse Flow Valve |

**BOX 3: SEALS**

| Symbol | Description |
|---|---|
| **A** | Nitrile |
| **H** | Fluorocarbon |

**BOX 4: INDICATOR**

| Indicator Type | BYPASS INDICATION @ 73 PSID (5.0 BAR) | NO BYPASS INDICATION @ 73 PSID (5.0 BAR) |
|---|---|---|
| VISUAL | **BV50** | **NV50** |
| VISUAL-LATCHING | **BL50** | **–** |
| ELECTRICAL (**T**) 28 VDC, 110-250 VAC | **BE50** | **NE50** |

**BOX 5: PORT OPTIONS**

| Symbol | Description | Filter Ser. |
|---|---|---|
| **S** | SAE-12 (1-1/16"-12 Thread) | 2 |
| **J** | SAE-16 (1-5/16"-12 Thread) | 2 |
| **H** | SAE-20 (1-5/8"-12 Thread) | 2 |
| **F** | 3/4" SAE Flange, Code 62 | 2 |
| **T** | 1" SAE Flange, Code 61 | 2 |
| **V** | Manifold Adaptor | 2 |

**Dual Indicator Codes:**

**BEE50** - Bypass with double electrical indicators
**NEE50** - No bypass with double electrical indicators
**BEV50** - Bypass with (1) mechanical visual (50 psid) and (1) electrical indicator (73 psid)
**NEV50** - No bypass with (1) mechanical visual (50 psid) and (1) electrical indicator (73 psid)

**Note:** Dual Indicators are not available with Port Option "V"

**BOX 6: ELEMENT TYPE**

| Symbol | Element Types | Absolute Ratings Micron |
|---|---|---|
| **Z** | All fluids | All ratings |

**BOX 7: ELEMENT LENGTH**

| Symbol | Description | Type |
|---|---|---|
| **1** | Length 1 | 5, 7 |
| **2** | Length 2 | 5, 7 |

**BOX 8: DEGREE OF FILTRATION**

| Symbol | Absolute Rating | Type |
|---|---|---|
| FF | 3µ | 5 |
| 10 | 15µ | 5 |
| **20** | 3µ | 7 |
| **21** | 6µ | 7 |
| **22** | 10µ | 7 |
| **23** | 20µ | 7 |



**Parker Hannifin Corporation**
Hydraulic Filter Division
Metamora, OH

## Applications/Features for High Pressure Hydraulic Filters 372 Series

- Pressures to 6,000 PSI
- Flows to 120 GPM
- BetaMaze™ Elements - 3 to 20 Micron Absolute
- Disposable or Recleanable Elements
- Reverse Flow

## Specifications

### High Pressure Hydraulic Filters — 372 Series

**Max Flow Rating:** 120 GPM

**Pressure Rating:**

| | |
|---|---|
| Operating Pressure (Maximum) | 6000 PSI |
| Proof Pressure | 9000 PSI |
| Burst Pressure | 12000 PSI |
| Fatique Pressure (Maximum) | 0-4000-0 PSI @3,000,000 Cycles |

**Fluid Temperature:** -40°F to +212°F

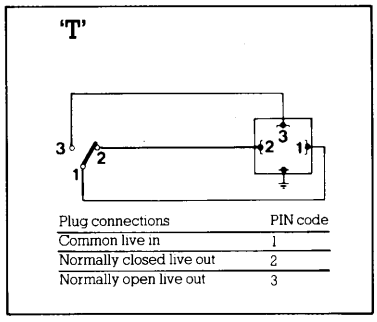
**Construction:**

| | |
|---|---|
| Head | Nodular Iron |
| Bowl | Extruded Steel |
| Indicators | Consult Factory |
| Elements | Consult Factory |

**Weight:**

| | S.A.E. or Flange Ports | Manifold Ports |
|---|---|---|
| Length 1 | 31 Lbs. | 36 Lbs. |
| Length 2 | 37.5 Lbs. | 42.5 Lbs. |
| Length 3 | 44 Lbs. | 49 Lbs. |

**Wiring Diagrams:**




| Plug connections | PIN code |
|---|---|
| Common live in | 1 |
| Normally closed live out | 2 |
| Normally open live out | 3 |

**Electrical Ratings:**

Hirschman Connector without Lamps:

**T** - 250 or 110 VAC or 28 VDC Max.

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272/372 Series

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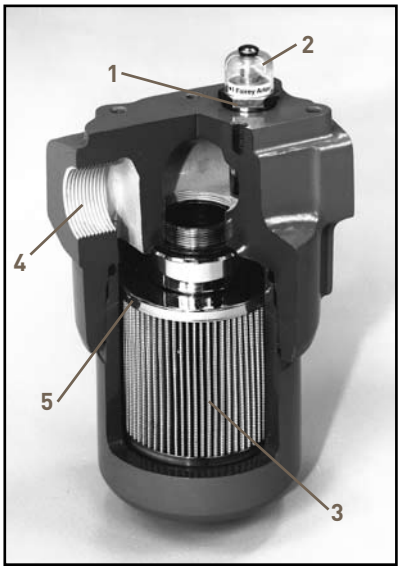


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**Other Features**

4. Port options include SAE straight thread SAE 3000 or 6000 PSI flanges or manifold mount.
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(A) 372 Series length 3
(B) 372 Series length 3 manifold mounting
(C) 372 Series length 1 with dual electrical and visual indicators
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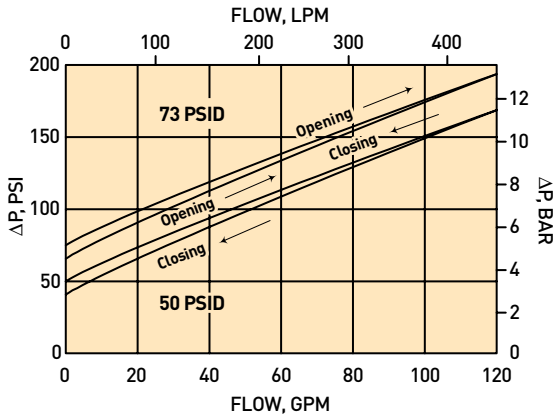




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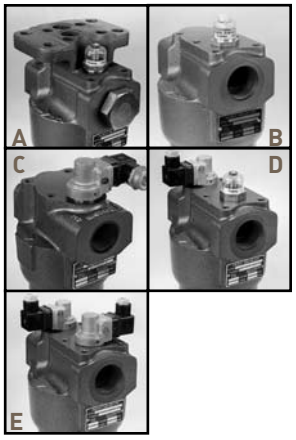
A. A 360° visibility non-latching type
B. A 360° visibility latching type (For remote locations or flow on demand systems, or where systems must be shut down to inspect the filter.)

Electrical indicators include:
C. Visual electrical
D. Electrical and Visual
E. Dual electrical

For electrical indicator connector options see Table 5 on back cover.




## Microglass Media High Performance

### Multi-Pass Test Results to ISO 4572 (Time Weighted Average)

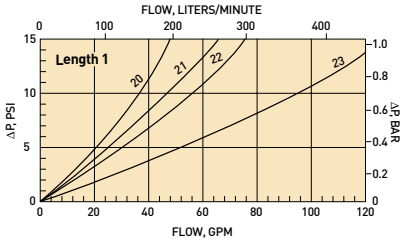
| Filter Type | | Media | Code | Filtration Rating | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $\beta_x$>200 | $\beta_3$ | $\beta_6$ | $\beta_{10}$ | $\beta_{12}$ | $\beta_{20}$ | $\beta_{25}$ |
| 5 | 300psi High Collapse | 02QX | FF | 3 | ≥200<br>99.5 | >1000<br>99.9 | >3000<br>99.97 | >5000<br>99.98 | INF | INF |
| | | 10QX | 10 | 15 | 3<br>66.66 | 12<br>91.66 | 50<br>98.0 | 75<br>98.67 | >2000<br>99.95 | >5000<br>99.98 |
| **Filter Type** | | **Media** | **Code** | **Filtration Rating** | | | | | | |
| | | | | $\beta_x$>200 | $\beta_3$ | $\beta_6$ | $\beta_{10}$ | $\beta_{12}$ | $\beta_{20}$ | $\beta_{25}$ |
| 7 | 290psi Collapse | GDH3 | 20 | 3 | ≥100<br>99.0 | >300<br>99.67 | >1500<br>99.93 | >2000<br>99.95 | >5000<br>99.98 | INF |
| | | GDH6 | 21 | 6 | 12<br>91.7 | ≥100<br>99.0 | >1000<br>99.9 | >2000<br>99.95 | >5000<br>99.98 | INF |
| | | GDH10 | 22 | 10 | 8<br>87.5 | 22<br>95.4 | 100<br>99.0 | ≥200<br>99.5 | >5000<br>99.98 | INF |
| | | GDH20 | 23 | 20 | - | 2<br>50.0 | 8<br>87.5 | 20<br>95.0 | ≥100<br>99.0 | ≥200<br>99.5 |

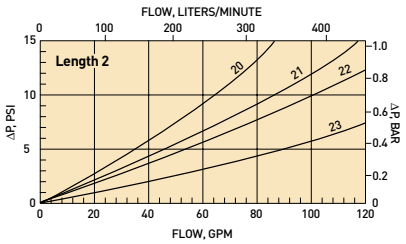
Element efficiency in percent
Element Beta ratio $\beta_x$

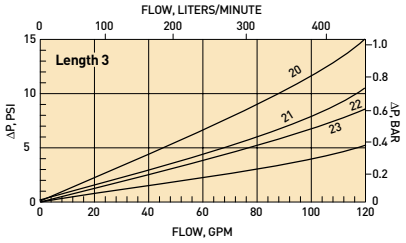
## Flow/Pressure Drop Curves

**Disposable Elements - 372 Series**

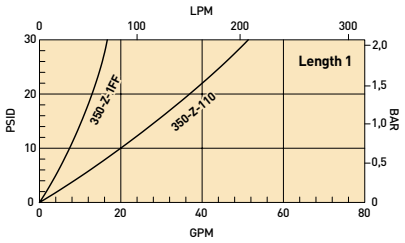
**For Bypass Equipped Housings (290 psid min. collapse)**

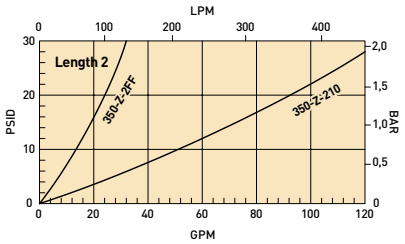


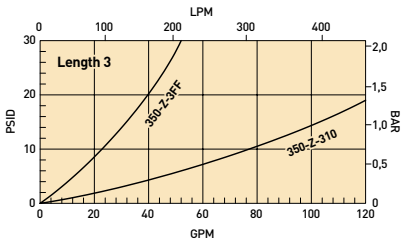




**For Non-bypass Housings (3000 psid min. collapse)**




**Fluid Conditions:** Viscosity 140 SSU (30 cSt) and SP. Gr. 0.88 **Note:** Element ΔP is directly proportional to viscosity.

## Find Filter Assembly Pressure Drop

Filter assembly ΔP is equal to the sum of element and housing pressure drops taken from the appropriate curves and adjusted for operating viscosity and specific gravity.

**Example:**

**Filer Model:** 372A-BV50-FL223

**Flow:** 120 GPM

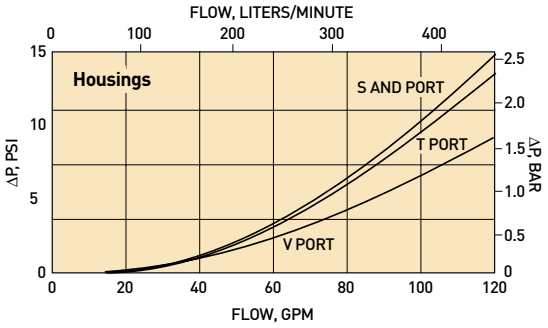
**Viscosity:** 225 SSU, Sp. Gr.: 1.0

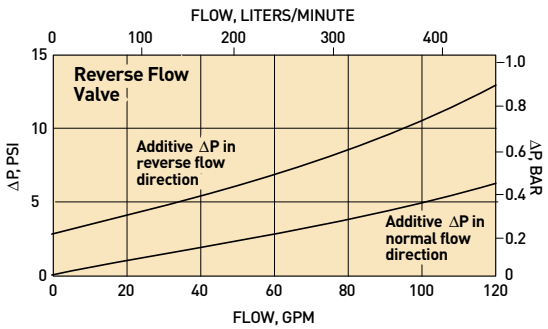
**Step 1.** **Correct element ΔP for viscosity.**
Element ΔP = 7 psi x 225SSU/140SSU = 11.2psi

**Step 2.** **Correct housing ΔP for specific gravity.**
Housing ΔP = 27 psi x 1.0/0.88 = 30.7 psi

**Step 3.** **Correct reverse flow valve ΔP for specific gravity.**
RFV ΔP = 6 psi x 1.0/.88 = 6.8 psi

**Step 4.** **Calculate assembly.**
ΔP = 11.2 psi + 30.7 psi + 6.8 psi = 48.7 psi





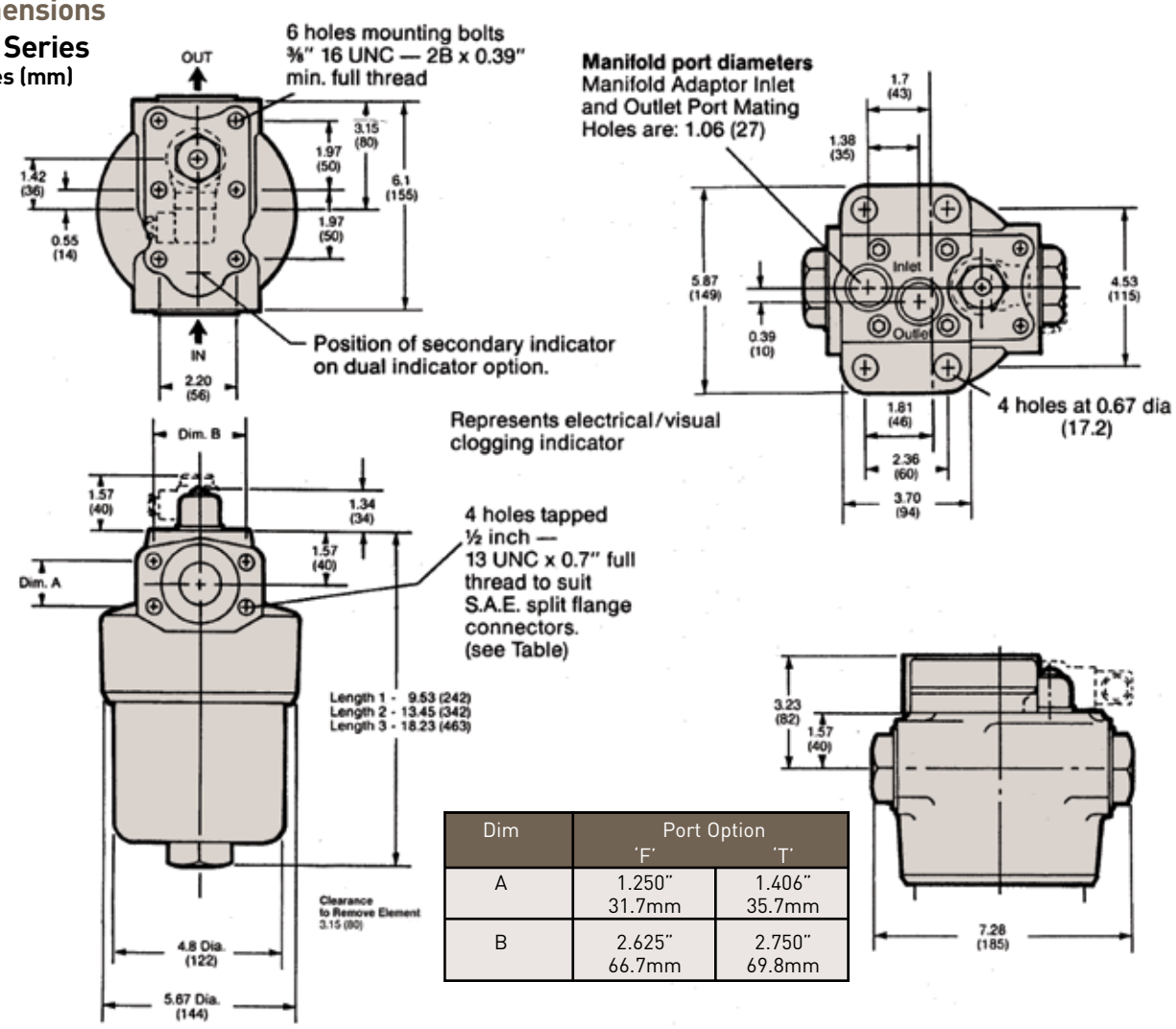


**Parker Hannifin Corporation**
Hydraulic Filter Division
Metamora, OH

## Dimensions

### 372 Series

**Inches (mm)**

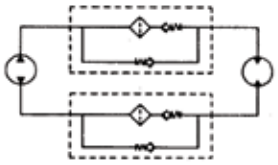



| Dim | Port Option 'F' | Port Option 'T' |
|---|---|---|
| A | 1.250" 31.7mm | 1.406" 35.7mm |
| B | 2.625" 66.7mm | 2.750" 69.8mm |

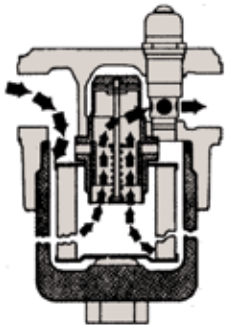
## Reverse Flow Valve — Better Three Ways

For hydrostatic drives and other systems where reverse flow is required a valve is incorporated which allows fluid to pass through the element in one direction but to by-pass the element when flow is reversed. (See diagrams).

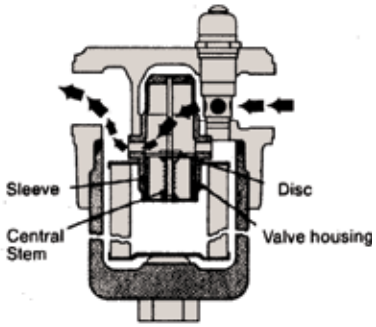
1. Rugged one piece steel body design that is built to last. Unlike stamped metal or aluminum designs. Parker's Reverse Flow Valve (RFV) is a spool/ disc valve caged in a high strength machined steel body. This greatly reduces the risk of valve failure and resultant filter or component damage.
2. Low pressure drop the spool/disc design keeps system pressure losses at a minimum without sacrificing reliability.
3. Our modular design means easy change over or replacement. The reverse flow valve threads directly into the filter head, replacing the standard element adapter. For customers with more that one application or for system conversions, multiple applications from the dame hardware means less inventory.



**Normal Flow Condition**



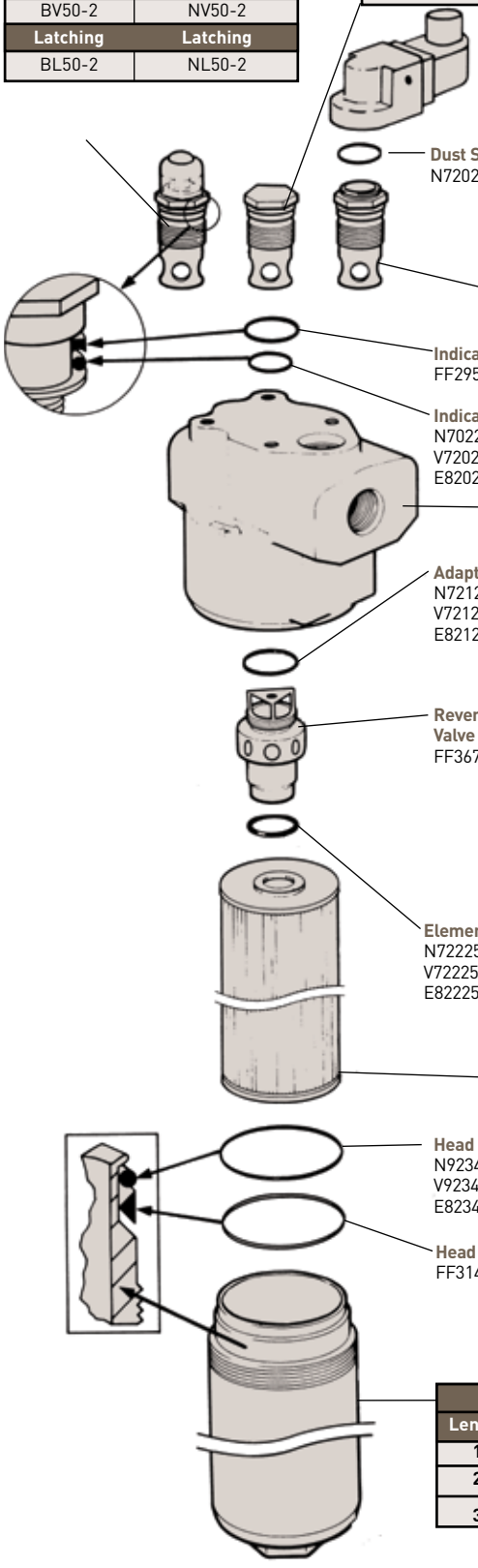
**Reverse Flow Condition**



## Filter Parts Breakdown
### 372 Series

| Visual Indicator Assembly | |
|---|---|
| **Bypass Valve** | **No Bypass Valve** |
| BV50-2 | NV50-2 |
| **Latching** | **Latching** |
| BL50-2 | NL50-2 |

| Non-Indicator Assembly | |
|---|---|
| **Non-Bypass Plug** | **Bypass Assy.** |
| – | BN50-2 |



**Dust Seal**
N72021 Nitrile

**Indicator Back-Up Ring**
FF2957

**Indicator to Head Seal***
N7022 Nitrile
V72022 Fluorocarbon
E82022 EPR

**Adapter to Head Seal***
N72128 Nitrile
V72128 Fluorocarbon
E82128 EPR

**Reverse Flow Valve Assembly**
FF3677

**Element to Adapter Seal***
N72225 Nitrile
V72225 Fluorocarbon
E82225 EPR

**Head to Bowl Seal***
N92346 Nitrile
V92346 Fluorocarbon
E82346 EPR

**Head to Bowl Back-Up Ring**
FF3142

| Electrical Actuator Assembly<br>Hirschmann Connector | | |
|---|---|---|
| **Code** | **Part Number** | **Voltages Available** |
| T | FF3468 | 28 VDC, 250 VAC Max. |

| ELECTRICAL SUBASSEMBLY | |
|---|---|
| **Bypass Valve** | **Non-Bypass** |
| 90.34.000.29, 73 PSID | 90.34.000.27, 73 PSID |
| 90.34.000.28, 50 PSID | 90.34.000.26, 50 PSID |

| Head | |
|---|---|
| **Description** | **Part Number** |
| SAE-20 ($1^{5}/_{8}$″ 12 Thread) | 304-S |
| SAE 6000 PSI $1^{1}/_{4}$″ Flange, Code 62 | 304-F |
| SAE 3000 PSI 1½″ Flange, Code 61 | 304-T |
| Manifold Adapter | 304-V |

| Element Kit | | | | |
|---|---|---|---|---|
| **Length** | **Disposable All Fluids** | | | |
| | **3 µm abs.** | **6 µm abs.** | **10 µm abs.** | **20 µm abs.** |
| 1 | 370-Z-120 | 370-Z-121 | 370-Z-122 | 370-Z-123 |
| 2 | 370-Z-220 | 370-Z-221 | 370-Z-222 | 370-Z-223 |
| 3 | 370-Z-320 | 370-Z-321 | 370-Z-322 | 370-Z-323 |
| | **Disposable High Collapse (3000 psid)** | | | |
| | **3 µm absolute** | | **15 µm absolute** | |
| 1 | 350-Z-1FFH | | 350-Z-110H | |
| 2 | 350-Z-2FFH | | 350-Z-210H | |
| 3 | 350-Z-3FFH | | 350-Z-310H | |
| | **Cleanable High Collapse (3000 psid)** | | | |
| | **6 µm absolute** | | **20 µm absolute** | |
| 1 | 340-Z-101 | | 340-Z-110 | |
| 2 | 340-Z-201 | | 340-Z-210 | |
| 3 | 340-Z-301 | | 340-Z-310 | |
| | **Cleanable Mesh** | | | |
| | **40 µm absolute** | | **75 µm absolute** | |
| 1 | 390-Z-140 | | 390-Z-175 | |
| 2 | 390-Z-240 | | 390-Z-275 | |
| 3 | 390-Z-340 | | 390-Z-375 | |

*Included in Seal Kit: 936060 Nitrile
936061 EPR
936062 Fluorocarbon

| Bowl | |
|---|---|
| **Length** | **Part Number** |
| 1 | FF4287 |
| 2 | FF4288 |
| 3 | FF4289 |

## HOW TO ORDER 372 Series Filters:

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

**Example:**

| STD | BOX 1 | BOX 2 | BOX 3 | BOX 4 | BOX 5 | BOX 6 | BOX 7 | BOX 8 |
|---|---|---|---|---|---|---|---|---|
| 3 | 7 | 2 | A | BV50 | S | Z | 1 | 23 |

**Element Example:**

| STD | BOX 1 | STD | BOX 6 | BOX 7 | BOX 8 | BOX 3 |
|---|---|---|---|---|---|---|
| 3 | 7 | 0 | Z | 1 | 23 | A |

**BOX 1: FILTER/ELEMENT TYPE**

| Symbol | Description |
|---|---|
| **7** | Microglass Inorganic disposable |
| **5** | High Strength Disposable |

**BOX 2: FILTER FLOW**

| Symbol | Description |
|---|---|
| **2** | With Reverse Flow Valve |

**BOX 3: SEALS**

| Symbol | Description |
|---|---|
| **A** | Nitrile |
| **H** | Fluorocarbon |

**BOX 4: INDICATOR**

| Indicator Type | BYPASS INDICATION @ 73 PSID (5.0 BAR) | NO BYPASS INDICATION @ 73 PSID (5.0 BAR) |
|---|---|---|
| VISUAL | **BV50** | **NV50** |
| VISUAL-LATCHING | **BL50** | **–** |
| ELECTRICAL (**T**) 28 VDC, 110-250 VAC | **BE50** | **NE50** |

**Dual Indicator Codes:**

**BEE50** - Bypass with double electrical indicators
**NEE50** - No bypass with double electrical indicators
**BEV50** - Bypass with (1) mechanical visual (50 psid) and (1) electrical indicator (73 psid)
**NEV50** - No bypass with (1) mechanical visual (50 psid) and (1) electrical indicator (73 psid)

**Note:** Dual Indicators are not available with Port Option "V"

**BOX 5: PORT OPTIONS**

| Symbol | Description |
|---|---|
| **S** | SAE-20 (1-5/8"-12 Thread) |
| **F** | S.A.E. 6000PSI 1-¼" Flange |
| **T** | S.A.E. 3000PSI 1-½" Flange |
| **V** | Manifold Adapter |

**BOX 6: ELEMENT TYPE**

| Symbol | Element Types | Absolute Ratings Micron |
|---|---|---|
| **Z** | All fluids | All ratings |

**BOX 7: ELEMENT LENGTH**

| Symbol | Description | Type |
|---|---|---|
| **1** | Length 1 | 4, 5, 7, 9 |
| **2** | Length 2 | 4, 5, 7, 9 |
| **3** | Length 3 | 4, 5, 7,9 |

**BOX 8: DEGREE OF FILTRATION**

| Symbol | Absolute Rating | Type |
|---|---|---|
| FF | 3µ | 5 |
| 10 | 15µ | 5 |
| **20** | 3µ | 7 |
| **21** | 6µ | 7 |
| **22** | 10µ | 7 |
| **23** | 20µ | 7 |

# Notes



**Parker Hannifin Corporation**
Hydraulic Filter Division
Metamora, OH