



EU - TYPE EXAMINATION CERTIFICATE

2014/32/EU Measuring Instruments Directive

Certificate No : 1783-MID-0203

In accordance with Measuring Instruments Directive dated February 26, 2014 and numbered 2014/32/EU of the European Union Parliament and Measuring Instruments Directive numbered 2014/32/AB which was published in Official Journal of Turkish Republic dated 29.06.2016 and numbered 29757:

Manufacturer : **Jordan Factory for Meters Manufacturing Co, W. L.L.**
Amman – Zarqa Highway, Marka Industrial Area,
Amman – JORDAN

Essential requirements Applied : **MID Annex I and Annex MI-001**

Name of Measuring Instrument : **Water meter**

Type : **MD**

Environmental Classes

- Climatic -10 °C / +55 °C
- Mechanic M1 / O
- Electromagnetic E2

Project Number : **3398-24/217186**

Comformity Assessment Report : **3398-MID-0203/2024-01**

Date of issue : **07.10.2024**

Valid until : **10.12.2025**

Total Page Number : **17**



Dr. Alkan HAFÇI
Director of Directives Ankara,
07.10.2024 Rev.00

This certificate is only valid with TSE-Notified Body 1783 seal.



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1. General Information about Water Meter

1.1 Designation

Cold Water Meter(s) suitable for use in dwellings, commercial light industry and heavy industry; for indoor and outdoor, designed for measuring clean cold water volume, MD model, dry type, multi jet measurement principle, should be connected horizontal position.

1.2 Design

Essential Parts of the Meter

- Calculator (Can be vacuum,ultrasonic welding, metal chamber)
- Lower Body
- Upper Body
- Meter Glass can be with or without wiper.

1.3 Metrological Characteristic

Measurement of the water volume passing through

1.4 Software

Not applicable

1.5 Supplementary equipments

Not applicable

1.6 Equipments out of the scope of MID

pre – paid device;

Automatic Meter Reading Systems;

data output through module RF, MBUS, Modbus, GPRS or SMART card;

pulse output (optional).

Coupling, Check Valve





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2. Technical and Metrological Data

Table 1

Type	-	MD-23	MD-4	MD-2	MD-3C	MD-26	MD-5C
Nominal Diameter	mm	15	15	20	25	32	40
Overload Flowrate Q_4	m ³ /h	3,125	3,125	5	7,875	12,5	20
Permanent Flowrate Q_3	m ³ /h	2,5	2,5	4	6,3	10	16
Transitional Flowrate Q_2	m ³ /h	0,0200	0,016	0,032	0,04032	0,064	0,128
Minimum Flowrate Q_1	m ³ /h	0,0125	0,01	0,02	0,0252	0,04	0,08
Ratio Q_3 / Q_1	-	200 ^b	250 ^a	200 ^b	250 ^a	250 ^a	200 ^b
Connection Thread	mm	G ¼ B	G ¼ B	G 1 B	G1 ¼ B	G1 ½ B	G 2 B
Construction Length	mm	165/170	165	190	260	260	300
Width	mm	77	100	96	92	92	135
Total Overall Meter Height	mm	107	114	114	124	124	148
Connection Position	-	H					
Description	-	a) Include R200, R160, R125, R100, R80, R63, R50, R40. b) Include R160, R125, R100, R80, R63, R50, R40.					
Maximum Working Pressure	bar	16					
Temperature Class	°C	T50					
Maximum Permissible Error in upper flow rates $Q_2 \leq Q \leq Q_4$	%	± 2 (≤ 30 °C) (For Class 1 ± 1) ± 3 (≥ 30 °C)					
Maximum Permissible Error in lower flow rates $Q_1 \leq Q < Q_2$	%	± 5 (For Class 1 ± 3)					
Scale Interval	-	0.00005					
Capacity of calculator	m ³	9999 / 99999 / 99999,99 / 99999,999					
Environment Class	-	O					
Electromagnetic Class	-	E2					
Installation Conditions	-	U0-D0					
Class	-	Class 1 or 2					
Pressure Loss Class	-	$\Delta P63$					

3. Marking

The following data shall be marked on the water meter

- Unit of measurement
- Accuracy class, where it differs from accuracy class 2.
- manufacturer's name and/or registered trademark,
- type of water meter,



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- year of production and serial number,
- continuous flowrate Q_3 and Q_3/Q_1 ratio (R),
- maximum operating pressure,
- connection shape, temprature class, pressure loss class, installation sensitivity class
- EU-type examination certificate number,
- comformity marking according to the regulation in regards to the measuring intruments
- The flow direction shall be marked on a water meter's body in the form of an arrow

3.1 Registered trademark of the manufacturer

The manufacturer uses the following figure inscription commercial trademark on the water meters

JO METER

4. Sealing

The sealing wire and stamp is used in order to prevent unauthorized intervention to water meter, adjustment screw and the lower body to upper body connection. Unauthorized intervention to the adjustment screw, the lower body to upper body connection is not possible without damaging that seal.

5. Terms of Production, putting into use and usage

5.1 Production

- no special terms identified for production

5.2 Putting into use

- water meters must be installed in the plumbing as mentioned in installation instructions and/or user's manual of the manufacturer.
- no terms identified for straight pipe lengths at the inlet and exit of the meter, flow profile class of the meter was determined according to EN ISO 4064:2014.
- type tests of the meter were carried out according to EN ISO 4064:2014 and OIML R 49-1.

5.3 Requirements for usage

- must be used in accordance with the terms of the user's manual given by the manufacturer.

6. Documentation used within the scope of assessment

- Inspection and testing report dated 08.12.2015 and numbered 727-MID-007/2015-01 TSE EN ISO 4064:2014 Water Meters Inspection and Test Report
- Inspection and testing report dated 03.03.2016 and numbered 727-15/293499 TSE EN ISO 4064:2014 Water Meters Inspection and Test Report
- Test Report dated 08.04.2020 and No:120040801 issued by Baylan Test Laboratory



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- Inspection and testing report dated 04.04.2017 and numbered 727-MID-007/2017-02 TSE EN ISO 4064:2014 Water Meters Inspection and Test Report
- Inspection and testing report dated 11.12.2017 and numbered 727-MID-007/2017-03 TSE EN ISO 4064:2014 Water Meters Inspection and Test Report
- Manufacturer's technical file, technical drawings, component lists

7. Standards and regulations used within the scope of assessment

7.1 Regulations, harmonised standards and mandatory normative documents

- Measuring Instruments Directive numbered 2014/32/EU published in the Official Journal dated 29.06.2016 and number 29757
- EN ISO 4064-1:2017
- EN ISO 4064-2:2017
- EN ISO 4064-3:2014
- EN ISO 4064-4:2014
- EN ISO 4064-5:2017
- OIML R 49-1:2013
- OIML R 49-2:2013

7.2 Reference documents

- WELMEC Guide 11.1
- WELMEC Guide 11.3

8. Conclusion

Structural, technical and metrological parameters of the meter which is going to be put into market must provide compatible with the documentation submitted with this Type Examination Certificate. The tested meters meet the requirements of the Measuring Instruments Directive numbered 2014/32/EU of the European Union Parliament and the Council and the Measuring Instruments Directive numbered 2014/32/EU published in the Official Journal dated 29.06.2016 and number 29757 of Turkish Republic.

9. Annexes

- Annex-1: Illustrative pictures of the water meter**
- Annex-2: Main Dimensions of the water meter**
- Annex-3: Demonstration of Sealing**
- Annex-4: Marking**





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Annex-1:

MD-23 DN15 165mm.



MD-4 DN15 165mm.



MD-2 DN20 190mm.



MD-3C DN25 260mm.





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MD-26 DN32 260mm.



MD-5C DN40 300mm.



Illustrative of water meter



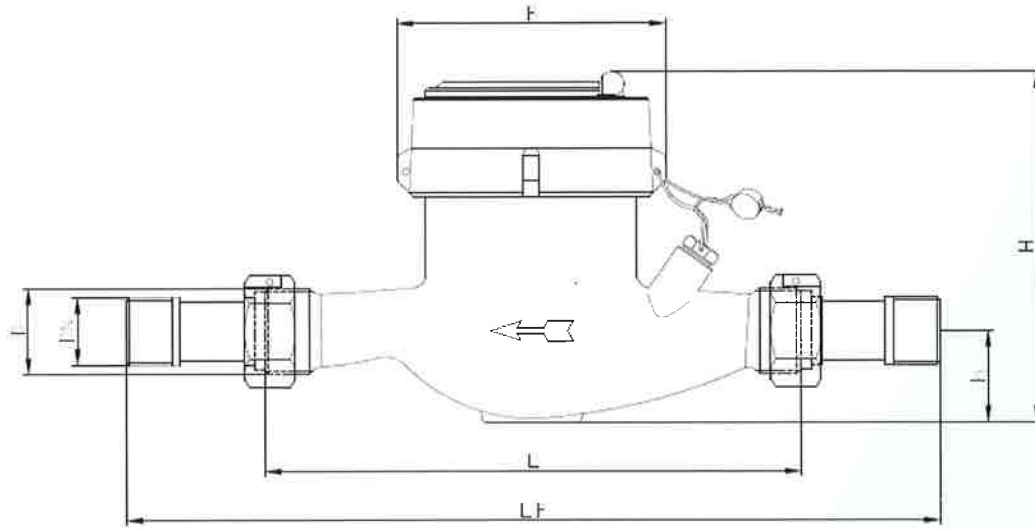


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Annex-2:**MD-23**

DIMENSIONS		
Connection Pipe Diameter (mm) – DN	15	
Connection Thread – D	G3/4B	
Meter Length (mm) – L	165	170
Length With Connections (mm) – LB	245	245
Total Overall Meter Height (mm)– H	107,5	107,5
Axis Height (mm)– h	28,1	28,1
Width (mm)– B	82	82





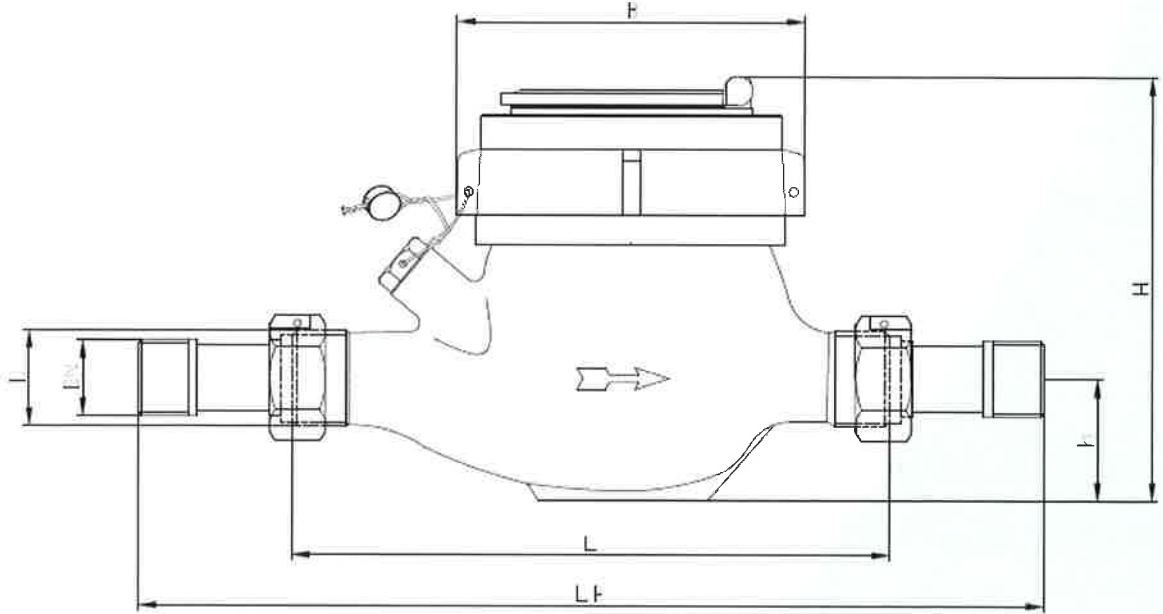
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MD-4

DIMENSIONS - ÖLÇÜLER

Connection Pipe Diameter (mm) – DN	15
Connection Thread – D	G3/4B
Meter Length (mm) – L	165
Length With Connections (mm) – LB	245
Total Overall Meter Height (mm) – H	116,5
Axis Height (mm) – h	33,4
Width (mm) – B	96



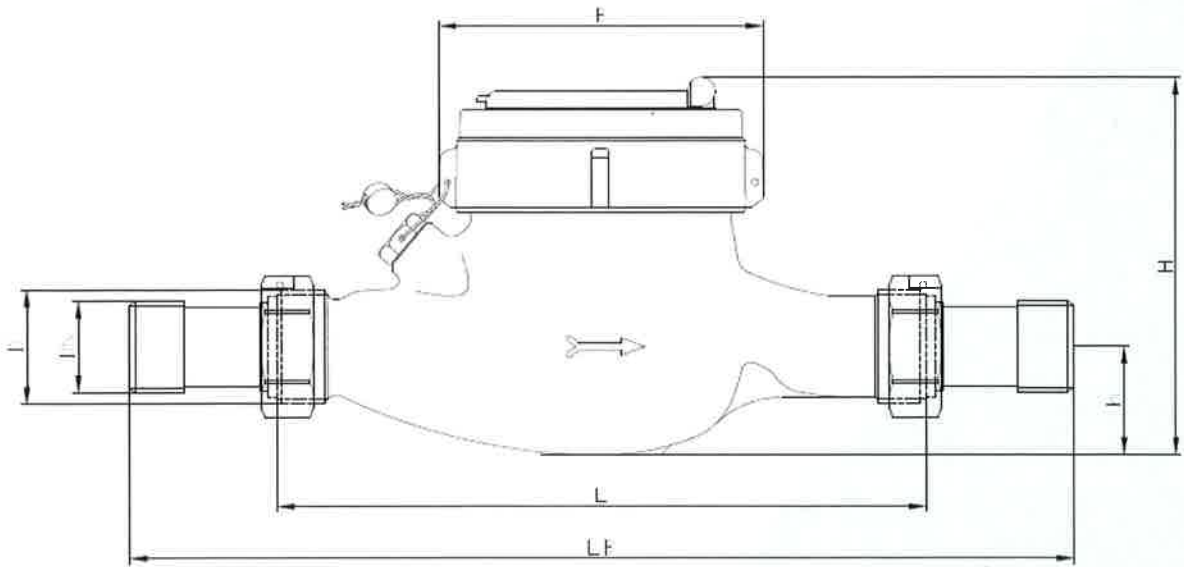


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MD-2

DIMENSIONS - ÖLÇÜLER	
Connection Pipe Diameter (mm) – DN	20
Connection Thread – D	G1B
Meter Length (mm) – L	190
Length With Connections (mm) – LB	270
Total Overall Meter Height (mm) – H	109
Axis Height (mm) – h	33
Width (mm) – B	93



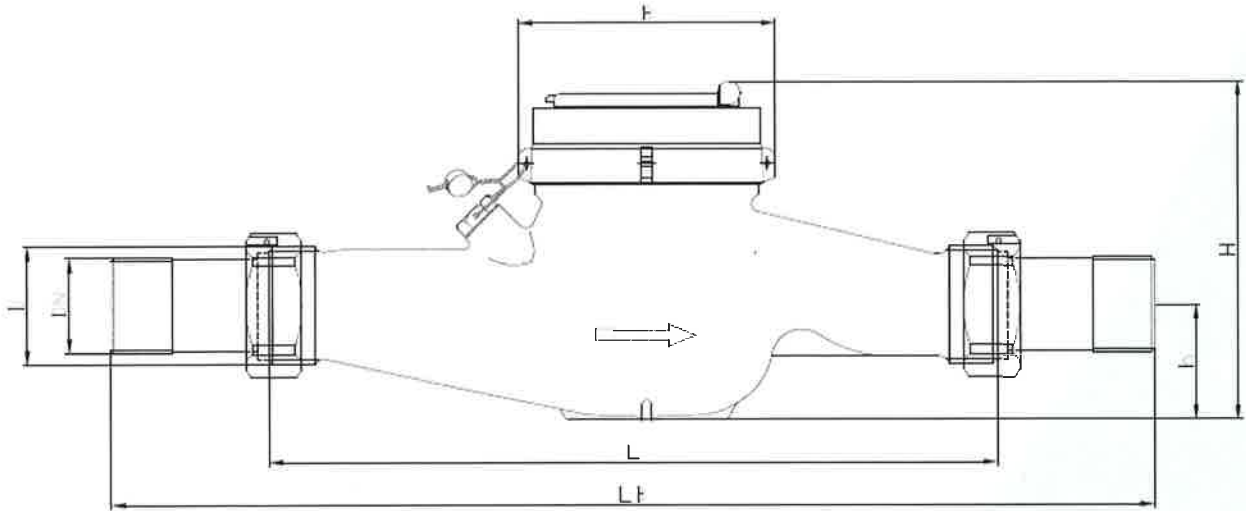


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MD-3C

DIMENSIONS	
Connection Pipe Diameter (mm) – DN	25
Connection Thread – D	G1 1/4B
Meter Length (mm) – L	260
Length With Connections (mm) – LB	340
Total Overall Meter Height (mm) – H	124
Axis Height (mm) – h	40,8
Width (mm) – B	91,9



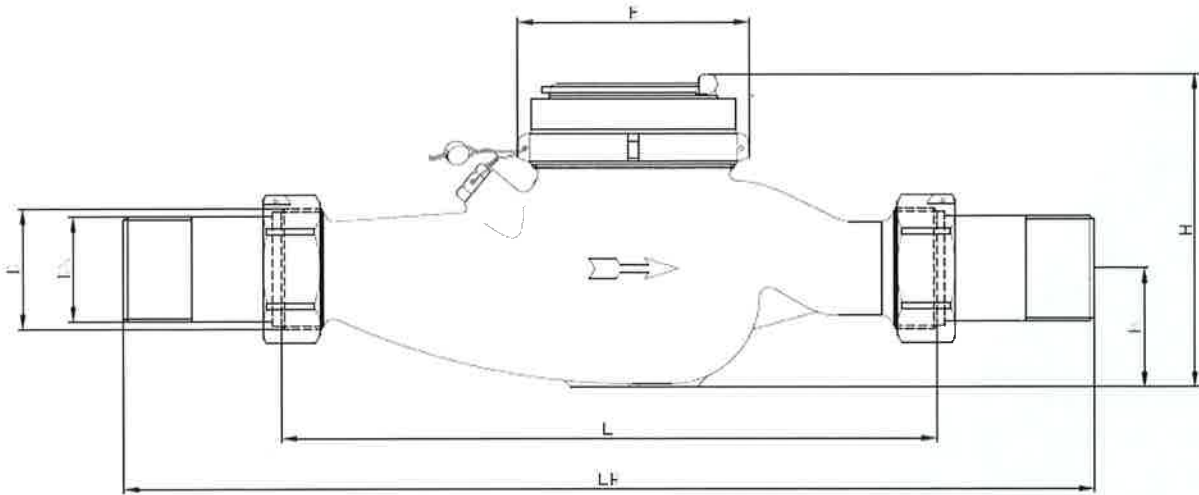


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MD-26

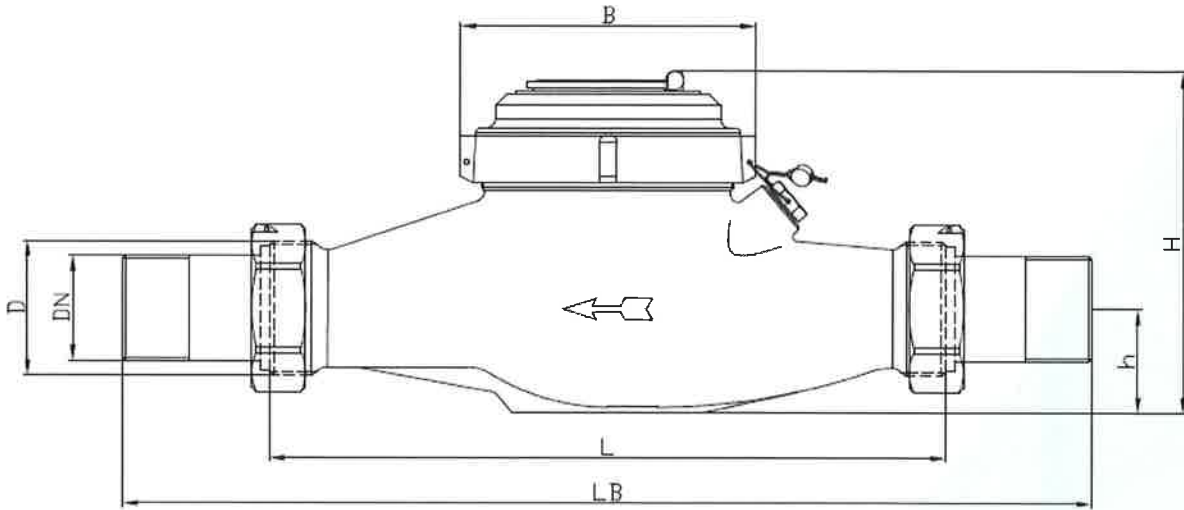
DIMENSIONS	
Connection Pipe Diameter (mm) – DN	32
Connection Thread – D	G1 1/2B
Meter Length (mm) – L	260
Length with connections (mm) – LB	375
Total Overall Meter Height (mm) – H	124
Axis Height (mm) – h	47
Width (mm) – B	92



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MD-5C

DIMENSIONS	
Connection Pipe Diameter (mm) – DN	40
Connection Thread – D	G 2 B
Meter Length (mm) – L	300
Length With Connections (mm) – LB	440
Total Overall Meter Height (mm)– H	148
Axis Height (mm)– h	42
Width (mm)– B	135

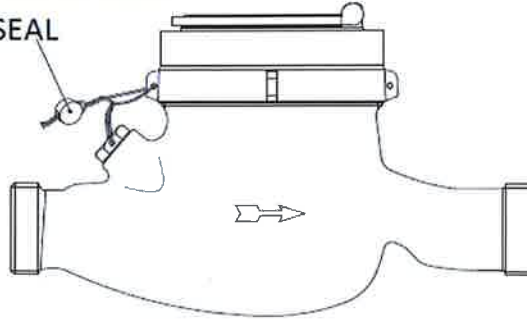


Main Dimensions of water meter



Annex-3:**Plastic or lead seal + seal wire**

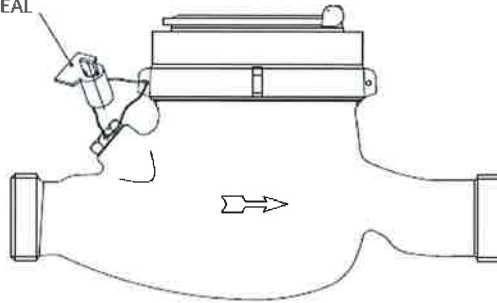
PLASTIC OR WIRE
SEAL



MD-23, MD-4, MD-2, MD-3C, MD-26, MD-5C

Twist Seal

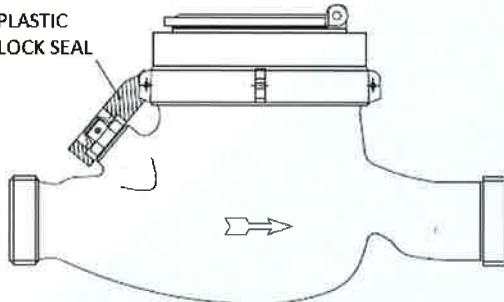
TWIST
SEAL



MD-23, MD-4, MD-2, MD-3C, MD-26, MD-5C

Plastic Lock Seal

PLASTIC
LOCK SEAL



MD-23, MD-4, MD-2, MD-3C, MD-26, MD-5C

Sealing Plan of Water Meters

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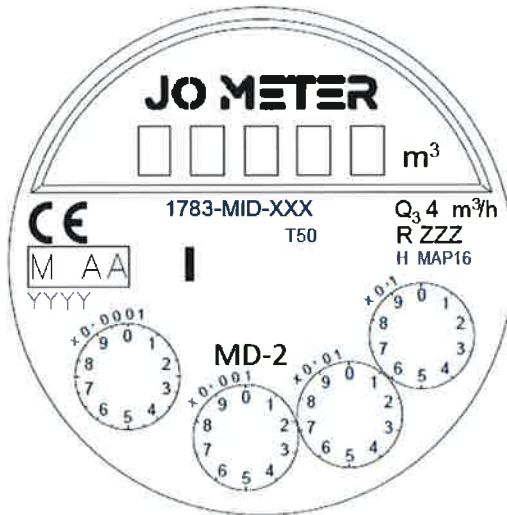
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Annex-4:

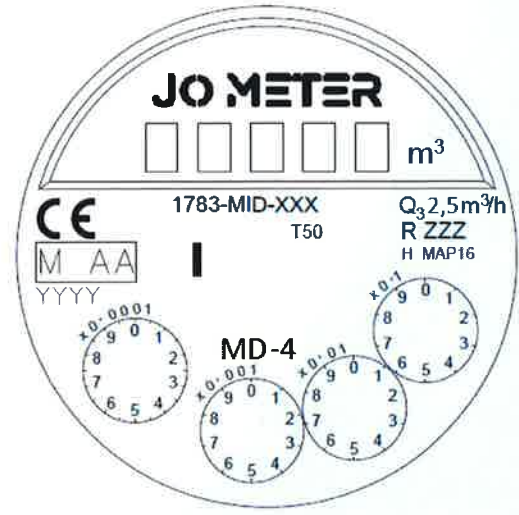
NOTE:

- Design of the marking can be different according to 4,5,7, and 8 rollers mechanism.
- AA; Last 2 digits of manufacturing year
- TT; Q_3 value of the meter
- ZZZ ; R value of the meter
- If meter is Class 1, It will be written on the marking.
- The YYYY can be different according to D module number.
- 1783-MID-XXX is EU Type Examination Certificate Number.

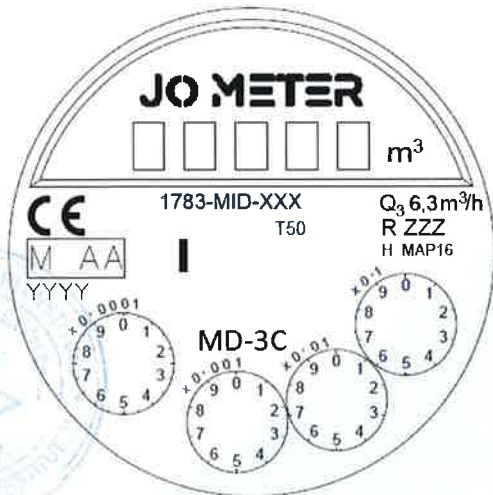
MD-2



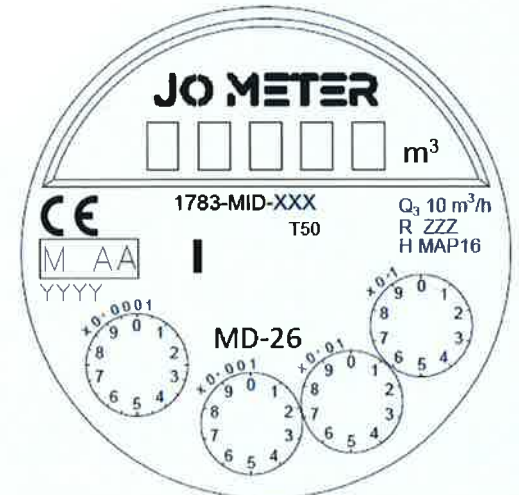
MD-4



MD-3C

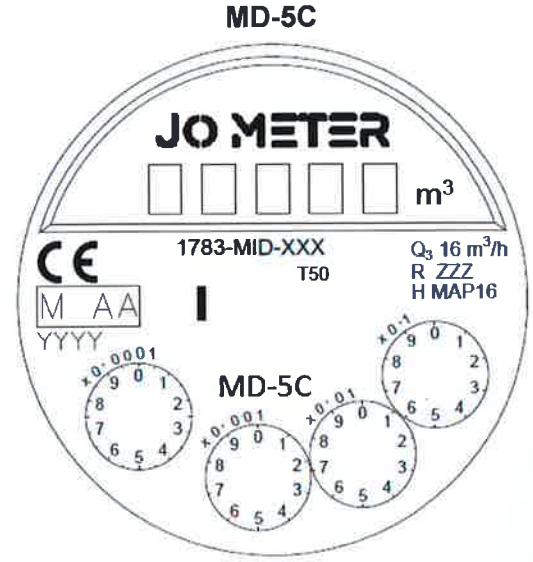
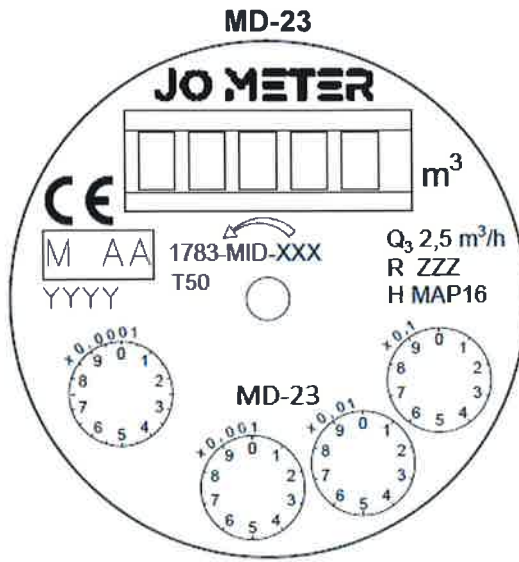


MD-26





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Marking





Certificate No:1783-MID-0203

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TURKISH STANDARDS INSTITUTION

REVISION PAGE

Rev. Nu.	Date	Reason of Revision
00	07.10.2024	First Issue

