

AN 130

Flow sensor for water temperatures from 5 °C to 130 °C, PN 16 and PN 25



The flow sensors AN 130 are multi-jet dry dial vane impeller hot water meters, suitable for installing in central heating and cooling systems and remote warning systems. With their built-in pulse sender they are approved as flow sensors for heating meters according to the European measuring instruments directive 2014/32/EU (MID).

Versions for horizontal, rising and falling flow directions with screwings (PN 16) or flanges (horizontal flow, PN 25) are available.

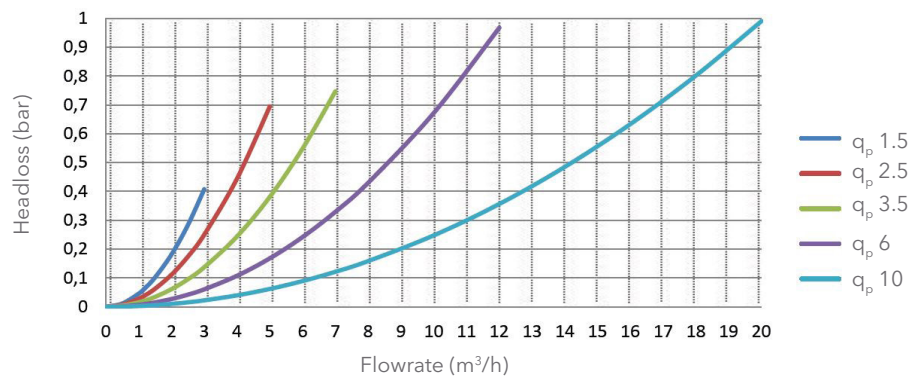
Pattern Approval

DE-12-MI004-PTB002

MAIN CHARACTERISTICS

- Fully dry dial meter with no gear reduction in the wet chamber
- Wear resistant tungsten carbide / sapphire
- Magnetic coupling protected against magnetite
- Pulse sender safe from interference
- Easy to repair construction with external regulation

Typical Head Loss Curve



Technical Data

Display	00000.000 m ³
Working pressure	16 bar 25 bar (Special version)
Working temperature	10 ... 130 °C
Accuracy class	Class 2 or 3

Pulse Sender

Pulse sender	Reed switch permanently installed
Cable length	2 m
Load capacity	max. 0.1 A, max. 28 V
Contact resistance	max 105 Ohm
Pulse value	10 Litres / pulse For other pulse values see special versions



AN130 FAN



AN130 SAN

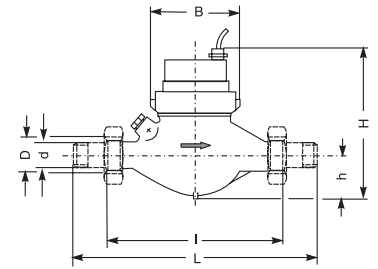
AN 130

Flow sensor for water temperatures from 5 °C to 130 °C, PN 16 and PN 25

Dimensions and Weight

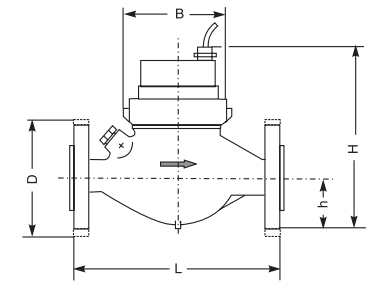
Horizontal installation for threaded fittings, Type AN 130 q_p ... AN R ... K 10

Size marking	q _p	m ³ /h	1.5	1.5	2.5	3.5	6	6	10
Nom. connection size	DN	mm	15	20	20	25	25	32	40
Pipe connection thread ¹⁾	d	inches	R¾	R¾	R¾	R1	R1	R5/4	R1½
Meter stub thread ²⁾	D	inches	G¾	G1	G1	G1¼	G1¼	G1½	G2
Installed length without fittings	l	mm	165	190	190	260	260	260	300
Installed length with fittings	L	mm	244	288	288	378	378	378	438
Height	H	mm	155	155	155	170	170	170	190
Height	h	mm	34	36.5	36.5	49	49	49	62
Width	B	mm	96	97	97	103	103	103	140
Weight of meter without fittings		~kg	1.6	2.0	2.1	2.9	2.9	2.9	5.2
Weight of meter with fittings		~kg	2.1	2.5	2.6	3.6	3.6	3.6	6.5



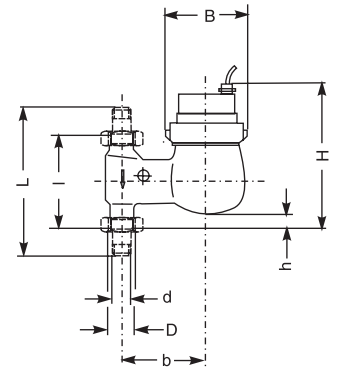
Horizontal installation with flanges, Type AN 130 q_p ... AN R ... K 10

Size marking	q _p	m ³ /h	1.5	2.5	3.5	6	10
Nom. connection size	DN	mm	20	20	25	25	40
Installed length	L	mm	190	190	260	260	300
Height	H	mm	157	157	179	179	197
Height	h	mm	46	46	51	51	68
Flange diameter	D	mm	105	105	115	115	150
Width	B	mm	95	95	101	101	131
Weight		~kg	3.5	3.5	4.8	4.8	8



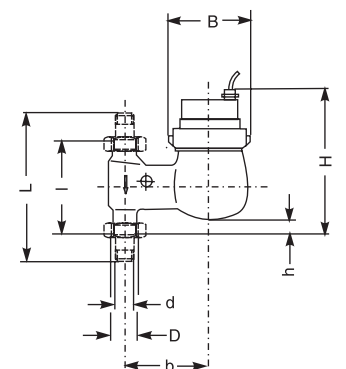
Installation in falling line for threaded fittings, Type AN 130 q_p ... FAN R ... K 10

Size marking	q _p	m ³ /h	1.5	2.5	3.5	6	10
Nom. connection size	DN	mm	20	20	25	25	40
Pipe connection thread ¹⁾	d	inches	R¾	R¾	R1	R1	R1½
Meter stub thread ²⁾	D	inches	G1	G1	G1¼	G1¼	G2
Installed length without fittings	l	mm	105	105	150	150	200
Installed length with fittings	L	mm	203	203	268	268	338
Height	H	mm	160	160	175	175	195
Height	h	mm	13	13	22	22	30
Axial offset	b	mm	100	100	105	105	120
Width	B	mm	97	97	103	103	140
Weight of meter without fittings		~kg	2	2.1	3.3	3.3	5
Weight of meter with fittings		~kg	2.3	2.4	3.8	3.8	6.3



Installation in rising line for threaded fittings, Type AN 130 q_p ... SAN R ... K 10

Size marking	q _p	m ³ /h	1.5	2.5	3.5	6	10
Nom. connection size	DN	mm	20	20	25	25	40
Pipe connection thread ¹⁾	d	inches	R¾	R¾	R1	R1	R1½
Meter stub thread ²⁾	D	inches	G1	G1	G1¼	G1¼	G2
Installed length without fittings	l	mm	105	105	150	150	200
Installed length with fittings	L	mm	203	203	268	268	338
Height	H	mm	155	155	170	170	190
Height	h	mm	19	19	33	33	30
Axial offset	b	mm	82	82	94	94	120
Width	B	mm	97	97	103	103	140
Weight of meter without fittings		~kg	2	2.1	3.3	3.3	5
Weight of meter with fittings		~kg	2.3	2.4	3.8	3.8	6.3



Connection thread dimensions: 1) d Withworth tapered pipe thread
2) D Pipe thread

R ½" to R 2" to ISO 7/1 = DIN 2999 Part 1
G 1 to G 2 B to DIN ISO 228/1

AN 130

Flow sensor for water temperatures from 5 °C to 130 °C, PN 16 and PN 25

Materials

Casing	Brass, painted
Impeller	Plastic
Impeller cup	Plastic
Bearing pin	Tungsten carbide
Tungsten carbide	Sapphire
Magnetic coupling	Ceramic permanent magnets

Performance Data

Nominal size	q _p		1.5	2.5	3.5	6	10
Continuous loading	q _p	m ³ /h	1.5	2.5	3.5	6	10
Max. flow rate (short-term)	q _s	m ³ /h	3	5	7	12	20
Ratio	q _i : q _p		1:50	1:50	1:50	1:50	1:50
Minimum flow rate	q _i	l/h	30	50	70	120	200
Pressure loss at q _p		bar	0.11	0.18	0.19	0.24	0.25
Flow rate at 1 bar pressure loss		m ³ /h	4.7	6.0	8.1	12.2	20.1

Order Information

Type	Ordering Text	Order No.
Horizontal version for threaded fittings - Pulse sender, 10 litres/pulse, according MID directive	AN130 q _p 1.5 AN R ¼" K 10	88189301
	AN130 q _p 1.5 AN R ¾" K 10	88189300
	AN130 q _p 2.5 AN R ¾" K 10	88189500
	AN130 q _p 3.5 AN R 1" K 10	88189700
	AN130 q _p 6 AN R 1" K 10	88189800
	AN130 q _p 6 AN R 5/4" K 10	88189801
	AN130 q _p 10 AN R 1½" K 10	88189900
Horizontal version with flanges, PN 16 - Pulse sender, 10 litres / pulse, according MID directive	AN130 q _p 1.5 ANF DN 20 K 10	88189304
	AN130 q _p 2.5 ANF DN 20 K 10	88189504
	AN130 q _p 3.5 ANF DN 25 K 10	88189704
	AN130 q _p 6 ANF DN 25 K 10	88189804
	AN130 q _p 10 ANF DN 40 K 10	88189904
Falling line version for threaded fittings - Pulse sender, 10 litres / pulse, according MID directive	AN130 q _p 1.5 FAN R ¾" K 10	88189303
	AN130 q _p 2.5 FAN R ¾" K 10	88189503
	AN130 q _p 3.5 FAN R 1" K 10	88189703
	AN130 q _p 6 FAN R 1" K 10	88189803
	AN130 q _p 10 FAN R 1½" K 10	88189903
Horizontal version with flanges, PN 25 - Pulse sender, 10 litres / pulse, according MID directive	AN130 q _p 1.5 ANF DN 20 K 10	88189351
	AN130 q _p 2.5 ANF DN 20 K 10	88189551
	AN130 q _p 3.5 ANF DN 25 K 10	88189751
	AN130 q _p 6 ANF DN 25 K 10	88189851
	AN130 q _p 10 ANF DN 40 K 10	88189951
Rising line version for threaded fittings - Pulse sender, 10 litres / pulse, according MID directive	AN130 q _p 1.5 SAN R ¾" K 10	88189302
	AN130 q _p 2.5 SAN R ¾" K 10	88189502
	AN130 q _p 3.5 SAN R 1" K 10	88189702
	AN130 q _p 6 SAN R 1" K 10	88189802
	AN130 q _p 10 SAN R 1½" K 10	88189902



UK & Ireland Inquiries | Sensus UK Systems Ltd. | 3 Lindenwood Crockford Lane, Chineham Business Park | Basingstoke RG24 8QY UK | +44 1256 372800 | info.gb@xylem.com
 International Inquiries | Sensus GmbH Hannover | Meineckestr. 10 | 30880 Laatzen | Germany | +49 5102 743177 | info.int@xylem.com

©2020 Sensus. All products purchased and services performed are subject to Sensus' terms of sale, available at [sensus.com](https://www.sensus.com). Sensus reserves the right to modify these terms and conditions in its own discretion. The Sensus logo and other Sensus products or services referenced are registered trademarks of Sensus.

This document is for informational purposes only, and SENSUS MAKES NO EXPRESS WARRANTIES IN THIS DOCUMENT. FURTHERMORE, THERE ARE NO IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY. ANY USE OF THE PRODUCTS THAT IS NOT SPECIFICALLY PERMITTED HEREIN IS PROHIBITED.