

AQUARIUS S / RS / P

SINGLE-JET METER

DIEHL
Metering



APPLICATION

For measuring consumption in apartments and buildings for billing purposes

FEATURES

- ▶ Single-jet impeller meter of fully dry-running design with magnetic coupling
- ▶ Modularity with the IZAR system world
- ▶ Excellent starting flow rate
- ▶ Low pressure loss
- ▶ Installation position: horizontal, vertical
- ▶ Compact design
- ▶ Rotatable counter
- ▶ Shield against static magnetic fields according to VDDW standard and EN 14154
- ▶ Working pressure 10 bar according to DIN 2401
- ▶ Protection class IP 54

AQUARIUS S / RS / P

SINGLE-JET METER

GENERAL

		AQUARIUS S / RS / P	
Medium temperature range cold water	°C	0 ... 30	
Medium temperature range warm water	°C	0 ... 90	
Nominal pressure	PN	bar	10
Display range	0.1 l ... 9,999 m ³ /h		
EC type approval EO 6 30 °C	D 98 / 6.131.09		
EC type approval EO 6 90 °C	D 98 / 6.331.93		
Metrological class	A/B•H		
Protection class	IP 54		

Note:

Single-jet impeller meters are delivered calibrated in accordance with the calibration regulations. (AQUARIUS P with 10 l/pulse cannot be calibrated.)

VERSIONS



AQUARIUS S



AQUARIUS RS



AQUARIUS P

Nominal flow rate	Q _n	m ³ /h	1.5	1.5	1.5	2.5
Overall length	L	mm	80	110	130	130
AQUARIUS S - radio segment retrofittable			•	•	•	•
AQUARIUS RS - radio segment mounted			on request	on request	on request	on request
AQUARIUS P - pulse output		l/pulse	10 / 100	10 / 100	-	10 / 100

Note:

AQUARIUS S: radio segment IZAR RS 868 retrofittable

AQUARIUS RS: on request with mounted and configured radio segment IZAR RS 868

AQUARIUS P: pulse output by reed switch, cable length 2 m LiYY 2 x 0.25 mm², 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.

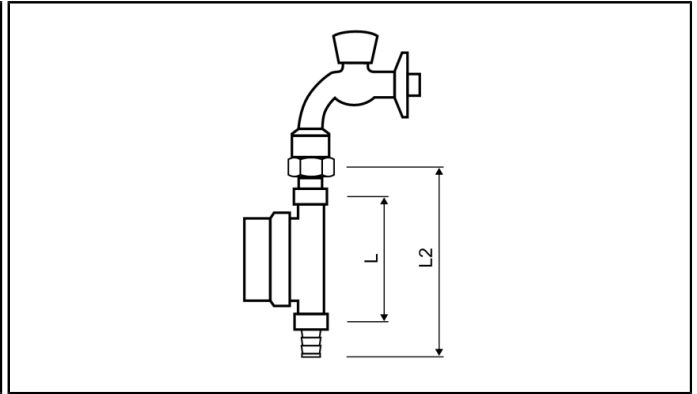
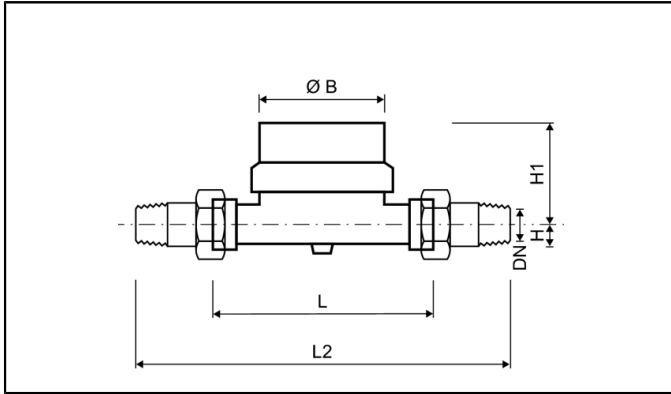
TECHNICAL DATA

Nominal flow rate	Q _n	m ³ /h	1.5	1.5	1.5	2.5
Overall length	L	mm	80	110	130	130
Nominal diameter	DN	mm	15	15	15	20
Maximum flow rate (short-term)	Q _{max}	m ³ /h	3	3	3	5
Transition flow rate horizontal	Q _t	l/h	120	120	120	200
Transition flow rate any position	Q _t	l/h	150	150	150	250
Minimum flow rate horizontal	Q _{min}	l/h	30	30	30	50
Minimum flow rate any position	Q _{min}	l/h	60	60	60	100
Starting flow rate horizontal		l/h	8	8	8	12
Starting flow rate any position		l/h	14	14	14	18
Pressure loss at Q _n		bar	0.19	0.19	0.19	0.25

AQUARIUS S / RS / P

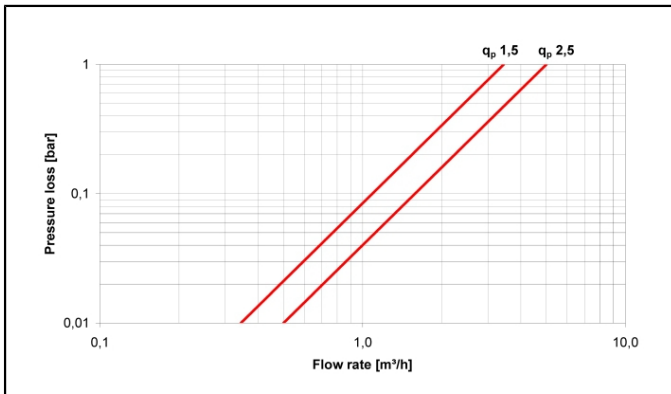
SINGLE-JET METER

DIMENSIONS

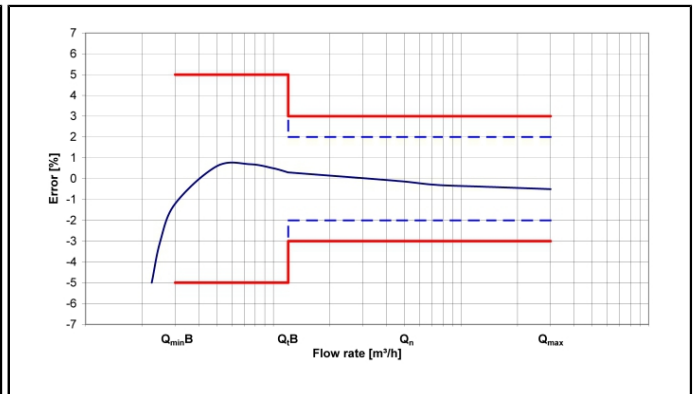


Nominal flow rate	Q_n	m^3/h	1.5	1.5	1.5	2.5
Overall length	L	mm	80	110	130	130
Overall length with coupling	L2	mm	160	190	210	228
Overall length with tap coupling	L2	mm	138	168	188	-
Connection thread on meter		Inch	G $\frac{3}{4}$ B	G $\frac{3}{4}$ B	G $\frac{3}{4}$ B	G1B
Connection thread of coupling		Inch	R $\frac{1}{2}$	R $\frac{1}{2}$	R $\frac{1}{2}$	R $\frac{3}{4}$
Height	H	mm	14	14	14	17
Height (AQUARIUS S / P)	H1	mm	52	52	52	52
Height (AQUARIUS RS)	H1	mm	69	69	69	69
Diameter	$\varnothing B$	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