

**NEWTONUS** PUMP

**END SUCTION CENTRIFUGAL PUMP**  
MR model (Stainless steel)



**We are professional engineers for energy saving pump & piping**

## Application :

- Commercial Building : Transfer to reservoir; booster to kran, wastafel, shower, toilet, nozzel
- Industrial : Transfer to reservoir; booster to kran, wastafel, shower, toilet, nozzel, process/circulation
- Water Treatment : Transfer to reservoir; process/circulation
- Chiller/Air Conditioning, boiler/heating : Circulation; transfer
- Agriculture, farming, gardening, water fountain: Booster to irrigation, sprinkle
- Residential : Transfer to reservoir; booster to kran, wastafel, shower, toilet, nozzel/sprinkle
- Sea water desalination : Transfer, booster
- Washing/Car washing : Sprayer/nozzel
- Jet pump : Transfer to reservoir; booster to kran, wastafel, shower, toilet, nozzel

## Specification :

- Maximum flow 160 M3/hour
- Maximum head 70 meter
- Liquid temperatur -20 deg.C to 100 deg.C
- Maximum working pressure 10Bar
- Inlet/outlet diameter DN32 - DN100
- Liquid pH 6 - 9, clean liquid non grain/fiber, non chemical

## Electric motor :

- 3Ph/380V-415V/50Hz/2P
- 1Ph/220V-240V/50Hz/2P
- Insulation class F, protection class IP55
- Maximum power : 37 kW



MR model (SS 304) c/w Motor

## Features :

- Compact and small size.
- Low vibration and low noise
- Easy to install at the piping.

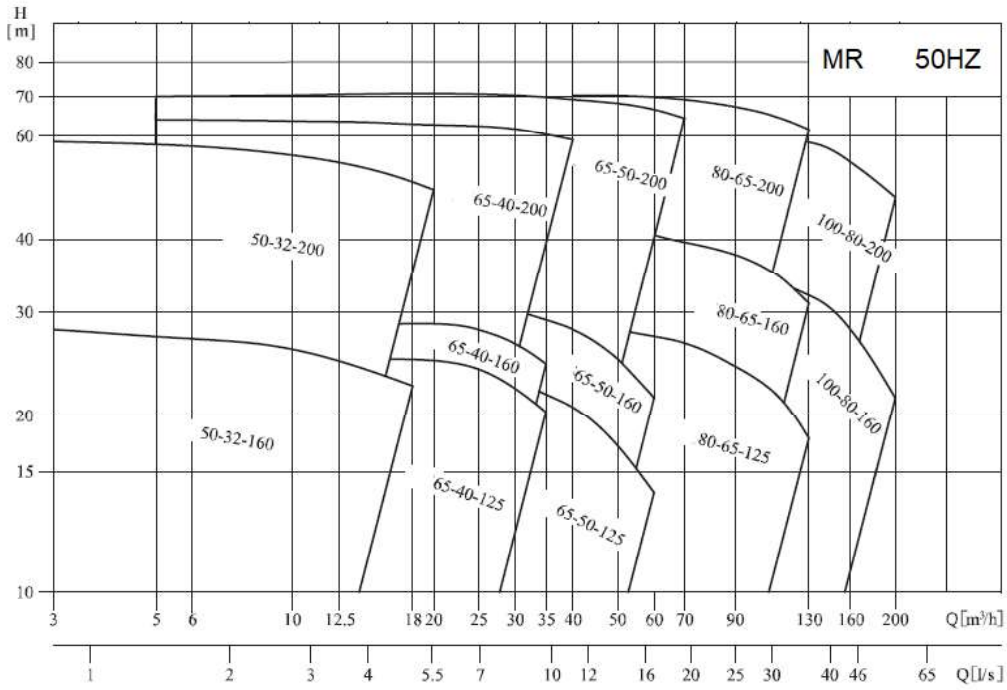
## Engineering & pricing solution

The energy saving & long life time of pump is our focus. The pump energy saving is not only determined by pump efficiency, but also depending by pipe diameter, controller, etc. Therefore we are ready to give consultation or training of piping engineering (Free of charge) before purchase the pumps, for as below :

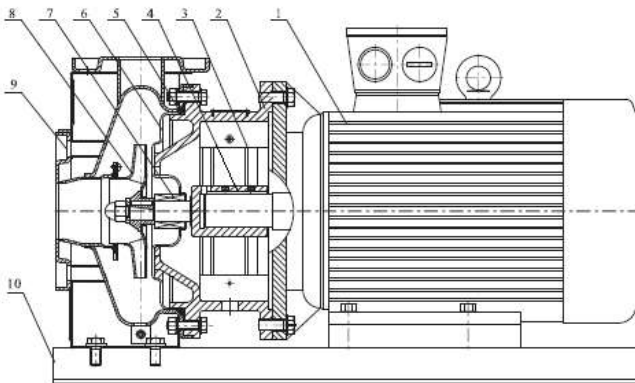
- Calculation to determine the pump flow & total head, pipe diameter & material (inlet/ outlet pipe)
- To avoid cavitation, the suction pipe (negative/positive suction) should be calculated max. suction lift (Hs).
- Selection of pump controller according to the application system
- Selection of pump type according to flow, total head, material and electrical power
- Selection of cheaper price with similar or better pump & application.

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**Performance curve :**

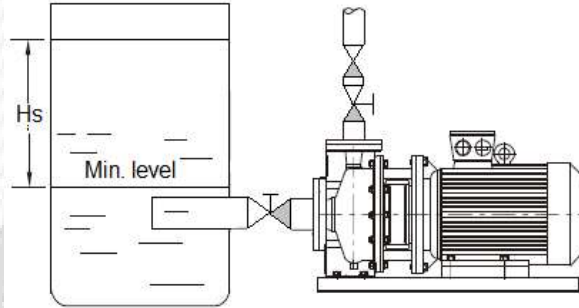


**Component & Material :**

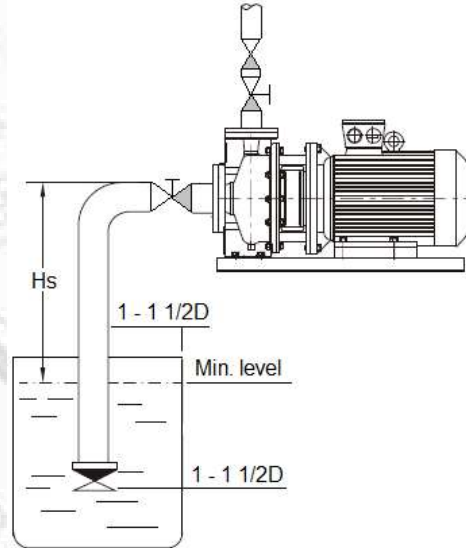


NO.	Parts	Material
1	Motor	
2	Pump head	ASTM25B
3	Guard plate	AISI304
4	Shaft	AISI420/ AISI304
5	O ring	NBR
6	Lining of pump head	AISI304
7	Mechanical seal	Carbon/Silicon Carbide
8	Impeller	AISI304
9	Casing	AISI304
10	Base plate	ASTMA570

## Suction piping installation:

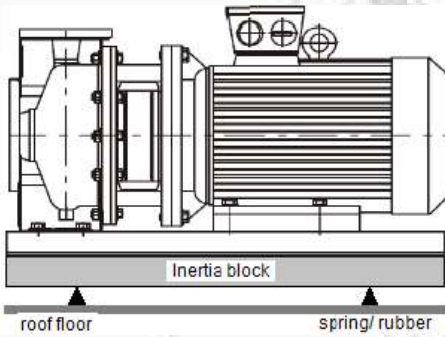


Positive suction, is recommended installation



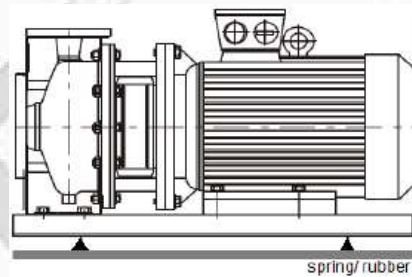
Negative suction.  $P > 2.2\text{KW}$ ,  $H_s$  (Max suction lift) should be calculated to avoid cavitation.  
Recommended  $P < 2.2\text{KW}$ ,  $H_s = 1\text{Mtr}-4\text{Mtr}$

## Pump installation :

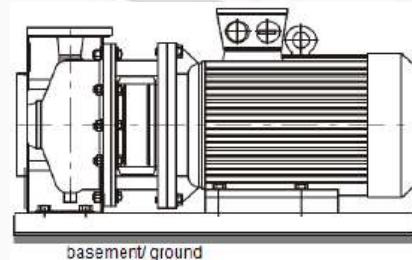


Pump installation,  $P > 2.2\text{KW}$  on the roof floor.

To avoid high vibration and noise occurring due to effect of rotation, the pump should be installed inertia block & spring/rubber vibration damper. This installation can avoid the damage of building constructions.



Not recommended pump installation. The base frame will deflect and shaft misalignment.



Installation of Pump  $> 2.2\text{KW}$  on the ground