



CHT-INNENTRA CANNED MOTOR PUMP





CHT CANNED MOTOR PUMP

CANALIZAMOS LA ENERGIA AL SERVICIO DEL INSTALADOR



CHT INNENTRA is a manufacturer of leak-free pumps, the main products are canned pumps, magnetic pumps and refrigeration pumps. Products are mainly used in petroleum, chemical, refrigeration and other fields. Our company can provide canned pumps and magnetic pumps that meet international standards such as VDMA24279/ ISO15783/API685, which are suitable for the transportation of harsh media such as high temperature, high pressure, low temperature, flammable, explosive, toxic, and gasification.

The product uses the top European hydraulic model, electromagnetic design, heat balance, axial force balance system and secondary pressure-bearing shell, which has the characteristics of high efficiency, energy saving, safety and stability, low noise and low vibration.

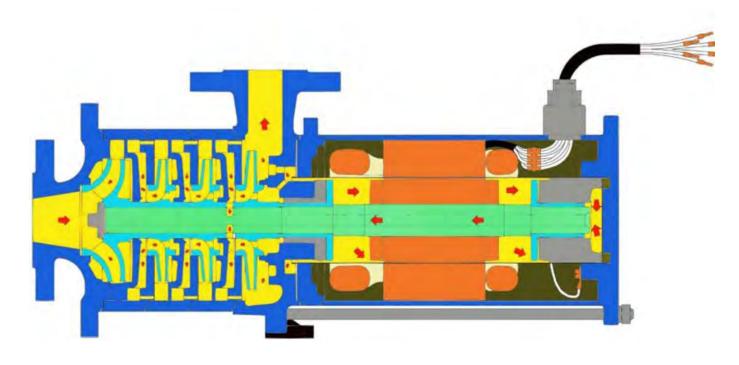
The company has professional customized processing, assembly, measurement, and testing equipment to ensure product accuracy and design realization.

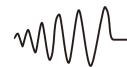
The company has been engaged in the design, manufacture, testing and maintenance of canned pumps and magnetic pumps for 20 years, and has rich experience in product design, production and service.

The material suppliers of key parts of the product (bearings, magnet wires, insulating materials, shielding sleeves, etc.) are all well-known international and domestic brands. The materials of pressure castings and forgings can be customized according to national standards, European standards and American standards. Each component basically realizes full CNC equipment processing, and has a digital pump test station and a large number of hydraulic model test data. Improved on the basis of the European excellent hydraulic model, the NPSH and efficiency have been improved.

European technology, craftsman quality, reasonable profit, satisfactory service. Committed to providing you with safe, reliable, high quality leak-free pump products and professional technical services.

High-end brand of leak-free pump technology!





PRODUCT INTRODUCTION >>>

REFRIGERATION SHIELDED ELECTRIC PUMP

I. Overview

Canned electric pump is a new type of pump, which consists of pump, canned sleeve and canned motor. The rotor of the motor is coaxial with the impeller, and the stator is separated from the rotor by the stator can. When the rotor of the canned motor rotates, the impeller rotates synchronously to realize the non-contact transmission of power. There is no dynamic seal, so that there is no leakage at all.

The refrigeration canned motor pump product of CHT Technology is specially designed for conveying refrigerant. It also has the following characteristics:

- 1. Using advanced hydraulic models in Europe, the hydraulic efficiency is high.
- 2. Excellent electromagnetic design, high efficiency of motor;
- 3. The can is made of 316L and special forming technology, with low eddy current loss.
- 4. The sliding bearing is FH82A. It has good wear resistance and self-lubrication. It is suitable for refrigerant transportation fluctuation situation;
 - 5. Axial force is automatically balanced and bearings are wear-free when running.
- 6. Thermal balance and turbocharging design of rotor chamber, the heat generated by canned motor will not cause medium vaporization at all.
 - 7. The principle of building block is simple and convenient for on-site maintenance.
 - 8. The product is stable, reliable, long service life and low maintenance cost.

II. Scope of application

The refrigeration canned pump in CHT Technology is a completely leak-free product, which is mainly used for transporting R22,NH3, silicone oil, CO2 and other media.

III. Scope of Work

Flow: 80m³/h Head: 200m

Temperature: -100 ~+40 ~C Rated Pressure: 1-10 MPa Viscosity: 0.1-100 CP

IV. Product Design Standards

GB/T 5656 Technical Conditions for Centrifugal Pumps Class II (equivalent to ISO 5199:2002)

GB/T 3216 "Acceptance Test for Hydraulic Performance of Rotary Power Pumps Grade 1 and 2" (Revised ISO 9906:1999)

GB/T 3214 "Measurement Method of Pump Flow Rate"

GB/T 13006 "Cavitation Residual of Centrifugal Pump, Mixed Flow Pump and Axial Flow Pump"

JB/T 8097 "Vibration Measurement and Evaluation Method of Pumps"

JB/T 8098 "Noise Measurement and Evaluation Method of Pumps"

Reference standard

API 685-2011 "Sealed Centrifugal Pumps for Petroleum, Heavy Chemistry and Natural Gas Industry"

GB/T 3215 Centrifugal Pumps for Petroleum, Heavy Chemistry and Natural Gas Industries (equivalent to API 610, tenth edition)

API 610-2010 Centrifugal Pump for Heavy Chemical Industry of Petroleum Industry and Natural Gas Industry (equivalent to ISO 13709:2003)

GB/T 25140-2010 "Technical Conditions for Rotary Power Pumps without Shaft Seals (Class II)" (Revised ISO 15783:2002)

ISO 15783-2002 Technical Specification for Rotary Power Pumps without Shaft Seals (Class II)

V. Material Selection

Castings: LTCS, ZG230-450, CF-8, CF-3M

Forging: 20Cr13, 304, 316L

Can: 316L, Haste C

Sliding bearings: FH82A, S-SIC, SIC-30, W5

VI. Pump Type

1. BLM / Multistage Type



Work Scope:

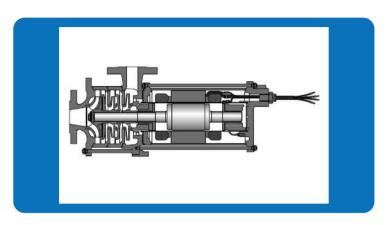
Capacity: 0.5~40m³/h Head: 10~200m

Speed: 2900r/min'

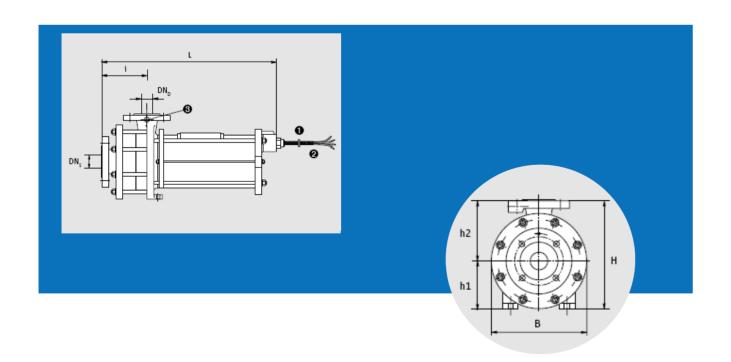
Operating temp. : -100~+40℃

Viscosity: 0.1~100cp Rated pressure: 1~10Mpa

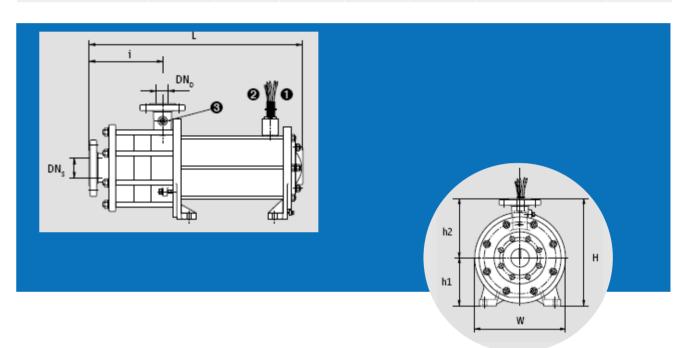




| Туре | Qmax | Hmax | Rated Power /KW | | | | | | | |
|------|------|------|-----------------|-----|-----|-----|----|----|----|--|
| BLM | m³/h | m | 3.0 | 4.5 | 6.5 | 8.5 | 11 | 15 | 19 | |
| Α | 10 | 80 | 0 | 0 | 0 | | | | | |
| В | 15 | 150 | | | 0 | 0 | 0 | 0 | | |
| С | 30 | 200 | | | | 0 | 0 | 0 | 0 | |



| Туре | Power | DNs | DNd | L | В | Н | h1 | h2 | i |
|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|
| A/2 | 3.0 | 40 | 32 | 536 | 218 | 250 | 110 | 140 | 135 |
| A/3 | 4.5 | 40 | 32 | 577 | 218 | 250 | 110 | 140 | 176 |
| A/4 | 4.5 | 40 | 32 | 618 | 218 | 250 | 110 | 140 | 217 |
| A/5 | 6.5 | 40 | 32 | 659 | 218 | 250 | 110 | 140 | 258 |
| A/6 | 6.5 | 40 | 32 | 700 | 218 | 250 | 110 | 140 | 299 |



| Туре | Power | DNs | DNd | L | W | Н | h1 | h2 | i |
|------|-------|-----|-----|------|-----|-----|-----|-----|-----|
| B/3 | 6.5 | 50 | 25 | 665 | 260 | 360 | 200 | 160 | 165 |
| B/4 | 8.5 | 50 | 25 | 705 | 260 | 360 | 200 | 160 | 205 |
| B/5 | 11 | 50 | 25 | 845 | 260 | 360 | 200 | 160 | 245 |
| B/6 | 15 | 50 | 25 | 885 | 260 | 360 | 200 | 160 | 285 |
| C/4 | 11 | 80 | 40 | 870 | 300 | 380 | 200 | 180 | 243 |
| C/5 | 15 | 80 | 40 | 910 | 300 | 380 | 200 | 180 | 293 |
| C/6 | 19 | 80 | 40 | 1000 | 300 | 380 | 200 | 180 | 343 |



2. BLS / Single Type

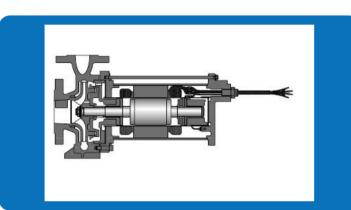


Work Scope:

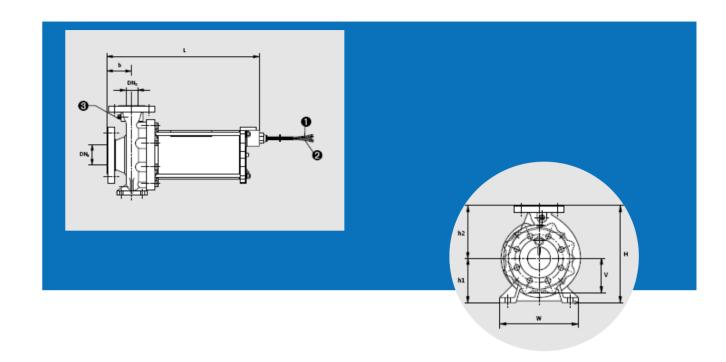
Capacity: 5~65m³/h Head: 10~100m Speed: 2900r/min'

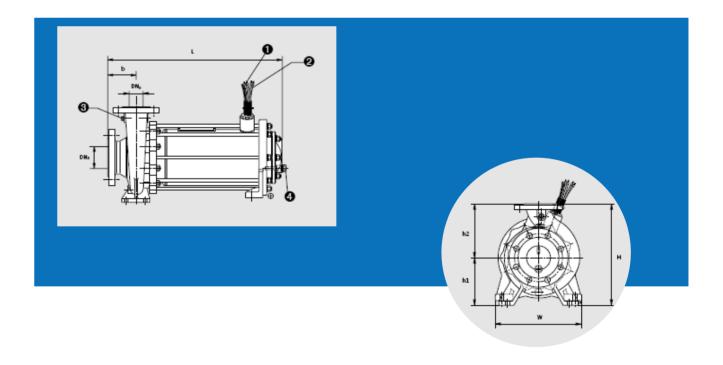
Operating temp. : -100~+40℃

Viscosity: 0.1~100cp Rated pressure: 1~10Mpa



| Туре | Qmax | Hmax | Rated Power /KW | | | | | | |
|--------|------|------|-----------------|-----|-----|-----|----|----|--|
| BLS | m³/h | m | 3.0 | 4.5 | 6.5 | 8.5 | 11 | 15 | |
| 32-160 | 20 | 40 | 0 | 0 | | | | | |
| 32-200 | 20 | 65 | | 0 | 0 | 0 | 0 | 0 | |
| 32-250 | 20 | 95 | | | 0 | 0 | 0 | 0 | |
| 40-160 | 30 | 40 | | 0 | 0 | 0 | | | |
| 40-200 | 35 | 65 | | | 0 | 0 | | | |
| 40-250 | 38 | 100 | | | | 0 | 0 | 0 | |
| 50-160 | 50 | 40 | | | 0 | 0 | | | |
| 50-200 | 65 | 65 | | | | 0 | 0 | 0 | |
| 50-250 | 65 | 95 | | | | | 0 | 0 | |







| Туре | Power | DNs | DNd | L | W | Н | h1 | h2 | b |
|--------|-------|-----|-----|-----|-----|-----|-----|-----|-----|
| 32-160 | 3.0 | 50 | 32 | 506 | 240 | 292 | 132 | 160 | 80 |
| | 4.5 | 50 | 32 | 506 | 240 | 292 | 132 | 160 | 80 |
| 32-200 | 4.5 | 50 | 32 | 526 | 265 | 340 | 160 | 180 | 80 |
| | 6.5 | 50 | 32 | 526 | 265 | 340 | 160 | 180 | 80 |
| | 8.5 | 50 | 32 | 610 | 265 | 340 | 160 | 225 | 80 |
| 32-250 | 6.5 | 50 | 32 | 630 | 320 | 405 | 180 | 225 | 100 |
| | 8.5 | 50 | 32 | 660 | 320 | 405 | 180 | 225 | 100 |
| 40-160 | 4.5 | 65 | 40 | 506 | 240 | 292 | 132 | 160 | 80 |
| | 6.5 | 65 | 40 | 506 | 240 | 292 | 132 | 160 | 80 |
| | 8.5 | 65 | 40 | 575 | 240 | 292 | 132 | 160 | 80 |
| 40-200 | 6.5 | 65 | 40 | 526 | 265 | 340 | 160 | 180 | 100 |
| | 8.5 | 65 | 40 | 526 | 265 | 340 | 160 | 180 | 100 |
| 40-250 | 8.5 | 65 | 40 | 660 | 320 | 405 | 132 | 225 | 100 |
| | 11 | 65 | 40 | 700 | 320 | 405 | 180 | 225 | 100 |
| | 15 | 65 | 40 | 700 | 320 | 405 | 180 | 225 | 100 |
| 50-160 | 6.5 | 80 | 50 | 526 | 265 | 340 | 160 | 180 | 100 |
| | 8.5 | 80 | 50 | 630 | 265 | 340 | 160 | 180 | 100 |
| 50-200 | 8.5 | 80 | 50 | 630 | 265 | 360 | 160 | 200 | 100 |
| | 11 | 80 | 50 | 700 | 265 | 360 | 160 | 200 | 100 |
| | 15 | 80 | 50 | 700 | 265 | 360 | 160 | 200 | 100 |
| 50-250 | 11 | 80 | 50 | 725 | 320 | 405 | 180 | 225 | 125 |
| | 15 | 80 | 50 | 725 | 320 | 405 | 180 | 225 | 125 |

VII. Instructions for Order

In order to make the product better applied to the working conditions, please provide the following parameters when selecting the type. We will match the most suitable pump type for you in the first time.

- 1. Liquid
- 2. Density
- 3.Operating Temperature
- 4. Rated pressure
- 5. Vaporization pressure
- 6. Viscosity
- 7. Capacity
- 8. Head
- 9. NPSHa
- 10. Particles or not
- 11. Material Requirements
- 12. Motor Requirements