

General Introduction

The Endura-MC is a **M**agnetically **C**oupled end-suction centrifugal pump line, manufactured by Liquiflo Equipment Company. This line is available in long coupled (Power Frame) or close-coupled (C-Face mounting) styles.

DIMENSIONAL ENVELOPE

The **long-coupled** option is, dimensionally, in **full compliance with ANSI B73.1** specifications and will retrofit any existing ANSI pump installation.

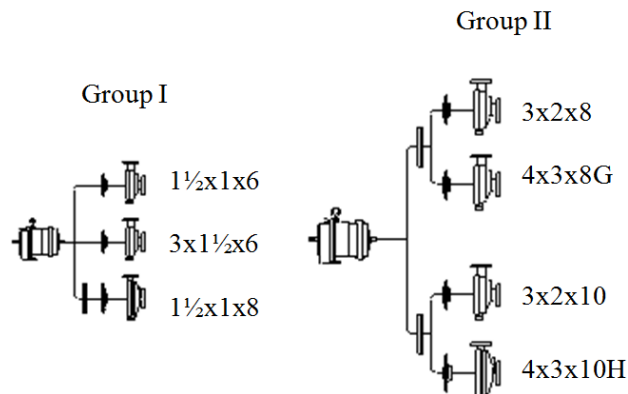
The **close-coupled** option involves **no piping modifications**. The magnetic coupling mounts directly onto the motor shaft, requiring the motor to be moved forward. This C-Face mounting eliminates the need for coupling alignment.

The back pull out design enables the removal of the rotating assembly without removing the casing from the piping.

AVAILABLE STANDARD SIZES

Group I:	Max. RPM
1.5x1x6	3550
3x1.5x6	3550
1.5x1x8	3550

Group II:	Max. RPM
3x2x8	3550
4x3x8G	3550
3x2x10	3550
4x3x10H	1750



IMPELLER

All MC pumps use a closed impeller design.

FLANGES

The MC is fitted with a 150# serrated Raised Face standard flanged casing while the 300# serrated Raised Face flanged casings are optional.

MATERIALS

The standard material is 316 Stainless Steel. For Hastelloy-C or other materials, please contact factory. For chemical compatibility information, refer to page 104 in the Liquiflo Gear Pump Catalog.

Journal bearings for the MC are pure alpha-sintered silicon carbide (SiC) and have O-rings for support and alignment. In all pumps, shaft bearings are held on with Hastelloy-C tolerance rings.

ELASTOMERS

Teflon O-rings are the standard for MC casing and containment cans. Consult the factory for additional materials.

TEMPERATURE RANGE

The standard MC can be applied at temperatures up to +350 °F. Normal 'N' temperatures range from 70 to 350 °F. Low temperatures 'L' range from -100 to +70 °F. Contact factory for low temperature applications.

PRESSURE CAPABILITY

MC pumps are rated for 275 psi at temperatures up to +100 °F. Above +100 °F, the rated pressure is linearly de-rated. At +350 °F, the pressure is 205 psi (316 s/s).

CONTAINMENT SHELL

The MC containment shells match the metallurgy of the casing. However, containment shells made out of Transformation-Toughened Zirconia (TTZ), a ceramic and non-conductive material, are available which eliminate eddy current horsepower losses.

All cans are 100% hydrostatically tested at 412 psi.

MINIMUM FLOW RATE

A generally accepted industry practice for minimum flow rate is 15% of the Best Efficiency Point (BEP).

SOLIDS HANDLING CAPABILITY and DRY RUNNING

The MC is capable of running with up to 1% solids, 30 micron size, and should not be run dry under any circumstances.

MAXIMUM VISCOSITY

The maximum viscosity is similar to any comparable ANSI pump and is generally applied at less than 200 centipoise. Refer to the Engineering Data Viscosity Correction Chart in the Liquiflo Gear Pump Catalog or consult the factory.

VENT AND DRAIN

The MC is self-venting due to its centerline discharge, ANSI design. It is supplied with a ½" NPT drain plug as standard.

SPECIAL FEATURES

Impeller is keyed to the shaft and secured with a nut to prevent backing-off if rotation is reversed
Shaft is oversized to minimize deflections

SPARES

Module – complete spare rotating assembly. This module is a complete pump, less the casing, drive magnets, and mounting bracket. It is recommended when a quick turn-around is essential for plant operation. Due to modular design, the drive (back-end) will fit several casings.

Parts – all individual parts can be purchased separately (refer to Bill of Materials).