

Unitor™ Corrosion Block 20-1.5” Installation Maintenance Manual



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Product N. 767650

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1.0 Introduction:

Dear Customer, thank you for selecting **Unitor™** Product range. This manual is intended to provide the installation, start up and maintenance guidelines for the product **Corrosion Block 20-1.5"**, should you need any further information, pls. reach out to our customer service contact.

2.0 Product Description:

Corrosion Block 20-1.5": is an innovative product design to reduce carryover of corrosion product, sediments in the potable water distribution through filtration therefore preventing and improving potable water quality. Product complies with DM25, ACS and ANSI/NSF 42 standards.

3.0 Corrosion Block 20-1.5" Installation and Maintenance Guideline:

Customer scope: To connect all incoming and outgoing connection valves/line/flexible/fittings to Corrosion Block 20-1.5".

The installation and maintenance guidelines are divided into 4 sections.

3.1 Pre-Installation

3.2 Installation & Start up

3.3 General Maintenance

3.4. Cartridge Replacement

Pic 1: Overall System Set Up Requirement for Corrosion Block 20-1.5"

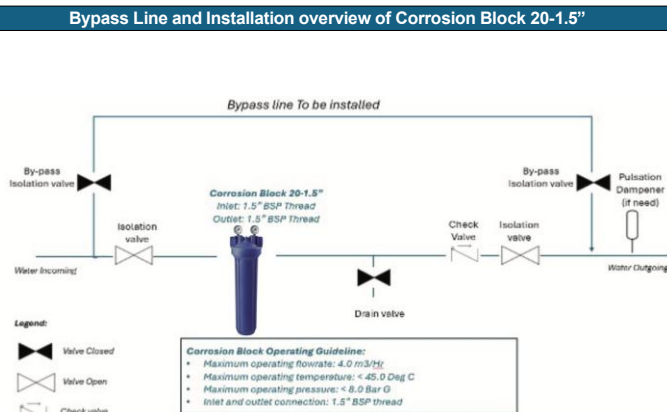


Table 1: Dimension, Gross Weight, Connection Size for Corrosion Block & Individual Parts

Product No.	Product Name	Item	Product Description	UoM	Qty [pcs]	As Box Set			
						Dimensions			Gross Weight [KG]
						Height	Width	Length	
						mm	mm	mm	
767650	Corrosion Block 20 - 1.5" Starter Kit	1	Corrosion Block 20 - 1.5" Housing	Pcs	1	210	620	560	9.5
a	Spanner	Pcs	1						
b	Plastic Wall Bracket	Pcs	1						
c	Lubrication Kit (incl. O-RING)	Pcs	5						
d	Pressure Gauge (0 -12 BarG)	Pcs	3						
e	Corrosion Block 20 - 1.5" Cartridge	Pcs	4						

Pic 2: Component List Corrosion Block 20-1.5"



Housing Material: Plastic, selected raw material, suitable for potable water

Important Reminder: for Corrosion Block 20-1.5", the installation is suitable for the following operating conditions

- a. Maximum operating flowrate: 4.0 m³/h
- b. Maximum operating temperature: < 45.0 Deg C
- c. Maximum operating pressure: < 8.3 Bar G

3.1. Pre-Installation:

1. Check and inspect the **Corrosion Block 20-1.5"** parts are as per the bill of material included in table 1
2. Install 2 pressure gauges to Corrosion Block 20-1.5" according to the pressure gauge installation guide.
3. Recommend installing bypass line to ensure potable water is always available when **Corrosion Block 20-1.5"** is under maintenance or for other abnormal operation.
4. Ensure the water inlet and outlet valves are isolated prior connecting the **Corrosion Block 20-1.5"** to existing system.

3.2. Installation & Start Up:

1. Identify the IN-OUT position at the filter head section, look for the **"TRIANGLE"** sign, this is the indication of the flow direction. IN represent connection of water inlet to filter housing and OUT represent water outlet.
2. Connect the water inlet to the 1.5" BSP thread located at the filter head (remember: Follow the **"TRIANGLE"** sign as indication of water inlet)
3. Connect to existing water pipeline with fixed pipeline or flexible hoses. Unscrew the housing bowl from head, lubricate the O-ring with supplied lubricant, then screw the bowl to head and tighten with supplied spanner
4. Loosen the air vent valve to allow air venting
5. Gradually open incoming water valve to the filter unit, once water started to flow out from the air vent valve, start to screw back and tighten
6. Ensure there is no water leak from the filter unit, tighten the filter bowl to the filter head and pressure gauge if needed.
7. Continue to observe and check for leakages for 48 hours.
8. In the case of leakage, open the filter housing, remove the O-ring from the bowl, place a new O-ring and lubricate the O-ring with lubrication kit, retighten the filter unit.
9. Continue to observe and check for leakages for 48 hours.
10. It is recommended after the installation, slowly turn on a water supply ~~after the installation~~ and let the water flow for at least 5 minutes before use.

3.3. General Maintenance:

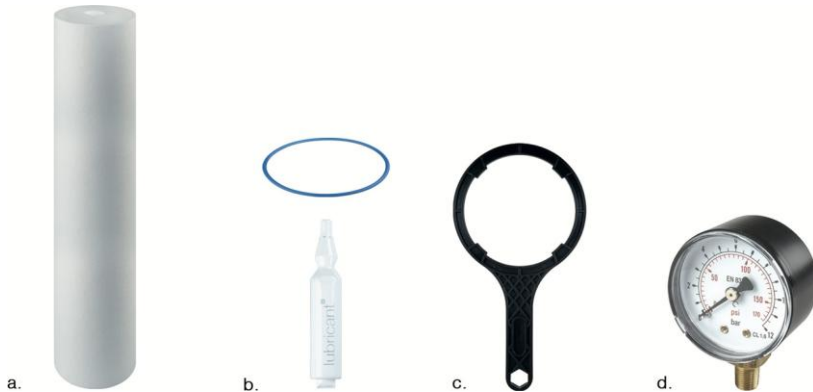
Periodically clean the housing with cold water and sponge. If not in use for long time, remove the cartridge, upon restart, use a new cartridge.

Table 2: Corrosion Block 20-1.5' part and replacement list for 12 mths use

Product No.	Product Name	Item	Product Description	UoM	Qty [pcs]	As Box Set			
						Dimensions			Gross Weight [KG]
						Height	Width	Length	
						mm	mm	mm	
767655	Corrosion Block 20-1.5" Replacement Kit	a	Corrosion Block 20 - 1.5" Cartridge	Pcs	4	540	235	315	4.5
		b	Lubrication Kit (incl. O-RING)	Pcs	5				
		c	Spanner	Pcs	1				
		d	Pressure Gauge (0 -12 BarG)	Pcs	1				

Pic 3: Component List Corrosion Block 20-1.5" Replacement Kit

Corrosion Block 20-1.5" Replacement Kit – Part List and product Description



Recommend to replacement frequency as below. The product should always be stored in a cool, sheltered and dry storage condition.

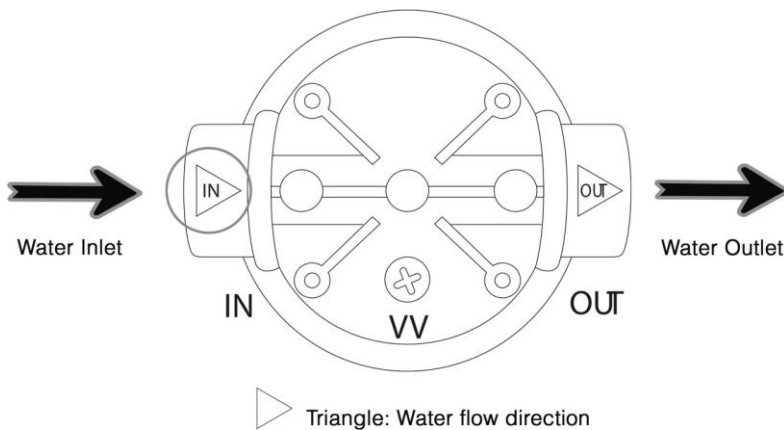
No.	Item	Product	Frequency
1	Housing	Corrosion Block 20-1.5" Housing	Every 5 years
2	Filter Cartridge	Corrosion Block 20 -1.5" Cartridge	Every 3 months
3	Spanner	Spanner	If needed
4	Lubrication Kit	Lubrication Kit (incl. O-RING)	Every 3 months (by cartridge replacement)
5	Pressure Gauge	Pressure Gauge 1/8", 0 - 12 Bar G	If needed

1. After every maintenance or replacement of filter cartridge, it is recommended to change the O-ring with a new one and lubricate the O-ring with lubrication kit before tightening the filter bowl to the filter head. Ensure there's no water leak from the filter unit, tighten the housing bowl housing head and pressure gauge if need.
2. Continue to observe and check for leakages for 48 hours.
3. It is recommended after the maintenance, to slowly turn on a water supply ~~after the installation~~ and let the water flow for at least 5 minutes before use.

3.4. Cartridge Replacement:

1. Check and shut off incoming water valve
2. Release the pressure of the line by gradually opening the vent valve or drain valve available on the connection line.
3. Gradually unscrew to open the filter housing using the spanner provided
4. Remove the used filter cartridge
5. Wipe clean the filter housing with water and a soft sponge.
6. Remove the plastic wrap on the new filter cartridge
7. Insert the new filter cartridge into housing
8. Replace existing filter bowl O-ring with a new O-ring.
9. Lubricate the O ring with lubrication kit before tightening the filter bowl to the filter head
10. Tighten the filter bowl to the filter head with the spanner, do not over tighten.
11. Loosen the air vent valve to allow air venting
12. Turn on the water supply
13. Gradually open incoming water valve to the filter unit, observed air venting from the top section, once water started to flow out from the air vent valve, start to screw back and tighten
14. Ensure there's no water leak from the filter unit, tighten the filter bowl to the filter head and pressure gauge if needed.
15. Continue to observe and check for leakages for 48 hours.
16. In the case of leakage, open the filter housing, remove the O-ring from the bowl, place a new O-ring and lubricate the O-ring with lubrication kit, retighten the filter unit.
17. Continue to observe and check for leakages for 48 hours.
18. It is recommended that after the installation, to slowly turn on a water supply and let the water flow for at least 5 minutes before use.

Pic 4: How to identify the correct Flow Direction located on the filter head



Pic 5: Installation Guide for Corrosion Block 20-1.5"

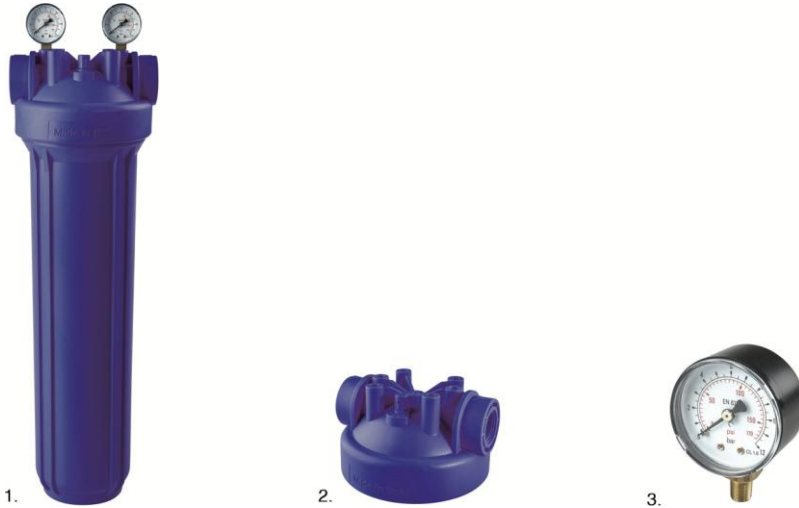
Corrosion Block 20-1.5" Installation Guide



1. Unscrew the filter bowl from the filter head
2. Insert Cartridge into filter bowl
3. Use the lubrication kit to lubricate the bowl O-ring which is located at the filter bowl top
4. Complete the installation by re-assemble head and bowl, and screw tight the head and bowl
5. Tighten the filter bowl to the filter head with spanner

Pic 6: Installation Guide Corrosion Block 20-1.5"

Pressure Gauge Installation Guide



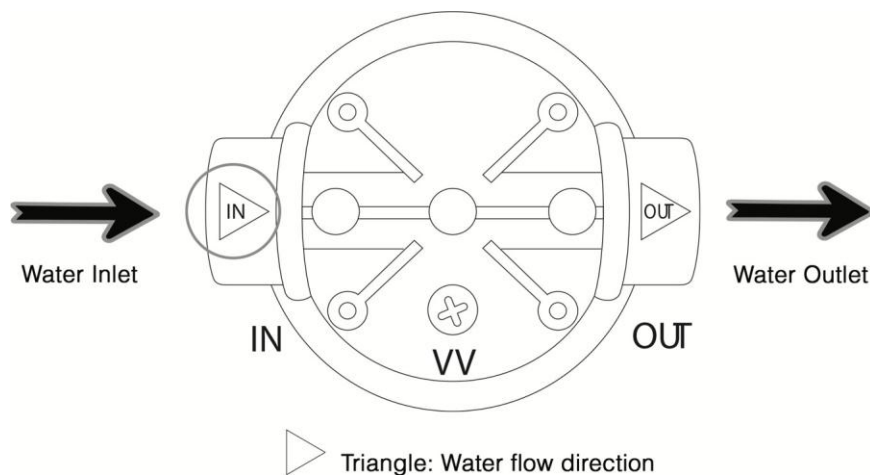
1. Top section, head: Inlet and outlet 1.5" BSP Thread
2. Apply some sealing tape to the thread of the pressure gauge.
3. Screw tight to the thread port at the top section of the filter housing, do not overtighten

Pressure Gauges Installation

Apply some sealing tape to the thread of the pressure gauge and screw them on tightly, but without over-tightening, into the 1/8" threaded ports on the top of the head; at product start-up, in case of leakage of water add some more sealing tape and/or screw more tightly.

Pic 7: Air Venting During Startup/Maintenance

Air venting during startup/maintenance



1. Unscrew the vent-valve and wait for air purge, then screw and tighten the vent-valve (note: Look for vent signage)

Pic 8: Recommended Installation Location for Corrosion Block and Corrosion Shield

