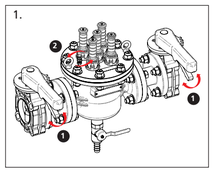
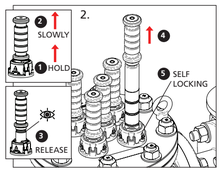
Servicing instructions

NOTE: Do not remove the magnets completely out of the filter. Individual magnets, during servicing, are to be lifted slowly to the service position only. If a magnet is entirely removed, care should be taken at all times to ensure the magnets are not placed near another metallic/magnetic source.

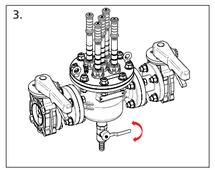
It is necessary to keep the magnets and pockets dry at all times.



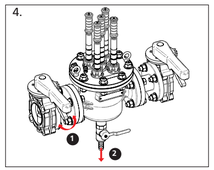
1. Turn off the boiler and isolate the electrics. Close the isolation valves on either side of the *MagnaClean Commercial* unit, then open the air vent.



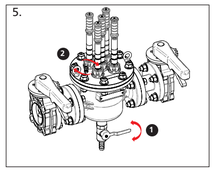
2. To position the magnets into service mode, lift and hold the gray locking ring, then carefully pull up the magnet. Release the locking ring and continue to slowly lift the magnet assembly until it locks into service position. Ensure that the magnets are not taken out from the filter completely.



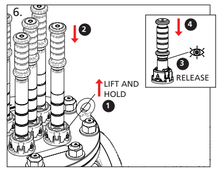
3. Either connect a hose to the 1¼" NPT drain valve or place a bucket underneath the unit. Open the drain valve or remove the drain plug.



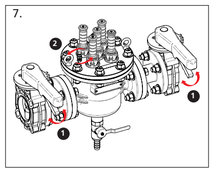
4. Slightly open the inlet isolation valve, leaving the other isolation valve closed, and allow the deposits to drain through.



5. Once the water runs clear, close the inlet isolation valve, then close the drain point by turning off the drain valve or replacing the plug. Close the air vent.



6. To replace the magnets to operational mode, lift and hold gray locking ring up and slowly push down magnet assembly. Release locking ring and continue to slowly push down magnet assembly until it locks into operational mode.



7. Re-open both isolation valves then refill the system as required. Bleed the air from the filter using the air vent. Ensure all magnets and pockets remain dry at all times and any excess fluid is wiped off the top plate.

(If gaskets are lost or damaged please contact ADEY on 844 378 0442)

Service warranty
The product is backed by a two year warranty.

These instructions are designed to support installers in the safe and effective installation and servicing of ***MagnaClean Commercial.***

Any queries should be directed to **ADEY** on **844 378 0442**
For the most up-to-date version of installation and servicing instructions visit **adeyusa.com**

MagnaClean®

Technical specifications

MagnaClean
Maximum working pressure: 145 psi
Maximum working temperature: 212°F

Casing
Housing and lid material: 304L stainless steel (SA351CF3)
Drain: 1¼" FEMALE NPT hole, with 1¼" MALE NPT plug
Lid Seal: EPDM

Flow flanges
ASME B16.5 Class 150
Supplied with IBC gaskets (EPDM)

Magnets
Material: High power, NdFeB
Pocket sleeves: 304L Stainless steel (SA351CF3)

MagnaClean designed, manufactured and third party approved to **ASME Boiler and Pressure Vessel Code Section VIII Division 1 - 2015**

Inlet and outlet flanges
Size options: 2", 3" 4", 6", 8"
Flanges: ASME B16.5 Class 150

Filter size	Flange thickness (inch)	Bolt size	Bolt quantity	Bolt hole PCD (inch)
2"	0.79	5/8"	4	4.75
3"	0.98	5/8"	4	6.00
4"	0.98	5/8"	8	7.50
6"	1.02	¾"	8	9.50
8"	1.14	¾"	8	11.75

Product code	Filter size	Filter diameter (inch)	Inlet size (inch)	No. of magnetic rods	Filter volume (US gallons)	Filter dry weight (lbs)
FL1-03-2700	2"	6.30	2	5	0.83	54.7
FL1-03-2701	3"	8.27	3	6	1.84	88.6
FL1-03-2702	4"	8.50	4	7	2.18	103.4
FL1-03-2703	6"	12.76	6	9	7.4	211.4
FL1-03-2704	8"	12.76	8	9	8.7	241.4

CAUTION:

MagnaClean filter contains strong magnets. Keep away from all electrical devices, bank cards and other magnetic devices.

MagnaClean filter contains strong magnets. Caution should be taken at all times when handling if you have a pacemaker fitted.

MagnaClean filter is a pressurized device. Always release pressure before servicing.

Unit may be hot in operation. Handle with care.

ADEY®
PROFESSIONAL HEATING SOLUTIONS

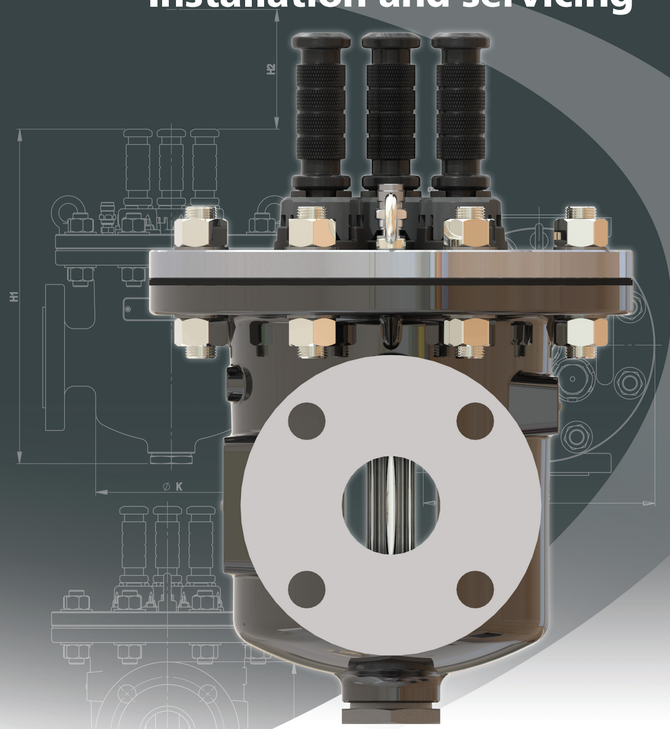
Toll free: 844 378 0442 | Office: 412 406 8292 | Email: info@adeyusa.com
adeyusa.com

A carbon neutral company

M01708 LF2-01-02602 V2

MagnaClean®

Installation and servicing



ADEY®
PROFESSIONAL HEATING SOLUTIONS

Installation instructions

MagnaClean® Commercial™ is an incredibly powerful range of magnetic filters designed to remove black iron oxide sludge from light commercial hydronic heating systems through to heavy industrial applications.

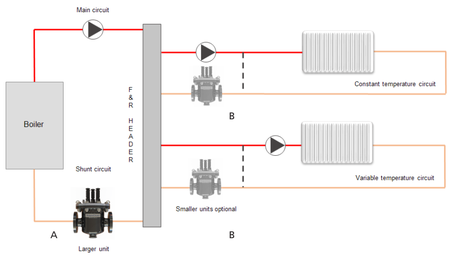
The exceptional design characteristics and high production quality of *MagnaClean Commercial* make installation and ongoing maintenance extremely straightforward.

Correct installation and servicing is essential to ensure optimum operating performance and a longer operational life for the system.

Flexible magnetic filtration options

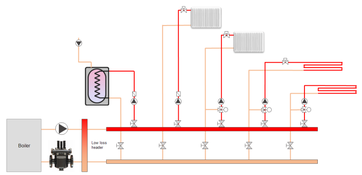
As can be seen in the diagram below, *MagnaClean Commercial* provides a number of installation solutions in terms of unit size and location. The typical HVAC system illustrated identifies two of these options within the various circuits.

Installation with Cascade (zoned) system

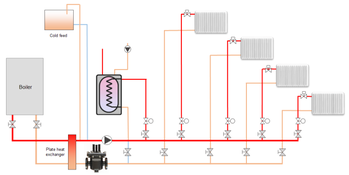


* Position A is the recommended best practice installation option. Position B could be added in as an option to further protect the system.

Installation with a Low loss header

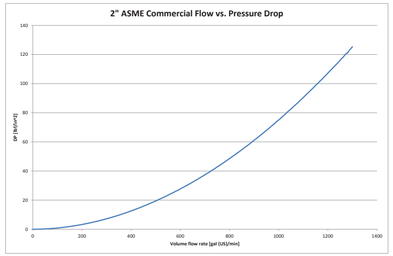


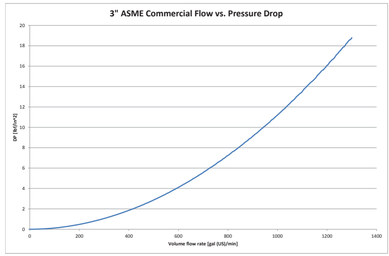
Installation with a Plate to plate

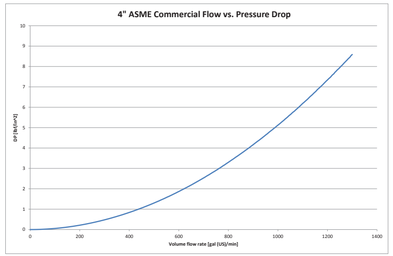


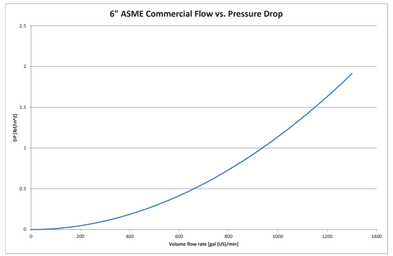
For chiller systems, it is recommended that a *MagnaClean* is installed on the return of the system before the chiller.

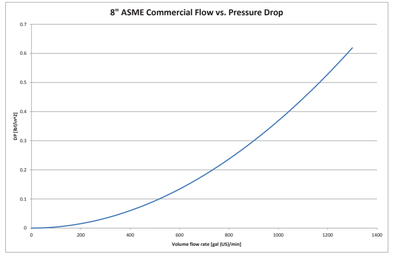
Pressure differential flow

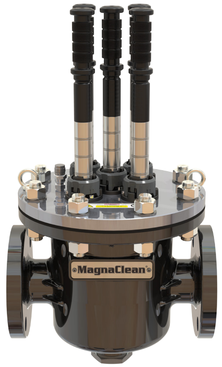






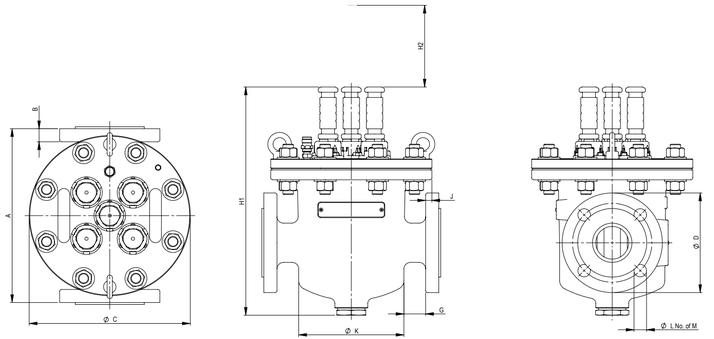






Measurements table

ADEY product code	Description	Filter diameter	Inlet size	No. of magnet-ic rods	Measurement (inch)										
					A	B	ØC	ØD	G	H1	H2	J	ØK	L	M
FL1-03-2700	2" filter	6.30	2	5	10.47	0.79	9.65	6	1.30	13.75	7.88	-0.37	6.30	0.75	4
FL1-03-2701	3" filter	8.27	3	6	13.78	0.98	11.61	7.5	1.78	15.56	8.86	0.10	8.27	0.75	4
FL1-03-2702	4" filter	8.50	4	7	14.96	0.98	11.78	9	2.24	15.84	9.77	0.61	8.50	0.75	8
FL1-03-2703	6" filter	12.76	6	9	19.13	1.02	16.93	11	2.17	20.47	10.63	0.08	12.76	0.88	8
FL1-03-2704	8" filter	12.76	8	9	21.97	1.14	16.93	13.5	3.46	20.47	13.39	1.38	12.76	0.88	8



Step by step guide to installation

NOTE: Do not remove the magnets completely out of the filter. Individual magnets, during servicing, are to be lifted slowly to the service position only (see servicing instructions for more information). If a magnet is entirely removed, care should be taken at all times to ensure the magnets are not placed near another metallic/magnetic source.

It is necessary to keep the magnets and pockets dry at all times.

NOTE: We recommend that *MagnaClean* is fitted on the primary circuit on the return to the boiler.

IMPORTANT: The filter must be installed in an upright position.

Follow the illustrations and measurements for easy installation of *MagnaClean Commercial.*

There are four key steps to successful installation:

Step 1

Use the measurement table to identify the correct length of pipework to be cut-out (refer to measurement 'A').
Allow extra length for isolation valves, if required.
It is recommended that the filter is fitted on the primary circuit on the return to the boiler.
Give consideration to the area above *MagnaClean* to access the magnets during servicing. Refer to dimension 'H2' on measurement table shown.

Step 2

Using appropriate fittings, fit the valves to the two ASME B16.5 Class 150 flanges using suitable gaskets.

Step 3

Install the *MagnaClean Commercial*, ensuring that all fittings are aligned correctly and securely.
Install a fixed drainage pipe and drain valve to the 1¼"NPT drain point at the base of the unit (remove the drain plug first). Alternatively, place a bucket underneath the unit and remove the drain plug during servicing.

Step 4

Having checked the installation, run the system for a period of time. Ensure the isolation valves are fully open and there are no leaks.