

Residential Use

DS TRP WATER METER



IS
779:1994

LICENCE
MADDALENA

Sealed register permanently protected dial multi-jet meter

DS TRP is the latest range of sealed register permanently protected dry dial multi-jets by ADM designed to meet the strict requirements of the Directive IS 779:1994. DS TRP combines high performance at low flow rates and maximum resistance to high flow rates and pressure.

DS TRP is designed for remote communication: it may be equipped with a pulser of the latest generation and a radio module maintaining the mechanical and metrological characteristics and without affecting readability.

DS TRP is guaranteed by ADM under the licence of MADDALENA (Italy): manufacturer of high quality measuring instruments for the past century.



ADM METERS LLP
IMPECCABLE TECHNOLOGY

DS TRP WATER METER

DS TRP multi-jet water meters feature a sealed register and permanently protected dial design.

The plate showing the measurement and the IS 779:1994 inscriptions does not come into contact with the flowing water. As a result it remains perfectly clear ensuring reading with scaling and ferrous water and suspended particles contained in water. Readability is also ensured by the mineral tempered glass lens which has a flat and smooth surface and, unlike plastic lenses, is scratch resistant and does not turn opaque.

DS TRP meters are unaffected by external magnetic interference and are tamper proof. Performance is unaffected by the installation conditions and the water characteristics.

DS TRP water meters may be equipped with a new generation bidirectional static pulser. The pulser may also be retrofitted in **pre-equipped water meters** maintaining the meter characteristics, the design and **the mineral glass lens**.

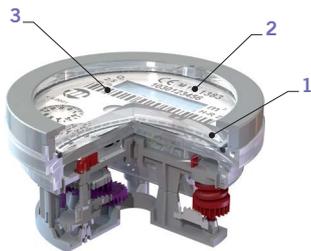
NEW VERSION

DS TRP meters are now available in a new version ready for retrofitting an inductive pulser. They are the only sealed register meters available in this design and that retain the glass lens. This has been made possible by the introduction of a new glass (GORILLA GLASS), widely used in electronic devices, that enables the use of a fully non-magnetic sensor (patent pending).

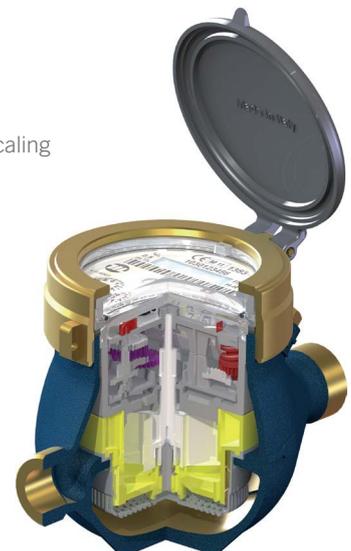
DS TRP water meters are certified in accordance with the Directive IS 779:1994.

DS TRP water meters are also certified for use with potable water in accordance with IS 779:1994.

Technical Specifications



- **Tempered mineral glass** lens of adequate thickness **(1)**
The inductive design features a high-performance glass lens
- **The numbered drums, the cubic meter fractions, the inscriptions and the serial number are in the sealed register and do not come into contact with water ensuring continued readability (2)**
- Pre-equipped meters maintain both the mineral glass lens and the standard inscriptions
- **The serial number is marked on the dial both in digits and in barcode form. It is also marked on the closing ring (3)**
- No upstream or downstream straight pipe requirements
- Installation in vertical pipes available on DN 13 and DN 20 meters (see relevant data sheet)
- R50 meters for vertical installation are also available
- PiiP certification mark available upon request on Q₃ 2.5 water meters
- Internal and external epoxy powder coating
- Stainless steel numbered drums' shaft
- Inlet strainer with wide straining area
- Non-return valve available upon request
- Internal components made of anhygroscopic, anti-scaling and wear resistant plastic materials
- Maximum water temperature: 50 °C; 90 °C version available on request (not approved)
- Nominal working pressure: 16 bar

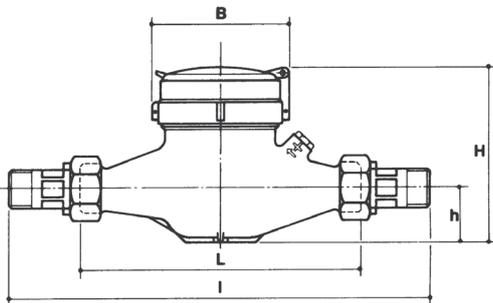


HYDRAULIC PERFORMANCE

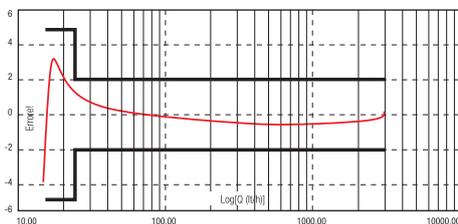
Size	mm	15	20	25	30	40	50
	in	½"	¾"	1"	1¼"	1½"	2"
Performance in accordance with IS 779:1994, class B							
Q_{min}	l/h	30	50	70	100	200	450
Q_t	l/h	120	200	280	400	800	3000
Q_n	m³/h	1.5	2.5	3.5	5	10	15
Q_{max}	m³/h	3	5	7	10	20	30
Real performance							
Q_{min}	l/h	25	25	50	50	100	450
Q_t	l/h	37.5	37.5	75	75	150	3000
Q_n	m³/h	1.5	2.5	3.5	5	10	15
Q_{max}	m³/h	3	5	7	10	20	30
Starting flow rate	l/h	8-10	8-10	20-22	23-25	25-30	30-35
Head of loss at Q_{max}	bar	0.6	0.8	0.5	0.95	0.85	0.9
Head of loss at Q_n	bar	0.15	0.2	0.13	0.25	0.22	0.23
Nominal pressure	bar	16	16	16	16	16	16
Maximum reading	m³	100,000	100,000	100,000	100,000	1,000,000	1,000,000
Minimum reading	l	0.05	0.05	0.05	0.05	0.05	0.05
Turbine revolutions per litre		19.41	19.41	10.04	10.04	4.40	3.16
Weight	kg	1.450	1.610	2.300	2.370	4.500	9.500 threaded 14.000 flanged
Pulse options	l/pulse	1-10 (Quadruplus); 1-10-100-1000 (reed switch)					

DIMENSIONS

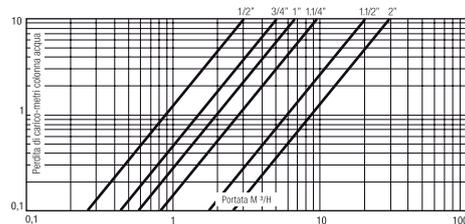
Length (L)	mm	110-130 145-160-165 170-190	160-190	220-260	220-260	300	300
Length with couplings (l)	mm	190-210-225 240-245-250	258-288	378	378	438	461 (flanged 300)
H	mm	114	114	123	123	163	175
h	mm	36.5	36.5	43	43	64.5	77
B	mm	97.5	97.5	97.5	97.5	130	154



Typical error curve



Head loss diagram



ACCESSORIES



SINGLE REED SWITCH PULSER

Suitable for industrial batching.



QUADRAPLUS PULSER

Static bidirectional pulser; equipped with false pulse detection device; battery-powered.



ARROW RADIO MODULE

In combination with the Quadraplus static pulser or the single reed switch pulser it enables the remote reading of water meters.



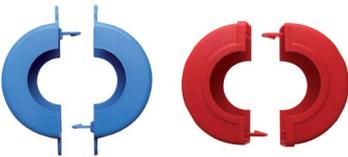
NON-RETURN VALVE

Mounted in the meter outlet to protect it from backflow.



COUPLING KIT

It includes two nuts, two tail pieces and two gaskets.



SEALS

Designed to secure the water meter to the pipe.

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