

TURBINE FLOW SENSOR WITH FIELD TRANSMITTER



- LED OR LCD DISPLAY UNIT
- 4...20 mA · PULSE · SWITCH · COMMUNICATION
- BATTERY-POWERED VERSION AVAILABLE

FLOW RANGE

DN (mm)	Q min (m ³ /h)	Q max (m ³ /h)	DN (mm)	Q min (m ³ /h)	Q max (m ³ /h)
10	0.2	1.2	65	8	80
12	0.4	4	80	10	100
15	0.6	6	100	20	222
20	0.8	8	125	25	250
25	1	10	150	40	400
32	1.5	15	200	80	800
40	2	20	250	120	1200
50	4	40	300	180	1800



MEASUREMENT AND PROCESS

Measuring range	DN 10 ... DN 300 · 0.2 ... 1800 m³/h
Nominal pressure PN	6.3 · 16 · 25 · 40* MPa to DN32 · 2.5 MPa to DN100 · 1.6 MPa to DN300
Max. pressure loss	0.05 MPa at DN10 · 0.035 MPa to DN32 · 0.025 MPa to DN300
Pressure resistance	16 bar or 250 bar, by order code
Medium temperature	≤ 100 °C standard · ≤ 130 °C type H · ≤ 180 °C type H1
Measured medium	Low-viscosity liquid such as water, diesel or gasoline · oil is the factory default, water by order code

OUTPUT VERSIONS

F	Pulse output
A	4 ... 20 mA output
S	4 ... 20 mA + pulse + switching output
R	4 ... 20 mA + pulse + switching quantity + communication output
C	Battery powered, no output signal

VERSIONS

Sensor versions	Common type · high-precision type · wear-resisting type (hard alloy)
Amplifier versions	Normal and flameproof
Display unit	LED or LCD, in a round field housing with two cable entries
Battery version	Order code C · lithium battery, replaced yearly, no output signal

DISPLAY UNITS

Unit	Output codes
LED display unit	F · A
LCD display unit	S · R · C

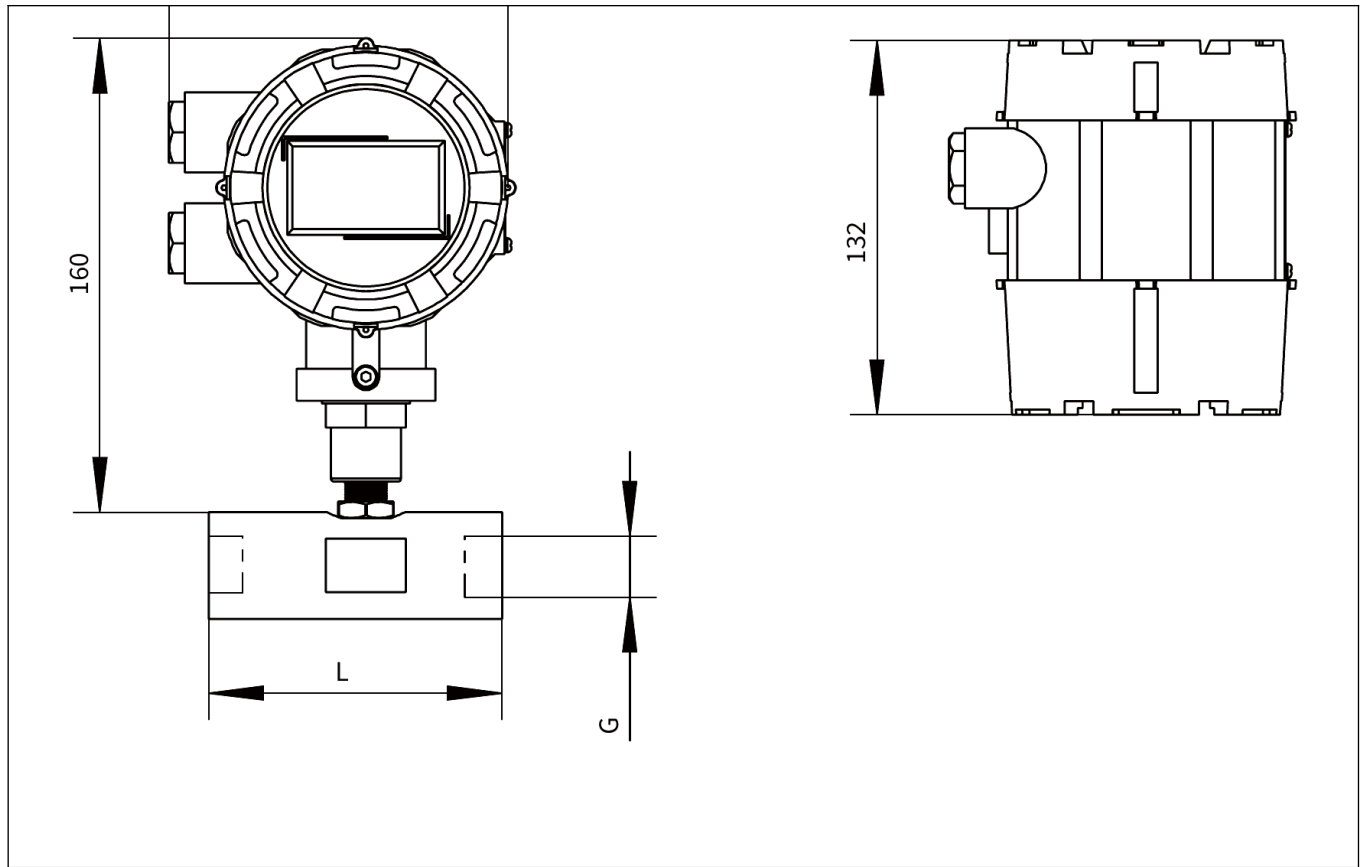
PROCESS CONNECTIONS AND DISPLAY UNITS



The transmitter sits in a round field housing with two cable entries. Two display units are offered: an LED unit with four keys for the pulse and 4...20 mA versions, and an LCD unit for the versions with switching output, communication or battery supply.



DIMENSIONS (mm)



DIMENSIONS · THREAD AND CLAMP (mm)

DN	External thread G	L external thread	Internal thread G	L internal thread	Clamp Ø	L clamp
10	G1/2	65	1/2	80	50.5	50
12	G3/4	65	1/2	80	50.5	50
15	G1 (33.2)	75	1/2	110	50.5	75
20	G1 (33.2)	85	3/4	115	50.5	85
25	G1-1/4 (41.9)	100	1	140	50.5	100
32	G1-1/2 (47.8)	120	1-1/4	172	50.5	120
40	G2 (59.6)	140	1-1/2	180	64	140
50	G2-1/2 (75.1)	150	2	200	78	150
65	G3	175	2-1/2	235	91	175
80		200	3	260	106	200
100		220			119	220

With the straight pipe section — order code 010B — the body length of DN10 is 345 mm instead of 65 mm. The field housing is ≈ 125 mm wide, ≈ 160 mm high above the process connection and ≈ 132 mm deep.



DIMENSIONS · FLANGE (mm)

DN	Flange Ø	Bolt circle	Hole Ø	Holes	Thickness	Body length L
12	95	65	14	4	14	65
15	95	65	14	4	14	75
20	105	75	14	4	16	85
25	115	85	14	4	16	100
32	140	100	18	4	18	120
40	150	110	18	4	18	140
50	165	125	18	4	20	150
65	185	145	18	8	20	175
80	200	160	18	8	20	200
100	220	180	18	8	22	220
125	250	210	18	8	22	250
150	285	240	22	8	24	300
200	340	295	22	12	26	360
250	400	355	26	12	28	400
300	460	410	26	12	32	500

Flange connection to PN 1.6 MPa.



COMPLIANCE AND CERTIFICATION

Nominal pressure PN	6.3 · 16 · 25 · 40* MPa to DN32 · 2.5 MPa to DN100 · 1.6 MPa to DN300
Pressure resistance	16 bar or 250 bar, by order code

OUTPUT VERSIONS AND ORDER CODE

Field housing with LCD display unit

- The transmitter sits in a round field housing with two cable entries. Two display units are offered: an LED unit with four keys for the pulse and 4...20 mA versions, and an LCD unit for the versions with switching output, communication or battery supply.



Housing
≈ 125 mm

Height
≈ 160 mm

OUTPUT VERSIONS

Code	Output	Display unit
F	Pulse output	LED
A	4 ... 20 mA output	LED
S	4 ... 20 mA + pulse + switching output	LCD
R	4 ... 20 mA + pulse + switching quantity + communication output	LCD
C	Battery powered, no output signal	LCD



ORDER CODE

Field	Code	Meaning
1 Series	QTKC	QTKC turbine flow sensor with field transmitter
2 Caliber	010 · 010B · 012 · 015 · 020 · 025 · 032 · 040 · 050 · 065 · 080 · 100 · 125 · 150 · 200 · 250 · 300	Measuring caliber DN10 ... DN300 · 010B is DN10 with straight pipe section
3 Output	F	Pulse output · LED display unit
	A	4 ... 20 mA output · LED display unit
	S	4 ... 20 mA + pulse + switching output · LCD display unit
	R	4 ... 20 mA + pulse + switching quantity + communication · LCD display unit
	C	Battery powered, no output · LCD display unit
4 Process	M	External thread connection, up to DN50
	K	Internal thread connection
	F	Flanged connection
	H	Sanitary hose clamp connection, up to DN100, applicable to 1.6 MPa
5 Pressure	L	Pressure resistance 16 bar
	H	Pressure resistance 250 bar
6 Ex	—	Non-explosion proof
	-E	Anti-explosion
7 Temperature	—	Conventional type · medium temperature ≤ 100 °C
	H	High temperature type · medium temperature ≤ 130 °C
	H1	Ultra-high temperature type · medium temperature ≤ 180 °C · coil type mandatory · mount more than 500 mm away from the power frequency source
8 Medium	—	Oil (factory default)
	S	Water

Example: QTKC-015 A M L - - -.

