# **98** Series Filters

Accessories

### Specifications

For other materials or modifications, please consult TESCOM.

#### **OPERATING PARAMETERS** Pressure rating per criteria of ANSI/ASME B31.3

#### 98-1010 Mini In-Line Series

## **Maximum Rated Operating Pressure**

6000 psig / 414 bar **Design Maximum Proof Pressure** 9000 psig / 621 bar Materials of Construction Body: 304 Stainless Steel Internal Filter - 10 micron: Pleated 304 Stainless Steel Porting See Part Number Selector **Operating Temperature** -320°F to 550°F / -196°C to 288°C

#### 98-1110 TEE-Type Series

#### **Maximum Rated Operating Pressure** 6000-10,000 psig / 414-690 bar

**Design Maximum Proof Pressure** 9000-15,000 psig / 621-1034 bar

**Materials of Construction** Body: 303 Stainless Steel Internal Filter - 10 micron: Pleated 304 Stainless Steel

O-rings: Buna, Teflon<sup>®</sup>, or Viton<sup>®</sup>

Porting

See Part Number Selector

**Operating Temperature** Buna O-ring: -20°F to 165°F / -29°C to 74°C Teflon® O-ring: -40°F to 165°F / -40°C to 74°C Viton<sup>®</sup> O-ring: 0°F to 220°F / -18°C to 104°C

#### 98-1210 In-Line Series

**Maximum Rated Operating Pressure** 3000-10,000 psig / 207-690 bar **Design Maximum Proof Pressure** 4500-15,000 psig / 310-1034 bar **Materials of Construction** Bodv 3000 psig / 207 bar: 303 Stainless Steel 6000 and 10,000 psig / 414 and 690 bar: 17-4 Stainless Steel Internal Filter, 10 micron: Pleated 304 Stainless Steel O-rings: Buna, Teflon<sup>®</sup>, or Viton<sup>®</sup> Porting See Part Number Selector **Operating Temperature** Buna O-ring: -20°F to 165°F / -29°C to 74°C **Teflon® O-ring:** -40°F to 165°F / -40°C to 74°C **Viton**<sup>®</sup> **O-ring:** 0°F to 220°F / -18°C to 104°C

Ethylene Propylene O-ring: -40°F to 225°F / -40°C to 107°C Teflon<sup>®</sup> and Viton<sup>®</sup> are registered trademarks of E.I. du Pont de Nemours

and Company.

98-1010

TESCOM 98 Series high pressure filters offer operating pressure ratings up to 10,000 psig / 690 bar with Mini In-line and TEE-Type designs.

## Application

• Filtration prior to pressure control components, protects from particulate contamination

## **Features and Benefits**

- Operating pressure ratings up to 10,000 psig / 690 bar
- In-line, Mini In-line and TEE-Type styles
- Pleated, 10 micron, 304 Stainless Steel internal filter material for maximum contaminant control
- Cleanable element reduces operating cost





#### D98XX1846X012





## **TESC**ØM

## **98 Series Drawings**

98-1010 SERIES MINI IN-LINE



| PART NUMBER   | DIMENSION A |
|---------------|-------------|
| 98-1010-T-2PM | 1.10"       |
| 98-1010-T-2PP | 1.58"       |
| 98-1010-T-2BT | 1.10"       |
| 98-1010-T-3PP | 1.58"       |
| 98-1010-T-3BT | 1.10"       |
| 98-1010-T-4PM | 1.42"       |
| 98-1010-T-4PP | 1.58"       |
| 98-1010-T-4BT | 1.10"       |

98-1110 SERIES TEE-TYPE



| PART NUMBER  | DIAMETER | LENGTH | ELEMENT<br>REPLACEMENT |
|--------------|----------|--------|------------------------|
| 98-1110-T-2P | 3.75"    | 7.85"  | 61667- <sup>1</sup>    |
| 98-1110-T-2B | 3.75"    | 7.85"  | 61667- <sup>1</sup>    |
| 98-1110-T-2F | 3.75"    | 7.85"  | 61667- <sup>1</sup>    |
| 98-1110-T-3P | 3.75"    | 7.85"  | 61667- <sup>1</sup>    |
| 98-1110-T-3B | 3.75"    | 7.85"  | 61667- <sup>1</sup>    |
| 98-1110-T-3F | 3.75"    | 7.85"  | 61667- <sup>1</sup>    |
| 98-1110-T-4P | 3.75"    | 7.85"  | 61667- <sup>1</sup>    |
| 98-1110-T-4B | 3.75"    | 7.85"  | 61667- <sup>1</sup>    |
| 98-1110-T-4F | 3.75"    | 7.85"  | 61667- <sup>1</sup>    |
| 98-1110-S-2P | 5.00"    | 9.65"  | 61667- <sup>1</sup>    |
| 98-1110-S-2B | 5.00"    | 9.65"  | 61667- <sup>1</sup>    |
| 98-1110-S-2F | 5.00"    | 9.65"  | 61667- <sup>1</sup>    |
| 98-1110-S-3P | 5.00"    | 9.65"  | 61667- <sup>1</sup>    |
| 98-1110-S-3B | 5.00"    | 9.65"  | 61667- <sup>1</sup>    |
| 98-1110-S-3F | 5.00"    | 9.65"  | 61667- <sup>1</sup>    |
| 98-1110-S-4P | 5.00"    | 9.65"  | 61667- <sup>1</sup>    |
| 98-1110-S-4B | 5.00"    | 9.65"  | 61667- <sup>1</sup>    |
| 98-1110-S-4F | 5.00"    | 9.65"  | 61667- <sup>1</sup>    |

1. See O-ring material table on page 6.

98-1210 SERIES IN-LINE



ELEMENT PART NUMBER DIMENSION A REPLACEMENT 61666-413 98-1210-U-2PP 6.00" 98-1210-U-2BB 4.19" 61666-411 98-1210-U-4PP 7.75" 61666-415 98-1210-U-4BB 6.00" 61666-413 98-1210-T-2PP 6.00" 61666-413 98-1210-T-2BB 4.19" 61666-411 98-1210-T-4PP 7.75" 61666-415 98-1210-T-4BB 6.00" 61666-413 98-1210-S-2BB 61666-411 4.19" 98-1210-S-2PP 6.00" 61666-411

All dimensions are reference & nominal



## TESCØM

### 98 Series Flow Charts

For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on www.tescom.com.

#### 98-1010 SERIES MINI IN-LINE



#### 98-1110 SERIES TEE-TYPE





## TESCOM

## 98 Series Flow Charts

For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on www.tescom.com.

#### 98-1210 SERIES IN-LINE





### 98 Series Optional Accessories



#### CODE R - Bypass Relief Valve

At a predetermined setting, the system fluid bypasses the element assembly until the element is either cleaned or replaced. Standard setting: 50 psid / 3.4 bar d cracking pressure.

#### CO<u>D</u>E V - △P Indicator

A Visual Differential Pressure Indicator enables an operator to read contaminant buildup before the element is plugged. The indicator is mounted on the head of the filter unit. It has an automatic reset. Stainless steel construction is standard. Standard setting is 40 psid / 2.8 bar d.

#### CO<u>D</u>E E - Electrical △P Indicator

This electrical Visual Differential Pressure Indicator is ideal for applications where visual inspections are difficult due to location or when centralized process equipment monitoring is desired. By wiring the indicator into a central control panel, the filter can be remotely monitored quickly and easily. The Electrical  $\triangle P$  Indicator is designed to be mounted on top of the filter unit. It is constructed of 303 Stainless Steel. An adjustable electric, normally open, reed switch  $\triangle P$  indicator can operate signal devices. The contacts close when the  $\triangle P$  increases and automatically resets when  $\triangle P$  decreases. There is a 3/4" male pipe connection for the electrical hook-up. Voltage requirements: 10W-DC resistive 110 VA-AC resistive. The switch current is 0.5 amps. Relay required for heavier loads.



# TESCØM

## 98 Series Part Number Selector

#### Repair Kits, Accessories & Modifications may be available for this product. Please contact TESCOM for more information.

Example for selecting a part number:

#### 98-1010 SERIES MINI IN-LINE

| 98-1010 -    | т                              | - 2   | РР   |
|--------------|--------------------------------|---|--|
| BASIC SERIES | PRESSURE RATING                | INLET PORT SIZE                                       | INLET AND OUTLET PORT TYPE   |
| 98-1010      | <b>T</b> – 6000 psig / 414 bar | <b>2</b> - 1/4"<br><b>3</b> - 3/8"<br><b>4</b> - 1/2" | <ul> <li>PP – Female NPTF</li> <li>PM – Female/Male NPTF (1/4" and 1/2" only)</li> <li>BT – MS33649 Female/MS33656 Male</li> </ul> |

#### 98-1110 SERIES TEE-TYPE

| 98-1110 -    | т   | - 2                              | В   | - L   | VR   |
|--------------|---|----------------------------------|---|---|--|
| BASIC SERIES | PRESSURE RATING   | INLET PORT SIZE                  | INLET AND OUTLET PORT TYPE  | O-RING MATERIAL <sup>1</sup>                                    | HOUSING OPTIONS  |
| 98-1110      | <ul> <li>T - 6000 psig<br/>414 bar</li> <li>S - 10,000 psig<br/>690 bar</li> <li>1. See SPEC</li> </ul> | 2 - 1/4*<br>3 - 3/8*<br>4 - 1/2* | <ul> <li>P – Female NPTF</li> <li>B – MS33649</li> <li>F – SAE</li> <li>ng temperatures for O-rings.</li> </ul> | STANDARD:<br>L – Buna<br>OPTIONAL:<br>N – Teflon®<br>M – Viton® | <ul> <li>E – Electrical</li> <li>V – Visual</li> <li>R – Bypass Valve</li> <li>VR – Visual △P Indicator and<br/>Bypass Relief Valve</li> <li>ER – Electrical/Bypass</li> </ul> |

#### 98-1210 SERIES IN-LINE

| 98-1210 -    | · U  | - 2  | BB   | - L   |
|--------------|--|--|--|---|
| BASIC SERIES | PRESSURE RATING  | INLET PORT SIZE  | INLET AND OUTLET PORT TYPE   | O-RING MATERIAL <sup>1</sup>  |
| 98-1210      | <ul> <li>U – 3000 psig</li> <li>207 bar</li> <li>T – 6000 psig</li> <li>414 bar</li> <li>S – 10,000 psig</li> <li>690 bar</li> </ul> | <ul> <li>2 - 1/4"</li> <li>3 - 3/8"</li> <li>4 - 1/2" (3000 and 6000 psig / 207 and 414 bar only)</li> <li>1. See SPECIFICATIONS for operations of the second secon</li></ul> | <b>PP</b> – Female NPTF<br><b>BB</b> – Male MS33649<br>erating temperatures for O-rings. | STANDARD:<br>L – Buna<br>OPTIONAL:<br>N – Teflon®<br>M – Viton®<br>Z – Ethylene Propylene |

WARNING! Do not attempt to select, install, use or maintain this product until you have read and fully understood the TESCOM Safety, Installation and Operation Precautions.

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