Residential Use

CD SD PLUS MID WATER METER

MID
MI001
CERTIFIED

Single Jet Super Dry Dial Magnetic Drive Water Meter

CD SD PLUS is the latest range of Super Dry single jet water meters by Maddalena. CD SD PLUS meters utilize a magnetically driven dry dial design.
They comply with the strict requirements of the Directive 2004/22/EC on measuring instruments and European Standard EN 14154. CD SD PLUS meters combine high performance at low flow rates and maximum resistance to high flow rates and pressure. CD SD PLUS meters are designed for remote communication: a pulse emitter and an M-Bus or radio module may be retrofitted maintaining the mechanical and metrological features and without affecting readability.
CD SD PLUS meters are guaranteed by Maddalena: manufacturer of high quality measuring instruments for a century.

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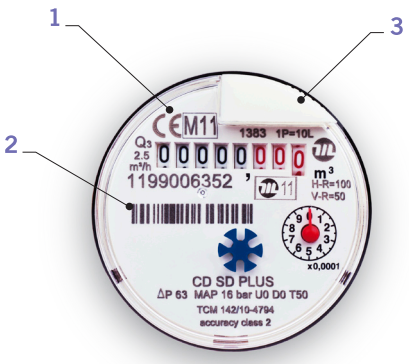
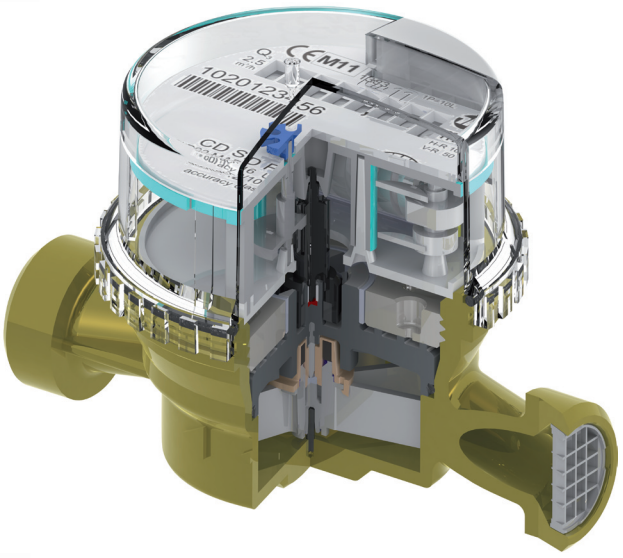
CD SD PLUS MID WATER METER

CD SD PLUS is a Super Dry single jet water meter. CD SD PLUS utilizes a magnetically driven dry dial design and is suitable for use with either cold (T50) or hot (T30/T90) water. The impeller is the only part in contact with the water, **thus ensuring readability with scaling water or with water containing small debris or sand particles**.
CD SD PLUS water meters comply with Directive 2004/22/EC (Annex MI-001) and have undergone conformity assessment procedure B + D. The maximum measuring range Q3/Q1 (R) certified is 100 for horizontal position and 50 for vertical position.
CD SD PLUS come also pre-equipped to retrofit a pulse emitter. The pulse emitter may be fitted maintaining the meter's standard features and without affecting redability.
CD SD PLUS water meters are certified for use with potable water in accordance with Italian and international regulations.



Specifications

- Meters comply with Directive 2004/22/EC (Annex MI-001) **(1)**
- Hot forged brass body
- **Dual pivot** for balanced impeller rotation under any flow rate and installation conditions. Pivots are made of non-magnetic, AISI 316 stainless steel
- Inlet strainer with wide straining area
- **Protection against external magnetic fields**
- Internal adjusting device
- Internal components are made of anhygroscopic, anti-scaling and hard-wearing resistant plastic materials
- Protective cover available as an option
- Nominal pressure (PN): 16 bar
- Installation: horizontal or vertical
  No upstream and downstream straight pipe requirements
- Maximum water temperature: 50 °C or 90 °C
- **The serial number is marked on the dial both in numbers and in bar code format (2)**
- Water meters also come pre-equipped to retrofit a pulse emitter **(3)**
- Hydraulic tests are carried out at three flow rates (Q1, Q2, Q3) on 100% of the production. Our testing benches comply with ISO 4064/3 and ISO 4185 (EN 14154/3) Standards and are approved by a European notified body
- A non-return valve fitted into the coupling comes as an option



HYDRAULIC PERFORMANCE

SIZE	mm	15	20
	in	½	¾
Module B no.		TCM 142/10-4794	
Module D no.		0119-SJ-A010-08	
MID metrological class		**R (Q3 / Q1) ≤ 100 H - ≤ 50 V**	
Performance data in accordance with Directive 2004/22/EC			
Q_3	**m^3/h**	2.5	4.0
Q_4	**m^3/h**	3.13	5.0
R100			
Q_1	**l/h**	25.0	40.0
Q_2	**l/h**	40.0	64.0
R80			
Q_1	**l/h**	31.25	50.0
Q_2	**l/h**	50.0	80.0

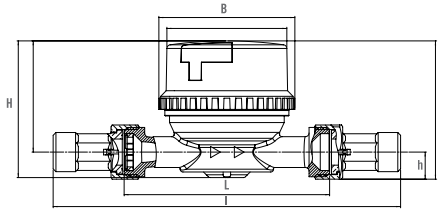
R options available upon request

TECHNICAL SPECIFICATIONS

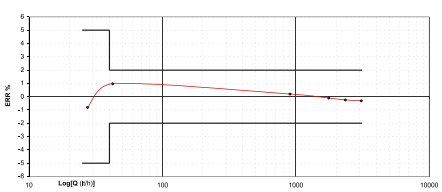
Maximum permissible error between Q_1 and Q_2 (excluded)		+/- 5%	
Maximum permissible error between Q_2 (included) and Q_4		+/- 2% with water temperature ≤ 30° C +/- 3% with water temperature > 30° C	
Temperature class		T50 and T30/90	
Flow profile sensitivity classes		U0 - D0 (no upstream and/or downstream straight lengths requirements)	
Starting flow rate	**l/h**	10	12
Pressure loss class (ΔP @ Q_3)	**bar**	ΔP 63	ΔP 40
Nominal pressure	**bar**	16	16
Maximum reading	**m^3**	100,000	100,000
Minimum reading	**l**	0.05	0.05
Turbine revolutions per litre		41.33	29.76
Pulse pre-equipment (available as an option)	**l/pulse**	10	10
Weight	**kg**	0.45	0.50

DIMENSIONS

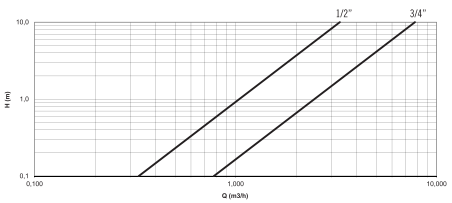
L	**mm**	80-100-110-115-120	130
Length with couplings	**mm**	160-180-190-195-200	228
H	**mm**	73.2	73.2
h	**mm**	14.5	14.5
B	**mm**	72.8	72.8



Typical error curve



Headloss diagram



ACCESSORIES

SINGLE REED SWITCH PULSE EMITTER

Available separately or paired with a CD SD PLUS water meter.
Also compatible with CD SD 8 meters (EEC approved).

ARROW RADIO MODULE

Paired with a pulse emitter for the remote reading of a water meter.

M-BUS MODULE FOR 1, 2, 4 METERS

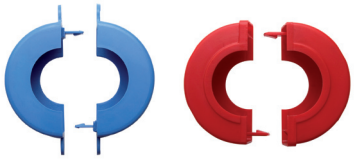
Designed for the remote reading of meters via M-Bus.
Available with 1, 2, or 4 pulse inputs.

NON-RETURN VALVE

Fitted into the coupling; designed to stop reverse flow
that may damage the water meter.

COUPLING KIT

It consists of two nuts, two tail pieces and two gaskets (couplings with built-in non-return valve are available on DN 15 mm meters).



SEALS

Designed to secure the water meter to the pipe.

For more information on the accessories please refer to the relevant data sheet.

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ISO 9001 - Cert. n° 0773/4