**Amarex**

**KSB submersible motor pump for waste water applications, in grey cast iron and special materials**

Vertical submersible motor pump set for wet installation, single-stage, with three-phase motor to IEC standards. Temperature sensor for protection against overheating, optional leakage sensor in the motor space, power cable with resin-sealed, absolutely water-tight cable entry and service-friendly plug-type connection in the motor space.

**Pump set**:

Make: KSB

Type: Amarex ARX F-max

Impeller: Free-flow impeller F-max

F-max is a free-flow impeller optimised for operating reliability. With its large free passage of max. 100 mm, it is especially suitable for handling wastewater containing all kinds of solids and fibres.

Impeller diameter: 180 mm

Free passage: max. 100 mm

**Operating data:**

Fluid handled: Waste water containing faeces

Flow rate: 100 m³/h

Head: 8 m

Power input: 1.78 kW

Operating temperature: max. 40 °C

**Drive:**

Nominal voltage: 400 V

Nominal frequency: 50 Hz

Starting method: DOL / star-delta starting is also possible

Enclosure: IP68 to EN 60529 / IEC 529, thermal class H

Explosion protection: ATEX II 2G Ex db h IIB T4 Gb / Without

Max. fluid temperature: 40 °C

Thermal motor protection: Temperature bimetal switch

Leakage sensor in the motor space: Yes / No

Efficiency class: Equivalent IE3 to IEC Standard / Not specified

Duty type: S1 submerged / S1 with motor partially outside the fluid

Nominal motor power P2: 2.3 kW

Nominal motor power P1: 2.6 kW

Motor efficiency: 82.6 %

Nominal current: 5.5 A

Speed: 1430 rpm

Cable length: 10 m

Cable entry: Screwed cable entry / Cable entry with individually stripped, resin-embedded cores and service-friendly plug-type connection inside the motor

**Materials:**

Pump casing: EN-GJL-250

Handle: 1.4306

Impeller: EN-GJL-250 / 1.4517 / EN-GJN-555[CR14]

Discharge cover: EN-GJL-250 / EN-GJN-555 [CR14]

Suction cover: EN-GJL-250

Shaft: 1.4021 + QT800

Cable sheath: Chloroprene rubber / TEFZEL

Elastomers: Nitrile rubber (NBR) / encapsulated seal (FEP/FKM) / fluorocarbon rubber (FPM) = Viton

Coating: Two-component high-solid epoxy resin

Colour: RAL 5002

**Shaft seal:**

2 independent mechanical seals fitted in an oil reservoir

Pump-end: Bellows-type mechanical seal / Mechanical seal with covered spring SiC-SiC

Motor-end: Bellows-type mechanical seal, Carbon-AI2O3

Oil fill: Environment-friendly, non-toxic oil

**Dimensions and connections:**

Nominal diameter, discharge side: DN 80, drilled to EN 1092-2 PN 16

Nominal diameter, suction side: DN 80 unmachined / drilled to EN 1092-2 PN 16

Net pump weight approx.: 78 kg

**Installation parts:**

Installation depth 4.5 / 6 m

From lower manhole edge to pump sump bottom

**Stationary installation**

- Duckfoot bend for **guide wire arrangement**

 Consisting of duckfoot bend, mounting bracket, 10 m guide wire, screws/bolts and anchor bolts

 Spacer for installation depth > 4.5 m

- Duckfoot bend for **single guide rail arrangement**

Consisting of duckfoot bend, mounting bracket, screws/bolts and anchor bolts (guide rail supplied by the operator)

 Additional mounting bracket, middle support for installation depth > 6 m

- Duckfoot bend for **twin guide rail arrangement**

 Consisting of duckfoot bend, mounting bracket, screws/bolts and anchor bolts (guide rails supplied by the operator)

 Additional mounting bracket, middle support for installation depth > 6 m

**Transportable model**

- Feet / foot plate, complete

**Lifting equipment:**

- Short-linked chain, tested and marked to Directive 2006/42/EC (Machinery Directive), hook, shackle

Length: 5/10 m

Max. load 200 kg

**Materials:**

Claw: EN-GJL-250 + U-profile joint NBR/Viton

Duckfoot bend (stat.): EN-GJL-250

Feet and plate (transp.): 1.4301

Chain: 1.4404

**Electrical accessories:**

- Thermistor protection relay Yes / No

 Pump without explosion protection

- Thermistor protection relay Yes / No

 Pump with explosion protection

- Leakage sensor protection relay Yes / No

**Typical tender for Amarex F-max**

**2573.522/02-EN**

**Subject to technical modification without prior notice**

**17.09.2020**