

Inverted High Pressure Fluid Filters

Description

See Figure 1. Nordson high-pressure fluid filters prevent nozzle-plugging by filtering contaminants out of coating materials.

These stainless steel, wall-mounted filters are available in two versions: one with a plug valve drain and one with a ball valve drain. Both have $\frac{3}{8}$ -in. ports, and are supplied with a 0.006 screen.

NOTE: Optional screens are available in mesh sizes from 0.002 to 0.030 in.

Specifications	
Maximum Operating Pressure	206.8 bar (3000 psi)
Height (Overall)	
Plug Valve Model	269.24 mm (10.6 in.)
Ball Valve Model	335.28 mm (13.2 in.)
Base (Width x Length)	63.5 x 63.5 mm (2.5 x 2.5 in.)

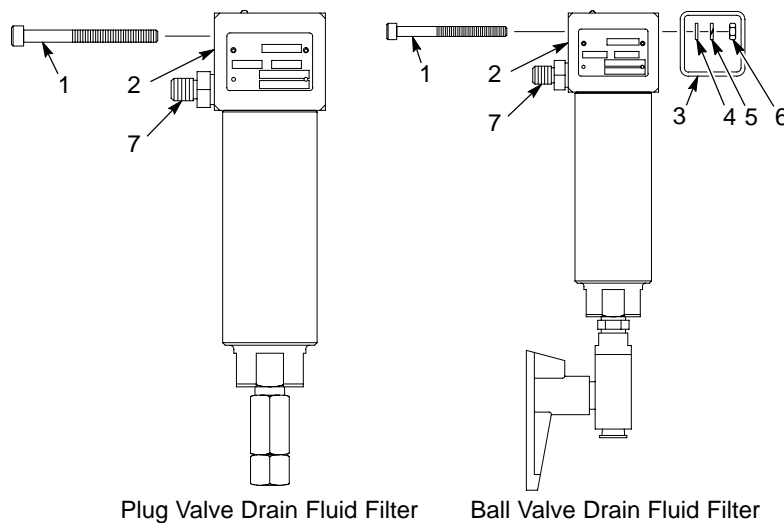


Figure 1 Plug and Ball Valve Drain Fluid Filters

- | | | |
|----------------------|----------------|---------------|
| 1. Mounting bolts | 4. Flat washer | 6. Nut |
| 2. Filter base | 5. Lock washer | 7. Inlet port |
| 3. Stand off bracket | | |

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Installation



WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

See Figure 1. Based upon your specific needs, you may install these filters in several ways. Use the mounting bolts to mount the filter base to a wall or a mounting plate.

NOTE: Refer to the shipped-loose items, as noted in the parts list, for the fittings and mounting parts included with each filter.

1. Mount the fluid filters:
 - a. Plug valve drain: Install the filter as shown. Install the two $5/16$ -18 x $2\frac{3}{4}$ -in. mounting bolts (1) through the filter base (2) and your specific mounting plate. Secure these with $5/16$ -in. lock washers and $5/16$ -18 hex nuts.
 - b. Ball valve drain: Install the filter as shown. Install the two $5/16$ -18 x 3-in. mounting bolts (1) through the filter base (2) and secure it to the standoff bracket (3) with $5/16$ -in. lock washers (5), $5/16$ -in. flat washers (4), and $5/16$ -18 hex nuts (6). Mount the entire assembly to the wall.

NOTE: The inlet and outlet ports are clearly marked.

2. Wrap the threads of the inlet (7) and outlet fittings with Teflon tape and install them in the filter base. Tighten fittings securely.
3. Connect high-pressure fluid hoses to the IN and OUT ports.

Operation

NOTE: Flush the filter with solvent prior to the first use. Failure to do so could result in paint contamination.

During operation, the filter assembly is in constant use. When it is first installed, shut down the system and inspect the filter screen daily to determine its scheduled cleaning requirements.

Maintenance



WARNING: Always turn off the air supply and relieve fluid pressure at the filter drain-off valve before performing any maintenance procedures.

See Figures 2 or 3. Follow these steps to occasionally disassemble the fluid filter to inspect, maintain, and replace its components.

1. Remove the housing:
 - a. Use an adjustable wrench or a $1\frac{1}{2}$ -in. open-end wrench to unscrew the housing from the base.
 - b. Remove the screen or screen assembly with the adapter.
2. Clean the screen and the base assembly thoroughly. Do not use a metal tool to clean the mesh screen.
3. Inspect the screen and O-rings. Replace them if they are damaged or worn.
4. Assemble the filter by reversing this procedure.

Parts

To order parts, call the Nordson Finishing Customer Support Center at (800) 433-9319 or your local Nordson representative.

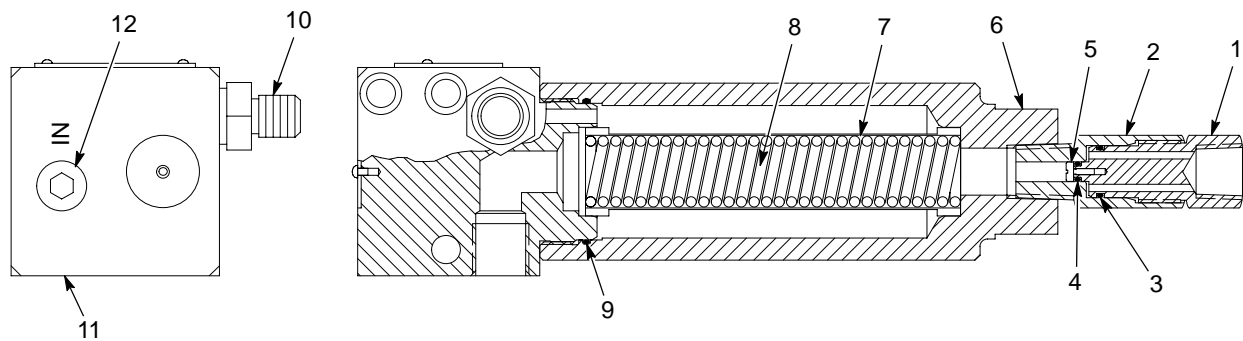
Filter with Plug Valve Drain

See Figure 2.

Item	Part	Description	Quantity	Note
—	338180	FILTER, stainless steel, plug drain	1	
1	338426	• PLUG, filter, stainless steel, O-ring	1	
2	338425	• ADAPTER, filter, stainless steel, O-ring	1	
3	940143	• O-RING, Teflon, 0.50 x 0.625 x 0.06 in.	1	
4	940053	• O-RING, Teflon, 0.094 x 0.218 x 0.06 in.	1	
5	341460	• SCREW, pan, #3-48 x 0.25, slotted, stainless steel	1	
6	337717	• HOUSING, filter, stainless steel	1	
7	161106	• SCREEN, reinforced, 0.006 in.	2	
8	338184	• SPRING, compression, 4.50 x 0.855 x 0.12 in.	1	
9	940302	• O-RING, Teflon, 1.625 x 1.75 x 0.06 in.	1	
10	972099	• CONNECTOR, male, 37°, 1/2-20 x 3/8 in. NPT, stainless steel	1	
11	338178	• BASE, filter, stainless steel, right-hand	1	
12	973423	• PLUG, pipe, socket, standard, 3/8 in., stainless steel	1	
NS	972718	• ELBOW, male, 37°, 1/2-20 x 3/8 in. NPT	1	A
NS	981443	• SCREW, socket, 5/16-18 x 2.75 in., black oxide	2	A

NOTE A: This item is shipped loose.

NS: Not Shown



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Figure 2 Filter with Plug Valve Drain

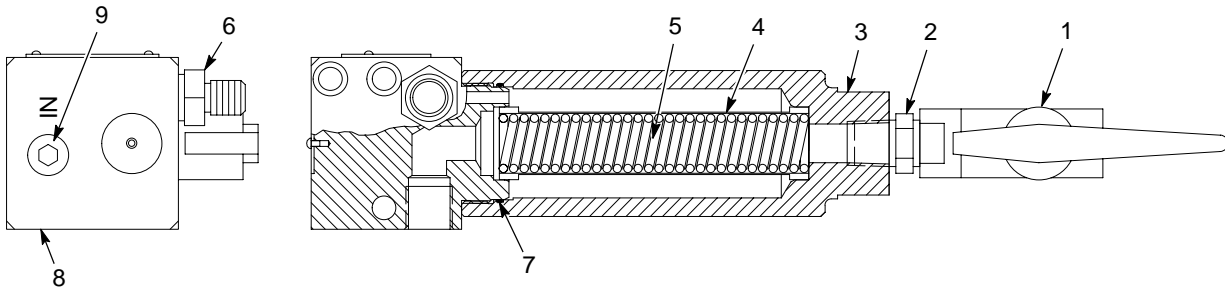
Filter with Ball Valve Drain

See Figure 3.

Item	Part	Description	Quantity	Note
—	338182	FILTER, stainless steel, 3000 psi valve	1	
1	750130	• VALVE, ball, stainless steel	1	
2	973059	• NIPPLE, hex, $\frac{3}{8} \times \frac{3}{8} \times 1.45$ in., stainless steel	1	
3	337717	• HOUSING, filter, stainless steel	1	
4	161106	• SCREEN, reinforced, 0.006 in.	2	
5	338184	• SPRING, compression, 4.50 x 0.855 x 0.120 in.	1	
6	972099	• CONNECTOR, male, 37°, $\frac{1}{2}$ -20 x $\frac{3}{8}$ in. NPT, stainless steel	1	
7	940302	• O-RING, Teflon, 1.625 x 1.75 x 0.06 in.	1	
8	338178	• BASE, filter, stainless steel, right-hand	1	
9	973423	• PLUG, pipe, socket, standard, $\frac{3}{8}$ in., stainless steel	1	
NS	972718	• ELBOW, male, 37°, $\frac{1}{2}$ -20 x $\frac{3}{8}$ in. NPT	1	A
NS	984140	• NUT, hex, regular, $\frac{5}{16}$ -18, steel, zinc	2	A
NS	338844	• SCREW, socket, $\frac{5}{16}$ -18 x 3.00 in., black oxide	2	A
NS	338427	• BRACKET, standoff, filter	1	A
NS	983532	• WASHER, flat, 0.344 x 0.875 x 0.063 in.	2	A
NS	983150	• LOCK WASHER, split, $\frac{5}{16}$ in., steel, nickel	2	A

NOTE A: This item is shipped loose.

NS: Not Shown



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Figure 3 Filter with Ball Valve Drain

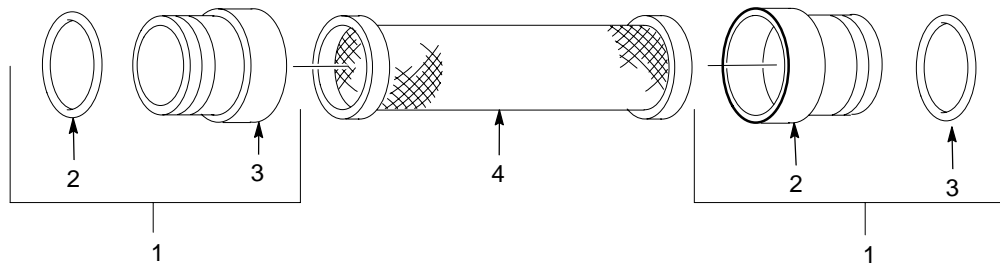
Optional Screens

Use this list to order different-sized screens as required.

Part	Description
161102	SCREEN, reinforced, 0.002 in.
161344	SCREEN, 0.002 in., assembly
161103	SCREEN, reinforced, 0.003 in.
161104	SCREEN, reinforced, 0.004 in.
161106	SCREEN, reinforced, 0.006 in.
161109	SCREEN, reinforced, 0.009 in.
161112	SCREEN, reinforced, 0.012 in.
161115	SCREEN, reinforced, 0.015 in.
161120	SCREEN, reinforced, 0.020 in.
161020	SCREEN, not reinforced, 0.020 in.
161030	SCREEN, not reinforced, 0.030 in.

Optional .002 Screen Assembly with Adapter

Item	Part	Description	Quantity	Note
-	161344	SCREEN, 0.002 in., assembly	1	
1	161339	• ADAPTER assembly, screen	2	
2	940210	• • O-RING, Teflon, 0.9385 x 1.063 x 0.063 in.	1	
3	161349	• • ADAPTER, screen	1	
4	161122	• SCREEN, reinforced, 0.002 in.	1	



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Figure 4 Optional 0.002 Screen Assembly with Adapter

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