

# R1200 Irrigation water meter



The R1200 is a paddle wheel irrigation water meter designed to withstand harsh agricultural conditions and comply with strict European standards.

The R1200 is the latest range of irrigation meters from Elster. Unlike a Woltmann meter, the paddle wheel rotor is located out of the main flow stream. This allows the free passage of water, reducing the risk of jamming and damage from stones and other suspended solids that are common in irrigation water. The unstricted cross-section also delivers a lower pressure loss than a Woltmann meter.

The R1200's removable mechanism is made from durable plastic with a steel pivot and synthetic sapphire bearing, while the corrosion-resistant housing is built from epoxy resin-coated cast iron. The hermetically sealed, dry dial register features a tempered mineral glass lens for clear readability and a tamper-proof shroud and lid.

The R1200 has been approved to the latest European Directive 2004/22/EC and has a certified Q3/Q1 = R40. The meter is available in seven sizes from DN50 to DN200, and operates at temperatures up to 50°C and a maximum working pressure of 16 bar.

MID Type Approval Certificate

0119-SJ-A010-08

## Key features

- Paddle wheel design for unhindered flow
- Long-lasting, wear-resistant materials
- Tamper-proof dry dial register (IP68)
- Removable mechanism for easy maintenance
- Suitable for horizontal and vertical installation
- Optional reed switch single pulser
- Maximum operating temperature: 30°C. Operation guaranteed up to 50 °C
- Nominal pressure (PN): 10 or 16 bar
- Approved to the latest European Directive 2004/22/EC

## R1200 Applications

- Irrigation water
- Raw water
- Untreated water
- Waste water
- Borehole water
- Agriculture, river and lake pumping

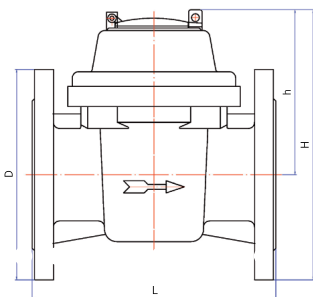
# Product specification

## Hydraulic performance

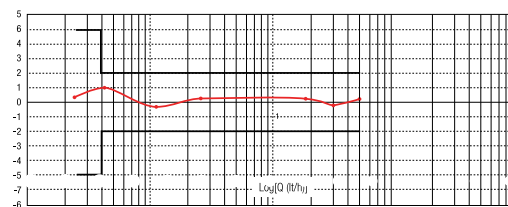
Size	mm in.	50 2"	65 2 1/2"	80 3"	100 4"	125 5"	150 6"	200 8"
Module B no.		TCM 142/13-5129						
Module D no.		0119-SJ-A010-08						
Metrological class (MID)		R (Q <sub>3</sub> /Q <sub>1</sub> ) < 40 H-V						
Performance in accordance with Directive 2004/22/EC		R 40 H-V						
Q <sub>3</sub>	m <sup>3</sup> /h	40	63	63	100	160	250	400
Q <sub>4</sub>	m <sup>3</sup> /h	50	78.8	78.8	125	200	313	500
Q <sub>1</sub>	l/h	1	1.58	1.58	3.13	4.0	6.25	10.0
Q <sub>2</sub>	l/h	1.6	2.52	2.52	5.0	6.4	10.0	16.0

Technical specifications								
Maximum permissible error between Q <sub>1</sub> and Q <sub>2</sub> (included)		± 5%						
Maximum permissible error between Q <sub>2</sub> (excluded) and Q <sub>4</sub>		± 2%						
Temperature class		T30						
Flow profile sensitivity classes		U10 - D5						
Starting flow rate	l/h	125	190	320	450	700	1200	1800
Pressure loss class ( ΔP @ Q <sub>3</sub> )		ΔP10						
Nominal pressure	bar	10/16	10/16	10/16	10/16	10/16	10/16	10/16
Maximum registration	m <sup>3</sup>	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	100,000,000	100,000,000
Minimum registration	m <sup>3</sup>	0.002	0.002	0.002	0.002	0.002	0.02	0.02
Turbine revolutions/litre		0.63	0.38	0.23	0.18	0.13	0.08	0.05
Weight	kg	10.9	12.7	14.0	16.2	21.5	29.1	42.6
Pulse options	l/p	10 - 1000	10 - 1000	10 - 1000	10 - 1000	10 - 1000	100 - 10,000	100 - 10,000

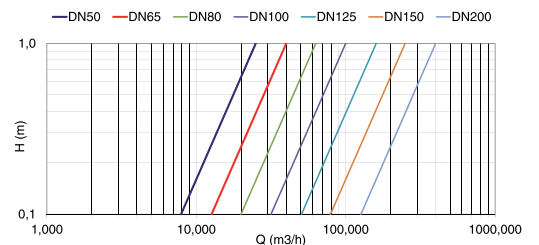
Dimensions								
L	mm	200	200	225	250	250	300	350
H	mm	250	264	280	292	312	338	378
h	mm	136	136	186	186	186	186	206
D	mm	165	165	200	220	250	280	340



Typical error curve



Head loss



Optional reed switch single pulser



ADRwater

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