



# Motor Servo for Angled Seat Valves

SKU: KFRLWE01

Version: 1.0.0



## Product Description

The motor drive designed for angle seat valves, specifically KFR valves, offers a solution for seamlessly retrofitting existing shut-off valves into remotely controlled intelligent devices. This process is achieved without the need to interrupt water supply or cut into the water pipe. The 12V-powered motor is not only water-resistant but also resistant to dirt, ensuring durability up to the power supply. Versatility is achieved through various adapter rings and a sophisticated connection system, allowing the motor to be compatible with modern angle seat valves featuring raising or non-raising stems, ranging from DN15 to DN32.

Incorporating an additional water sensor directly connected to the device enhances functionality, enabling the motor to serve as a leak protection system without the need for further configuration or wireless connectivity. The servo motor's waterproof design makes it suitable for deployment in damp, dirty, and outdoor environments. In its open state, the motor autonomously conducts valve training weekly, involving a closing/opening action by 1/8 turn to remove dirt and scale.

Control is facilitated through local buttons, and remote operation is achieved



through LoRaWAN commands. The device functions as a LoRaWAN Class C device, necessitating LoRaWAN network coverage for optimal performance. In the absence of existing coverage, the alternative is to set up and operate a dedicated LoRaWAN gateway.

Beside this the device can be connected directly to Aqua-Scope Leakage Monitors.

## Scope of Delivery

- Motor with power cable (150 cm) to waterproof coupling
- 4 \* adapter rings to connect to the valve housing
- 3 different connectors for the stem
- One small Distancering and the Splitring for EWE Valve Design
- Holder plus 2 wrist bands
- Main sleeve plus internal coupler
- Two Distance rings
- External wired Flood Sensor
- External Power Supply with 150 cm cable to waterproof coupling
- Spare Hand Wheel
- Users Manual
- 57 gr Epoxy

## Technical Data

- SKU: KFRLWE01
- EAN: 4251295783 277
- Mechanical Performance:
  - Rotation Speed: 15 rpm
  - Travel Time (full open close): 40 s
  - Mechanical Power: 10,95 W
  - Gearbox: 1 to 704 ratio
  - Noise: < 50 dB
  - Vibration: < 10 dB
- Installation space:
  - Min. Space from Wall: Pipe center min 35 mm from wall
  - Min. Space vertically: 175 mm above pipe center
  - Min. Space vertically for installation: 220 mm above pipe center
  - Adapters: M17, M22, M27, M30
  - Supported Stem height (from bottom of bonnet): 58 mm - 135 mm, raising and non-raising spindles
  - Supported Stem connector: 6, 7, 8 mm square
  - Supports Pipes DN15 ... DN 32
- Controls and interfaces:
  - Tree Color LED (red, yellow, green)
  - Single button for local operation and alarm clearing



- Jack to plug-in external water sensor pad for local loop operation
- RF Communication LoRaWAN
  - Radio Chip: SX 1261
  - Standard: Class C
  - Frequency: 868...869 MHz, other frequencies such as US configurable
  - Range: 150 ... 200 m (depends on gateway)
  - Network Joining: OTAA
- Dimensions and Shipment:
  - Weight: 380 ... 420 gr (depends on adapters used)
  - Dimensions: 70 x (170 ... 195) mm
- Electrical data:
  - Voltage: 12 V DC
  - Max. Current: < 1000 mA
- Environmental Conditions and Trading
  - Shipment/Storage: -30 °C ... +70 °C
  - Operation: - 20 °C ... 60 °C
  - Outdoor Use: IP67 (to power supply coupling), Power Supply is IP20
  - UN Customs Tariff: 85011093900