








## HERMETIC MAGNETIC DRIVE PUMP

-  Advantage 1 Low cost and high performance to price ratio
-  Advantage 2 Long service period and low product consumption
-  Advantage 3 Nearly zero maintenance and repair expense
-  Advantage 4 Low operation energy consumption and high efficiency
-  Advantage 5 Simple and compact structure makes low installation expense
-  Advantage 6 High safety performance
-  Advantage 7 Powerful after-sale service group

## Brief Introduction



Established in 1997, Dalian Hermetic Pump Co., Ltd. (as Dalian Hermetic) is a joint venture between Hermetic-Pumpen GmbH and Dalian Danai Pumps Co., Ltd., in which the German Party holds 54.38% shares and with sealless canned motor pump and magnetic drive pump as its main products. Hermetic-Pumpen GmbH was founded in 1866, being a worldleading position in the global market of sealless pump.

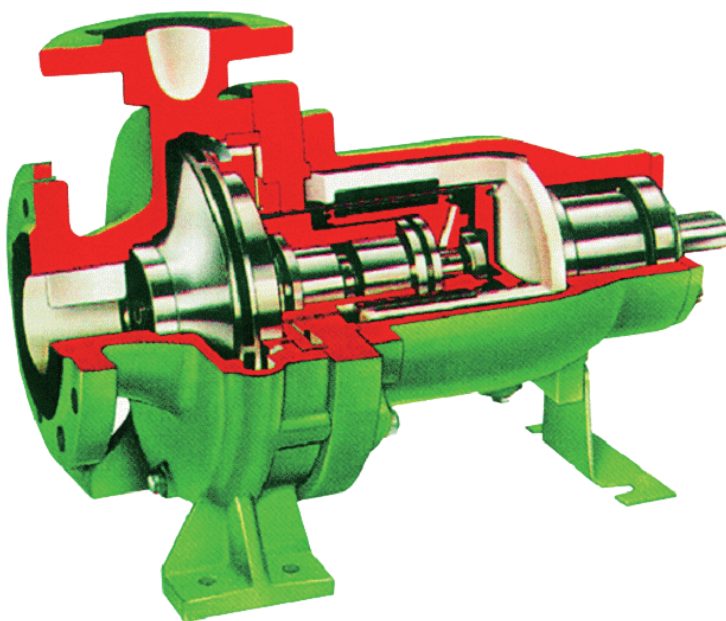
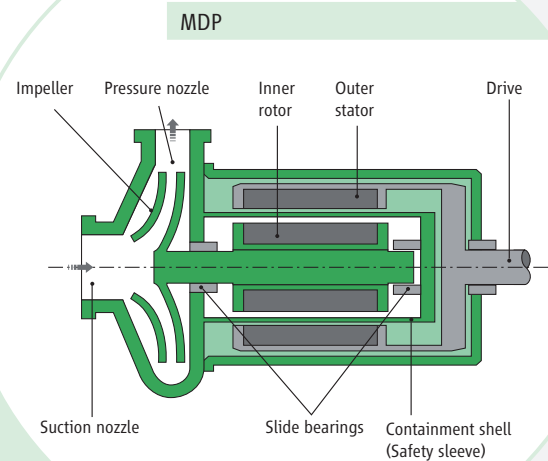
Hermetic products stand for best quality and highest operational safety in chemical, petrochemical, refrigeration and nuclear industries. Dalian Hermetic introduced synchronously the advanced design, manufacture technologies from Germany. The excellent quality assurance and customer service system is available to provide users with safe, efficient, environmentally-friendly and energy-efficient solutions to fluid delivery.

The products have been widely applied in chemical, petrochemical, pharmaceutical, textile, nuclear power and refrigeration industries. It has a long-term partnership with such well-known chemical, petrochemical enterprises as SINOPEC, CNPC, CHEMCHINA., BASF, BAYER, Evonik Degussa, Dupont, Dow Chemical, etc.

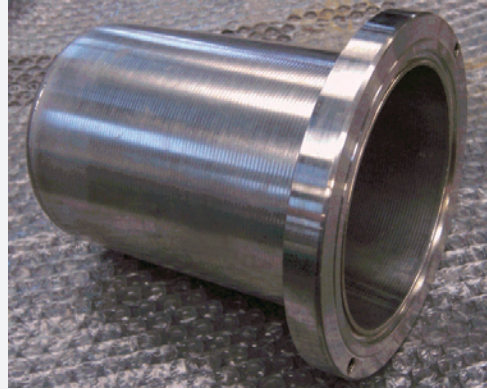
## Products Brief Introduction

### Working principle :

The magnetic driven pump of Hermetic is composed of such three parts of pump, magnetic coupler and motor, and driven by the magnetic coupler. The motor equipped is the common horizontal three phase AC motor. The entirety of the pump is designed following the building block principle, free from any shaft sealing device, and totally sealless. It's easy to install and repair, and all wearing parts can be repaired and replaced on site.



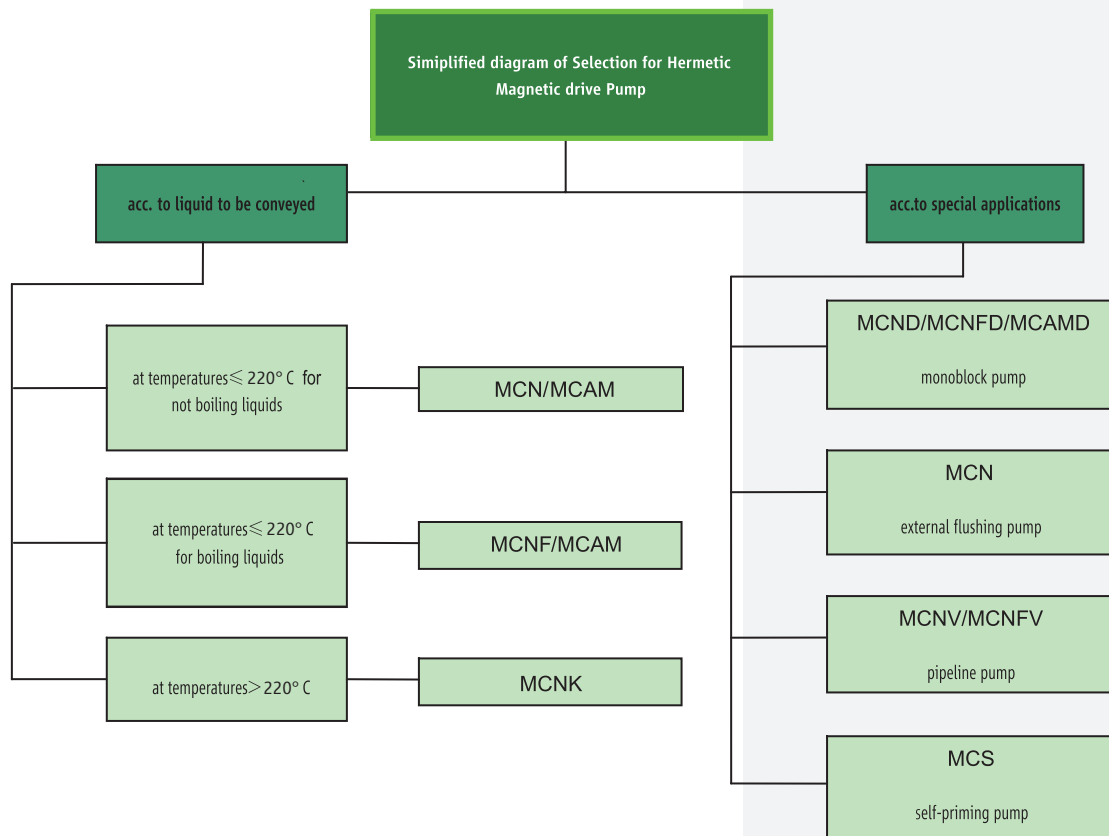
## Products Brief Introduction



### Characteristics of magnetic pump

- Efficient with an European excellent hydraulic model
- The containment can is in Hastelloy C4 imported from Germany, that is formed by rolling in a special process to have a high precision, a good quality free from welding defects, a high magnetic permeability and a strong resistance to corrosion. All these are a sufficient guarantee for the magnetic pump to operate reliably and stably
- The slide bearing is in real crystal silicon carbide (SSIC, SIC30) to have a high strength, a good resistance to wearing, corrosion and a service life 10 times more than graphite bearing; the rolling bearings are imported SKF ones
- The magnetic material is Sm-Co rare earth alloy (Sm<sub>2</sub>Co<sub>17</sub>) to have a good performance, with the highest non-reversible demagnetization temperature 450°C
- The axial force is balanced automatically in a hydraulic way at reaching the rated rotation speed
- In a simple and compact modular structure, it is easy for installation and maintenance
- Low operation cost, maintenance and service cost

## Simplified diagram of Selection for Magnetic drive Pump



### Example for designation of magnetic drive pump

MCAM 2 / 4 / A1

The diagram shows the designation 'MCAM 2 / 4 / A1' with lines connecting each part to its meaning: 'MCAM' to 'magnetic coupling code', '2' to 'pump stage number', '4' to 'curve code', and 'A1' to 'pump series number'.

magnetic coupling code  
pump stage number  
curve code  
pump series number

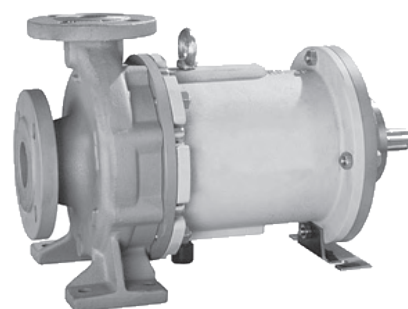
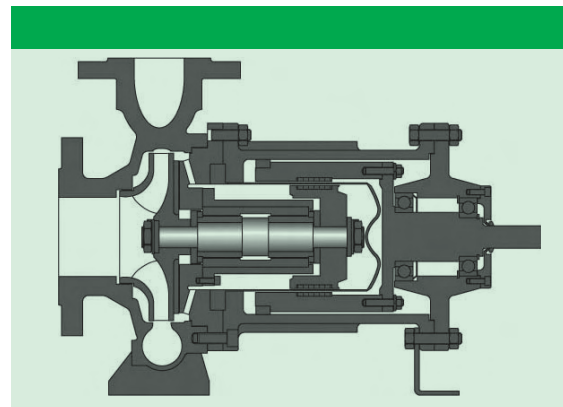
MCN 65-40-160 / A1

The diagram shows the designation 'MCN 65-40-160 / A1' with lines connecting each part to its meaning: 'MCN' to 'magnetic coupling code', '65' to 'impeller nominal diameter', '40' to 'discharge size', '160' to 'suction size', and 'A1' to 'pump series number'.

magnetic coupling code  
impeller nominal diameter  
discharge size  
suction size  
pump series number

## Magnetic drive Pump Series MCN(F)

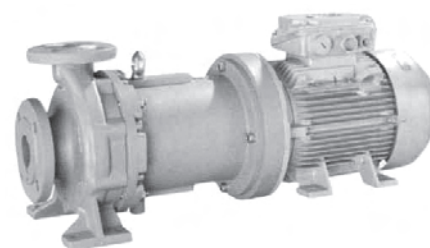
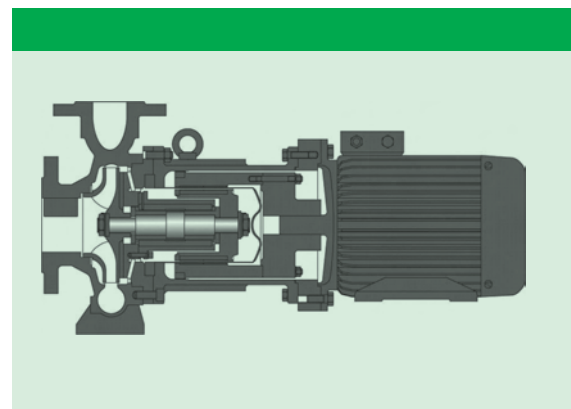
Size	25~250
Capacity	Max. 800m <sup>3</sup> /h
Head	Max. 220m
Rotating Speed	1,450/2,900r/min
Temperature range	Max. 220°C
Pressure rating	1.6MPa、2.5MPa、4.0MPa、5.0Mpa
Viscosity	Max. 150mm <sup>2</sup> /s
Power	Max. 200kW
Structural characteristics:	
<ul style="list-style-type: none"><li>● A pump with a single stage, a single suction and in a cantilever structure</li><li>● The internal high-pressure circulation mode is very suitable for delivery of boiling fluid media(Type MCNF)</li><li>● It is a suitable substitute for double mechanical seal pump and externally attached auxiliary system</li><li>● Model MCN(F)H of intermediate support type can be supplied when needed by users</li></ul>	





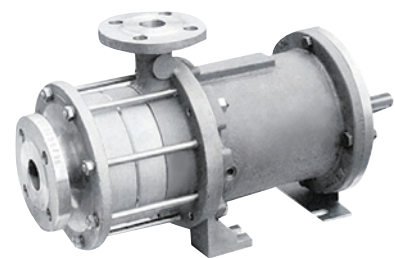
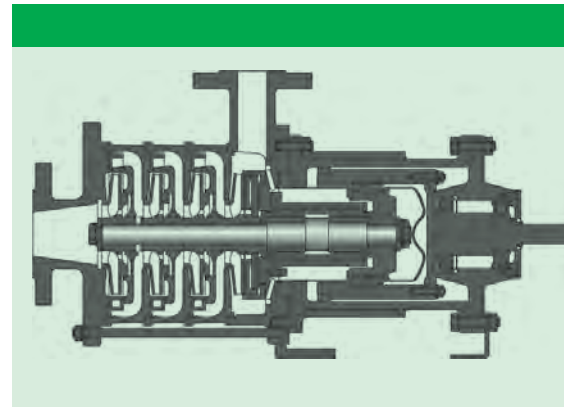
## Magnetic drive Pump Series MCNF(D)

Size	25~50
Capacity	Max. 65m <sup>3</sup> /h
Head	Max. 60m
Rotating Speed	1,450/2,900r/min
Temperature range	Max. 100°C
Pressure rating	1.6MPa、 2.5MPa、 4.0MPa
Viscosity	Max. 100mm <sup>2</sup> /s
Power	Max. 30kW
Structural characteristics:	
<ul style="list-style-type: none"><li>● A pump with a single stage, of a type in direct connection with the motor to save cost and space</li><li>● No installation of rolling bearing, coupling and no alignment for concentricity is necessary</li><li>● The internal high-pressure circulation mode is very suitable for delivery of boiling fluid media(Type MCNF)</li><li>● It is a suitable substitute for double mechanical seal pump and externally attached auxiliary system</li></ul>	



## Magnetic drive Pump Series MCAM

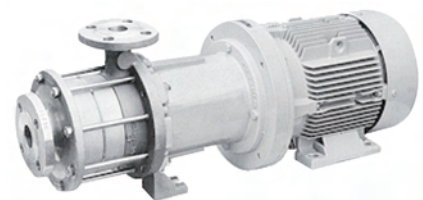
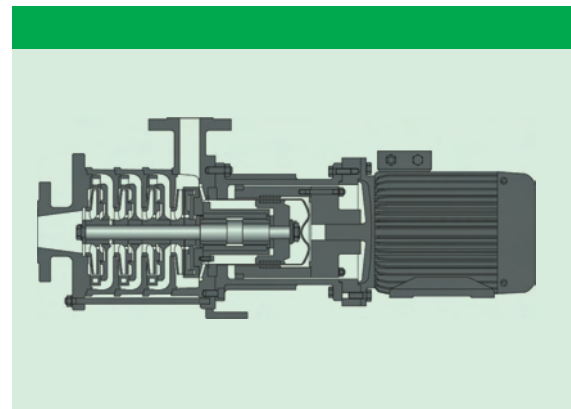
Size	32~150
Capacity	Max. 220m <sup>3</sup> /h
Head	Max. 360m
Rotating Speed	1,450/2,900r/min
Temperature range	Max. 220°C
Pressure rating	1.6MPa、 2.5MPa、 4.0MPa、 5.0MPa、 6.0MPa
Viscosity	Max. 100mm <sup>2</sup> /s
Power	Max. 200kW
Structural characteristics:	
<ul style="list-style-type: none"><li>● A pump with multi-stage, a single suction and in a cantilever structure</li><li>● A pump with a small capacity, a high head and being fully sealless</li><li>● Internal circulation mode: Part of high-pressure medium diverted from impeller outlet comes into and cools and lubricates the containment can and slide bearing. Then it flows through the shaft central hole to the inlet of the impeller in the secondary stage. This internal circulation mode is suitable for delivery of various fluid media including those boiling</li></ul>	





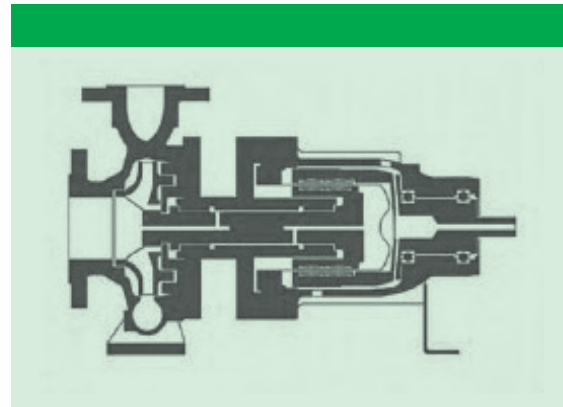
## Magnetic drive Pump Series MCAMD

Size	32
Capacity	Max. 15m <sup>3</sup> /h
Head	Max. 120m
Rotating Speed	1,450/2,900r/min
Temperature range	Max. 100°C
Pressure rating	1.6MPa、 2.5MPa、 4.0MPa、 5.0MPa
Viscosity	Max. 100mm <sup>2</sup> /s
Power	Max. 30kW
<b>Structural characteristics:</b> <ul style="list-style-type: none"><li>● A pump with multi-stage, of a type in direct connection with the motor to save cost and space</li><li>● No installation of rolling bearing, coupling and alignment for concentricity is necessary</li><li>● A pump with a small capacity, a high head and being fully sealless</li><li>● Internal circulation mode: Part of high-pressure medium diverted from the impeller outlet comes into and cools and lubricates the containment can and slide bearing. Then it flows through the shaft central hole to the inlet of the impeller in the secondary stage. This internal circulation mode is suitable for delivery of various fluid media including those boiling</li></ul>	



## Magnetic drive Pump Series MCNK

Size	25~250
Capacity	Max. 400m <sup>3</sup> /h
Head	Max. 300m
Rotating Speed	1,450/2,900r/min
Temperature range	Max. 360°C
Pressure rating	1.6MPa、2.5MPa、4.0MPa、5.0MPa
Viscosity	Max. 100mm <sup>2</sup> /s
Power	Max. 200kW
Structural characteristics:	
<ul style="list-style-type: none"><li>● A pump with a single stage, a single suction and in a cantilever structure</li><li>● Cool and lubricate the magnetic coupler and slide bearing with internal/external medium circulation (no cooling water and heat exchanger is necessary)</li><li>● It is used to deliver hot heating media and media with a high melting point</li><li>● Model MCNHK of intermediate support type can be supplied when needed by users</li></ul>	



## Magnetic drive Pump Series MCS

Size	32~50
Capacity	Max. 65m <sup>3</sup> /h
Head	Max. 64m
Self-priming height	Max. 6m
Rotation speed	1,450/2,900r/min
Temperature range	-20~+120℃
Pressure rating	1.6MPa and 2.5MPa
Viscosity	Max. 100mm <sup>2</sup> /s
Power	Max. 30kW
Structural characteristics:	
<ul style="list-style-type: none"><li>● Self-priming (once primed, priming will not be necessary any longer)</li><li>● A pump with a single stage, a single suction and in a cantilever structure</li><li>● Cool and lubricate the containment can and slide bearing in an internal circulating mode with the medium being delivered without any pollution</li><li>● It is used for suction in a working condition where the liquid level is beneath the impeller</li></ul>	



## Order Information

When ordering, please indicate such parameters as capacity, head, liquid, temperature, density, viscosity, vapor pressure, specific heat, pressure in suction and discharge, suction head geod., particles and impurities, etc., for us to select the right type for you.

Imagine my efficiency if there is no friction



[www.hermetic.com.cn](http://www.hermetic.com.cn)

Dalian HERMETIC Pump Co., Ltd.

No.86 LiaoHe East Road, DD Port Dalian, 116620 P.R.China.

Tel.: 86-0411-87581188

Fax.: 86-0411-87581199

Sales tel.: 86-0411-87581186

Service tel.: 86-0411-87582373

Free: 86-400-638-7775