# 1.1 KSB Guard – System for Pump Condition Monitoring

Monitoring unit for one pump set for measuring and analysing vibration and temperature values at set intervals in order to optimise the pump's availability.

It comprises a sensor unit for vibration and temperature measurement to be attached to the bearing bracket/drive lantern and includes all necessary installation material as well as a transmission and battery unit to transfer the data to a KSB Guard gateway and supply the sensor unit with power.

#### **Functions:**

- Notification of deviations from the stored limit values by e-mail or push message
- Retrieval of analysed data and pump documentation per app or in the KSB Web Portal (SSL encryption)
- Maintenance history for planning further condition-based maintenance and service work
- LED display for operating status and fault messages

### Technical data of sensor unit:

Material: Aluminium

Dimensions [mm]: 60 x 45 x 30

Enclosure: IP65

Cable: 1.5 m, PUR, 6-core Ambient temperature: ≤ 90 °C

#### Technical data of transmission and battery unit

Material: plastic

Dimensions [mm]: 120 x 80 x 65

Enclosure: IP65

Temperature range: 0 - 50 °C Power supply: 2 D Mono Cells, LR20 Wireless module: ISM band, 2.4 GHz

Connection: M8, 6-pin

### Purchase order information:

Weight: approx.1.0 kg Manufacturer: KSB

Type series: KSB Guard Kit Material price group: LV

Material number: 01852758

# 1.2 KSB Guard - Gateway

Gateway for wireless recording of the data of up to 20 transmission and battery units. Direct and encrypted transfer of data for processing into the KSB Cloud (C5 and ISO 270001 certified; server locations in Germany) with pre-installed and pre-configured SIM card via mobile communication.

LED display for connection status, signal strength and operating voltage.

# Technical data of gateway:

Material: plastic

Dimensions [mm]:  $158 \times 95 \times 45$ 

Enclosure: IP54

Mains voltage: 110-240 V, 1~ Mains frequency: 50/60 Hz Input power: < 15 W Temperature range: 0 - 40 °C

SMA-RP socket: antenna connection for 2.4 GHz SMA socket: antenna connection for 2G/3G/4G

#### **Purchase order information:**

Weight: approx. 0.7 kg Manufacturer: KSB

Type series: KSB Guard Gateway

Material price group: LV

Material number: 01852757

Typical tender for KSB Guard 4079.521/01-EN Subject to technical modification without prior notice 2 August 2019