

# Nalfleet Corrosion Block Installation & Maintenance Manual



## **Table of Contents**

<b>Topic</b>	<b>Page</b>
1.0 Introduction	3
2.0 Product Description	3
3.0 Corrosion Block 20-1” Installation and Maintenance Guideline	3
3.1. Pre-Installation	5
3.2. Installation & Start Up	5
3.3. General Maintenance	6
3.4. Cartridge Replacement (For Corrosion Block 20-1”)	6

### 1.0 Introduction:

Dear Customer, thank you for selecting Nalfleet Product range. This manual is intended to provide the installation, start up and maintenance guideline for the product **Corrosion Block 20-1"**, should you need any further information, pls. reach out to our customer service contact.

### 2.0 Product Description:

**Corrosion Block 20-1"**: 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 to with DM25, ACS and ANSI/NSF 42 standards

### 3.0 Corrosion Block 20-1" Installation and Maintenance Guideline:

**Customer scope:** To connect all incoming and outgoing connection valves/line/flexible/fittings to Corrosion Block 20-1".

The installation and maintenance guidelines are segregated into 4 sections.

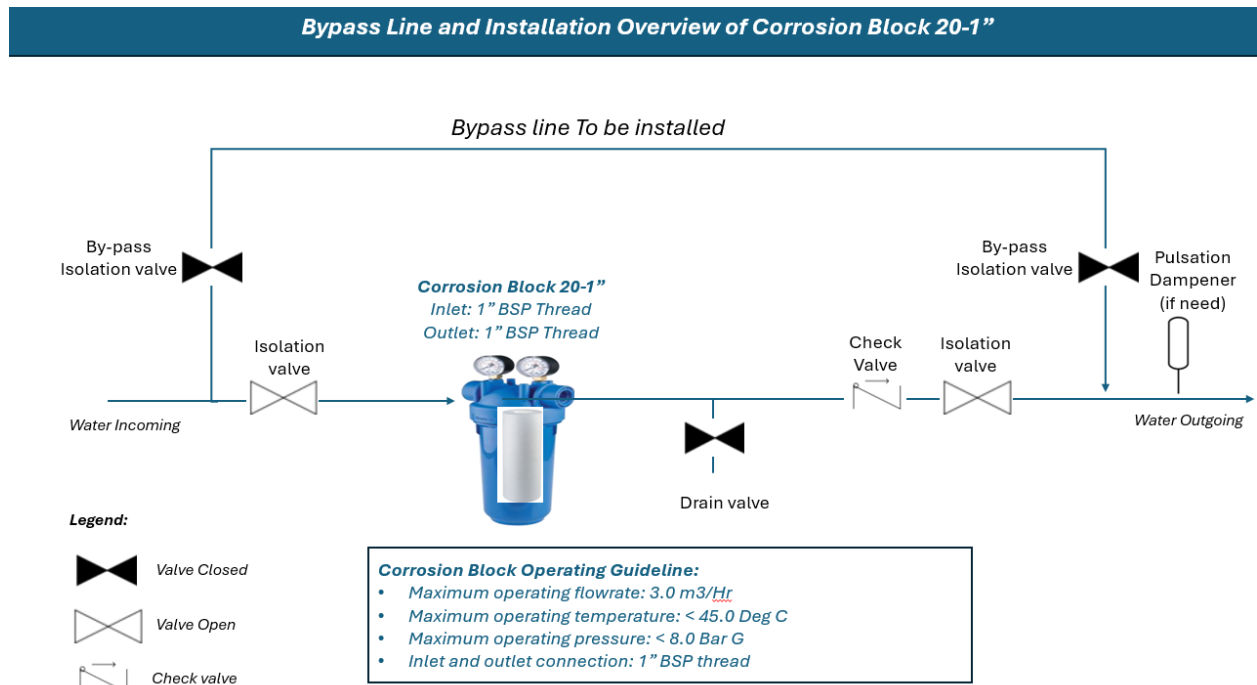
#### 3.1 Pre-Installation

#### 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"**



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

No	Product number	Product description	UoM	Qty	Gross Weight (kg)	Width	Height	Depth	Connection	
						(mm)	(mm)	(mm)	Inlet (BSP Thread)	Outlet (BSP Thread)
1	735106	CORROSION BLOCK 20-1"	Pcs	Pcs	3.192	107	643	122	1"	1"
2	735116	HOUSING 20-1" WITH PRESSURE GAUGE	Pcs	Pcs	1.800	107	643	122	1"	1"
3	735121	CORROSION BLOCK CARTRIDGE 20" 25 MC	Pcs	Pcs	0.320	61	505	61		
4	735127	CORROSION TREAT CARTRIDGE 20"	Pcs	Pcs	2.500	70	510	70		
5	735153	SPANNER SET (2 PCS)	Pcs	2 PCS/set	0.080	117	3	223		
6	735158	LUBRICATION SET (4 PCS)	Pcs	4 PCS/set	0.016	20	20	70		
7	735162	EPDM O RING 83 MM SET (4 PCS)	Pcs	4 PCS/set	0.016	83	3.5	83		
8	735147	Pressure Gauge 1/8", 0 - 12 BarG	Pcs	Pcs	0.070	55	50	32		

Housing Material: Plastic, non-toxic, suitable for potable water

In the installation manual, the following are the key components of Corrosion Block 20-1"

**Pic 2: Component List For Corrosion Block 20-1"**

**Corrosion Block 20-1" – Part List and Product Description**

**Filter Housing**  
In & Out Connection: 1"  
Thread: BSP  
Qty: 1



**Filter Head**



**Corrosion Block 20-1"**  
Cartridge: 4 pcs



**Spacer: 1 PC**



**Lubrikit: 4 pcs**



**EPDM O Ring 83 mm: 4 pcs**



**Filter Bottom**



**Spanner: 2 pcs**



**Pressure Gauge 1/8", 0 - 12 BarG: 2 pcs**



**Important Reminder:** for Corrosion Block 20-1", the installation is suitable for the following operating conditions

- a. Maximum operating flowrate: 3.0 m3/Hr
- b. Maximum operating temperature: < 45.0 Deg C
- c. Maximum operating pressure: < 8.0 Bar G

### 3.1. Pre-Installation:

1. Assemble the **Corrosion Block 20-1**” according to **Corrosion Block 20-1**” installation guide.
2. Install pressure gauge to Corrosion Block 20-1” according to the pressure gauge installation guide.
3. Recommend to install bypass line to ensure potable water is always available when **Corrosion Block 20-1**” 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**” 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” 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.
4. Unscrew the pressure gauge downstream of the “**TRIANGLE**” sign ( e.g. located at the outlet connection) to allow air venting
5. Gradually open incoming water valve to the filter unit, observed air venting from the top section, once water started to flow out from the pressure gauge port, start to screw back and tighten the pressure gauge, stop incoming water supply if this is easier for the pressure gauge to be installed.
6. Ensure there’s no water leak from the filter unit, tighten the filter head, filter bottom and pressure gauge if needed.
7. Continue to observe and check for leakages for 48 hrs.
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 Lubrikit, retighten the filter unit.
9. Continue to observe and check for leakages for 48 hrs.
10. It’s 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.

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

**Table 2: Corrosion Blocl 20-1' part and replacement list**

No.	Item	Product	Product No.	Frequency
1	Housing	HOUSING 20-1" WITH PRESSURE GAUGE	735116	Every 5 yrs
2	Filter Cartridge	CORROSION BLOCK CARTRIDGE 20" 25 MC	735121	Every 3 mths
3	Spanner	SPANNER SET (2 PCS)	735153	As Need
4	Lubrikit	LUBRICATION SET (4 PCS)	735158	Every 3 mths (When change cartridge)
5	O Ring	EPDM O RING 83 MM SET (4 PCS)	735162	Every 3 mths (When change cartridge)
6	Pressure Gauge	Pressure Gauge 1/8", 0 - 12 BarG	735147	As Need

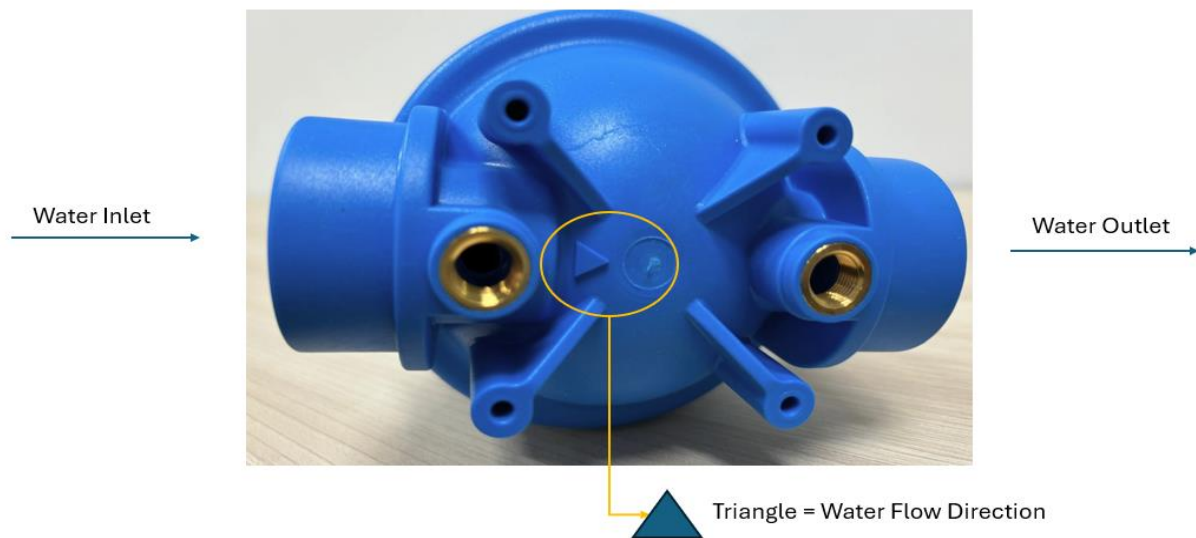
1. After every maintenance or change of filter cartridge, it's recommended to change the O ring with a new one and lubricate the O ring with Lubrikit before tightening the filter bottom to the filter head. Ensure there's no water leak from the filter unit, tighten the housing bowl housing head and pressure gauge if need.
2. Continue to observe and check for leakages for 48 hrs.
3. It's 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.

### 3.4. Cartridge Replacement:

1. Check and shutoff incoming water valve
2. Release the pressure of the line by gradually opening one of the pressure gauge 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. Transfer the spacer from the existing to the new filter cartridge
8. Insert the new filter into housing
9. Replace existing filter bottom O ring with a new O ring.
10. Lubricate the O ring with Lubrikit before tightening the filter bottom to the filter head
11. Tighten the filter bowl to the filter head with the spanner, do not over tighten.
12. Remove the pressure gauge downstream of the "TRIANGLE" sign ( e.g. located at the outlet connection) to allow air venting

13. Turn on the water supply
14. When water is observed coming out from the emptied pressure gauge port, start re-install the pressure gauge, do not over tighten, used white sealing tape if need.
15. Ensure there's no water leak from the filter unit, tighten the filter head, filter bottom and pressure gauge if needed.
16. Continue to observe and check for leakages for 48 hrs.
17. 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 Lubrikit, retighten the filter unit.
18. Continue to observe and check for leakages for 48 hrs.
19. It's 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.

**Pic 3: How To Identify The Installation Flow Direction Located On The Filter Head**





**Pic 4: Installation Guide for Corrosion Block 20-1”**

**Corrosion Block 20-1” Installation Guide**


**Spacer**  
(white color ring)



**Corrosion Block Cartridge 20” 25 MC**



**Filter Housing**




**Filter Head Section: Inlet and outlet 1” BSP Thread**



**Note: Spacer ring should be facing up**





**Step 1:** Prepare Spacer (white color ring) and Corrosion Block 20” 25 MC

**Step 2:** Insert spacer into the Cartridge

**Step 3:** Prepare to insert into filter bottom section

**Filter Bottom Section:**



**Step 6:** Insert cartridge fitted with spacer into filter bottom section

**Step 8:** Complete the installation by re-assemble head and bottom section, and screw tight the head and section

**Step 4:** Unscrew the housing into filter head section and filter bottom section

**Step 5:** Use the *lubrikit* to lubricate the housing-ring which is located at the Filter Bottom top




**Step 7:** Tighten the filter bowl to the filter head with *spanner*




**Pic 5: Installation Guide For Corrosion Block 20-1”**

**Pressure Gauge Installation Guide**


**Filter Housing**



**Top Section, Head: Inlet and outlet 1” BSP Thread**



**Step 2:** Apply some sealing tape to the bottom of the pressure gauge. Screw tight to the thread port at the top section of the filter housing, do not overtighten



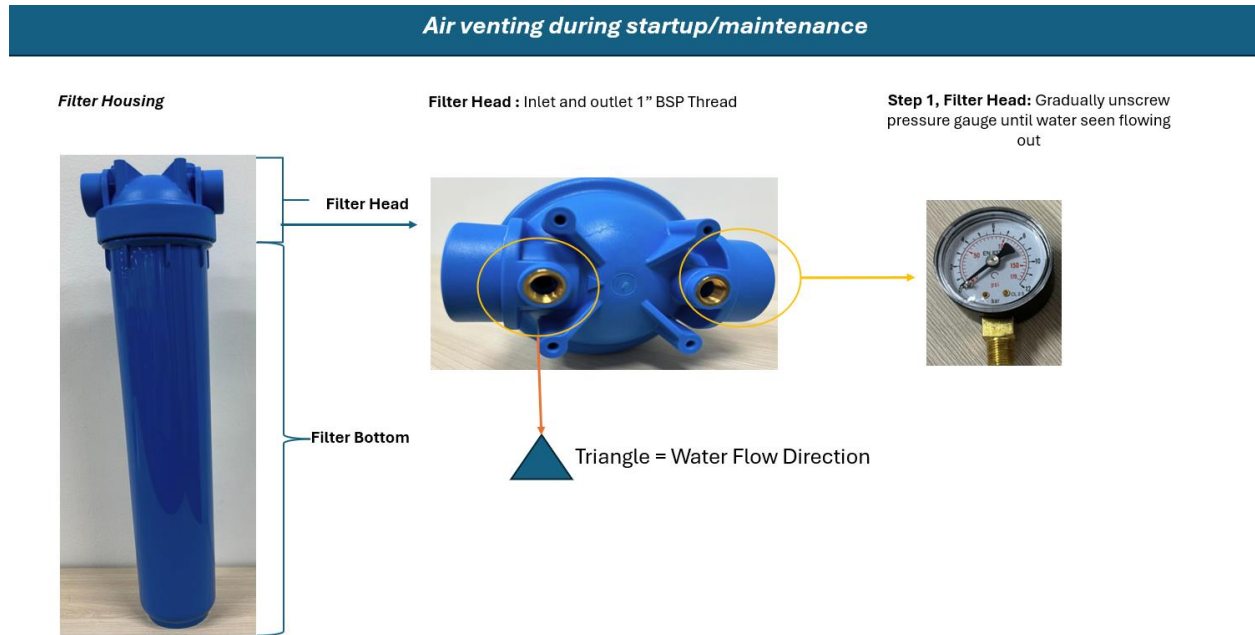
**Filter Head**

**Bottom Section, Bowl**

**Step 1:** Prepare completed set of filter housing follow the installation manual of with either the Corrosion Block 20-1” or Corrosion Treat 20-1”



Pic 6: Air Venting During Startup/Maintenance



Pic 7: Recommended Installation Location For Corrosion Block and Corrosion Shield

