

BETA

HORIZONTAL, CENTRIFUGAL, VOLUTE-TYPE PUMPS



BETA

BETA / BETA 610

APPLICATION

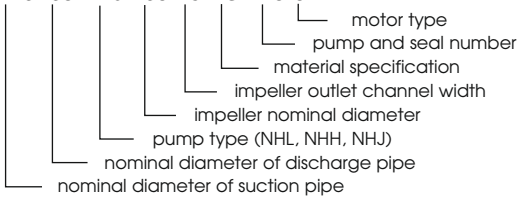
- pure or slightly polluted, active and neutral chemical liquids and combustibles
- chemical, petrochemical, pharmaceutical, food-processing and processing industries, power engineering both conventional & nuclear, water supply systems
- design:
 - A) standard for general use
 - B) explosive conditions for pumping incombustibles in dangerous explosive conditions
 - C) for combustibles- for pumping combustible liquids in zone 1 and 2
 - D) nuclear power engineering for both secondary and primary circuits

WORKING CONDITIONS

- medium temperature range from - 40°C to +180°C (for oils and hydrocarbons up to 260°C)
- working pressure of 16 bars and 25 bars
- medium density range from 600 kg.m⁻³ to 1900 kg.m⁻³
- kinematic viscosity up to 75 mm².s⁻¹
- pH 0 -14
- contents of solid particles up to 2% of weight
- particle size up to 0,5 mm
- rated for use in 50 and 60 Hz mains
- other values must be agreed with the manufacturer

TYPE IDENTIFICATION

125- 80-NHJ-250-23-YC-120-09



CONSTRUCTION

- dimensions and parameters acc. to EN 22858/ISO 2858/DIN 24 256 up to size 34 (200-150-NHJ-400), or acc. to API 610 form OH1
- full compliance with ISO 5199, or API 610 form OH1
- 43 sizes of standardized, hydrodynamic, medium-pressure pumps
- horizontal, centrifugal, single-stage, volute-type construction with an axial intake and a radial outlet (upwards flow)
- single seal ring design
- closed impeller with diffuser guide vanes set on a pump shaft
- "dry shaft" no contact with pumped medium
- metal-to-metal sealing of hydraulic section
- bearing housing connected to hydraulic unit by a lantern bracket, includes jacket for cooling or heating the area around the packing and behind the impeller
- 3 assembly arrangements: light (NHL), heavy (NHH) and heavy duty (NHJ)
- rated for 60 Hz mains
- dimensions of packing area acc. to ISO 3069
- flanges PN16 acc. to EN 1092-1 and 2/ISO 7005-1/-2
- other options consult with the manufacturer (eg. version for use in the petrochemical industry, version acc. to API 610 form OH1)

MATERIAL SPECIFICATION

| Part name | OC | ON | OL | YC | YN | ZC | ZN |
|-----------------------------|------------|------------|------------|-----------------|-----------------|-----------------|-----------------|
| volute | 1.0619 | 1.0619 | 1.0619 | 1.4308 | 1.4308 | 1.4408 | 1.4408 |
| pump casing, packing flange | 1.0619 | 1.0619 | 1.0619 | 1.4308 | 1.4308 | 1.4408 | 1.4408 |
| impeller | 1.0619 | 1.0619 | EN-GJL-200 | 1.4308 | 1.4308 | 1.4408 | 1.4408 |
| seal ring | EN-GJL-200 | CuSn10Zn2 | EN-GJL-200 | 1.4308 | CuSn10Zn2 | 1.4408 | CuSn10Zn2 |
| lantern ring / follower | EN-GJL-200 | EN-GJL-200 | EN-GJL-200 | stainless steel | stainless steel | stainless steel | stainless steel |
| shaft sleeve | 1.0619 | 1.0619 | 1.0619 | stainless steel | stainless steel | stainless steel | stainless steel |
| shaft | 1.0503 | 1.0503 | 1.0503 | stainless steel | stainless steel | stainless steel | stainless steel |
| impeller nut | 1.0503 | 1.0503 | 1.0503 | stainless steel | stainless steel | stainless steel | stainless steel |
| lantern bracket | EN-GJL-200 | EN-GJL-200 | EN-GJL-200 | EN-GJL-200 | EN-GJL-200 | EN-GJL-200 | EN-GJL-200 |
| bearing housing | EN-GJL-200 | EN-GJL-200 | EN-GJL-200 | EN-GJL-200 | EN-GJL-200 | EN-GJL-200 | EN-GJL-200 |

Possibility of choice of material acc. to API 610.



WORKING AREA (for 50 Hz)

| PUMP SIZE | SHAFT SPEED (r.p.m.) | FLOW Q (l/s) | DELIVERY HEAD H (m) | TEMPERATURE MAX. (°C) |
|---------------------------------------|----------------------|-----------------|---------------------|-----------------------|
| from 50-32-NHJ-125 to 300-250-NHJ-630 | 1450 2900 | from 0,5 to 300 | from 2,5 to 160 | 180 (260) |

