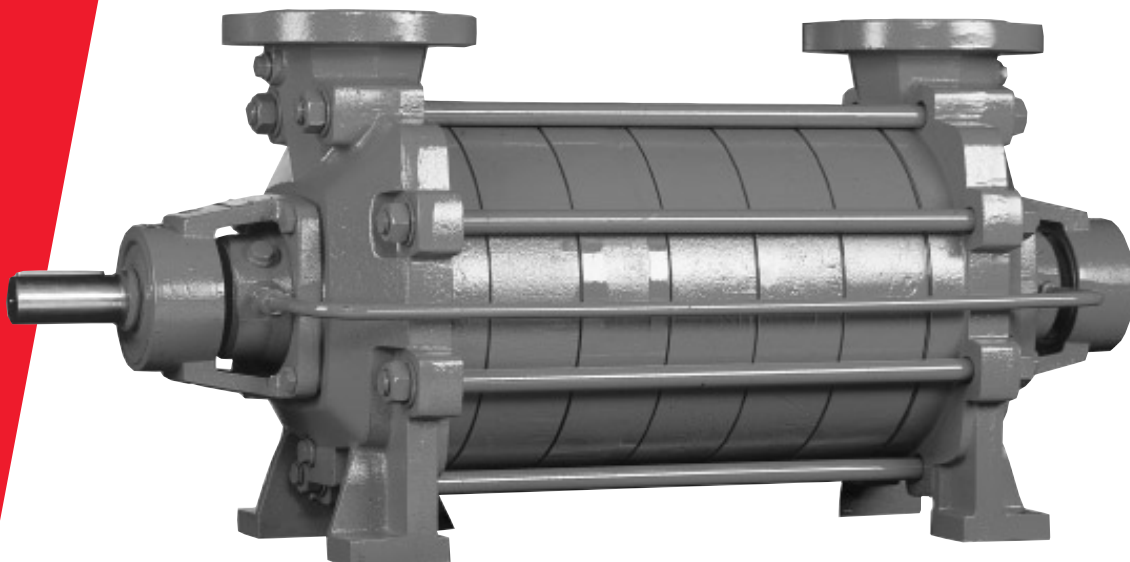


MCHZ, MCHZS

Horizontal high pressure self-priming pump



System characteristics

The MCHZ family, a range of horizontal high pressure self-priming pumps, has a high interchangeability in parts to other Johnson pumps, like the MCV or MCH. There are six different sizes, each built up with one or more stages.

The MCHZ family is self-priming by means of a built-in vacuum pump allowing handling of fluids with dissolved air (gas) or exclusively air during the suction/starting period. The integrated vacuum pump operates on the liquid ring principle.

Applications

The MCHZ pump family is suitable for handling clean or slightly contaminated liquids for instance well water, hot water, various coolants, condensed water, brine lye, sea water, petrol, kerosene, and petroleum.

For e.g. booster installations, hot water circulating systems, airconditioning systems, cooling for stationery and marine installations, industry, waterworks, agriculture and horticulture, spraying installations and ship-building.

Pump specifics

- The built-in vacuum pump will drive out any dissolved air (gas) during normal operation
- All types of the MCHZ family are fitted with closed impellers
- Suitable for a wide span of duties
- High interchangeability in spare parts between different sizes, thus limiting spare parts stock levels

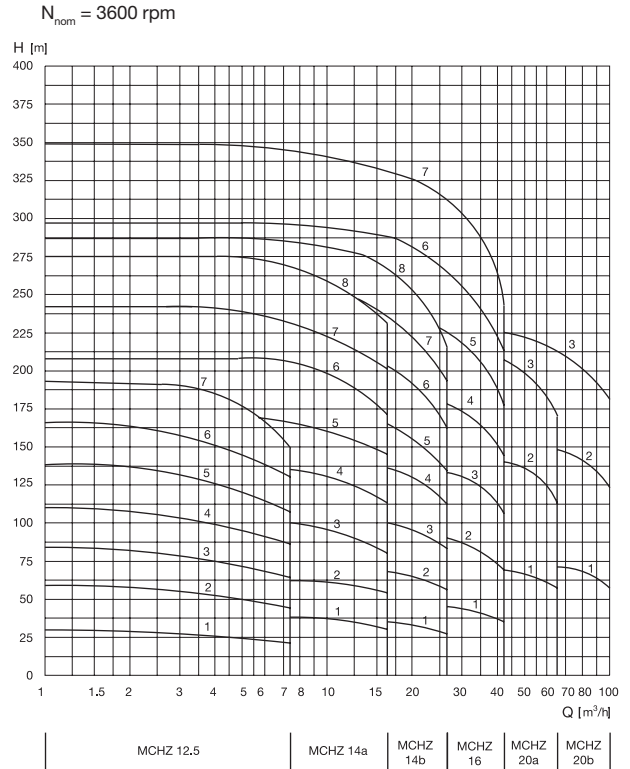
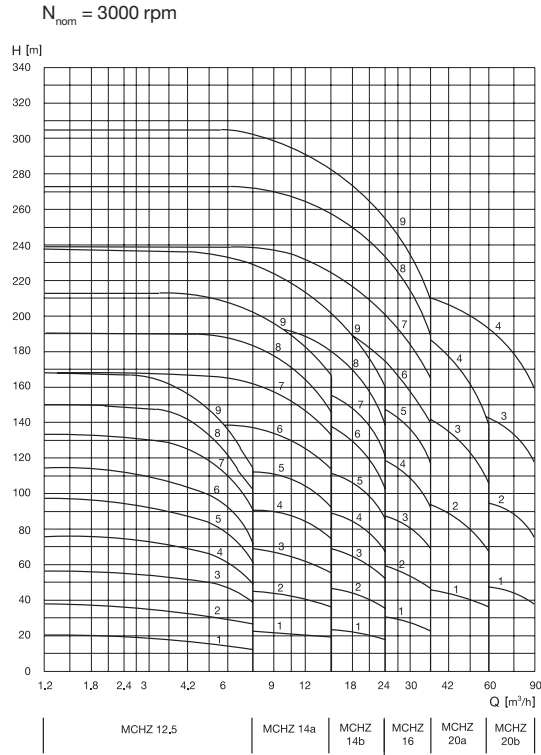
Technical data

| | |
|-----------------------------------|--|
| Type MCHZ: | Stuffing box packing Temperature -15°C – +105°C |
| Type MCHZS: | Mechanical seal Temperature -20°C – +120°C |
| Maximum capacity: | 100 m ³ /h |
| Maximum delivery head: | 340 m |
| Maximum operating pressure: | 40 - 3 x inlet pressure bar (4000 - 3 x inlet pressure kPa) <i>depending on pump size/ materials</i> |
| Maximum allowable inlet pressure: | 10 bar (1000 kPa) |

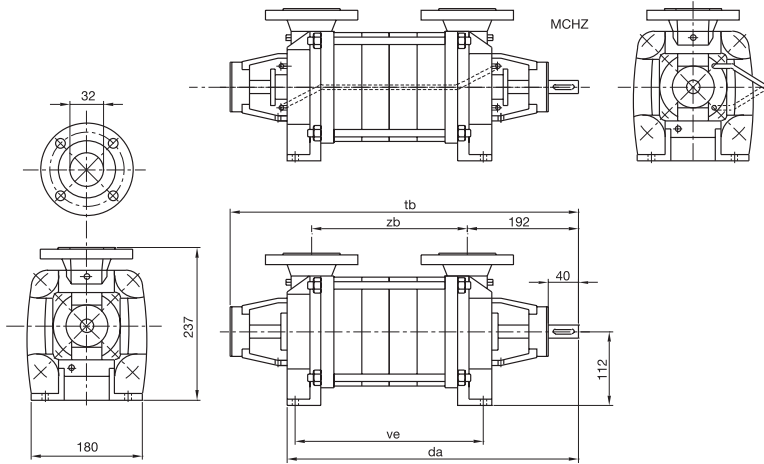
Materials

| | | |
|---------------------|-------------|--------|
| Casing parts | Cast iron | |
| Impeller | Cast iron | Bronze |
| Pump shaft | Steel alloy | |

Performance data



Dimensions



| MCHZ - MCHZS | da | tb | ve | zb |
|--------------|------|--------|------|--------|
| 12,5 x 1 | 405 | 507 | 227 | 169 |
| 12,5 x 2 | 450 | 552 | 272 | 214 |
| 12,5 x 3 | 495 | 597 | 317 | 259 |
| 12,5 x 4 | 540 | 642 | 362 | 304 |
| 12,5 x 5 | 585 | 687 | 407 | 349 |
| 12,5 x 6 | 630 | 732 | 452 | 394 |
| 12,5 x 7 | 675 | 777 | 497 | 439 |
| 12,5 x 8 | 720 | 822 | 542 | 484 |
| 12,5 x 9 | 765 | 867 | 587 | 529 |
| | da | da^* | tb | tb^* |
| 14 a,b x 1 | 425 | | 527 | 237 |
| 14 a,b x 2 | 475 | | 577 | 287 |
| 14 a,b x 3 | 525 | | 627 | 337 |
| 14 a,b x 4 | 575 | 621 | 677 | 387 |
| 14 a,b x 5 | 626 | 671 | 727 | 437 |
| 14 a,b x 6 | 675 | 721 | 777 | 487 |
| 14 a,b x 7 | | 771 | | 537 |
| 14 a,b x 8 | | 821 | | 587 |
| 14 a,b x 9 | | 871 | | 637 |
| 16 x 1 - 6,5 | 495 | | 624 | 267 |
| 16 x 2 - 6,5 | 555 | | 684 | 327 |
| 16 x 3 - 6,5 | 615 | | 744 | 387 |
| 16 x 4 - 6,5 | 675 | | 804 | 447 |
| 16 x 5 - 6,5 | 735 | | 864 | 507 |
| 16 x 6 - 6,5 | 795 | | 924 | 567 |
| 16 x 7 - 6,5 | 955 | | 984 | 627 |
| 16 x 8 - 6,5 | 915 | | 1044 | 687 |
| 16 x 9 - 6,5 | 975 | | 1104 | 747 |
| 20 a,b x 1 | 600 | | 727 | 332 |
| 20 a,b x 2 | 675 | | 802 | 407 |
| 20 a,b x 3 | 750 | | 877 | 482 |
| 20 a,b x 4 | 825 | | 952 | 557 |

* = Pump with improved bearings



Johnson Pump B.V.

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