



Main Characteristics

- ⇒ DN15 to DN50, PN16.
- ⇒ Tempered glass register lens.
- ⇒ Internal and external 60-70 micron fusion bonded epoxy coated brass body (OT58).
- ⇒ Horizontal installation only.
- ⇒ OIML R49 (R200) and ISO 4064 Class C pattern approval.
- ⇒ Low flow performance with high flow and pressure resistance.
- ⇒ Inductive pulse and radio read module options.
- ⇒ Quiet Multi-Jet operation and reliability.
- ⇒ No straight pipe required.
- ⇒ TRP = Totalizer Register Protection, ensures reading accuracy.

Application

- ⇒ DS TRP is a reliable long life precision Multi-Jet Meter.
- ⇒ Residential, Commercial, Rural metered connections, Industrial Process, Agricultural and Irrigation Resources Consent Meter.
- ⇒ Large in-built strainer protection, Stainless Bearing Pins, Protected register prepared for automatic meter reading.
- ⇒ Large Flow range characteristics with low starting flow.
- ⇒ Tamper Proof design.

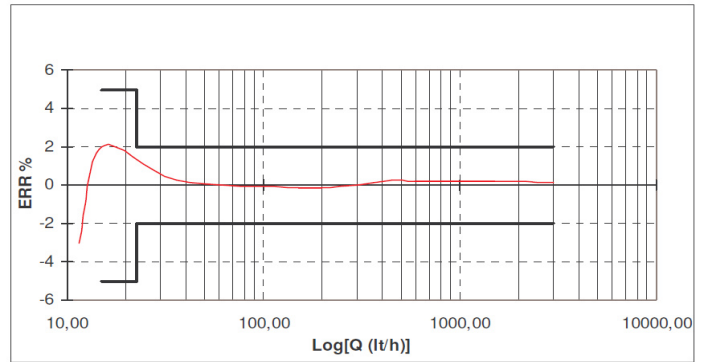
Typical Marking



Maddalena Factory

Marking available to either ISO 4064 Class C or OIML R49 Class 2 R200 pattern approval certifications

Typical Accuracy Curve



Accuracy and Reliability

The register mechanism is housed in a dry compartment meaning that it does not come into contact with the flowing water. As a result it remains perfectly clear for reading when used with scaling or sand particles suspended in the water.

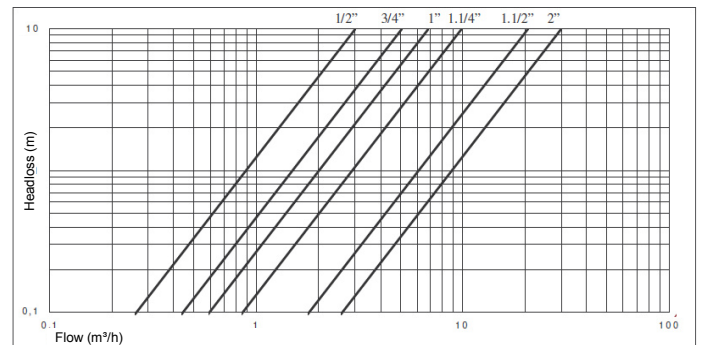
Stainless Steel 18/8 numbered drum and bearing shafts ensure accuracy is maintained for long meter life.

Internal components are made of unhygroscopic, anti-scaling and wear resistant plastic materials.

Each meter is hydraulic tested at three flow rates (Q1, Q2, Q3) on 100% of the production.

Meter performance exceed previous ISO 4064 Class C.

Typical Headloss Curve



Approvals

EEC Patern approval :

In conformity with :

- 75/33/EEC and ISO 4064 Class C
 - For DN15, DN20, DN25, DN30, DN40, DN50
- EEC approval no B89 317.01 to 05

EC type-examination certificate :

In conformity with :

- 2004/22/EC (MID) Annex M1-001
- EN 14154:2007
- OIML R49:2006 certified R200

Module B no. TCM 142/08-4604

Module D no. 0119-SJ-A010-08

DN15, DN20, DN25, DN30, DN40, DN50

Compliance for potable drinking water :

KTM / DVGM (D)	ACS (F)
WRAS (UK)	Hydrocheck

Legibility

The display on 5 drums for m³ and 4 pointer dials for litres ensures perfect reliability. The lowest resolution is 0.1 litres. The dial has a central disc for leak detection.

The register is within a dry protected housing isolated from water flow to ensure clear reading over the life of the meter.

The meter is pre-equipped to allow remote reading and radio read modules.

Options

SINGLE REED SWITCH PULSE EMITTER

Suitable for industrial batching



QUADRAPLUS PULSE EMITTER

Static bi-directional pulse emitter, equipped with false pulse detection device, battery powered.



HYDRAULIC PERFORMANCES

Diameter	mm	15	20	25	30	40	50
	inches	½	¾	1	1¼	1½	2
Module B no.	TCM 142/08-4604						
Module D no.	0119-SJ-A010-08						
Metrological class - MID	R (Q3 / Q1) ≤ 200						
Performances in accordance with Directive 2004/22/EC							
Q ₃	m ³ /h	2.5	4.0	6.3	10.0	16.0	25.0
Q ₄	m ³ /h	3.3	5.0	7.9	12.5	20.0	31.0
R160							
Q ₁	l/h	15.6	25	39.4	62.5	100	156.2
Q ₂	l/h	25	40	63	100	160	250
R100							
Q ₁	l/h	25	40	63	100	160	250
Q ₂	l/h	40	64	100.8	160	256	400

Other values of R available upon request

TECHNICAL DATA

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 ≤ 50° C						
Temperature class	T30 and T50						
Flow profile sensitivity classes	U0 - D0 (upstream or downstream straight lengths not required)						
Starting flow rate	l/h	4-5	7-9	16-18	22-24	28-30	28-30
Pressure loss class (ΔP @ Q ₃)	bar	Δ P 63					
Nominal pressure	bar	16	16	16	16	16	16
Maximum reading	m ³	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		25.31	19.41	11.22	10.04	4.40	3.16
Weight	kg	1.450 (for L=145mm)	1.610 (for L=190mm)	2.300	2.400	4.500	9.500 threaded 14.000 flanged

DIMENSIONS

Length	mm	110-130-145 160-165-170 190	160-190	220-260	220-260	300	300
Length with couplings	mm	210-225 240-245-250	258-288	338-378	338-378	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

