

Solaris ETK/ETW

Individual apartment water meters

Single-jet dry dial water meters



The Solaris series (Solaris ETK, for cold water and Solaris ETW, for warm water) represent the ideal solution for **individual water consumption metering** and **consumption-based billing** for the allocation market.

Solaris is a dry dial meter with magnetic coupling. Due to the sealed register **dirty water cannot influence the reading accuracy**.

Nominal diameter **DN 15 mm**

Permanent flow rate **1,5 m³/h**

Metrology classes: **A-V, B-H**

Maximum admissible temperature:

- » for Solaris ETK: **30°C (max. 50°C)**
- » for Solaris ETW: **90°C**

Nominal pressure: **max. 10 bar**

Communication and remote reading:

- » Built-in pulser version (Reed Contact pulser)
- » Retrofit pulser version
- » **Radio** (split or compact version)

Key benefits:

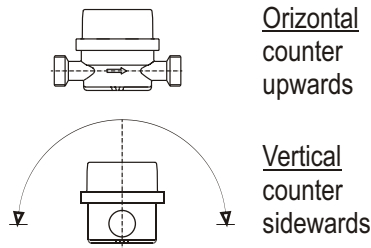
- » Malfunctions and blockages caused by soiled water are avoided due to the measuring principle
- » Exceptional performance, robustness associated with outstanding long-term accuracy
- » 360° orientable register for optimum legibility
- » Assured against moisture and mechanical tampering
- » First quality materials wear and corrosion resistant
- » Accessories upon request: protective cover, connectors or back flow valve.
- » The incidental back flows do not damage or influence the meter metrological performances.
- » Ideal for difficult installations, as they can be fitted horizontally or vertically (counter upwards).
- » Easily fitted and just as conveniently replaced.
- » Materials authorised for drinking water.
- » Compliance with the standards: **ISO 4064** for Solaris ETK, **OIML R72:85** for Solaris ETW respectively.

Register constructive version

- » **5-rollers display** (m³)+ 4 graded scales with pointers for sub-multiples of m³
- » **available** (upon request) in **magnetic protection** version
- » with **capped lid** or **sealing ring**

Installation instructions:

- » The series **Solaris ETK** have been designed for cold water metering under temperatures of up to **30°C** (max. **50°C**) and the series **Solaris ETW** have been designed for warm water metering under temperatures of up to **90°C**.
- » **Connectors included on request: coupling** (meter coupling nuts, coupling tail pieces and rubber-type washers)
- » For **horizontal pipelines models with counter upwards** (class B) or **counter sideways up to 90°C** (class A).



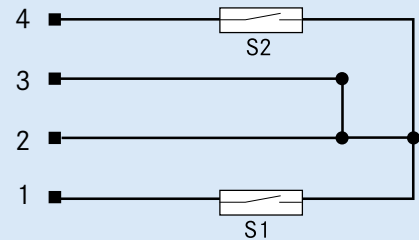
Constructive versions:



Solaris ETW 5RS-AM 5-rollers register (sealing ring) pulser version with radio module split-version

Communication and remote reading:

The dry dial meters are optionally (on request) equipped **pulser output (Reed Switch pulser)** which allow remote transmission of the data.



(1) Pulse Output Switch - white, (2) Ground GND - brown
(3) Cable break - green, (4) Tamper Output Switch - yellow.
(S1) Pulse Switch; (S2) Tamper Switch

Reed Switch technical features:

- » Maximum Switched Voltage: **24V AC**
- » Maximum Switched Current: **100 mA**
- » Flood proof **IP 68**
- » Length of the cable **2,0 m (standard)**
- » Supplementary tampering switch (standard version)
- » Retrofit: meters can be upgraded on site without breaking the meter seal

- » **Pulse rate** 5-rollers register pulser version with Reed contact splitt or compact version: **10 I/pulse**

Remote reading

Solaris pulser version can be integrated into AMR systems by a **meter interface unit split-version (FSM-WM) or compact version (FSM-5RT)**

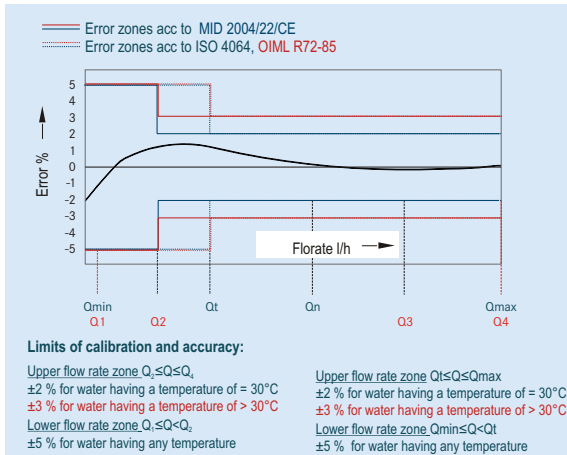
- » Free frequency band: 868,300 MHz
- » Pocket PC with Windows CE, etc.
- » Parametrization on site upon client's request
- » Flexible user-configurable software

Further information in the leaflet "Reed Pulsor"

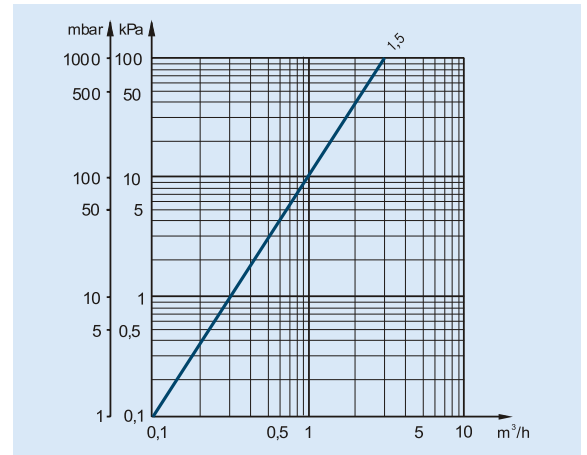


Solaris ETW 5RS-AM 5-rollers register (sealing ring) pulser version with radio module compact version

Typical accuracy curve



Typical head loss curve

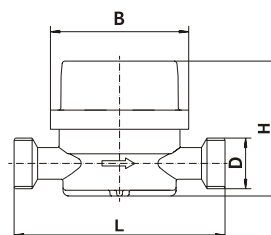


Technical features

Nominal diameter		DN	mm	15
Permanent flowrate		Q_n (Q3)	m^3/h	1,5 (2,5)
Overload flowrate		Q_{max} (Q4)	m^3/h	3 (3,125)
Transitional flowrate	Class A (V) R40 $Q_2 = 2,5 \times Q_1$	Q_t (Q2)	l/h	150 (156,25)
	Class B (H) R80 $Q_2 = 4 \times Q_1$			120 (125)
Minimum flowrate	Class A (V) $Q_1 = Q_3/40$	Q_{min} (Q1)	l/h	60 (62,5)
	Class B (H) $Q_1 = Q_3/80$			30 (31,25)
Starting flowrate		-	l/h	8
Counter range		max.	m^3	99 999
		min.	l	0,05
Dimensions	D_{thread}	inch	G1/2B	G3/4B
	L	mm	110	130
	H	mm	69	69
	B	mm	72	72
Weight		-	kg	0,41 0,6

*) the values between the brackets represent the characteristic flowrates acc to MID001 2004/22/CE

Dimensions:



- » All our products have attained **type approvals** imposed by international legislation issued by: Service Public Fédéral Economie Bruxelles, PTB (Physikalisch-Technische Bundesanstalt Germany), by Russian Research Institute for Metrological Service "VNIIMS", etc.
- » **Approvals of the raw materials suitable for contact with drinking water**, issued by Ministry of Health, Hygiene Institut Karlsruhe Hygiene-Institut des Ruhrgebietes Gelsenkirchen IRH Env. Nancy, by Russian Research Institute for Metrological Service "VNIIMS", etc.
- » Contor Group is one of the first enterprises of his branch who achieved the **Quality management system approval & CE Type evaluation certificates** for the its products according to MID (issued by PTB (Physikalisch-Technische Bundesanstalt) Braunschweig, Germany)



Other constructive versions:



Solaris ETK / ETW: 8-rollers register capped lens, lateral reading



Solaris ETK / ETW: 8-rollers register capped lens, top reading



Solaris ETW / ETW: 8-rollers register sealing ring, lateral reading



Solaris ETK 5-rollers register sealing ring and magnetic protection

UK METERING

Unit 33 | Wilford Industrial Estate | Ruddington Lane | Nottingham | NG11 7EP
Office Tel: 01159 819 755; Office Fax: 01159 455 247
E-mail: sales@uk-metering.net; www.uk-metering.net