

# POSITIVE DISPLACEMENT HOLLOW DISC MAGNETIC DRIVE PUMPS



## **MHV MAG-M Series**

Positive displacement hollow disc magnetic drive pumps.

Main features of these pumps are: self priming capability, reversible flow, and its low speed rotation. The low speed rotation fact, together with a new magnetic coupling design, allows an installed power almost identical to the traditional hollow disc pumps with mechanical seal, reducing magnetic losses to a minimum.

Hollow disc pumps are the ideal solution for pumping: OIL PRODUCTS, PAINTS, GLUES, RESINS, MOLASSES, SOLVENTS, SOAPS, COAL TAR, ADHESIVES, LOW LUBRICANT LIQUIDS, FOOD OILS, CHOCOLATE, GLUCOSE AND GENERAL FOOD PRODUCTS, CREAMS, DETERGENTS, CORROSIVE LIQUIDS.

# MHV MAG-M

# PUMP DETAILS

Can be supplied with optional by pass valve, bidirectional, accessible, to protect the pump and the installation of dangerous overpressures.

Pump head, base and cover made of ductile cast iron. Internal components made of stainless steel.

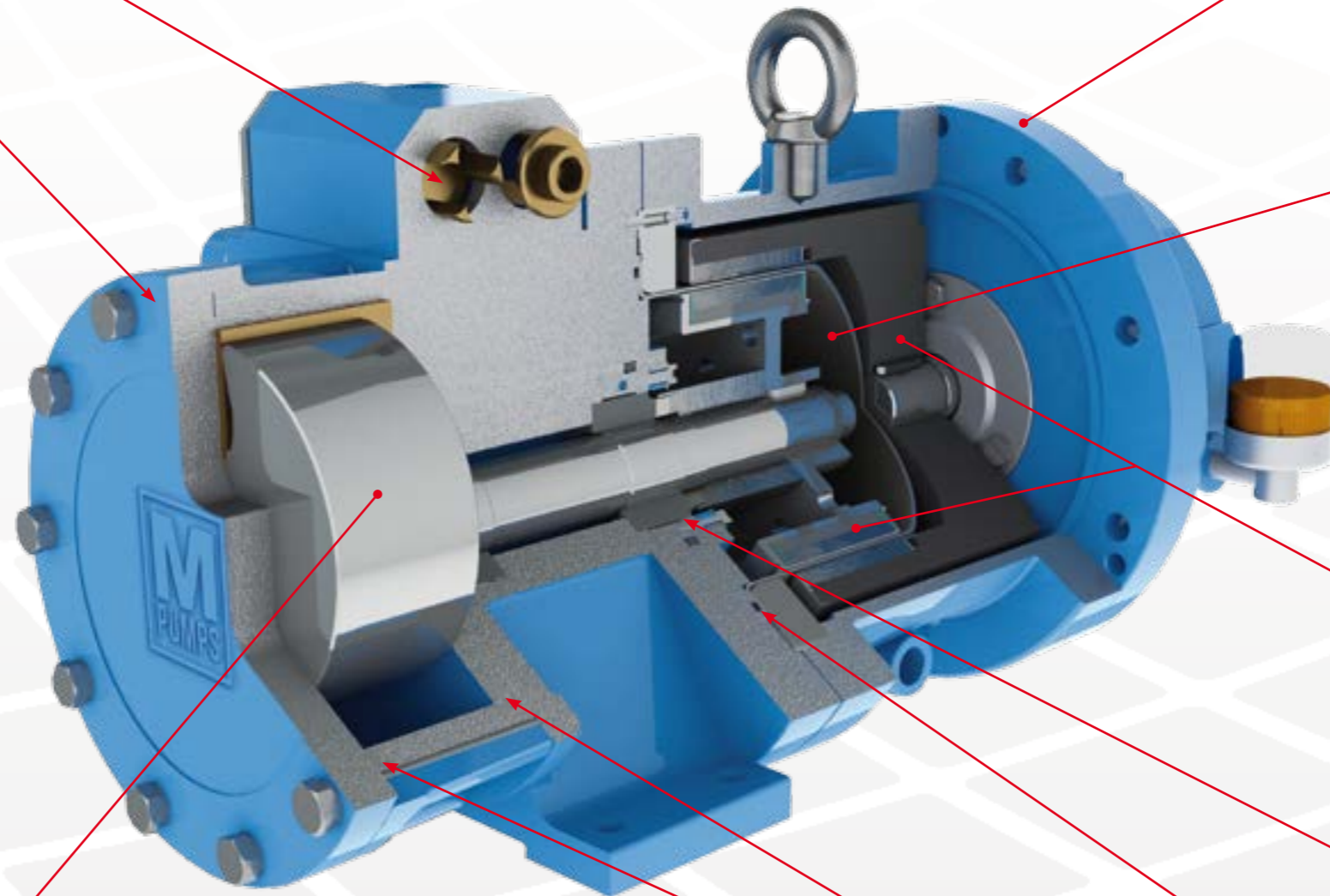
High manufacturing precision, assures best volumetric efficiency as well as maximum reliability.

Available with BSP (GAS) and NPT threaded connections, and DIN PN 16, PN25, ANSI 150 lbs, ANSI 300 lbs flanged.

## Available sizes

Type	Nozzles mm	Pipes	rpm	Flow up mc/h	Volume l/rev.
M35	36	1 1/4"	320	4	0,21
M55	52	2"	320	8	0,44
M65	62	2 1/2"	310	15	0,94
M85	84	3"	280	29	1,80

The maximum speed is permitted with lubricating liquids and viscosity lower than 200 mPa.s (cP).



Epoxy primer and polyacrylic enamel water-based painting for the best quality resistance linked to the environmental respect.



The rear shell is made of one single piece, no welding, ellipsoidal profile that has been studied to withstand higher pressures than the traditional one.

AISI 316 is the standard construction.



High power synchronous magnetic coupling are designed by our Technical Office and with rare earth magnetic elements mechanically locked.

The high performance magnets can operate at liquid temperature of up to 200 °C without external cooling.

Shaft supports are sized to withstand heavy loads, made up of metallized carbon stationary and rotating part tungsten carbide surface hardened.

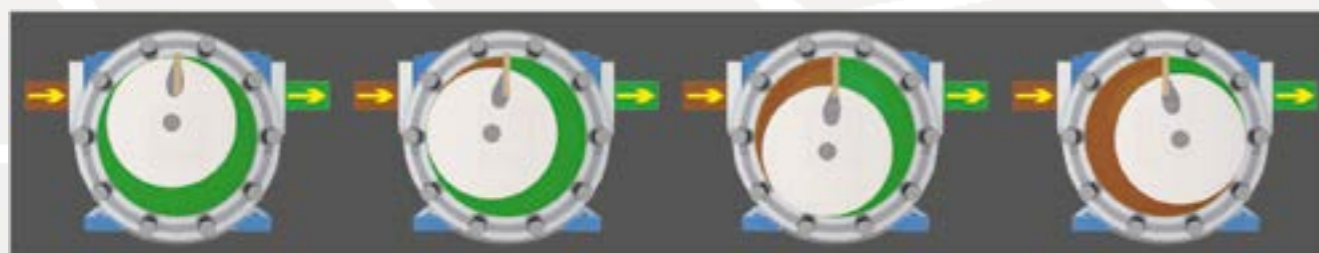
Special versions are developed to meet the different requests.

Rear casing sealing is ensured by O-ring, available in different materials, to satisfy the different needs:

- Viton® (standard)
- EPDM
- FEP

Static sealing system with flat gaskets prevents product leakage to the atmosphere – different materials available:

- Asbestos free (standard)
- PTFE
- GYLON®



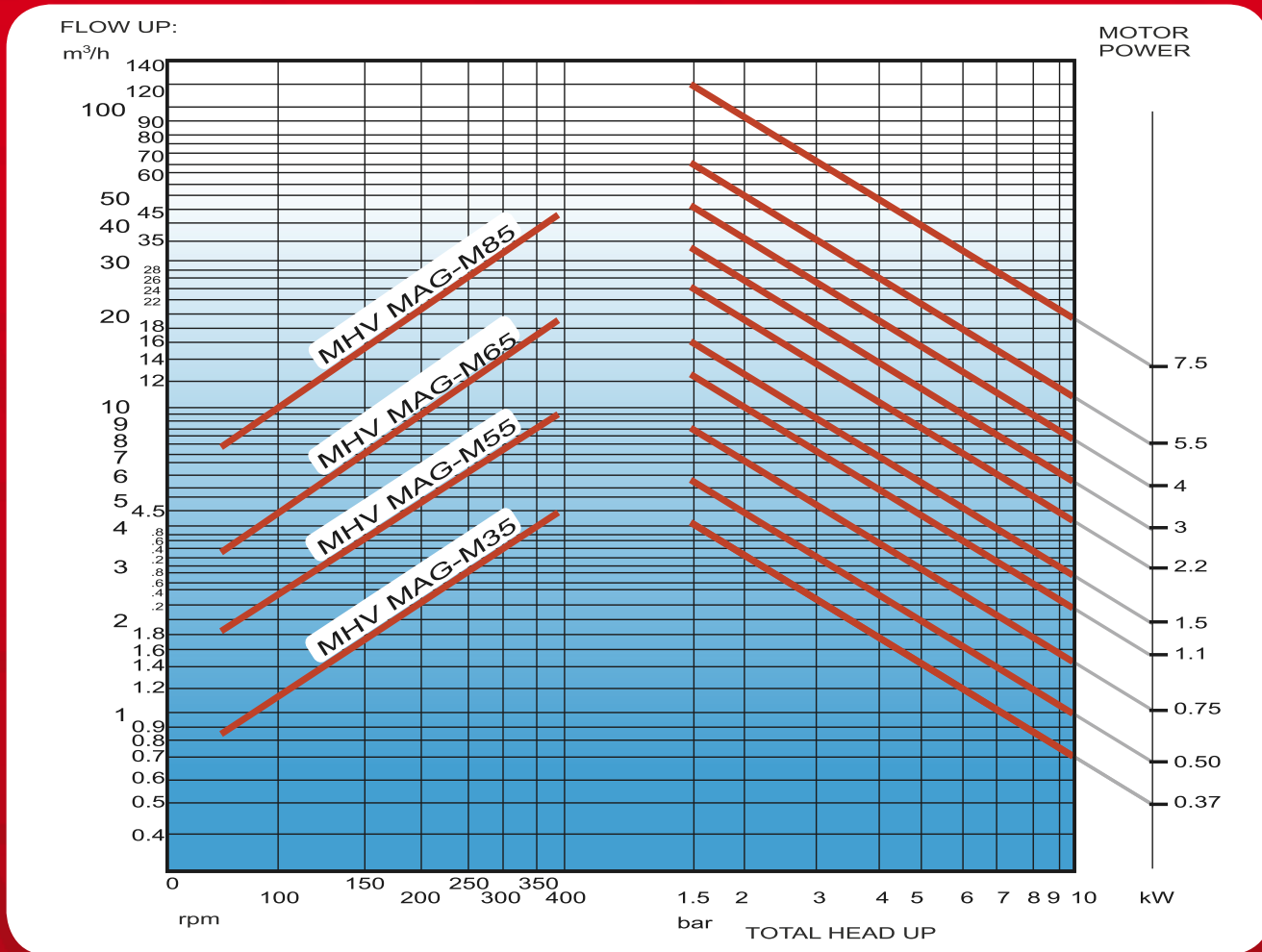
The hollow disc is eccentrically mounted in the rotor shaft and turns around the suction and discharge cameras separator vane. In this way the piston is obliged to follow the trajectory around the vane and externally to the pump head, where it is pushed via an elastic device internally inserted.

A silent and reliable pumping is achieved, without vortexes nor liquid breakages, for viscous fluids even above 10000 cst.

## Pump construction and operating limits

The long-coupled pump is connected to the B5 motor type by an elastic coupling.

- Flanges Connections BSP (GAS) and the NPT.
- Flange rating for DIN Norms Class PN16, PN25, ANSI B16.5 Class 150 and 300 lbs
- Max viscosity: over 10000 cSt
- Max system pressure: 16bar
- Higher pressure on request
- Flow up: to 45 mc/h – Head up: to 10 bar
- Temperature range: from -50 °C to +200 °C
- Electric motors: from 0,37 up to 37 kW
- Available Atex II - / 2G cbk II C T2-T5



Manufactured by:



A unit of  
**Mischiatti**  
GROUP

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