OrionM2M

SINGLE-JET DRY-DIAL WATER METER · DN 15 · DN 20

riza

DN 15 — Q3 2.5 m³/h · DN 20 — Q3 4.0 m³/h · R160 / R100 · water to 90 °C



01 KEY FEATURES

- Dry dial: register in a chamber isolated from the water
- Accuracy class 2, R160 or R100 dynamic range
- Cold and hot water up to 90 °C: temperature class T90
- Maximum admissible pressure 16 bar, pressure-loss class Δp63
- ORN-TWM-LW868 radio modem: readings over LoRaWAN
- Kazakhstan type approval No. 3868, 5-year verification interval

APPLICATIONS

- Apartments and private houses
- Commercial and office buildings
- Water utilities and housing management companies
- Remote water metering over LoRaWAN

02 SPECIFICATIONS

PARAMETER	DN 15 Q3 2.5 m³/h	DN 20 Q3 4.0 m³/h
METROLOGICAL DATA		
Permanent flow rate Q3, m³/h	**2.5**	**4.0**
Overload flow rate Q4, m³/h	**3.125**	**5.0**
Transitional flow rate Q2, m³/h — R160 / R100	**0.025 / 0.040**	**0.040 / 0.064**
Minimum flow rate Q1, m³/h — R160 / R100	**0.016 / 0.025**	**0.025 / 0.040**
Starting flow rate R100, m³/h, max.	**0.0125**	**0.02**
Accuracy class	**2**	
Max. permissible error: Q1…Q2 · Q2…Q4	**±5 % · ±2 %**	
OPERATING CONDITIONS		
Maximum admissible pressure (MAP)	**1.6 MPa (16 bar)**	
Pressure loss at Q4, max.	**0.063 MPa (Δp63)**	
Water temperature: cold · hot	**0 to +30 °C · up to +90 °C (T90)**	
Ambient temperature · humidity	**+5 to +50 °C · 5 to 98 % non-condensing**	
Ingress protection	**IP44**	
CONSTRUCTION		
Type	**single-jet vane-wheel, dry dial**	
Register	**roller or roller-and-pointer**	
Connection: body thread · tail-piece thread	**G3/4B · R1/2**	**G1B · R3/4**
Body length L, mm	**80 / 110**	**130**
Width × height, mm	**78 × 69**	**78 × 70**
Weight, kg, max.	**0.5**	**0.6**

03 ORDER INFO

MODEL	DESCRIPTION
riza DN 15 **riza DN 20** Ningbo Xingyuan Meter Technology Co., Ltd, China	**Single-jet dry-dial water meter for cold and hot water, accuracy class 2**

MODEL — SELECT

- riza DN 15 — Q3 2.5 m³/h, G3/4B, L 80 or 110 mm
- riza DN 20 — Q3 4.0 m³/h, G1B, L 130 mm
- R160 or R100 (DN 15 R160 — RW 15-2.5-R160)

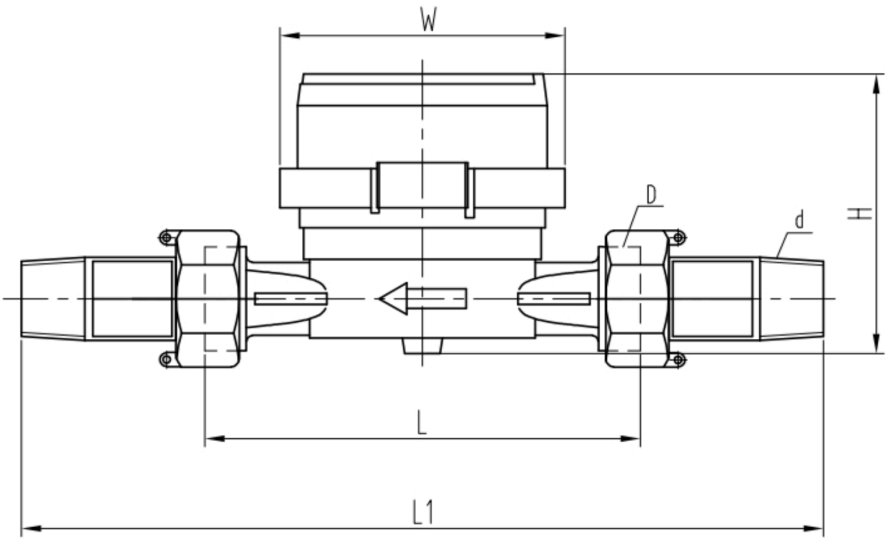
INCLUDED

- meter with initial factory verification
- tail pieces, nuts, gaskets
- product passport

riza · DN 15 · DN 20

DIMENSIONS, MARKING, VERIFICATION, REMOTE READING

04 DIMENSIONS



PARAMETER	DN 15	DN 20
Body thread **D**	**G3/4B**	**G1B**
Tail-piece thread **d**	**R1/2**	**R3/4**
Body length, mm **L**	**80 / 110**	**130**
Overall length, mm **L1**	**140 / 170**	**230**
Width, mm **W**	**78**	**78**
Height, mm **H**	**69**	**70**

Dimensions are maximum values. L1 — overall length with tail pieces and uncompressed gaskets. Tail pieces (DN 15 — 42 mm long), nuts and gaskets are included.

05 DIAL MARKING (EXAMPLE: DN 15, R160)



RW 15-2.5-R160	**DN 15 · Q3 2.5 m³/h · R160**
Q3/Q1=R160	**dynamic range R = Q3/Q1**
H↑ R160 U0/D0	**R160 in horizontal position, dial up; no straight pipe runs required**
MAP 16 bar	**maximum admissible pressure 16 bar**
Δp63 · T90	**pressure loss up to 0.063 MPa · water up to 90 °C**
IP44	**ingress protection of the meter; install in rooms not subject to flooding**

06 VERIFICATION AND CONFORMITY

Type approval, Kazakhstan	**certificate No. 3868 dated 2026-05-08**	Verification interval	**5 years**
State register, Kazakhstan	**KZ.02.01.03868-2026 · until 2031-05-12**	Initial verification	**at the factory; date in the passport**
Verification procedure	**ST RK 2.86-2005**	Warranty	**18 months from the date of sale**

07 REMOTE READING

The OrionMeter ORN-TWM-LW868 radio modem mounts on the register of riza DN 15 and DN 20 meters and reports readings over LoRaWAN (RU864 · KZ865 · EU863): volume, flow direction, 64-day hourly archive, magnetic tampering and removal alarms. Firmware 3.x adds wM-Bus T1/T2 and leak and burst alarms. Optical reading, snap-on mounting with 4 latches, retrofit to installed meters; battery life of 7 years or more, IP65. See the ORN-TWM-LW868 datasheet for details.

Photo, drawing and specifications — from the product passport and dial marking; type approval — certificate KZ07VTN00010686.