**Amarex**

**KSB submersible motor pump for wastewater 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 D-max

Impeller: Open two-vane impeller D-max

D-max is an open two-vane impeller of the latest generation. The D-max impeller ensures a non-clogging flow and an excellent hydraulic efficiency.

The D-flector technology is specially designed to drastically reduce the risk of clogging by items such as wet wipes contained in the waste water.

Impeller diameter: 180 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-GJS-600-3 / EN-GJN-555[CR14]

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

Suction cover: EN-GJS-600-3 / EN-GJN-555[CR14]

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 D-max**

**2573.521/02-EN**

**Subject to technical modification without prior notice**

**17.09.2020**