

Customer**Supplier**

Company name
Editor
Phone number
E-mail

Fields of Application

Hexa is a kind of multifunctional products. It can be used to convey various medium from tap water to industrial liquid at different temperature and with different flow rate and pressure.

Water supply: Water filter and transport in waterworks, boosting of main pipeline, boosting in high-rise buildings.

Industrial boosting: Process flow water system, cleaning system, high-pressure washing system, fire fighting system.

Industrial liquid conveying: Cooling and air-conditioning system, boiler water supply and condensing system, machine-associated purpose, acids and alkali.

Water treatment: Ultrafiltration system, reverse osmosis system, distillation system, separator, swimming pool.

Irrigation: Farmland irrigation, spray irrigation, dripping irrigation.

**Design Specification**

Hexa is a kind of vertical non-self priming multistage centrifugal pump, which is driven by a standard electric motor. The motor output shaft directly connects with the pump shaft through a coupling. The pressure-resistant cylinder and flow passage components are fixed between pump head and inlet & outlet section with stay bolts. The inlet and outlet are located at the pump bottom at the same plane. This kind of pump can be equipped with an intelligent protector to effectively prevent it from dry-running, out-of-phase and overload.

Operation Conditions

Thin, clean, non-flammable and non-explosive liquid containing no solid, granules and fibers.

Liquid temperature:
Normal temperature type : -15 °C ~ +70 °C
Hot water type : +70 °C ~ +120 °C
Ambient temperature : Up to +40 °C
Altitude : Up to 1000 m
Shaft Seal : Mechanical Seal

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Operating data specification

| | | | | | |
|-----------------------------|-------|--------------------|--------------------------|-----|-------------------|
| Pumped fluid | Water | | Rated flow | | m ³ /h |
| Solids | | | Rated head | | m |
| Kind | | | Geodetic head | | m |
| Percentage of solid content | 0 | | Available system NPSH | | m |
| pH value | | | Inlet pressure (pin) | 0 | kPa |
| Temperature | 20 | °C | Altitude above sea level | 100 | m |
| Density | 998.3 | kg/m ³ | Max. operating pressure | 985 | kPa |
| Kin. viscosity | 1.005 | mm ² /s | Max. diff. pressure | 985 | kPa |
| Vapour pressure | 2.34 | kPa | | | |

Pump

| | | | | | |
|------------------------|--|-------|-----------------------|------|-------------------|
| Make | MAS DAF | | Impeller type | | |
| Pump type | Hexa 16/07 | | Impeller construction | | |
| Frame size | | | Impeller Ø | | |
| Design | | | Max. | 111 | mm |
| Self priming | <input checked="" type="checkbox"/> No | | designed | 111 | mm |
| Speed | 2900 | 1/min | Min. | 111 | mm |
| Stages | 7 | | Flow | | |
| Suction port | | | Nominal | 17.4 | m ³ /h |
| Pressure rating | PN25 | | Max. | 22 | m ³ /h |
| Nominal pipe size | DN50 | | Min. | 0 | m ³ /h |
| Standard | DIN | | Head | | |
| Discharge port | | | Nominal | 79.7 | m |
| Pressure rating | PN25 | | Min. | 60.9 | m |
| Nominal pipe size | DN50 | | Max. | 101 | m |
| Standard | DIN | | Shut off head | 101 | m |
| Shaft power | | kW | NPSH3 | | m |
| Shaft power P2(Q=max.) | 6.1 | kW | Efficiency | | % |

Motor

| | | |
|----------------------|----------------------------|-------|
| Make/Type | 7.5 KW-2900 RPM / 132S | |
| Specific design | IE3 / 50 Hz / Pole pairs 1 | |
| Rated power | 7.5 | kW |
| Electric voltage | 3~ 400 | V |
| Speed | 2910 | 1/min |
| Electric current | 13.3 | A |
| Frame size | 132S | |
| Degree of protection | IP 55 | |
| Type of protection | | |
| Explosion protection | | |

Coupling

| | |
|---------------|----|
| Make/Type | |
| Series | |
| Spacer length | mm |
| Frame size | |

Materials

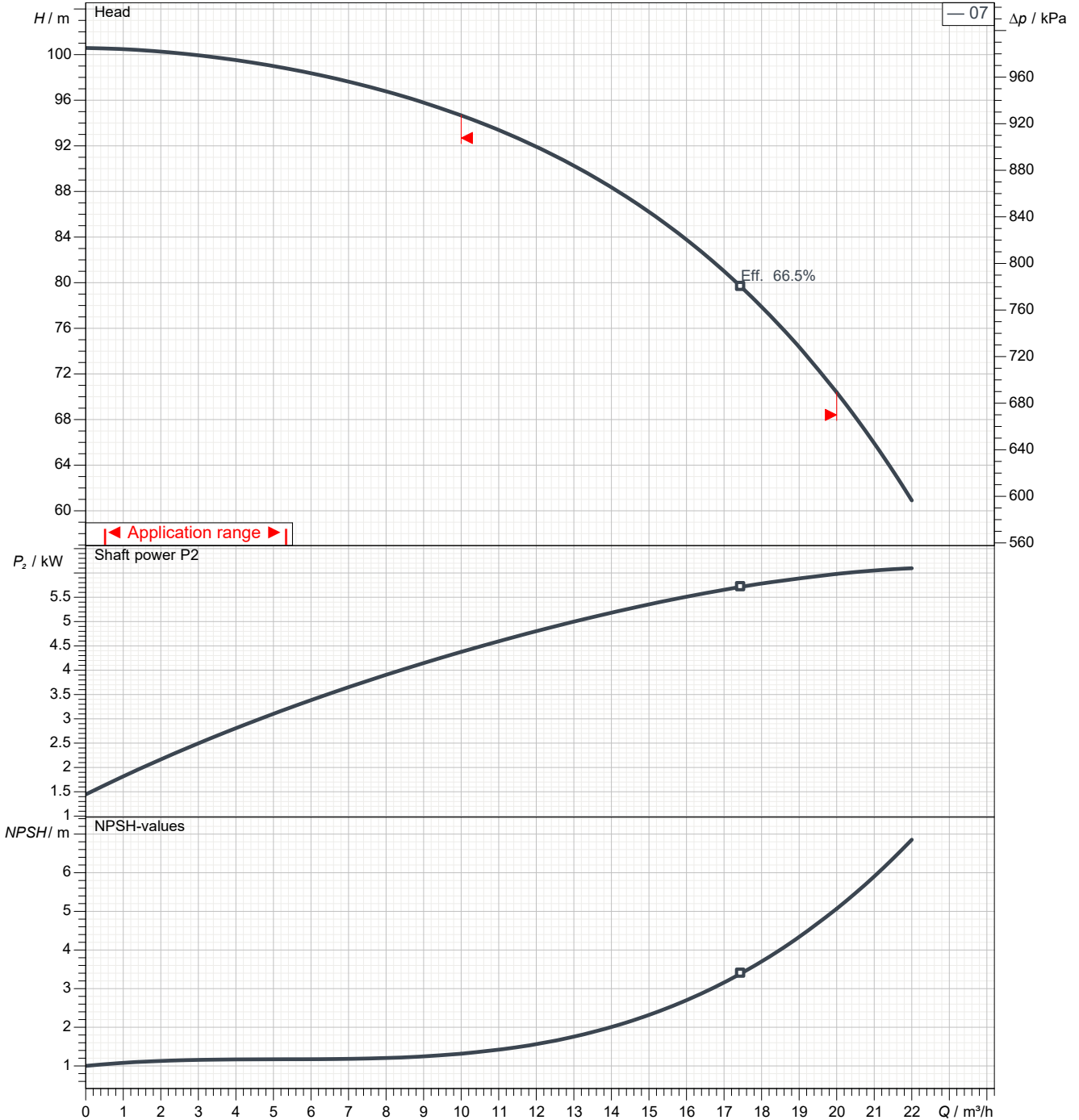
| | | | |
|---------------|-----------------------------|-----------------|------------------|
| Pump | | Shaft seal | VGMG - 1508 |
| Pump Casing | A 276 Type 304 (X5CrNi18.9) | Material code | VZFZF |
| Base Plate | GJL-250 (GG25) | Secondary Seals | Viton |
| Casing Flange | GJS-400-15 (GGG40) | Primary Rings | Tungsten Carbide |
| Impeller | A 276 Type 304 (X5CrNi18.9) | Metal Parts | Stainless Steel |
| Shaft | A 276 Type 304 (X5CrNi18.9) | Mating | Tungsten Carbide |
| | | Springs | Stainless Steel |

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Power data referred to: Water; 20°C; 998.3kg/m³; 1.005mm²/s Sense of rotation Clockwise from the drive end



Pump curves in accordance with ISO 9906 2B

| | | | | |
|-----------------|-------|--------------------|-------------|-------------------|
| Pumped fluid | Water | | Rated flow | m ³ /h |
| Temperature | 20 | °C | Rated head | m |
| Density | 998.3 | kg/m ³ | Shaft power | kW |
| Kin. viscosity | 1.005 | mm ² /s | Speed | 2900 1/min |
| Vapour pressure | 2.34 | kPa | NPSH3 | m |
| Impeller Ø | 111 | mm | Efficiency | % |

Subject to change

Projec

Issue date
2024-05-06

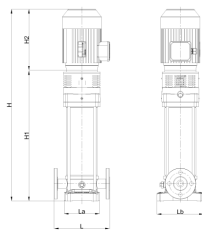
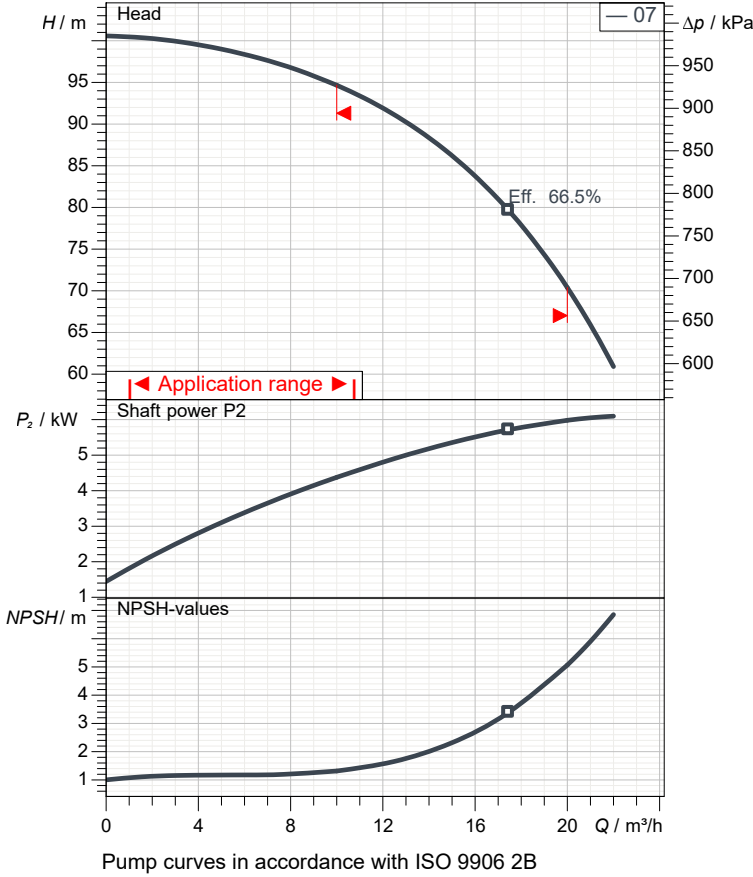
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Performance curves



| Dimensions | mm |
|------------|-----|
| H | 976 |
| H0 | 243 |
| H1 | 558 |
| H2 | 418 |
| L | 300 |
| La | 200 |
| Lb | 250 |

Pump

| | |
|-------------------|------------|
| Make | MAS DAF |
| Pump type | Hexa 16/07 |
| Design | |
| Suction port | |
| Pressure rating | PN25 |
| Nominal pipe size | DN50 |
| Standard | DIN |
| Discharge port | |
| Pressure rating | PN25 |
| Nominal pipe size | DN50 |
| Standard | DIN |

Operating data specification

| | | |
|-----------------|-------|--------------------|
| Pumped fluid | Water | |
| Temperature | 20 | °C |
| Density | 998.3 | kg/m ³ |
| Kin. viscosity | 1.005 | mm ² /s |
| Vapour pressure | 2.34 | kPa |
| Rated flow | | m ³ /h |
| Rated head | | m |
| Shaft power | | kW |
| Speed | 2900 | 1/min |
| NPSH3 | | m |
| Efficiency | | % |
| Impeller Ø | 111 | mm |

Motor

| | |
|----------------------|----------------------------|
| Make/Type | 7.5 KW-2900 RPM / 132S |
| Specific design | IE3 / 50 Hz / Pole pairs 1 |
| Rated power | 7.5 kW |
| Speed | 2910 1/min |
| Electric voltage | 3~ 400 V |
| Electric current | 13.3 A |
| Degree of protection | IP 55 |

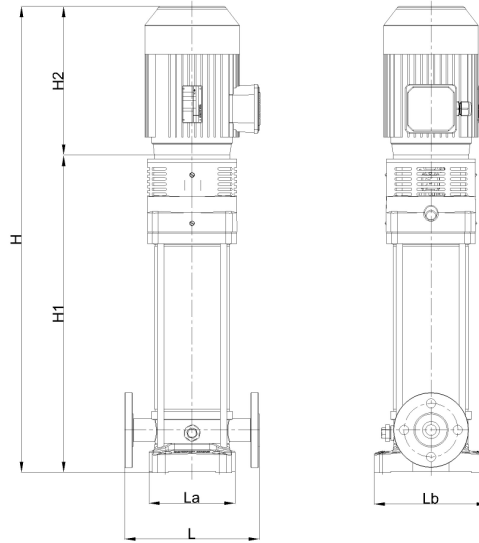
Materials

| | |
|-----------------|-----------------------------|
| Shaft seal | VGMG - 1508 |
| Material code | VZFZF |
| Secondary Seals | Viton |
| Primary Rings | Tungsten Carbide |
| Metal Parts | Stainless Steel |
| Mating | Tungsten Carbide |
| Springs | Stainless Steel |
| Pump Casing | A 276 Type 304 (X5CrNi18.9) |
| Base Plate | GJL-250 (GG25) |
| Casing Flange | GJS-400-15 (GGG40) |
| Impeller | A 276 Type 304 (X5CrNi18.9) |
| Shaft | A 276 Type 304 (X5CrNi18.9) |

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| Dimensions | mm |
|------------|-----|
| H | 976 |
| H0 | 243 |
| H1 | 558 |
| H2 | 418 |
| L | 300 |
| La | 200 |
| Lb | 250 |

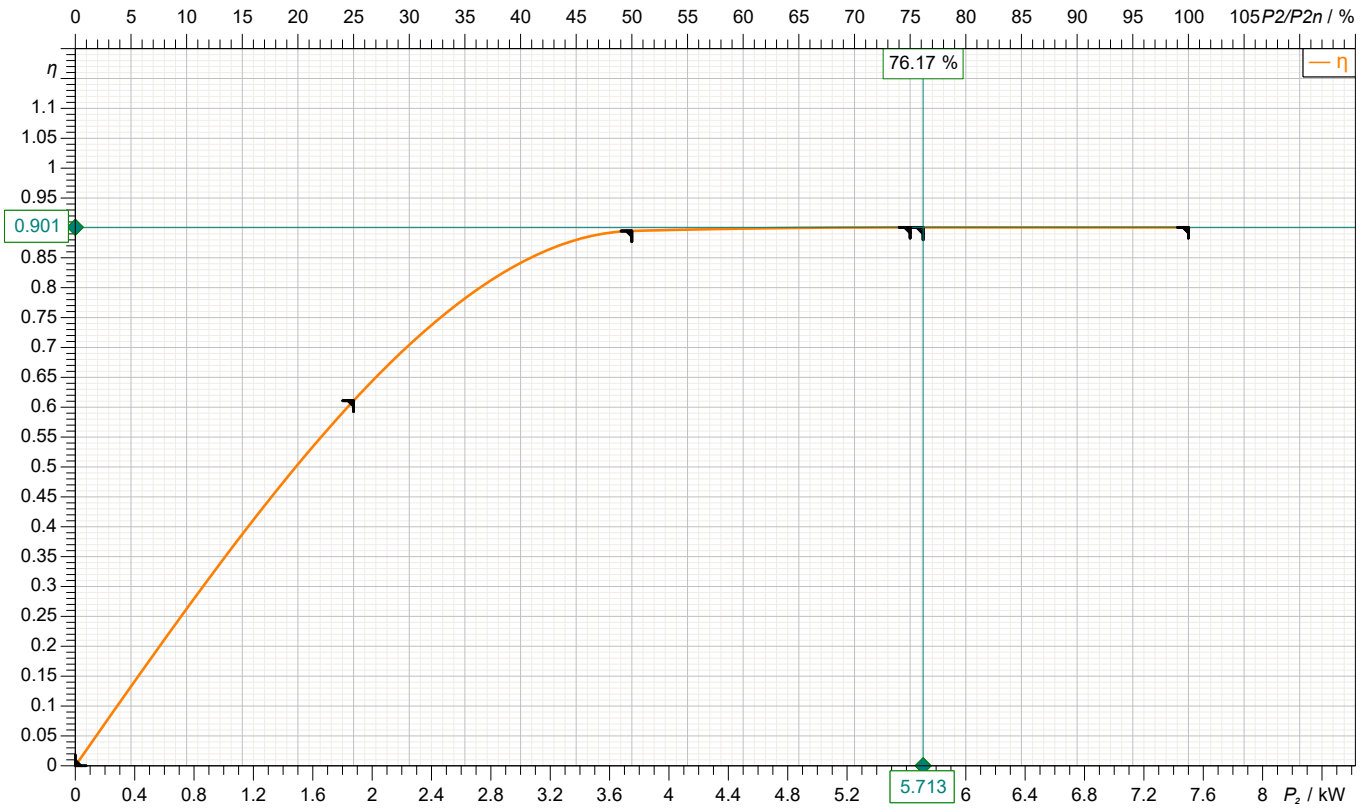
| Inlet / outlet | |
|----------------|----------------|
| Suction port | Discharge port |
| DN50 | DN50 |
| PN25 | PN25 |

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motor data



| Symbol | No load | 25 % | 50 % | 75 % | 100 % | 125 % |
|------------|---------|-------|------|-------|-------|-------|
| P_2 / kW | 0 | 1.875 | 3.75 | 5.625 | 7.5 | |
| P_1 / kW | | 3.069 | 4.19 | 6.243 | 8.324 | |
| η / % | 0 | 61.09 | 89.5 | 90.1 | 90.1 | |

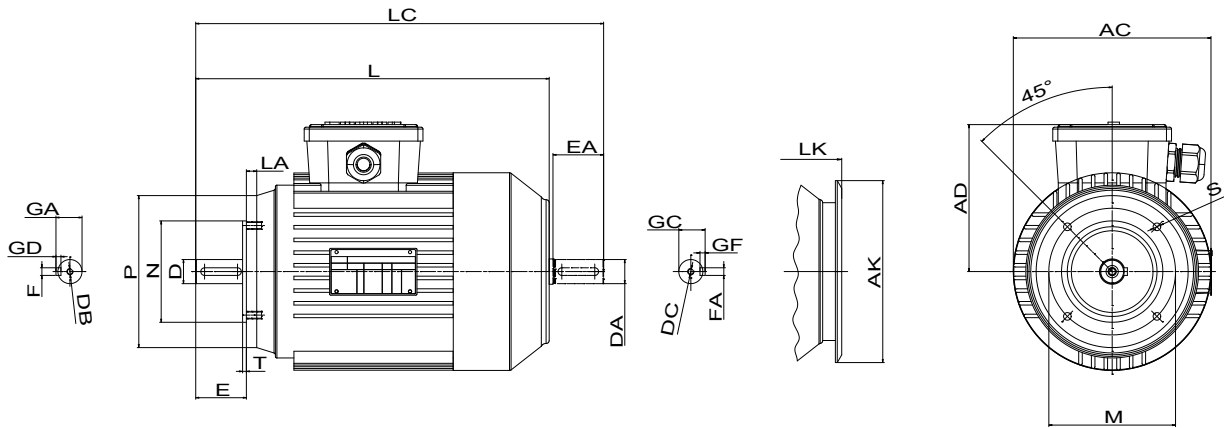
Motor

| | | | |
|------------------|----------------------------|----------------------|-----------|
| Make/Type | 7.5 KW-2900 RPM / 132S | Degree of protection | IP 55 |
| Specific design | IE3 / 50 Hz / Pole pairs 1 | Type of protection | |
| Rated power | 7.5 kW | Explosion protection | |
| Electric voltage | 3~ 400 V | Service factor | 1.15 |
| Number of poles | 2 | Starting current | |
| Speed | 2910 1/min | Starting torque | |
| Electric current | 13.3 A | Moment of inertia | |
| Power factor | 0.9 | No. starts per hour | |
| Frame size | 132S | Rated torque | 24.6 Nm |
| Efficiency class | IE3 | Insulation class | F (155C°) |

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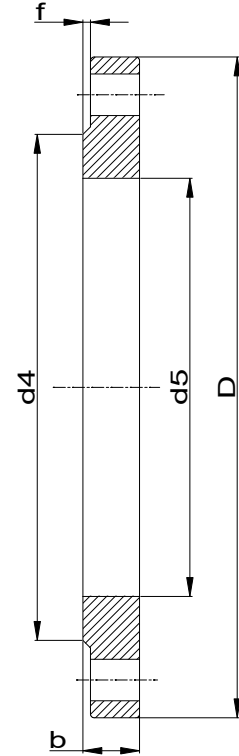
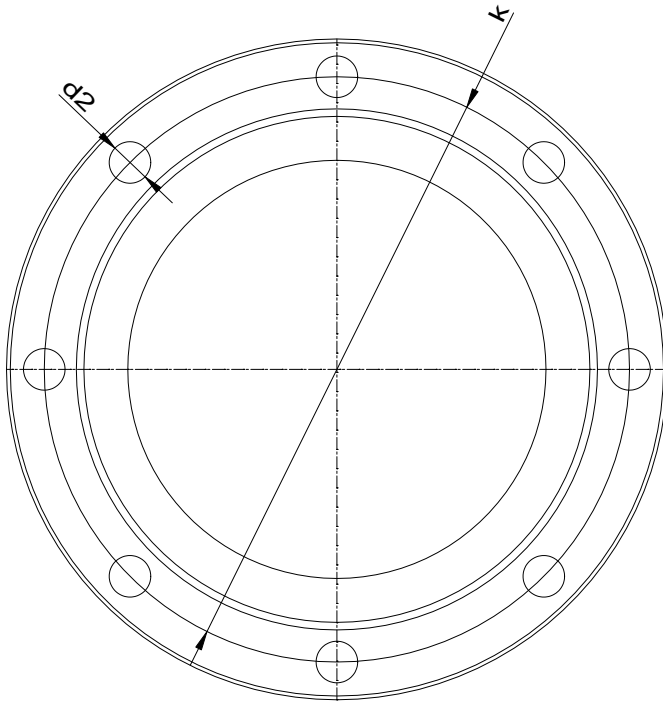


| Dimensions | mm | | mm |
|------------|------|----|-----|
| AC | 257 | LC | 584 |
| AD | 168 | LK | 535 |
| AK | 239 | M | 215 |
| D | 38 | N | 180 |
| DA | 38 | P | 250 |
| DB | M12 | S | M12 |
| DC | M12 | T | 4 |
| E | 80 | | |
| EA | 80 | | |
| FxGF | 10X8 | | |
| FxGD | 10X8 | | |
| GA | 41 | | |
| GC | 41 | | |
| L | 498 | | |
| LA | 18 | | |

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Suction connection

DN50
PN25

Discharge connection

DN50
PN25

| Dimensions | mm |
|------------|------|
| b | 20 |
| D | 165 |
| d2 | 18 |
| d4 | 102 |
| d5 | 61.5 |
| DN | 50 |
| f | 2 |
| k | 125 |
| n | 4 |

| Dimensions | mm |
|------------|------|
| b | 20 |
| D | 165 |
| d2 | 18 |
| d4 | 102 |
| d5 | 61.5 |
| DN | 50 |
| f | 2 |
| k | 125 |
| n | 4 |



Spare part list

Hexa 16/07

Revision number

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Subject to change

Projec

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Hexa 16/07

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