



BLFT Liquid Turbine Flow Meter



Technical Data Sheet

SPECIFICATIONS

Performance:

Repeatability:	±0.2%
Accuracy:	Standard: ±1% of reading; Optional: ±0.5% of reading

Wetted Components:

Housing:	Standard - 304 Stainless Steel Optional - 316 Stainless Steel
Bearings and Shaft:	Tungsten Carbide
Rotor:	Standard - 2Cr13 Stainless Steel (Optional Alloy CD4Mcu)
Retaining Rings:	316 Stainless Steel

Output Signal: (where applicable)

Coil Sensor:	Pulse signal (Sinusoidal Waveform 10-1000mV Peak to Peak :: varies with flow rate)
Amp Sensor:	Pulse signal (Low Level: ≤0.8V; High Level: ≥8V)
Transmitter:	4 to 20 mA DC current signal

Signal Transmission Distance:

≤1,000 m (Amplified Sensor)

≤100 m (Coil Sensor, with suitable cable and low noise environment)

Electrical Connections:

Basic Type:	Hausman Connector or three-core cable
Exd Junction Box:	2x M20×1.5 Female (NPT connections Optional)

Explosion Proof:

Standard:	None
Optional:	Exd Head

Protection Level:

IP65 Blind pulse output models / IP67 with F-Series display fitted or Exd Junction Box

OPERATING CONDITIONS

Ambient:

Temperature: -10°C to +55°C
 Pressure: 86 to 106 KPa
 Relative Humidity: 5% to 90%

Power Supply:

Sensor: +12V DC (Optional: +24V DC)
 Transmitter: +24V DC
 Display Type B,B12: Integral 3.2V Lithium Battery
 (+24V DC available on request)
 Display Type C, C110:
 C112 +24V DC, Loop Powered and or Battery. See Product spec sheet.

Fluid Temperature and Pressure:

Temperature: -20°C to +110°C
 Pressure: Fluid pressure should be limited according to the rating specified.

Flow Ranges and Working Pressures :

Nominal Diameter		Standard Flow Range (SFR)	Extended Flow Range (EFR)	Standard Pressure Rating Flange Limited	Customized Pressure Rating Flange Limited
(mm)	(in.)	(L/min)	(m ³ /h)	(Bar)	(Bar)
4	0.15	0.66 - 4.16	0.04 to 0.4	Threaded: 63	120, 160, 250
6	0.25	1.66 - 10	0.06 to 0.6	Threaded: 63	120, 160, 250
10	0.4	3.33 - 20	0.15 to 1.5	Threaded: 63	120, 160, 250
15	0.5	10 - 100	0.4 to 8	Thread: 63:: Flange: 25	40, 63, 120, 160, 250
20	0.75	13.3 - 133.3	0.45 to 9	Thread: 63:: Flange: 25	40, 63, 120, 160, 250
25	1	16.6 - 166.6	0.5 to 10	Thread: 63:: Flange: 25	40, 63, 120, 160, 250
32	1.25	25 - 250	0.8 to 15	Thread: 63:: Flange: 25	40, 63, 120, 160, 250
40	1.5	33.3 - 333.3	1 to 20	Thread: 63:: Flange: 25	40, 63, 120, 160, 250
50	2	4 – 40 m ³ /h	2 to 40	Flanged: 25	40, 63, 120, 160, 250
65	2.5	7 – 70 m ³ /h	4 to 70	Flanged: 25	40, 63, 120, 160, 250
80	3	10 – 100 m ³ /h	5 to 100	Flanged: 25	40, 63, 120, 160, 250
100	4	20 – 200 m ³ /h	10 to 200	Flanged: 16	40, 63, 120, 160, 250
125	5	25 – 250 m ³ /h	13 to 250	Flanged: 16	25, 40, 63, 120, 160
150	6	30 – 300 m ³ /h	15 to 300	Flanged: 16	25, 40, 63, 120, 160
200	8	80 – 800 m ³ /h	40 to 800	Flanged: 16	25, 40, 63, 120, 160

MODEL AND SELECTION

Blind Turbine Flow Meter with Sensor/Transmitter

Model:

- BLFT-NC** : Coil Signal Output (Self Powered)
- BLFT-N** : Amplified Pulse :: 12 to 24V DC Power Supply
- BLFT-A** : 2-wire 4- 20 mA Output :: 24V DC Power Supply



Tri-clamp model



BLFT-N



-A Blind Model with 4-20mA

Turbine Flow Meter with Digital Display

Model:

- BLFT-B** : Rate / Totaliser (3 yr Batt, Basic Model)
 - BLFT-B12** : Rate / Totaliser (5 yr Batt, Basic Model) ATEX, UL, CSA
 - BLFT-C110** : Rate / Totaliser +Pulse & 4-20mA output) ATEX
 - BLFT-C112** : Rate / Totaliser with linearization* +Pulse & 4-20mA output) ATEX
- (*Linearisation table inside contains calibration info to enhance accuracy and linearity)



BLFT-B



BLFT-B12 / C110 / C112



◇ Displays may be remote

Display types B12 / C110 / C112 are available optionally with EEX ia approval



MODEL SELECTION

Table 2

Model Suffix Code								Description (SFR: Standard Flow Range)
BLFT-	□	/□	/□	/□	/□	/□	/□	
Nominal Diameter (mm)	4							4mm; SFR: 0.66 – 4.16 L/min
	6							6mm; SFR: 1.66 – 10 L/min
	10							10mm; SFR: 3.33 – 20 L/min
	15							15mm; SFR: 10 – 100 L/min
	20							20mm; SFR: 13.3 – 133.3 L/min
	25							25mm; SFR: 16.6 – 166.6 L/min
	32							32mm; SFR: 25 – 250 L/min
	40							40mm; SFR: 33.3 – 333.3 L/min
	50							50mm; SFR: 66.6 – 666.6 L/min
	65							65mm; SFR: 7 to 70 m ³ /h
	80							80mm; SFR: 10 to 100 m ³ /h
	100							100mm; SFR: 20 to 200 m ³ /h
	125							125mm; SFR: 25 to 250 m ³ /h
	150							150mm; SFR: 30 to 300 m ³ /h
	200							200mm; SFR: 80 to 800 m ³ /h
Type	NC							Basic Type: Coil Pick-up Signal
	N							N= Amplified Pulse 12-24V DC
	A							4 to 20 mA current output
	B							LCD Display Rate / Total + Reset (B12, B12X options)
	C							LCD Display: 4 to 20 mA / Pulse (C110, C110X, C112, C112X options)
	C1							LCD Display with RS485
Accuracy			10					±1.0% of reading
			05					±0.5% of reading
Measuring Range				S				Standard: Refer to table 1
				E				Extended: Refer to table 1
Body Material					S			304 Stainless Steel
					L			316 (L) Stainless Steel
Explosion Rating								Blank: Not Explosion Proof
						E		Explosion Proof: Exd
Pressure Rating							N	Standard: Refer to table 1
							H(x)	Customized: Refer to table 1

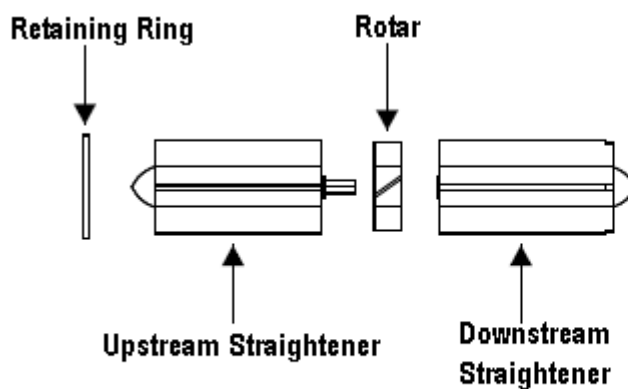
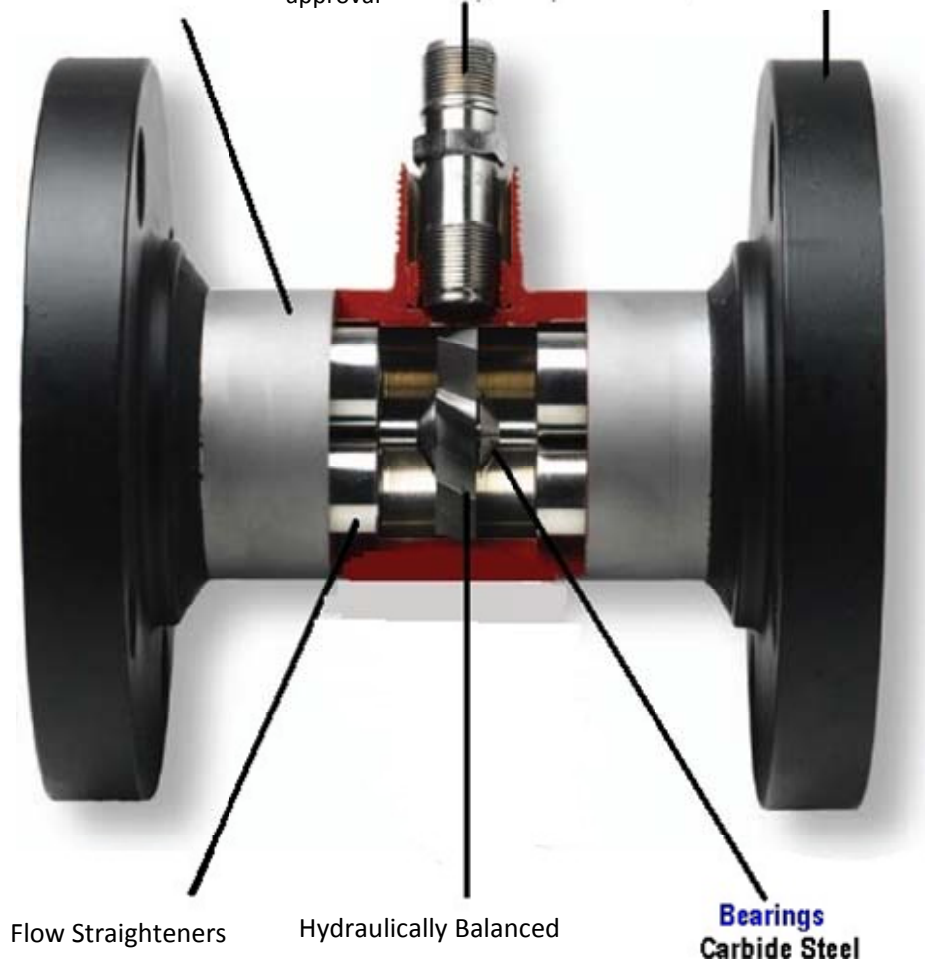
METER CONSTRUCTION

Materials of Housing Stainless Steel 304
(See options for alternative grades)

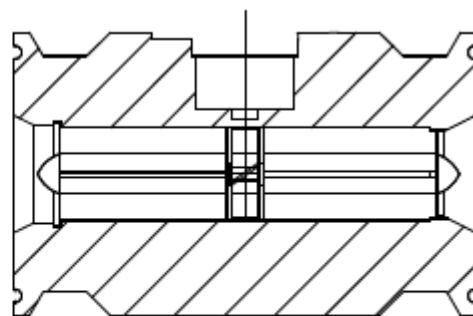
Magnetic Pickup.

For hazardous areas, pickup
coils supplied with ATEX, UL
approval

Flanges: Carbon Steel
(Others available on request)



Exploded View of Internals



Assembled Internals