

HL 962.02

Canned motor pump



Description

- hermetic centrifugal pump, particularly suitable for pumping liquid gases
- accessory for installation in assembly stand HL 962

Canned motor pumps are used primarily in process engineering to pump aggressive, toxic, fire-hazard, explosive, delicate or volatile liquids (such as liquid gases). They are also suitable for pumping extremely hot or cold products, and liquids under high system pressure or under vacuum.

The pump is a fully self-contained centrifugal pump with no shaft seal, the drive is provided electro-magnetically via the canned motor. Its design means it is completely leak-tight and largely maintenance-free. Part of the primary flow is branched off by way of a self-cleaning filter to cool the motor and lubricate the journal bearings, and to provide hydraulic compensation for the axial thrust. After passing through the hollow shaft and the rotor chamber, the cooling medium is returned to the primary flow on the delivery side.

Learning objectives/experiments

- in conjunction with HL 962, HL 962.30 and HL 962.32
 - ▶ operation of a canned motor pump
 - ▶ recording the pump characteristic
 - ▶ leak testing

Specification

- [1] hermetic pump for aggressive liquids
- 2] accessory for installation in HL 962
- [3] drive: three-phase squirrel-cage motor
- [4] water supply provided by HL 962
- [5] maintenance-free pump

Technical data

Canned motor pump

- max. flow rate: 12m³/h
- max. head: 39m
- power consumption: 3kW
- nominal speed: 2900min⁻¹

Connecting flange

- delivery side (radial): DN32
- intake side (axial): DN50

400V, 50Hz, 3 phases LxWxH: 510x240x305mm Weight: approx. 62kg

Scope of delivery

- 1 pump
- 1 manual