

Gladiator UK

Positive Displacement Water Meter (Concentric and Inline)



The Gladiator is Arad's super sensitive positive displacement water meter of rotating piston type. The flowing water causes the piston to rotate within its chamber, each piston revolution being equivalent to a known volume of water. The piston movement is transferred by a magnetic coupling to the register which has the appropriate reduction gearing. The Gladiator is tailor made for the UK market and its unique application.



Applications

Domestic consumption

Available Sizes

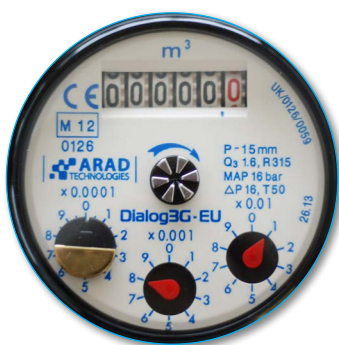
1/2" - 3/4" (15mm and 20mm)

Standards

MID 2014/32/EU (based on OIML R49 EN 14154 and ISO 4064:2014), WRAS

Features

- Specially designed for high accuracy and wide measuring range
- Sealed super-dry register
- Communication types: LoRaWan, Dialog 3G, OE and ER



Example of a Gladiator type dial register

Technical Specifications

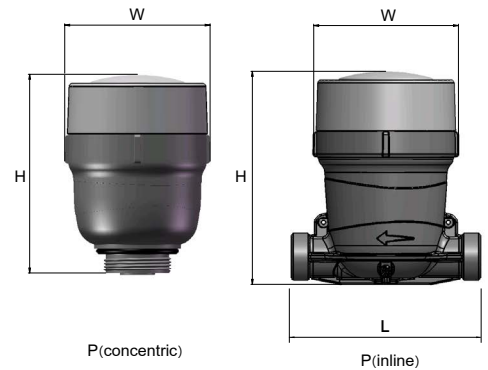
Maximum Working Pressure	16 bar
Maximum Working Temperature	50°C
Meter body material	Highly reinforced composite material
Body	BSP, NPSM
Inlet / Outlet Threads	3/4" (For pipe line 1/2") 1" (For pipe line 3/4")
Register	IP68

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Dimensions

Model		PD15 (concentric)	PD20 (concentric)	PD15 (inline)
Nominal size	(mm)	15	20	15
	(inch)	1/2	3/4	1/2
L – Length without couplings (mm)		-	-	134
W – Width (mm)		103	103	103
H – Height (mm)		141	141	151
Weight (kg)		0.66	0.66	0.66

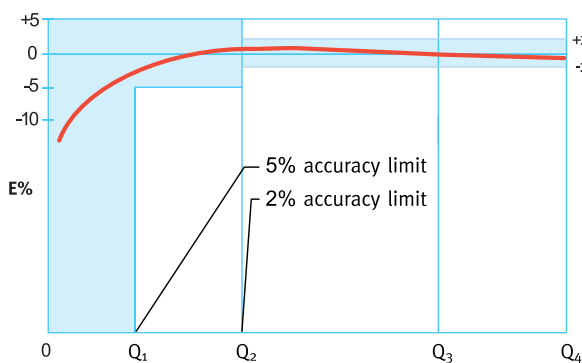


Performance data:

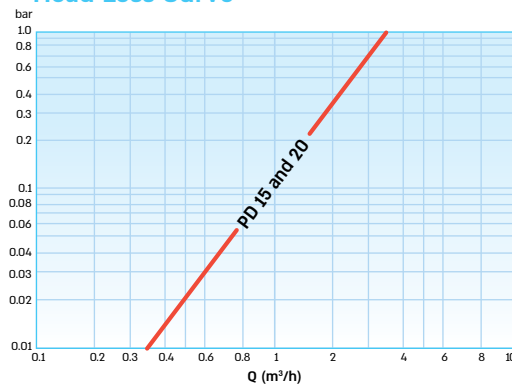
Model	Nominal Size (mm)	Q4 Maximum flowrate (m3/h)	Q3 Nominal flowrate (m3/h)	Q2 Transitional flowrate (l/h)	Q1 Minimum flowrate (l/h)	R Q3/Q1	Δp at Q3 (ISO class)	Maximum register capacity (m3)	Minimum register capacity (l)	Sensitivity (l/h)
PD 15 and 20 (concentric)	15 or 20	2	1.6	8	5	315	16	10 ⁵	0.02	1
				10.50	6.40	250				
				13	8	200				
PD 15 and 20 (concentric)	15 or 20	3.125	2.5	10	6.25	400	40	10 ⁵	0.02	1
				12.80	8	315				
				16	10	250				
				20	12.50	200				
				25	15.63	160				
PD 15 (inline)	15	2	1.6	8	5	315*	16	10 ⁵	0.02	1

* Q3= 4m3/h is in development

Accuracy Curve



Head Loss Curve



Installation

- The meter can be installed in any position (horizontal, vertical or inclined)
- See separate Installation Instructions for full details.