



AMIAD WATER SYSTEMS

AMIAD 2" Manual Steel Filter



Installation and Maintenance Instructions



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SAFETY INSTRUCTIONS

General

- 1. Prior to installation or any treatment given to the filter, read carefully the installation and operation instructions.
- While treating the filter all conventional safety instructions should be observed in order to avoid danger to the workers, the public or to property in the vicinity.
- 3. No changes or modification to the equipment are permitted without a written notification given by the manufacturer or by its representative, on the manufacturer behalf.

Installation

- 1. Install the filter according to the installation instructions detailed in this manual.
- 2. Make sure to leave enough clearance so as to enable easy access for future treatments and safe maintenance operations.
- 3 Extra safety devices should be installed on hot water applications to avoid skin burn danger.

Operation and Maintenance

- 1. Loosening or unscrewing bolts should be done only after the pressure in the filter had been released.
- 3. Avoid splashing and water leaking so as to minimize slipping danger or damage to the equipment caused by moisture.
- 4. Always open and close valves slowly and gradually.
- 5. Remove grease and fat material residues in order to avoid slipping.
- 6. After treatment has been completed, re-assemble the protection covers.
- 7. Manual cleaning of filter element using high water pressure or steam should be performed in accordance with the cleaning system instructions and without endangering the operator or his vicinity.
- 8. Manual cleaning of filter element using acid or other chemical agents should be performed in accordance with the relevant material safety instructions and without endangering the operator or his vicinity.

Use of Lifting Equipment

- 1. While using lifting equipment, make sure that the filter or the lifted part is chained securely and in a safe manner.
- 2. Do not leave lifted equipment if there is no necessity. Avoid working below lifted equipment.
- 3. Wear a safety helmet while using lifting equipment.



PRINCIPLE OF OPERATION

The Amiad series of manual filters remove dirt and debris from water as it flows through a stainless steel filtration element. This consists of a perforated cylinder or a weave-wire screen. Filtration elements are available for various degrees of filtration and are color coded for convenient identification.

Water flows through the filter element from the inside-out so that dirt and debris accumulate on the inside surface. The direction of flow is indicated by an arrow on the filter housing.

The 2" manual steel filter has to be cleaned manually. For optional accessories for automatic or semi-automatic operation please consult your Amiad dealer.

INSTALLATION

Installation Site design recommendations

- 1. Select a convenient location for the installation of the filter where operation and maintenance will be optimal.
- 2. Refer to the drawing on page 4 for a typical installation drawing.
- 3. Isolation valves are needed in order to isolate filter during maintenance or repair.
- 4. Design the installation according to the correct direction of flow as indicated by an arrow on the filter housing.
- 5. Take care to leave enough room to remove the filter element for cleaning or service.
- 6. It is recommended that the filter housing is situated in 45° downwards.

Installation instructions

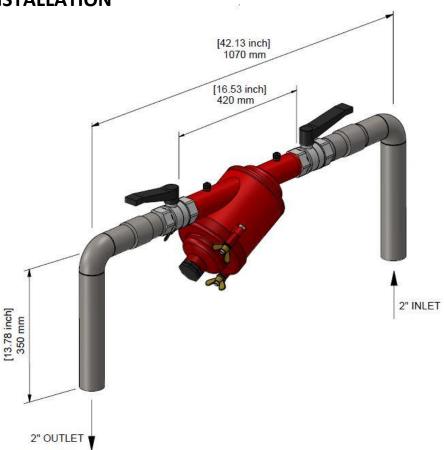
- Install the filter on suitable foundations. Make sure to bolt it and anchored it properly. Ensure the direction of flow according to the arrow marked on the filter housing.
- 2. Prior to installing the filter, flush the main line at the connection point thoroughly in order to remove large objects that may damage the filter's internal mechanism.
- 3. Arrange for suitable lighting at the area of the filter to enable good visibility and safe maintenance.
- 4. Arrange suitable platforms and safety barriers to enable easy access to the filter without climbing on pipes and other equipment.

IMPORTANT!!

The customer is required to prevent static back pressure at the filter's outlet port and to ensure that there will be no reverse flow through the filter. It is recommended to install a non-return valve at the outlet of the filter.



TYPICAL INSTALLATION



CLEANING THE FILTER

- Clean the filter element (as described below) when the pressure drop between the pressure check-points exceeds 0.7 1.0 bar (10 15 psi), or when the downstream pressure or the flow become unacceptably low. Pressure drop can be measured by means of permanently mounted pressure gauges or by a pressure gauge fitted with an Amiad pressure check needle.
- 2. Close the inlet valve. If an outlet valve exists, close it as well, to prevent backflow.
- Open the valve in the filter lid to release pressure. WARNING! DO NOT LOOSEN THE FILTER LID BOLTS UNTIL PRESSURE HAS BEEN RELEASED.
- 4. Remove the lid's nuts, washers and bolts and set aside.
- 5. Remove the lid and inspect its seal. Rinse away any dirt and replace the seal if necessary. New seals may be glued to place using contact cement or a cyano-acrylate (super glue) adhesive.
- 6. Remove the filter element and clean it by spraying a hard stream of water on its outside surface. This flushes the accumulated dirt off the inside surface. Stubborn dirt may be removed using a light to medium stiffness brush (do not use a wire brush).
- Check the filter element for damage and ensure that the seals are properly seated and in good condition. Replace seals if necessary (see picture below)
- 8. Install the filter element in the housing. Ensure that the lid seal is properly seated and in good condition. Install the lid using the bolts, washers and nuts. Tighten the nuts in alternating pairs.
- 9. Turn the water back on and correct any leaks that may occur.



PARTS SCHEDULE

No.	CAT. No.	Description	Qty	Material
1	710105-000050	METAL HOUSING 2" BSPT PKPK 3002 ST.37-2 POLYESTER	1	Various
1	710105-000051	METAL HOUS 2" NPT PKPK 3002 ST.37-2 POLY	1	Various
1	710105-000049	METAL HOUS 2" BSTD PKPK 3002 ST.37-2	1	Various
1	710105-000064	METAL HOUS 2" ISO PKPK 3002 ST.37-2 POLY	1	Various
1	710105-004611	METAL HOUS 2" I/L ASA PKPK 3002 ST.37-2	1	Various
2	710103-000591	NIPPLE 1/4" 2" METAL BRASS BSPT	2	Brass
3	700190-001305	PRESSURE CHECK POINT (PLASTIC) W/O NIPPLE	2	Various
4	760101-000322	HEX BOLT PARTIAL THRD M12 80MM C/ST DIN931 Z. PLATED	3	Zinc Plated
5	710101-000632	2-4"METAL RING F/SCREW M12 PP BLACK	3	PP
6	770104-000083	SHAPED SEAL NBR 70 SHORE SERVICE PORT SAF-4500	1	NBR
7	710105-000057	METAL LID 2" PKPK 3002 ST.37-2 POLYESTER	1	ST.37-2
8	760103-000077	FLAT WASHER M12 DIN125 C/ST ZINC PLATED	3	Zinc Plated
9	700101-000388	MOLDED WEAVEWIRE SCREEN S/ST316L 500SQ.CM 130MIC AMIAD 2"	1	S/ST 316
9.1	770102-000130	PARKER O-RING 2-242 NBR 70 SHORE NO FLASH DW	2	NBR
10	700101-000382	PERFORATED SCREEN S/ST316L 500SQ.CM 1500MIC AMIAD 2"	1	S/ST 316
11	780101-000948	PLUG 1 1/2" BSP M PP PLASSON	1	PP
12	760102-000113	WING NUT M12 BRASS DIN315	3	Brass

PARTS DRAWING

