

Engelmann Ultrasonic Flow Meter

2WR7



- Any mounting position possible
- Detachable measuring electronics housing (3 m cable length)
- Optical communication interface
- Automatic data storage on yearly reading date; 36 monthly values
- Estimated lifetime of 10 years

Technical Data:

2WR7 (for bigger flow meters on request)

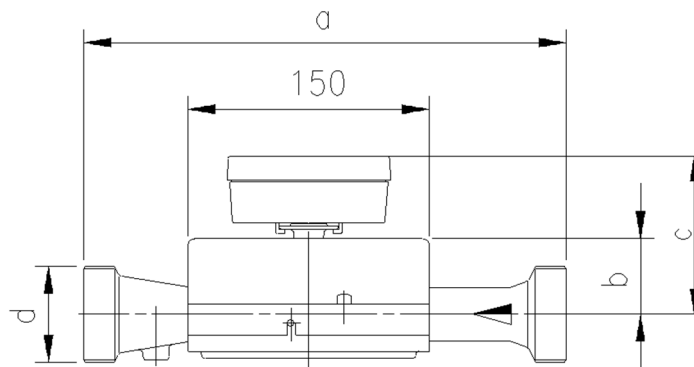
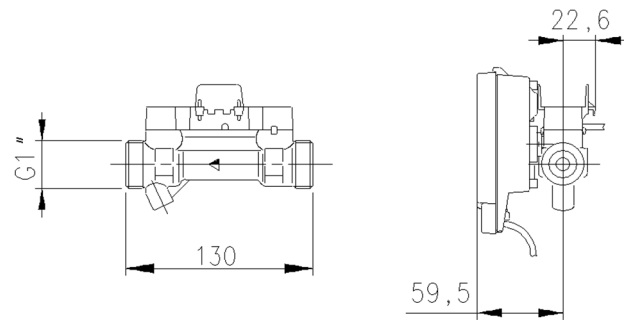
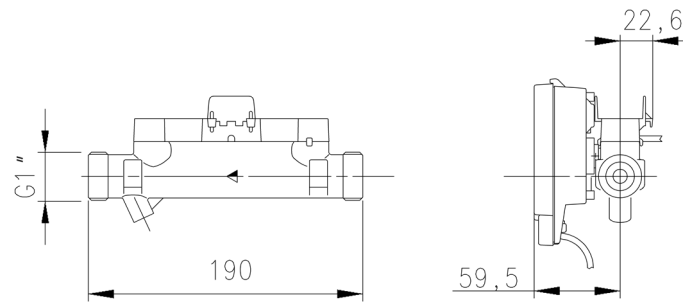
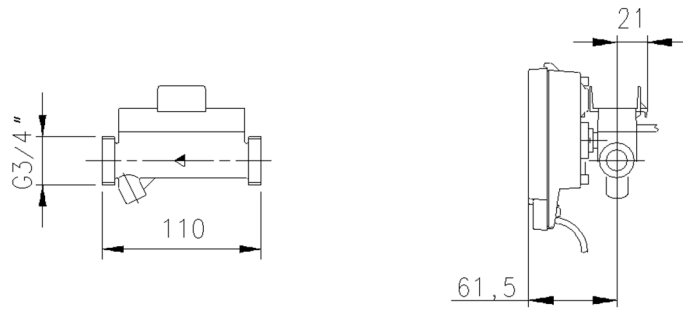
Nominal flow q_p	m^3/h	0,6	1,5	2,5	3,5	6	10
Low flow threshold	l/h	2,4	6	10	14	24	40
Minimum flow q_i	l/h	6	15	25	35	60	100
Maximum flow q_s	m^3/h	1,2	3	5	7	12	20
Dynamic range q_i/q_p		1:100					
Temperature range	$^{\circ}C$	5 – 130; national approvals may differ					
recommended for heat	$^{\circ}C$	10 – 130					
recommended for cooling	$^{\circ}C$	5 – 50					
Mounting position		any position					
Protection class		heat: IP54 (optional: IP65); cooling: IP65					
Medium		water					

Flow meter electronics

Accuracy class (MID)		up to q_p 2,5 m^3/h class 3; q_p 3,5 m^3/h and larger class 2										
Ambient temperature in the field	$^{\circ}C$	5 – 55; at 25 $^{\circ}C$ < 93 % rH										
Storage and transport temperature	$^{\circ}C$	-20 – 60										
Point of installation		outlet flow / inlet flow; please consider the parameterization of the calculator										
Mechanical class		M1										
Electromagnetic class		E1										
Environment class		A										
Protection class		IP54										
Power supply		exchangeable 3,6 V lithium battery										
Estimated lifetime	years	10										
Connecting cable between flow sensor and measuring electronics	m	3										
Pulse output cable	m	2										
Dimensions electronics housing (H x W x D)	mm	112 x 88 x 41,5										

2WR7 with threaded connection

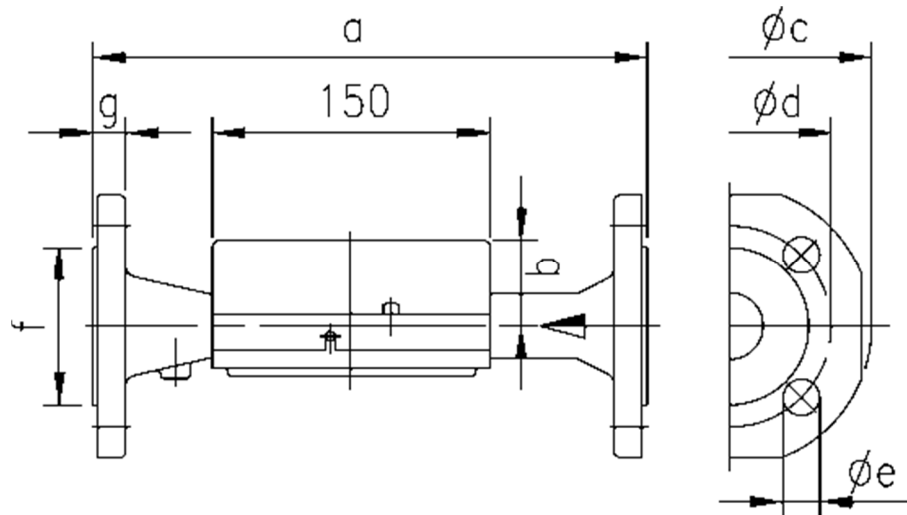
Nominal flow q_p	m^3/h	0,6	1,5	1,5	2,5	2,5	3,5	6	6	10	10
Pressure loss at q_p	mbar	150	170	160	200	210	55	190	140	130	110
Pressure loss graph		A	B	C	E	D	G	F	H	I	J
Flow rate at 1 bar pressure loss	m^3/h	1,5	3,6	3,8	5,6	5,5	15	14	16	28	30
Nominal diameter	DN	15	15	20	20	20	25	25	25	40	40
Thread	inch	G $\frac{3}{4}$ B	G $\frac{3}{4}$ B	G1B	G1B	G1B	G1 $\frac{1}{4}$ B	G1 $\frac{1}{4}$ B	G1 $\frac{1}{4}$ B	G2B	G2B
Length	mm	110	110	190	130	190	260	150	260	200	300
Nominal pressure PN	bar	16	16	16	16	16	16	16	16	16	16
Pulse value	$l/pulse$	1	2,5	2,5	2,5	2,5	10	10	10	10	10
Weight	kg	1	1	1,5	1,5	1,5	3	3	3	2,6	4



q_p (m ³ /h)	a (mm)	b (mm)	c (mm)	d
3,5	260	59	96	G1½B
6	260	59	96	G1½B
6	150	59	63	G1½B
10	200	59	93	G2B
10	300	59	93	G2B

2WR7 with flange connection

Nominal flow q_p	m^3/h	3,5	6	10	15	15	25	40	60
Pressure loss at q_p	mbar	55	140	130	95	110	105	160	115
Pressure loss graph		G	H	I	L	K	M	N	O
Flow rate at 1 bar pressure loss	m^3/h	15	16	28	49	45	77	100	177
Flange connection	DN	25	25	40	50	50	65	80	100
Length	mm	260	260	300	200	270	300	300	360
Nominal pressure PN	bar	25	25	25	25	25	25	25	16; 25
Pulse value	l/pulse	10	10	10	25	25	25	100	100
Weight	kg	5	5	7	5	8	11	13	22



q_p (m^3/h)	PN (bar)	DN (mm)	a (mm)	b (mm)	$\varnothing c$ (mm)	$\varnothing d$ (mm)	$\varnothing e$ (mm)	Number of holes	f (mm)	g (mm)
3,5	25	25	260	59	112	85	14	4	60	19
6	25	25	260	59	112	85	14	4	60	19
10	25	40	300	59	140	110	18	4	90	19
15	25	50	270	59	155	125	18	4	102	20
15	25	50	200	59	155	125	18	4	102	20
25	25	65	300	52	185	145	18	8	122	22
40	25	80	300	56	200	160	18	8	138	24
60	16	100	360	68	235	180	18	8	158	24
60	25	100	360	68	235	190	22	8	158	24

Pressure loss 2WR7

