

October 1995

P590 Series Filters

Introduction

Scope of the Manual

This manual provides instructions for installation, maintenance and parts information for P590 Series filters.

Product Description

P590 Series filters are designed to remove dirt, scale or other solid substances from gases just upstream from pilot supply lines for air or gas pressure regulators.

P590 Series filters come with either aluminum or brass bodies and cellulose or aluminum/brass filter elements. Type P593-1 is also available with a NACE option.

The brass body filters (Types P595 and P594-1) are capable of handling up to 1400 psig (96,5 bar) working pressure, while the aluminum-bodied (Type P593-1) can withstand 600 psig (41,4 bar) maximum working pressure.

Installation

WARNING

Personal injury, equipment damage, or leakage due to escaping gas or bursting of pressure-containing parts may result if the filter is installed where its capabilities can be exceeded or where conditions exceed any ratings of the adjacent piping or piping connections. To avoid this, install a filter where:

- Service conditions are within unit capabilities.
- Service conditions are within applicable codes, regulations, or standards.

Using good piping practices, make sure that all tubing and piping are clean and unobstructed. Apply a good grade of pipe compound to the male pipeline threads. Install the filter in the line with the flow in the direction of the arrow shown in Figure 1.

Maintenance

Filter parts are subject to normal wear and must be inspected periodically and replaced as necessary. The frequency of inspection and replacement depends upon the severity of service conditions and upon applicable codes and government regulations.

Due to the care Fisher takes in meeting all manufacturing requirements (heat treating, dimensional tolerances, etc.), use only replacement parts manufactured or furnished by Fisher.

WARNING

To avoid personal injury resulting from sudden release of pressure, isolate the regulator/filter from all pressure and cautiously release trapped pressure from the regulator/filter before attempting disassembly.

Perform this procedure to clean or replace filter parts in a P590 Series filter assembly. Key numbers are referenced in Figure 1.

Remove the following parts: filter body (key 1), machine screw (key 4), spring washer (key 6), gasket (key 7), two flat washers (key 5), and filter element (key 2).

Upon reassembly, one of the flat washers (key 5) must go between the filter element and the filter head (key 3) and the other must go between the filter element and gasket. Use a good grade of pipe thread sealant on the filter head pipe threads as shown by P.T.S. in Figure 1.

Parts Ordering

When corresponding with your Fisher sales office or Fisher representative about this filter, always reference the FS number.

When ordering replacement parts, specify the complete 11-character part number from the following parts list.



P590 Series

Parts List

Note

In this parts list, parts marked NACE are intended for corrosion-resistant service as detailed in the National Association of Corrosion Engineers (NACE) standard MR0175.

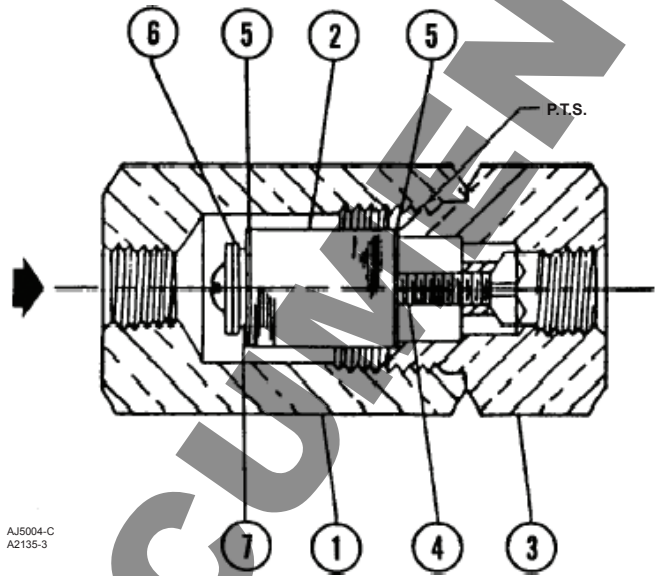


Figure 1. Typical P590 Series Filter Assembly

Key	Description	Part Number
1	Filter Body Types P595, P594-1, Brass Type P593-1, Aluminum Aluminum (NACE)	1E312414012 1E312409012 1E312409012
2*	Filter Element, Aluminum/brass Cellulose Cellulose (NACE)	1C533499012 1E312606992 1E312606992
3	Filter Head Types P595, P594-1, Brass Type P593-1, Aluminum Aluminum (NACE)	1E312514012 1E312509012 1E312509012
4	Machine Screw Types P595, P594-1, Brass Type P593-1, Aluminum Aluminum (NACE)	1J500218992 1J500209012 1J500209012
5	Washer (2 required) Types P595, P594-1, Brass Type P593-1, Aluminum Aluminum (NACE)	1J500018992 1J500010062 1J500010062

Key	Description	Part Number
6	Spring Washer, Steel	1H885128982
7*	Gasket, Composition Types P594-1, P593-1	1F826804022
11	NACE Tag (Type P593-1 NACE only) 18-8 Stainless steel (not shown)	19A6034X012
12	Tag Wire (Type P593-1 NACE only) 303 Stainless steel (NACE)	1U7581X0022

*Recommended Spare Parts

Industrial

USA - Headquarters
McKinney, Texas 75070 USA
Tel: 1-800-558-5856
Outside U.S. 1-469-293-4201

Asia-Pacific
Shanghai, China 201206
Tel: 86-21-5899 7887

Europe
Bologna, Italy 40013
Tel: 39 051 4190611

Natural Gas Technologies

USA - Headquarters
McKinney, Texas 75070
Tel: 1-800-558-5856
Outside U.S. 1-469-293-4201

Asia-Pacific
Singapore, Singapore 128461
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Bologna, Italy 40013
Tel: 39 051 4190611
Gallardon, France 28320
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Industrial/High Purity

TESCOM
Elk River, Minnesota 55330 USA
Tel: 1-763-241-3238
Selmsdorf, Germany 23923
Tel: +49 (0) 38823 31 0

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