

AQUARIUS S / P

SINGLE-JET METER

DIEHL
Metering



APPLICATION

AQUARIUS S / P is a single-jet water meter specifically designed for Submetering market.

FEATURES

- ▶ DN 15/20
- ▶ Q3 = 2.5 m³/h (DN 15) / Q3 = 4 m³/h (DN 20)
- ▶ Starting flow rate: 8 l/h (DN 15) / 12 l/h (DN 20)
- ▶ Low pressure loss
- ▶ Installation position: horizontal, vertical, over head
- ▶ Brass and composite body
- ▶ Shield against static magnetic fields according to VDDW standard and EN 14154

AQUARIUS S / P

SINGLE-JET METER

GENERAL

AQUARIUS S / P			
Cold water temperature	°C	1 ... 30	
Hot water temperature	°C	30 ... 90	
Nominal pressure	PN bar	10	
Display range		0.1 l ... 9,999 m ³ /h	
Ambient operating temperature	°C	5 ... 55	
Ambient storage temperature	°C	1 ... 50	
Environmental class		B	
Protection class		IP 54	

VERSIONS



AQUARIUS Standard



AQUARIUS Pulse

Nominal diameter	DN	mm	15	15	15	20
Overall length	L	mm	80	110	130	130
Permanent flow rate	Q ₃	m ³ /h	2.5	2.5	2.5	4
AQUARIUS S - brass body			•	•	•	•
AQUARIUS S - composite body			-	•	-	-
AQUARIUS P - pulse output ¹			10 / 100	10 / 100	10 / 100	10 / 100

Note:

¹AQUARIUS P: with pulse output by reed switch, cable length 2 m, contact rating 24 V ~ 0.2 A, max. cable length 20 - 50 m (depending on electrical perturbation). Switching amplifier have to be used at a longer distance. The meter (10 l or 100 l) is delivered tested but not conformity declared.

APPROVAL

AQUARIUS S / P		
MID approval		MID DE-14-MI001-PTB006
Standards		EN 14154 ISO 4064 OIML R49
Sanitary conformity		AoC DEU
Dynamic range (Q ₃ /Q ₁)	R	80 H / 40 V 40
Dynamic range (Q ₃ /Q ₁) with pulse output ²	R	80 H / 31.5 V 40 H / 31.5 V

² only without MID approval

REACH

Information pursuant to Article 33 (1) of Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006:

This product series contains components with the following substances in a concentration of more than 0.1% weight by weight (w/w):
 - Lead (CAS no.: 7439-92-1)

AQUARIUS S / P

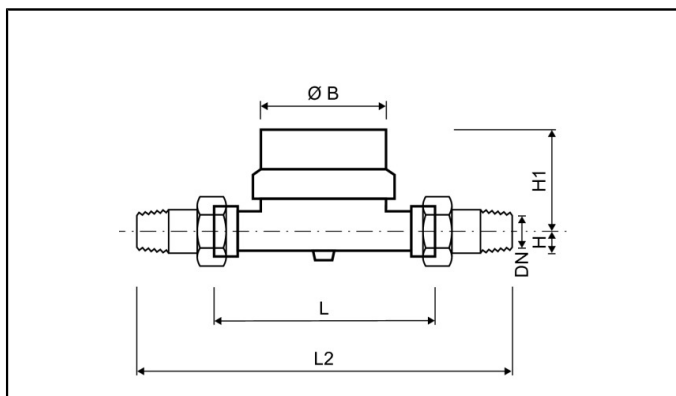
SINGLE-JET METER

METROLOGICAL DATA

Nominal diameter	DN	mm	15	15	15	20
Overall length	L	mm	80	110	130	130
Permanent flow rate	Q ₃	m ³ /h	2.5	2.5	2.5	4
Overload flow rate	Q ₄	m ³ /h	3.125 ²	3.125 ²	3.125 ²	5 ²
Transitional flow rate horizontal	Q ₂	l/h	50 ²	50 ²	50 ²	80 ²
Minimum flow rate horizontal	Q ₁	l/h	31 ²	31 ²	31 ²	50 ²
Starting flow rate horizontal		l/h	8	8	8	12
Pressure loss at Q ₃		bar	0.63	0.63	0.63	0.63

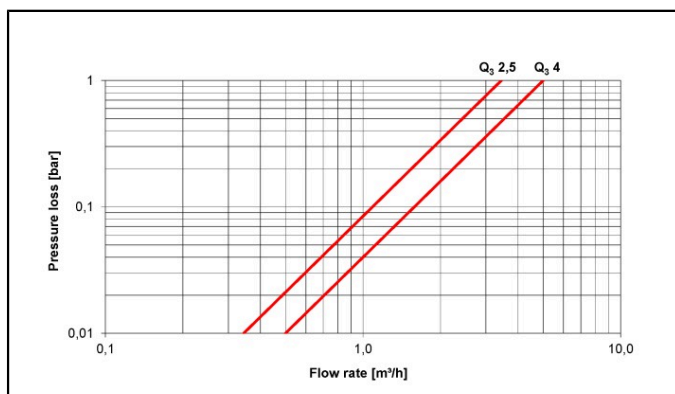
² at R=80H

DIMENSIONS

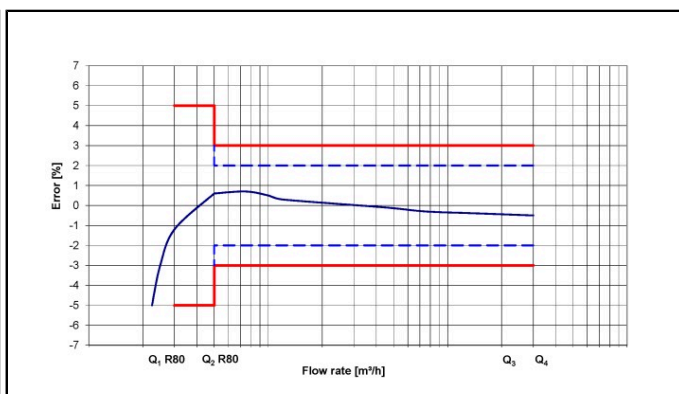


Nominal diameter	DN	mm	15	15	15	20
Overall length	L	mm	80	110	130	130
Permanent flow rate	Q ₃	m ³ /h	2.5	2.5	2.5	4
Overall length with coupling	L2	mm	160	190	210	228
Connection thread on meter		Inch	G ³ / ₄ B	G ³ / ₄ B	G ³ / ₄ B	G1B
Connection thread of coupling		Inch	R ¹ / ₂	R ¹ / ₂	R ¹ / ₂	R ³ / ₄
Height	H	mm	14	14	14	17
Height (with segment cover and pulse output)	H1	mm	52	52	52	52
Height (with radio segment)	H1	mm	69	69	69	69
Diameter	Ø B	mm	64	64	64	64
Weight without coupling		kg	0.4	0.44	0.54	0.54
Weight with coupling		kg	0.58	0.64	0.72	0.72

PRESSURE LOSS GRAPH / TYPICAL ERROR GRAPH



Pressure loss graph



Typical error graph