

	
OIML Member State SLOVAKIA	OIML Certificate No. R49/2024-A-SK1-26.02
OIML CERTIFICATE ISSUED UNDER SCHEME A	
OIML Issuing Authority Name: Slovak Legal Metrology (SLM) Address: Geologická 9966/1, 821 06 Bratislava-Podunajské Biskupice, Slovakia Product Certification Body Hviezdoslavova 31 974 01 Banská Bystrica, Slovakia Person responsible: Ing. Dušan Šmigura, PhD., Director of PCB	
Applicant Name: BAYLAN ÖLÇÜ ALETLERİ SAN. VE TİC. A.Ş Address: A.O.S.B 10032. SOKAK NO:16 ÇİĞLI Izmir, Turkey	
Manufacturer Name: BAYLAN ÖLÇÜ ALETLERİ SAN. VE TİC. A.Ş Address: A.O.S.B 10032. SOKAK NO:16 ÇİĞLI Izmir, Turkey	
Identification of the certified type <i>(the detailed characteristics are defined in the additional pages)</i> Water meter type VK-12	
Designation of the module <i>(if applicable)</i> Mechanical volumetric water meter	
This OIML Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML type evaluation report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML): OIML R 49, Edition (year): 2024 For accuracy class: 2	



This OIML Certificate relates only to metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML Recommendation identified above.

This OIML Certificate does not bestow any form of legal international approval.

The conformity was established by the results of tests and examinations provided in the associated:

Test report No: 2026/CV019/312.15 dated 23th July 2026 that includes 59 pages

OIML type evaluation report No. 2026/ER020/SK1 dated 9th September 2026 that includes 27 pages.

The technical documentation relating to the identified type is contained in documentation file name: „Technical documentation file Baylan_VK-12_00“ dated 4th September 2026 that includes a sum of documents 17 pages.

OIML Certificate History

Revision No.	Date	Description of the modification
0	9 th September 2026	Certificate first issued

Identification, signature and stamp



The OIML Issuing Authority


Dusan Smigura
Date: 9th September 2026

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate is issued, partial quotation of the Certificate and of the associated OIML type evaluation report(s) is not permitted, although either may be reproduced in full.

1. Designation

The water meter type VK-12 is designed to measure, memorize and display the volume of water passing through the measuring chamber at metering conditions. The water meters are intended for the measurement of clean water volume in residential use.

The mechanical volumetric (rotary piston) water meter VK-12 is water meter with dry type mechanical indication device.

The water meter VK-12 can be installed to operate in horizontal and vertical positions and is not designed to measure the reverse flow.

2. Description

Essential parts of the water meter type VK-12:

- measuring mechanism – consisting of measuring chamber assembled with a rotary piston and top plate with transmission shaft for connection of measuring part with register;
- dry type mechanical register and indication device with:
 - 8 numbered drums (last significant drum moves continuously), 5 drums black colour for cubic meters, 3 drums red colour for sub-multiples of a cubic meter;
 - 1 continuously moving rotating pointer with marked 0,00005 sub-multiples of a cubic meter;
- magnetic coupling for the connection of the register part with the measuring mechanism (rotary piston);
- the brass body with inlet and outlet connections.

Non-essential parts of water meter:

- sieve (in the inlet tube of water meter);
- non-return valve (in the outlet tube of water meter);
- coupling (in the inlet and outlet connection of water meter);
- external optional device - a remote-controlled valve without a measuring function and without data transmission, used to open/close the water flow.

2.1 Metrological functions

- measuring, memorizing and displaying the volume of water passing through the water meter.

3. Integrated equipment and functions

- RF, M-Bus, Modbus, GPRS or Smart card and Pulse output (optionally).

4. Technical and metrological data

Water meter type	VK-12	
Parameter	Unit	
Nominal diameter DN	mm	DN15
Permanent flowrate Q_3	m ³ /h	2,5
Minimum flowrate Q_1	m ³ /h	0,00625
Transitional flowrate Q_2	m ³ /h	0,010
Overload flowrate Q_4	m ³ /h	3,125
Ratio Q_3/Q_1	-	400

Water meter type	VK-12	
Parameter	Unit	
Ratio Q_2/Q_1	-	1,6
Connection thread	-	G ¾ B
Construction length L	mm	170
Installation orientation	-	H/V
Water temperature range	°C	0,1 to 50
Water temperature range class	-	T50
Maximum admissible pressure (MAP)	bar	16
Pressure loss	bar	0,63
Pressure loss class Δp	-	Δp 63
Ingress Protection (IP) rating	-	IP68
Maximum permissible error in upper flowrates range $Q_2 \leq Q \leq Q_4$	%	± 2 (at $\theta \leq 30^\circ\text{C}$) ± 3 (at $\theta > 30^\circ\text{C}$)
Maximum permissible error in lower flowrates range $Q_1 \leq Q < Q_2$	%	± 5
Scale range	m ³	0,00001
Capacity of calculator	m ³	99999,99999
Accuracy class	-	2
Mechanical class	-	M1
Environmental class	-	O
Electromagnetic class	-	E2
Climatic class	°C	-25 to +55
Flow profile sensitivity class	-	U0D0

5. Marking and inscriptions

The following data shall be marked on the water meter:

- name or trademark of the manufacturer;
- type name of the water meter;
- unit of measurement m³;
- year of manufacture, the last two digits of the year of manufacture, or the month and year of manufacture;
- serial number (as near as possible to the indicating device);
- direction of flow, by means of an arrow (shown on both sides of the body or on one side only provided the direction of flow arrow is easily visible under all circumstances);
- flowrate Q_3 and ratio Q_3/Q_1 indicated as (R) followed by the ratio value;
- H/V – water meter can operate in the horizontal and vertical position;
- maximum admissible pressure (MAP);
- temperature class (T);
- environmental classification (can be given on a document supplied separately);
- electromagnetic environmental class (can be given on a document supplied separately);
- type approval sign according to national regulations.

Designation of trademark on the water meter

Manufacturer can use following trademark on its water meters:

BAYLAN

6. Security measures

The water meter type VK-12 shall be protected against unauthorised manipulation by:

- one twist or lead or plastic seal securing the connection of the water meter head with the body;
- or
- a security circle (it is seal) between plastic upper body and lower body in order to prevent the water meter against unauthorized interference.

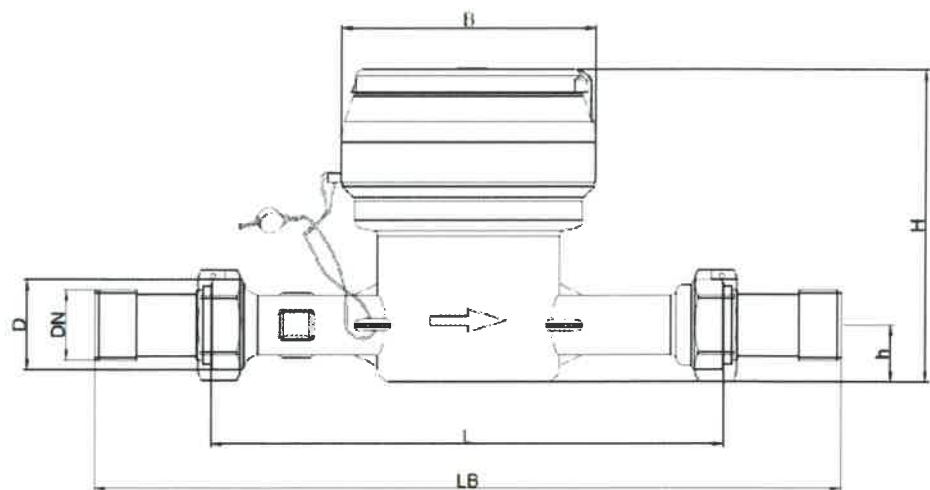
Fig. 3.

7. Figures



Fig. 1: Illustrative views of water meter type VK-12





DN size	L (mm)	LB (mm)	H (mm)	h (mm)	B (mm)	D (mm)
DN15	170	250	116	21,5	98	G ¾ B

Fig. 2: Dimensions of water meter type VK-12

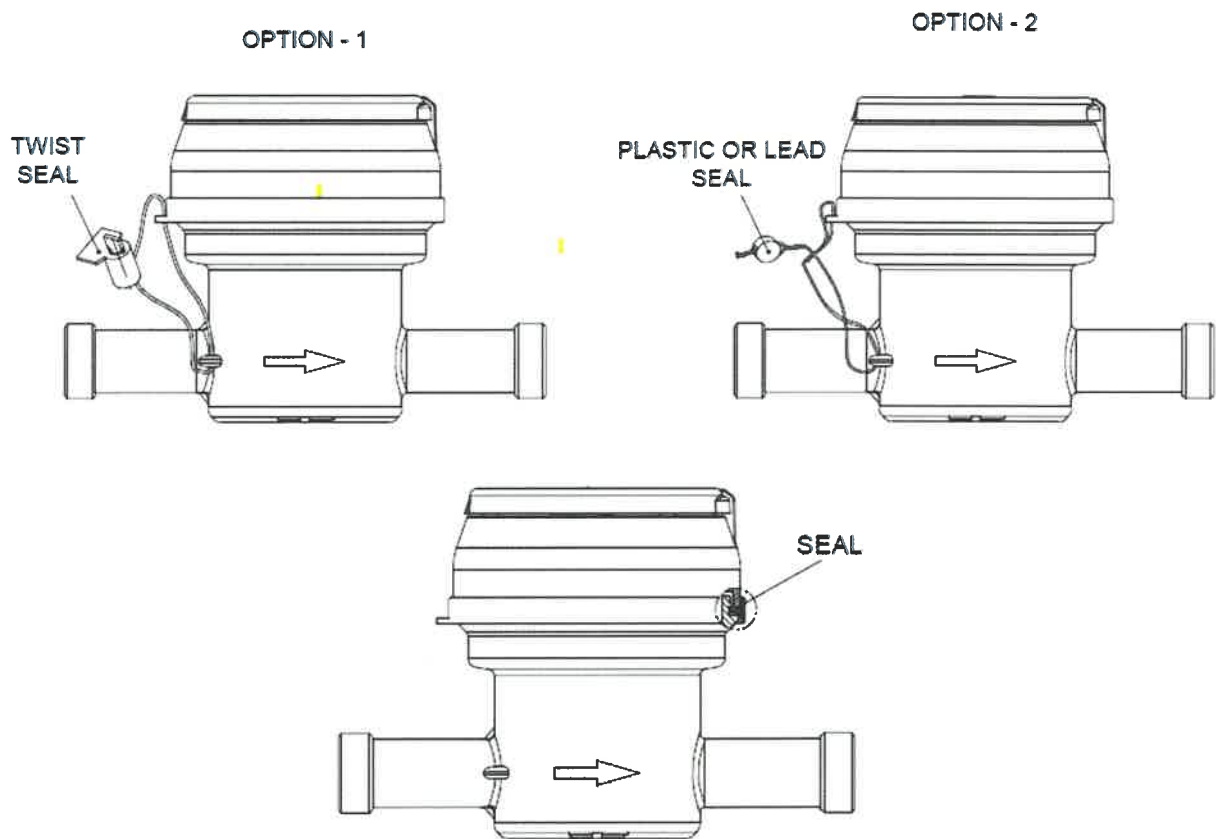


Fig. 3: Sealing of water meter type VK-12