

# 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
- ▶  $Q_3 = 2.5 \text{ m}^3/\text{h}$  (DN 15) /  $Q_3 = 4 \text{ m}^3/\text{h}$  (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 <sup>3</sup> /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

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

Note:

<sup>1</sup> AQUARIUS 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		KTW
Dynamic range (Q <sub>3</sub> /Q <sub>1</sub> )	R	80 H / 40 V   40
Dynamic range (Q <sub>3</sub> /Q <sub>1</sub> ) with pulse output <sup>2</sup>	R	80 H / 31.5 V   40 H / 31.5 V

<sup>2</sup> 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

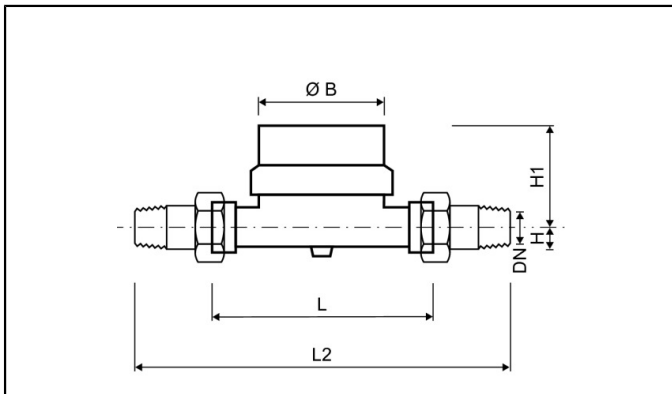
## SINGLE-JET METER

### METROLOGICAL DATA

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

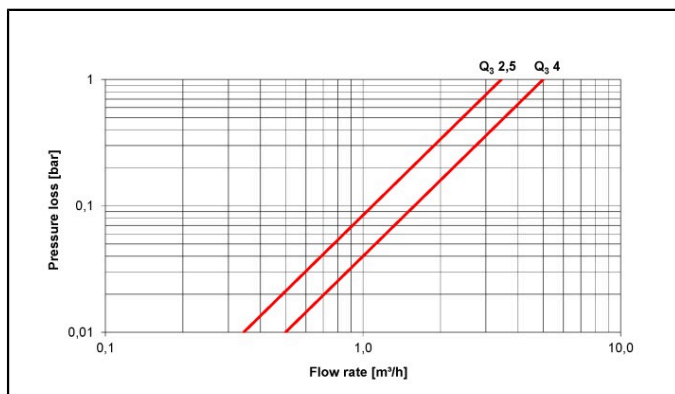
<sup>2</sup> at R=80H

### DIMENSIONS

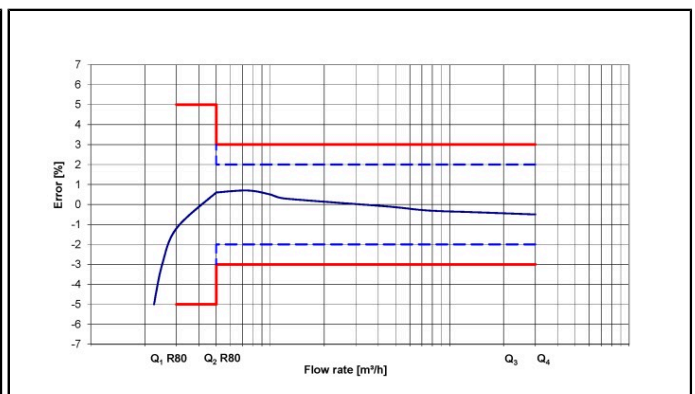


Nominal diameter	DN	mm	15	15	15	20
Overall length	L	mm	80	110	130	130
Permanent flow rate	Q <sub>3</sub>	m <sup>3</sup> /h	2.5	2.5	2.5	4
Overall length with coupling	L2	mm	160	190	210	228
Connection thread on meter		Inch	G <sup>3</sup> / <sub>4</sub> B	G <sup>3</sup> / <sub>4</sub> B	G <sup>3</sup> / <sub>4</sub> B	G1B
Connection thread of coupling		Inch	R <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>4</sub>
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