

Data sheet



KRTF 40-252/72WEC2-S IE3

Version no.: 1

Operating data

| | | | |
|-------------------------|--|------------------------|--|
| Pumped medium | Wastewater, municipal mechanically treated | Actual flow rate | 29.55 m ³ /h |
| Pumped medium details | Not containing chemical and mechanical substances which affect the materials | Actual developed head | 23.24 m |
| Ambient air temperature | 20.0 °C | Efficiency | 44.2 % |
| Fluid temperature | 60.0 °C | Power absorbed | 4.22 kW |
| Fluid density | 997 kg/m ³ | Pump speed of rotation | 2943 rpm |
| Fluid viscosity | 0.19 mm ² /s | Shutoff head | 32.39 m |
| Max. power on curve | 5.96 kW | Performance test | No |
| Design | Single system 1 x 100 % | | Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2 |

Design

| | | | |
|---|--|----------------------------------|-------------------------------------|
| Design | Close-coupled submersible | Type | 4STQ |
| Orientation | Vertical | Material code | SIC/SIC/FPM |
| Suction flange pump drilled according to(DN1) | unmachined | Impeller type | Free flow (vortex) impeller (F-max) |
| Discharge flange pump drilled according to(DN2) | DN 40 / PN 10 / Drilled according to EN 1092-2 | Impeller diameter | 150.0 mm |
| Shaft seal | Double acting shaft seal cartridge in tandem arrangement with oil reservoir. | Free passage size | 25.0 mm |
| Shaft seal manufacturer | KSB | Direction of rotation from drive | Clockwise |

Driver, accessories

| | | | |
|------------------------------|--|------------------------|----------------------------|
| Driver type | Electric motor | Temperature sensor | Bimetal switch 2x |
| Model (make) | KSB | Motor winding | 400 / 690 V |
| Motor const. type | KSB Sub. motor | Number of poles | 2 |
| Efficiency class | Efficiency class IE3 acc. to IEC60034-30-1 | Starting mode | Direct/Star-delta possible |
| Frequency | 50 Hz | Connection mode | Delta |
| Rated voltage | 400 V | Motor cooling method | Surface cooling |
| Rated power P2 | 5.50 kW | Motor version | W |
| Available reserve | 30.32 % | Cable design | Rubber hose |
| Rated current | 11.9 A | Cable entry | Sealed along entire length |
| Starting current ratio | 7.6 | Power cable | S1BN8-F 12G2.5 |
| Insulation class | H according IEC 34-1 | Number of power cables | 1 |
| Motor enclosure | IP68 | Moisture sensor | With |
| Cos phi at 4/4 load | 0.75 | Cable length | 10.00 m |
| Motor efficiency at 4/4 load | 89.2 % | | |

Materials C2

| | | | |
|-----------------------|-------------------------------|---------------------|-------------------------------|
| Pump casing (101) | GX2CRNIMOCUN25-6-3-3 1.4517 | O-Ring (412) | Fluor caoutchouc FPM |
| Discharge cover (163) | GX2CRNIMOCUN25-6-3-3 1.4517 | Motor housing (811) | GX2CRNIMOCUN25-6-3-3 1.4517 |
| Shaft (210) | Duplex stainless steel 1.4462 | Motor cable (824) | Chloroprene rubber |
| Impeller (230) | GX2CRNIMOCUN25-6-3-3 1.4517 | Screw (900) | Duplex stainless steel 1.4462 |
| Bearing bracket (330) | GX2CRNIMOCUN25-6-3-3 1.4517 | | |

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Nameplates

Nameplates language International Duplicate nameplate With

Installation parts

| | | | |
|--------------------|------------------------------|--------------|---------------|
| Installation type | Stationary with guide wire | Type | Rope |
| Scope of supply | Pump with installation parts | Material | Polypropylene |
| Installation depth | 4.50 m | Length | 5.00 m |
| Material concept | C2 | Max. load | 200 kg |
| | | Lifting Bail | With |

Duckfoot bend

| | |
|--------------------------------|--------------------------------|
| Size | DN 50 |
| Flange design | EN |
| Duckfoot bend size (DN2 / DN3) | DN 50 Drilled according to EN |
| Material | GX2CRNIMOCUN25-6-3-3 1.4517 |
| Mounting type | Composite anchor bolts |
| Foundation rail | Without |

Claw

| | |
|--------|------------|
| Design | Straight |
| Size | DN 40 / 50 |

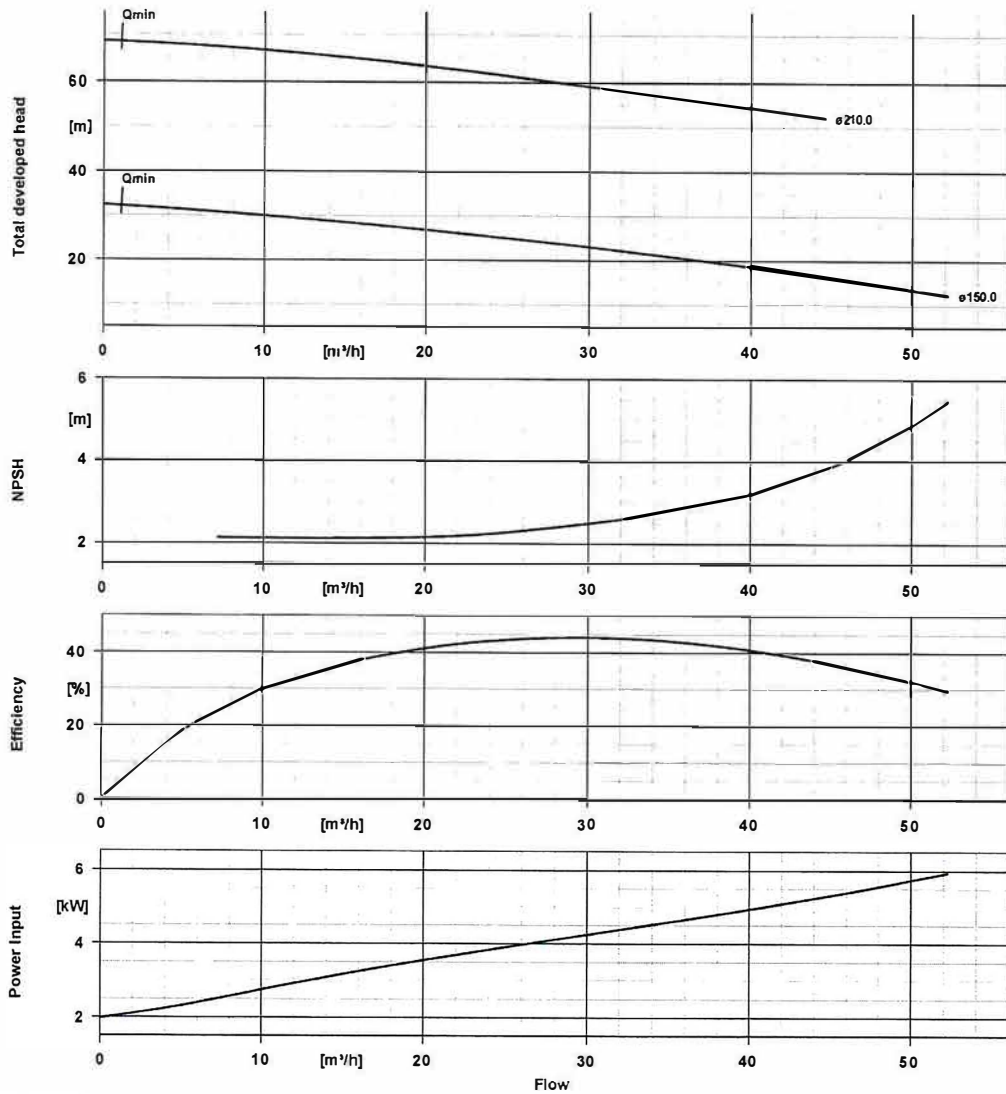
Lifting chain / -rope

Performance curve



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Curve data

| | | | |
|----------------------|---------------|-----------------------------|--|
| Speed of rotation | 2943 rpm | Power absorbed | 4.22 kW |
| Fluid density | 997 kg/m^3 | NPSH req. 3% | 2.47 m |
| Viscosity | 0.19 mm^2/s | Curve number | K43388s |
| Flow rate | 29.55 m^3/h | Effective impeller diameter | 150.0 mm |
| Total developed head | 23.24 m | Acceptance standard | Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2 |
| Efficiency | 44.2 % | | |

Installation plan



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Motor

| | |
|--------------------|----------|
| Motor manufacturer | KSB |
| Motor size | 7E |
| Motor power | 5.50 kW |
| Number of poles | 2 |
| Speed of rotation | 2925 rpm |

Connections

| | |
|---|-------------------------------|
| Suction flange pump drilled according to(DN1) | unmachined |
| Duckfoot bend size (DN2 / DN3) | DN 50 Drilled according to EN |

Weight net

| | |
|--------------------|--------|
| Pump, Motor, Cable | 128 kg |
| Claw / Foot | 9 kg |
| Total | 137 kg |

Connect pipes without stress or strain!

Dimensional tolerances for shaft axis height: DIN 747
Dimensions without tolerances, middle tolerances to:
Connection dimensions for pumps:
Dimensions without tolerances - welded parts:
Dimensions without tolerances - gray cast iron parts:
Dimensions without tolerances - stainless steel parts:

ISO 2768-m
EN735
ISO 13920-B
ISO 8062-CT11
ISO 8062-CT12

For auxiliary connections see separate drawing.