

Filters

MF/MFD/MFDS Series Service and Parts



up to 120 gpm (454 lpm), up to 250 psi (17 bar) - sizes 90/95,
120 psi (8 bar) - sizes 40/80/85/160/180/190/195

1. Maintenance

1.1 General

Please follow the maintenance instructions.

1.2 Installation

Before installing the filter into the system, check that the operating pressure of the system does not exceed the permitted operating pressure of the filter. Refer to the type code label on the filter.

1.3 Commissioning

Check that the correct filter cartridge(s) is/are screwed on firmly.

1.4 Maintenance Tools

Strap wrench

1.5 Torque Values For Clogging Indicators

Type	Torque Nm[ft-lb]
VMF	10 [7.4] or use Loctite 542 or equivalent for indicator installation

Seal on MA version

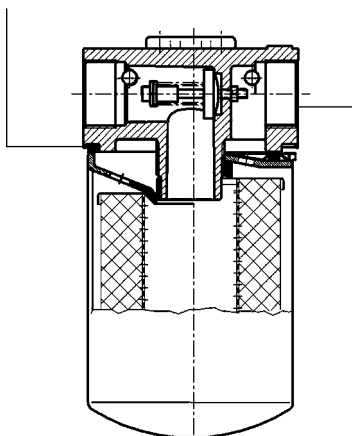
Note:

On this version, the seal must be installed on the filter head.

Seal on MG version

Note:

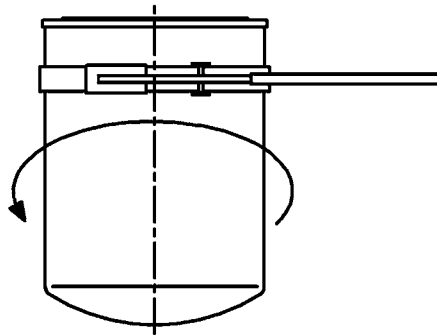
On this version, the seal must be installed on the filter cartridge.



2. Changing the Cartridge

2.1 Element Removal

1. Unscrew filter cartridge counterclockwise using a strap wrench



Filter cartridge type MA:

2. Lubricate seal and install on the filter head.
3. Screw on the cartridge until contact is made with the sealing surface – then tighten by hand by another half to full turn. (Consult the instructions printed on the cartridge for specifics regarding cartridge sizes.)
4. Do not overtighten.

Filter Cartridge Type MG:

1. Unscrew filter cartridge counterclockwise using a strap wrench.
2. Lubricate seal and install on the filter cartridge.
3. Screw on the cartridge until contact is made with the sealing surface – then tighten by hand by another half to full turn. (Consult the instructions printed on the cartridge for specifics regarding cartridge sizes.)
4. Do not overtighten.

NOTE:

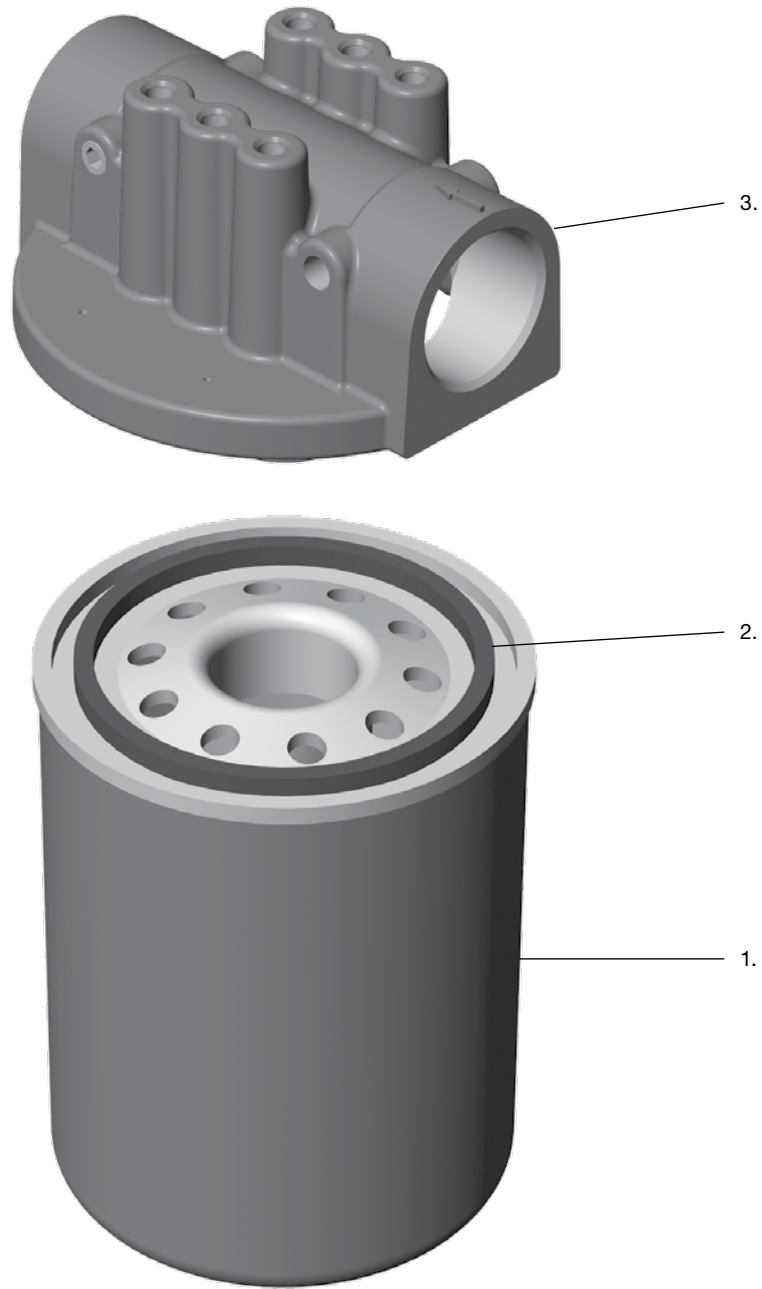
Contamination or incomplete pressure release on disassembly can lead to seizing of the bowl thread.

Filter elements which cannot be cleaned must be disposed of in accordance with environmental protection regulations.

FILTER MAINTENANCE

3. Spare Parts

3.1 MF

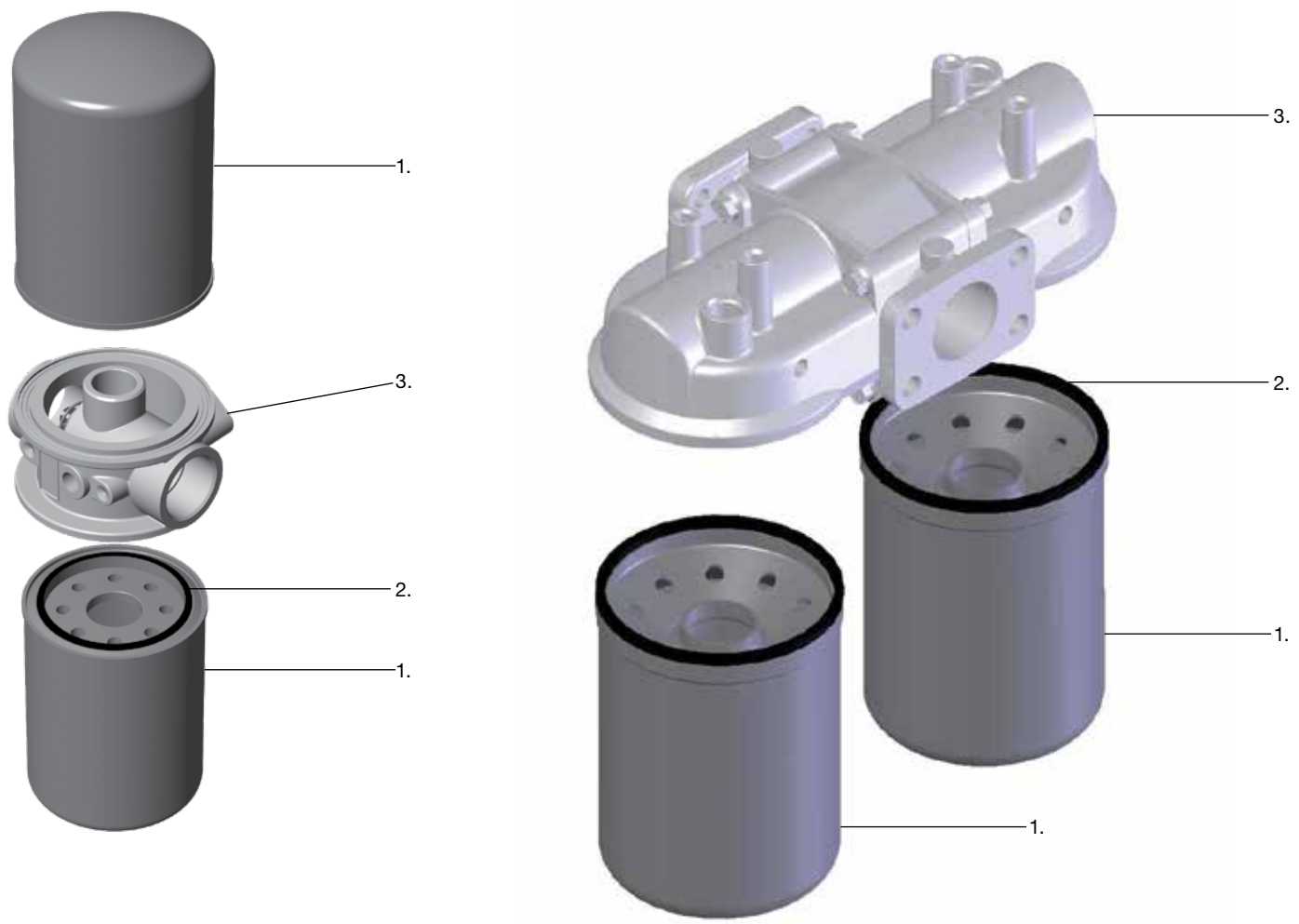


3.2 SPARE PARTS LIST MF

Item	Description	80/85	90/95	160/180/190/195
1	Refer to model code breakdown on Pg 4.			
2	Seal Kit (note, seals are included with replacement cartridge)	N/A – seal integral to cartridge	N/A – seal integral to cartridge	3132212
3	Head Assembly – consult HYDAC for part number. Please provide complete filter assembly model code.	HEAD ASS'Y MF80GXX.....	HEAD ASS'Y MF90GXX.....	HEAD ASS'Y MF160GXX..... or HEAD ASS'Y MF190GXX.....

Buna seals only.
Size 190 uses 0160 MA cartridge, size 195 uses 0180 MA cartridge.

3.3 MFD/MFDS



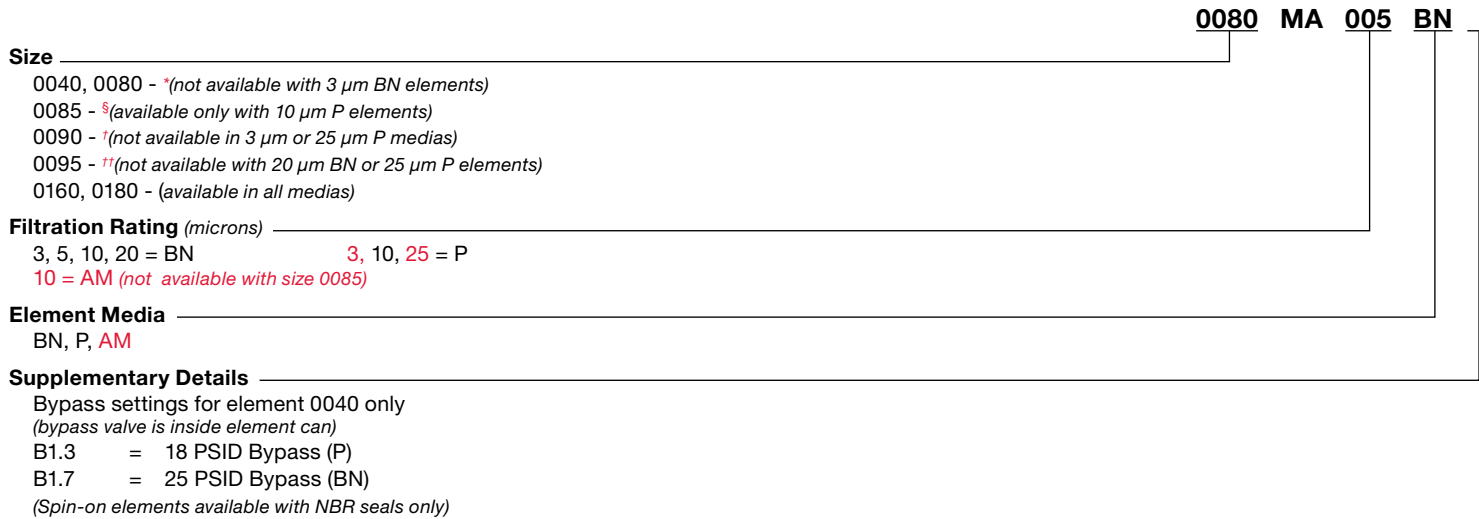
3.4 SPARE PARTS LIST MFD/MFDS

Item	Description	MFD	MFDS
1		Refer to model code breakdown on Pg 4.	
2	Seal Kit (note, seals are included with replacement cartridge)	3132212, two kits required	2070531 (head seal kit) & 3132212 (cartridge seal kit, two kits required)
3	Head Assembly – consult HYDAC for part number. Please provide complete filter assembly model code.	HEAD ASS'Y MFD160GXX.....	HEAD ASS'Y MFDS160GFXX..... or HEAD ASS'Y MFDS190GFXX.....

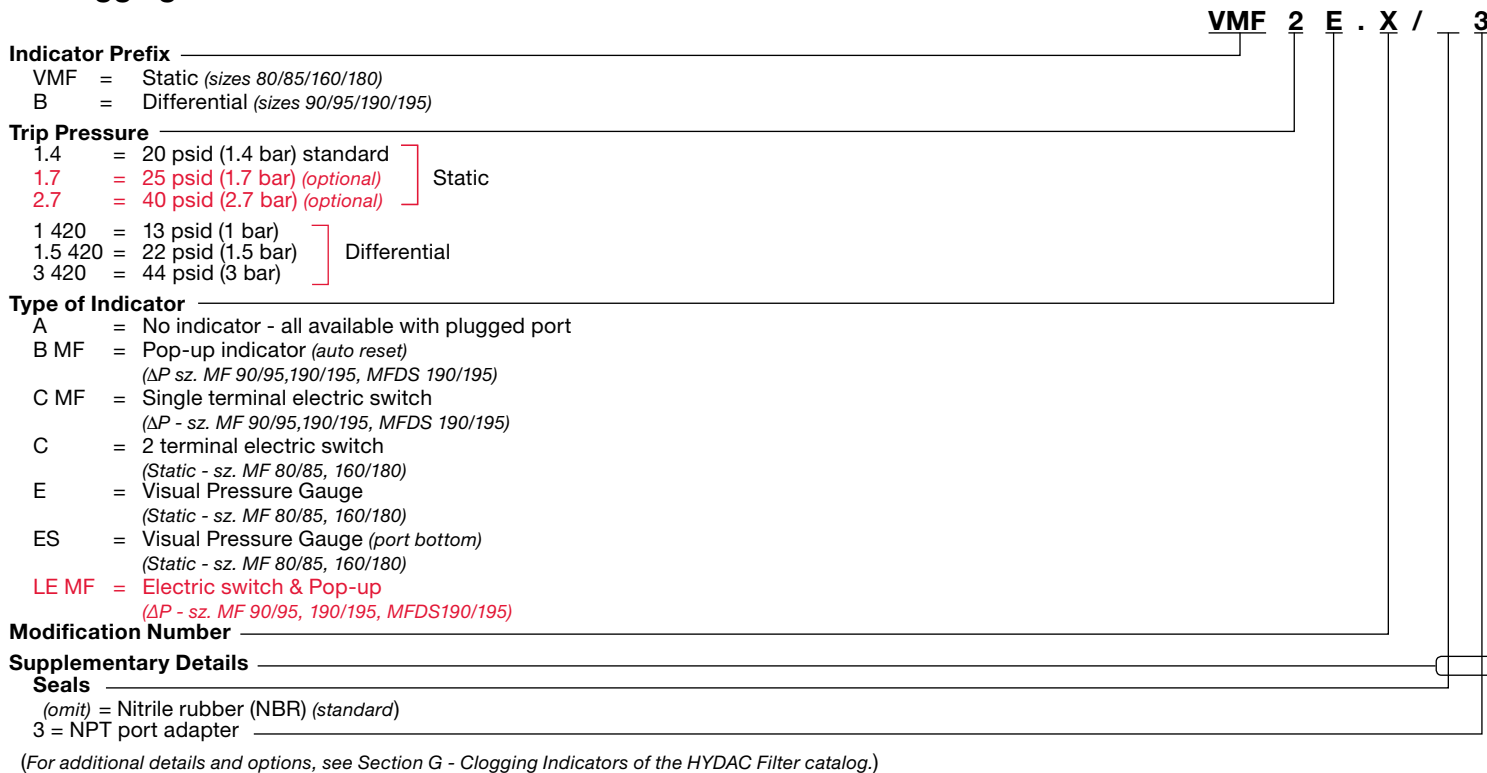
Buna seals only.
 Size 190 uses 0160 MA cartridge, size 195 uses 0180 MA cartridge.

FILTER MAINTENANCE

4. Replacement Element Model Code



5. Clogging Indicator Model Code

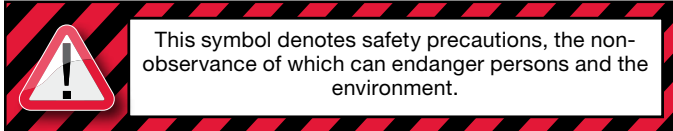


6. Maintenance Instructions

6.1 User Instructions for Filters



- This pressure equipment must only be put into operation in conjunction with a machine or system.
- The pressure equipment must only be used as stipulated in the operating instructions of the machine or system.
- This pressure equipment must only be operated using hydraulic or lubricating fluid.
- It is the responsibility of the operator to comply with the water regulations of the country concerned.



CAUTION

- The user must take appropriate action (e.g. venting) to prevent the formation of air pockets.
- Repairs, maintenance work and commissioning must only be carried out by trained personnel.
- Allow the pressure equipment to cool before handling.
- The stipulations of the operating instructions of the machine or the system must be followed.
- Statutory accident prevention regulations, safety regulations and safety data sheets for fluids must be observed.
- Filter housing must be grounded.
- When working on, or in the vicinity of, hydraulic systems, open flames, sparks and smoking are forbidden.
- Hydraulic oils and water-polluting fluids must not be allowed to enter the soil or watercourses or sewer systems. Please ensure safe and environmentally friendly disposal of hydraulic oils. The relevant regulations in the country concerned with regard to ground water pollution, used oil and waste must be complied with.
- Whenever work is carried out on the filter, be prepared for hot oil to escape which can cause injury or scalding as a result of its high pressure or temperature.

DANGER!

- Caution: pressure equipment! Before any work is carried out on the pressure equipment, ensure the pressure chamber concerned (filter housing) is depressurized.
- On no account must any modifications (welding, drilling, opening by force...) be carried out on the pressure equipment.
- When using electrical clogging indicators, the electrical power supply to the system must be switched off before removing the clogging indicator connector.

6.2 Maintenance, General

This section describes maintenance work which must be carried out periodically. The operational safety and life expectancy of the filter, and whether it is ready for use, depend to a large extent on regular and careful maintenance.

6.3 Maintenance Measures

- Spare parts must fulfil the technical requirements specified by the manufacturer.
This is always ensured when using original HYDAC spare parts.
- Keep tools, working area and equipment clean.
- After disassembling the filter, clean all parts, check for damage or wear and replace parts if necessary.
- When changing a filter element, a high level of cleanliness must be observed.

6.4 Interval Between Cartridge Changes

In principle we recommend that the filter element is changed every 6 months or upon indication, whichever occurs first. We recommend installing the filter with a clogging indicator (pressure gauge/ pressure switch or vacuum gauge/ vacuum switch) to monitor the filter element. If the clogging indicator responds, it is necessary to change the filter cartridge. If the pressure gauge indicates 2 bar (or the vacuum pressure switch 0.2 bar), it is also necessary to change the filter cartridge.

Customer Information in respect of Machinery Directive 2006/42/EC

Hydraulic filters are defined as fluid power parts / components and are therefore excluded from the scope of the Machinery Directive, sections 1.4.1 - 1.4.3. They do not bear the CE mark.

Before using these components, ensure compliance with the specifications provided by HYDAC Technology Corporation. The specifications also contain information on the relevant essential health and safety requirements (based on Machinery Directive 2006/42/EC).

We hereby declare that the filters are intended to be incorporated into machinery within the terms of the Directive 2006/42/EC. It is prohibited to put the filters into service until the machinery as a whole is in conformity with the provisions of the Machinery Directive.

Service address

HYDAC Technology Corporation Filter Division

2260 City Line Road
Bethlehem, PA 18017
+1.610.266.0100

NOTE

The information in this brochure relates to the operating conditions and applications described.

For applications or operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

Global Headquarters
HYDAC INTERNATIONAL
GMBH

Industriegebiet
D – 66280 Sulzbach/Saar
Germany

Tel.: +49 6897 509-01

Fax: +49 6897 509-577

Internet: www.hydac.com
Email: info@hydac.com

North America Locations

USA

www.HYDAC-NA.com

North America Headquarters
HYDAC TECHNOLOGY CORPORATION
Filter Division

2260 City Line Road
Bethlehem, PA 18017
+1.610.266.0100

HYDAC TECHNOLOGY CORPORATION
Electronic Division
Process Filter Division

HYDAC CORPORATION
Accumulator Division
90 Southland Drive
Bethlehem, PA 18017
+1.610.266.0100

HYDAC TECHNOLOGY CORPORATION
Accessory Division

2204 Avenue C
Bethlehem, PA 18017
+1.610.266.0100

HYDAC TECHNOLOGY CORPORATION
Filter System Division
Process Filter Division
Fuel Filtration Division

580 West Park Road
Leetsdale, PA 15056
+1.724.318.1100

HYDAC TECHNOLOGY CORPORATION
Hydraulic Division –
Compact Hydraulics

450 / 445 Windy Point Drive
Glendale Heights, IL 60139
+1.630.545.0800

HYDAC TECHNOLOGY CORPORATION
Hydraulic Division – Tech Center

430 Windy Point Drive
Glendale Heights, IL 60139
+1.630.545.0800

HYDAC TECHNOLOGY CORPORATION
Cooling System Division

1051 Airlie Parkway
Denver, NC 28037
+1.610.266.0100

HYDAC TECHNOLOGY CORPORATION
Mobile Hydraulic Division

1660 Enterprise Parkway • Suite E
Wooster, OH 44691
+1.610.266.0100

HYDAC CYLINDERS LLC

540 Carson Road North
Birmingham, AL 35217
+1.205.520.1220

HYDAC TECHNOLOGY CORPORATION
HYDAC CORPORATION
Sales Office & Operations

510 Stonegate Drive
Katy, TX 77494
+1.281.579.8100

HYDAC TECHNOLOGY CORPORATION
HYDAC CORPORATION
NW Sales Office & Operations

1201 NE 144th St. Bldg. B • Suite 111
Vancouver, WA 98685
+1.610.266.0100

HYDAC TECHNOLOGY CORPORATION
HYDAC CORPORATION
NE Sales Office

1660 Enterprise Parkway • Suite E
Wooster, OH 44691
+1.610.266.0100

HYDAC TECHNOLOGY CORPORATION
HYDAC CORPORATION
SE Sales Office

1051 Airlie Parkway
Denver, NC 28037
+1.610.266.0100

HYDAC TECHNOLOGY CORPORATION
HYDAC CORPORATION
NC Sales Office

9415 West Forest Home Ave. • Suite 200
Hales Corners, WI 53130
+1.610.266.0100

Canada

www.HYDAC-NA.com

HYDAC CORPORATION
14 Federal Road
Welland, Ontario, Canada L3B 3P2
+1.905.714.9322

HYDAC CORPORATION
Sales Office
5160 75 Street NW
Edmonton, Alberta, Canada T6E 6W2
+1.780.484.4228

HYDAC CORPORATION
Sales Office
Montreal, Québec, Canada J2M 1K9
+1.877.539.3388

Mexico

www.HYDACmex.com

HYDAC INTERNATIONAL SA de CV
Calle Alfredo A Nobel No 35
Col Puente de Vigas
Tlalnepantla, Edo Mexico
CP 54090
Mexico
+011.52.55.4777.1262