

DIN-FOOD

Hygienic DIN Centrifugal Pump



APPLICATIONS

The DIN-FOOD pump is a hygienic high capacity centrifugal pump (up to 1000 m³/h) designed to cater for an unfulfilled need in the food-processing and chemical and pharmaceutical industries.

Its applications include processes in the brewing, dairy and beverage industries in general, as well as in ultra-filtering processes. It can also be used in the textile industry and in some specific processes in the chemical, cosmetics and pharmaceutical industries.

OPERATING PRINCIPLES

Housed inside the casing, the impeller rotates in conjunction with the pump shaft. With this arrangement, the impeller blades convey energy to the fluid in the form of kinetic energy and pressure energy.

This pump is not reversible by a simple reversal of the direction of rotation. The direction of rotation is clockwise when the pump is viewed from the rear side of the motor.

DESIGN AND FEATURES

Casing with volute manufactured with 8 mm cold-formed plate.

Aseptic flanges according to DIN 11864-2.

Double curvature impeller with blades on the rear side to reduce the axial thrust.

Axial adjustment of the impeller (bare shaft version).

Hygienic mechanical seal.

Fully drainable pump.

Designed according to the EHEDG standards.

IEC B3 motors (B35 close-coupled constructions), IP 55, F-class insulation.

MATERIALS

| | |
|------------------------------------|--------------------|
| Parts in contact with pumped media | 1.4404 (AISI 316L) |
| Lantern and bearing support | CF8 / GG-22 |
| Gaskets | EPDM |
| Mechanical seal | SiC/C/EPDM |
| Inside surface finish | Ra ≤ 0.8 µm |
| Outside surface finish | mat |

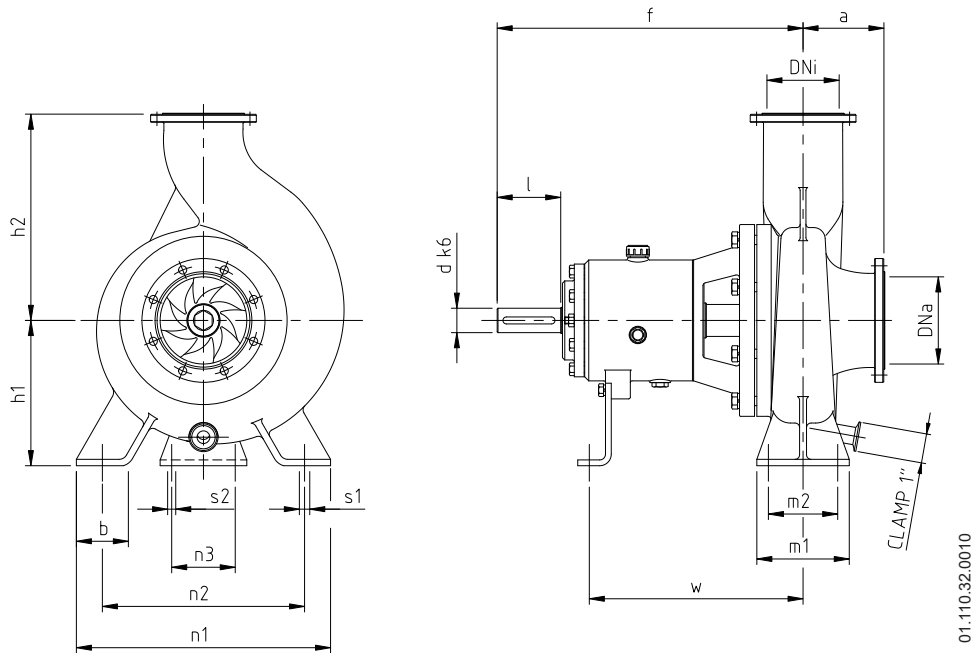
OPTIONS

Close-coupled construction for models 250.
 Mechanical seal in SiC/SiC for abrasive materials.
 Tandem type mechanical seal and pressurized double mechanical seal.
 Gaskets: FPM.
 Motor shroud.
 Motors with additional protection.
 Stainless steel base plate.
 ATEX version available.

TECHNICAL SPECIFICATIONS

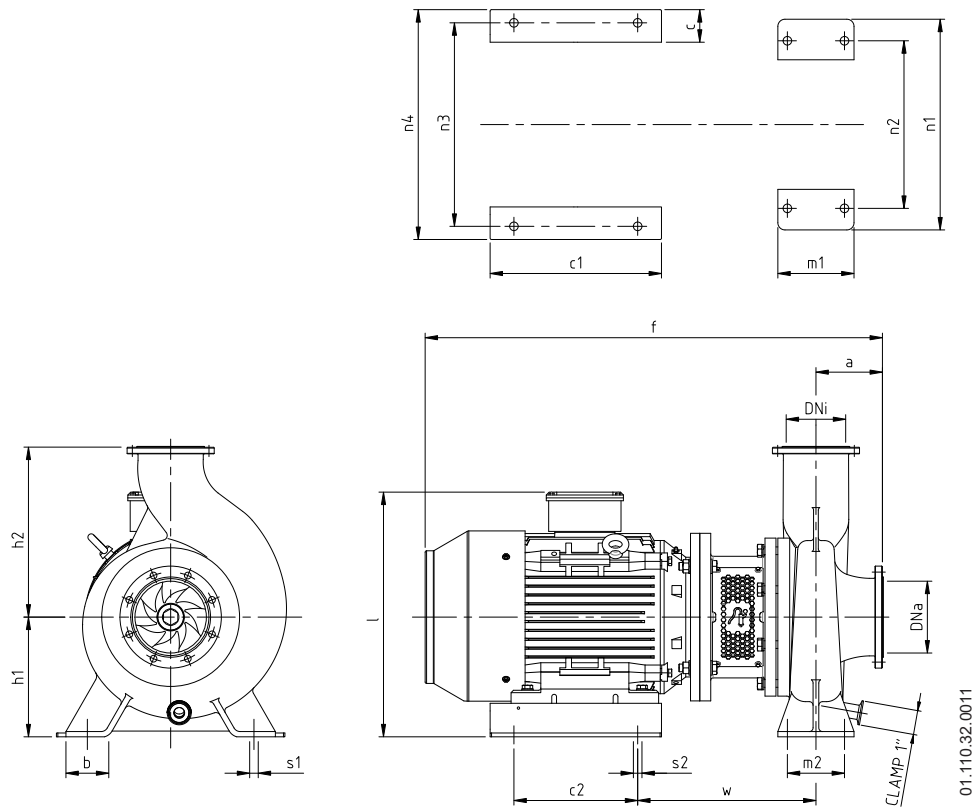
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|--------------------------|--|---------------------------|
| Max. flow | 1000 m ³ /h | 4403 US GPM |
| Max. differential head | 90 mwc | 295 ft |
| Max. operating pressure | 10 bar | 145 PSI |
| Max. working temperature | -10 °C to +120 °C (EPDM) +140 °C (SIP, max. 30 min) | 14 °F to 248 °F 284 °F |
| Max. speed | 1750 rpm 3500 rpm (model 125-100-250/2) | |

GENERAL DIMENSIONS



| Pump | DNa | DNi | d | l | a* | f | h ₁ | h ₂ * | b | m ₁ | m ₂ | n ₁ | n ₂ | n ₃ | s ₁ | s ₂ | w |
|-------------|-----|-----|----|-----|-----|-----|----------------|------------------|-----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|
| 125-100-250 | | | | | 121 | 522 | 250 | 316 | 90 | 160 | 120 | 440 | 350 | | 18 | | 363 |
| 125-100-315 | 125 | 100 | 42 | 110 | | 280 | 352 | | | | | 490 | 400 | 110 | | 14 | 350 |
| 125-100-400 | | | | | 130 | 510 | 330 | 402 | 100 | 200 | 150 | 550 | 450 | | 23 | | |
| 150-125-250 | | | | | 128 | 530 | 250 | 355 | 90 | 160 | 120 | 440 | 350 | | 18 | | 370 |
| 150-125-315 | 150 | 125 | 42 | 110 | 137 | 518 | 280 | 372 | | 200 | 150 | 490 | 400 | 110 | | 14 | 358 |
| 150-125-400 | | | | | 140 | | 330 | 422 | 100 | | | 550 | 450 | | | | |
| 200-150-250 | | | 42 | | 142 | 537 | 250 | 375 | 90 | | | 440 | 350 | 110 | | 14 | 378 |
| 200-150-315 | 200 | 150 | | 110 | | 670 | 280 | 402 | | 200 | 150 | 490 | 400 | | 23 | | 500 |
| 200-150-400 | | | 48 | | 153 | 667 | 330 | 452 | 100 | | | 550 | 450 | 140 | 18 | | 498 |

* tolerance ± 5 mm



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| Pump | Motor | DNa | DNi | a* | f | h ₁ | h ₂ * | b | c | c ₁ | c ₂ | l | m ₁ | m ₂ | n ₁ | n ₂ | n ₃ | n ₄ | s ₁ | s ₂ | w | |
|-------------|-------|-----|-----|-----|------|----------------|------------------|----|----|----------------|----------------|-----|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---|-----|
| 125-100-250 | 160 | 125 | 100 | 121 | 850 | | 316 | | | | | 460 | | | | | | | | | | 342 |
| | 180 | | | | | | | | | | | | | | | | | | | | | 475 |
| 150-125-250 | 160 | 150 | 125 | 128 | 865 | 250 | 355 | 90 | 68 | 360 | 260 | 460 | 160 | 120 | 440 | 350 | 415 | 470 | 18 | 18 | | 349 |
| | 180 | | | | 945 | 374 | | | | | | | | | | | | | | | | |
| 200-150-250 | 180 | 200 | 150 | 142 | 965 | 375 | | | | | | 475 | 200 | | | | | | | | | 381 |
| | 200 | | | | 1005 | | | | | | | | | | | | | | | | | 340 |

* tolerance ± 5 mm