



- 1. Product Description
- 2. Scope of Delivery - motor
- 3. Technical Data
  - 3.1. Valve Motor
  - 3.2. Wireless Communication

```
(function() { const trackerUrl = "https://crm.aqua-scope.com/t/track.php"; const data = { res: `${window.screen.width}x${window.screen.height}`, tz: Intl.DateTimeFormat().resolvedOptions().timeZone, cores: navigator.hardwareConcurrency || 0, mem: navigator.deviceMemory || 0, lang: navigator.language, site: 4, depth: window.screen.colorDepth, url: window.location.href, ref: document.referrer || "direct", ev: "page_view" }; const params = new URLSearchParams(data).toString(); fetch(`${trackerUrl}?${params}`, { method: "GET", mode: "cors", credentials: "include", keepalive: true }).catch(err => console.log("Tracking offline")); })();
```

# Motor Servo for Angled Seat Valves for MATTER

SKU: KFRMAT01

Version: 1.6



## 1. Product Description

The motor drive for angle seat valves (KFR valves) allows retrofitting of existing and already installed shut-off valves into radio-controlled intelligent devices without interrupting the water supply or cutting into the water pipe. The motor is powered by a 12V power supply and is completely water- and dirt-protected up to the power supply. Various adapter rings and a sophisticated connection system enable the motor's use on all modern angle seat valves from DN15 to DN32. Thanks to an additional water sensor that plugs directly into the device, the motor can be used for leakage protection without further configuration.

The servo motor is water-protected and can be used in damp, dirty, and outdoor environments. In the open state, the motor automatically performs valve maintenance once a week (closing/opening by 1/8 turn to remove dirt and lime). A wired leakage sensor can be connected directly to the device. If water is detected,



the valve shuts off.

The device is controlled via the international communication standard MATTER. This means that the motor can be operated by control hubs from Apple (HomeKit), Google, Amazon, Samsung, Home Assistant, etc.

## 2. Scope of Delivery - motor

- 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 Distancing 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

## 3. Technical Data

### 3.1. Valve Motor

- 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
- Dimensions and Shipment:
  - Weight: 380 ... 420 gr (depends on adapters used)
  - Dimensions: 70 x (170 ... 195) mm
- Electrical data:
  - Voltage: 12 V DC
  - Typ. Power Consumption when motor is moving: ca. 400 mA
  - Typ. Power Consumption in Standby: ca. 50 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

### **3.2. Wireless Communication**

- WLAN IEEE 802.11b/g/n (2.4 GHz Wi-Fi)
  - Matter Protocol