

HM 365.15

Side channel pump



The illustration shows a similar unit.

Description

- operating behaviour of a side channel pump
- part of the GUNT-FEMLine

Side channel pumps form a category between positive displacement pumps and rotodynamic pumps. During the suction phase the side channel pump operates according to the positive displacement principle. As soon as the suction process is over, the side channel pump starts working like a centrifugal pump. The centrifugal force of the rotating impeller separates the fluid and gas. Side channel pumps are self-priming pumps.

HM 365.15 is a self-priming, single-stage side channel pump that is delivered ready for installation, mounted on a plate. The pump is installed in the HM 365.10 supply unit with just a few simple steps, connected via hoses with quick-release couplings, and attached with clamping levers. For power supply,

the pump is connected to the drive unit HM 365 with a V-belt. The pump speed is reduced by the transmission ratio of the belt.

The pressures at the inlet and outlet of the side channel pump are recorded with sensors. The measured values are read from digital displays on the supply unit and can be transmitted simultaneously via USB directly to a PC, where they can be analysed using the included software.

Learning objectives/experiments

- in combination with HM 365 and HM 365.10
 - ▶ recording of pump characteristics, system characteristics, operating point
 - ▶ power requirement, hydraulic power, pump efficiency, NPSH value

Specification

- [1] investigation of a self-priming, single-stage side channel pump
- [2] operation with HM 365.10 Supply unit for water pumps
- [3] powered by HM 365 Universal drive and brake unit
- [4] pressure sensors at the inlet and outlet of the pump
- [5] pressure display on the display unit of HM 365.10

Technical data

Side channel pump, single-stage, self-priming

- max. flow rate: 5m³/h
- max. head: 48m
- nominal speed: 1450min⁻¹
- transmission ratio: 1:2

LxWxH: 400x310x460mm
Weight: approx. 24kg

Scope of delivery

- 1 side channel pump

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Required accessories

070.36500	HM 365	Universal drive and brake unit
070.36510	HM 365.10	Supply unit for water pumps