Centrifugal fans

HZV

The HZV is a ultra-high pressure centrifugal fan with some special characteristics. Designed to deliver high pressures, but low air flow. It makes it especially well suited for double wall fuel pipe applications typically found on LPG/LNG motored vessels.

The fans can be delivered as ATEX/IECEX certified.





Standard sizes 75 – 350 mm



Air flow 200 - 15.000 m3/h



Static pressure 20 - 33.000Pa



Engine power 0 - 200kW

Summary

Design

The HZV fans are single inlet centrifugal fans with direct drive as a standard.

The fan can be mounted according to the positions given by Eurovent standard for centrifugal fans.

As with all Nyborg products the HZV can be customized to fit the customers needs.

Execution

The HZV fan can be produced in several types of material. The standard is steel execution.

However, it is typically delivered completely (housing/impeller) manufactured in stainless steel (AISI316L).

Impeller

The impeller is usually delivered in the same material as the fan housing. The impellers are dynamically balanced.

The impeller can be delivered in four different types:

Type B:

Backward, convex curved blades. The standard impeller. Cost effective with high efficiency.

Forward curved blades (Scirocco impeller). For applications where high air flows are required). Only for smaller

Type F:

fans. Type Z:

Backward, concave curves blades. Self-cleaning impeller, ideal for applications where dust or material can build up on the impeller.

Type R: Radial blades. Heavy duty impeller for transport applications (e.g. saw dust).

Motor

The motors are as standard squirrel-cage induction motors in marine execution. Motors are IP55 and insulation class F as standard.

The fans can also be equipped with EX motors class Exe (increased safety), Exd or Exde (explosion-/flameproof)

Motor prepared for frequency converter is available on request.

or EXN motor.

• Belt driven execution.

Customizations

- With gas tight motor flange (for EX applications where motor can be placed outside hazardous area)
- With coupling drive
- With coupling drive and cooling wheel (air cooled) for high temperature applications • Portable execution (only smaller fans)
- With water-, air- or hydraulic driven motor.

Accessories

Flexible connections (inlet / outlet)

Vibration dampers

- Counter flange (inlet / outlet)
- Protection grid (inlet / outlet) Flanged inlet
- Drain plug Inspection hatch
- Motor pedestal (required for heavy motors)
- Base frame / foundation
- Earthing plug for fan / motor pedestal Suction chamber on inlet
- Iris / regulating damper • Diffuser on outlet

Gallery

