

# Turbine Flowmeter Selection Guide



Model No.	FTB370	FTB4600	FTB700	FTB-900/950	FTB-100	FTB-1300	FTB-1400
<b>Flowmeter Type</b>	Turbine	Turbine	Turbine	Turbine	Turbine	Turbine	Turbine
<b>Standard Calibration</b>	Water	Water	Water	Water	Water	Liquid	Liquid
<b>Accuracy</b>	3% of Reading	10% of Reading	1% of Full Scale	0.5% of Reading	1/2% of Reading	1% of Reading	1% of Reading
<b>Repeatability (Full Scale)</b>	0.5% of Reading	—	—	0.1% of Reading	0.1% of Reading	—	0.1%
<b>Minimum Flowrate (GPM)</b>	0.5	0.15	2	0.5	0.35	0.08	0.6
<b>Maximum Flowrate (GPM)</b>	110	20	3000	650	650	12,000	10,800
<b>Maximum Pressure (psig)</b>	145	150	200	5000	5000	5000	5000
<b>Maximum Temp °C (°F)</b>	85 (185)	88 (190)	93 (200)	232 (450)	232 (450)	85 (185)	177 (350)
<b>Minimum Temp °C (°F)</b>	0 (32)	0 (32)	0 (32)	-268 (-450)	-268 (-450)	-40 (-40)	-101 (-150)
<b>Standard Output</b>	Hall Effect	Frequency Squarewave	Frequency Squarewave	Frequency Sinewave	Frequency Sinewave	Frequency Squarewave	Frequency Signwave
<b>Optional Outputs with Integral Signal Conditioner</b>	—	—	4 to 20 mA	4 to 20 mA, 0 to 5 V, 0 to 10 V	4 to 20 mA, 0 to 5 V, 0 to 10 V Squarewave	4 to 20 mA	Frequency Squarewave
<b>Required Power</b>	5 to 24 Vdc	6 to 16 Vdc	11 to 24 Vdc power	Self powered, 12 to 28 Vdc power with signal conditioner	Self powered, DC or AC power with signal conditioner	10 to 28 Vdc	12 to 24 Vdc
<b>Connection</b>	3/4, 1, 1 1/2 NPT	1/2, 3/4 NPT	Flange 2 to 8"	1/2, 3/4, 1, 1 1/2, 2, 2 1/2, 3 NPT or Flare	1/2, 3/4, 1, 1 1/2, 2, 2 1/2, 3 NPT	1/2, 1, 1 1/2, 2 NPT	1/2, 1, 1 1/2, 2 NPT
<b>Calibration Certificates</b>	CAL-2 (no points)	CAL-2 (no points)	CAL-2 (no points)	NIST Included	NIST Included	CAL-2 (no points)	CAL-2 (no points)
<b>Materials of Construction</b>	Brass body (see full specs for other wetted parts)	Brass body, stainless steel, polyimide (fiberglass), polypropylene, EPDM O-ring	Meter Body: PVC, carbon steel or 304SS (see full specs for other wetted parts)	Body: 304SS Rotor: 17-4 pHSS Bearings: 440C SS	Body: 304SS Rotor: 17-4 pHSS Bearings: 440C SS	Body: 316L, 303 and 1.4122 SS and carbide with nickel binder	316 SS (see full specs for other wetted parts)
<b>Integral Display Avail.</b>			✓				
<b>Popular Compatible Meters (See M Section)</b>	DPF700	DPF700, DPF75	DPF700, DPF75, DPF60	DPF700, DPF75, DPF60	DPF700, DPF75, DPF60	DPF701	DPF701
<b>Additional Features</b>	Wide turn down ratio	Long Life	High flow	High accuracy/ High pressure	High accuracy/ High pressure	Economical, High flow	Economical

Standard requirements for turbine and paddlewheel sensors: A minimum of 10 pipe diameters upstream and 5 downstream, full pipe, clean liquid, flow horizontal or flowing up. Positive displacement meters do not require straight pipe diameters upstream.



Model No.	FTB-400A	FTB-1200	FTB-970A	FTB-201	FTB4700/4800	FPR300	FPR200
<b>Flowmeter Type</b>	Turbine	Turbine	Turbine	Turbine	Turbine	Tangential Turbine	Tangential Turbine
<b>Standard Calibration</b>	Water	Water	Water	Water	Water	Water	Water
<b>Accuracy</b>	0.5% of Reading	1% of Reading	0.5% of Reading	0.5% of Reading	1% of Full Scale	1% of Full Scale	2% of Full Scale
<b>Repeatability (Full Scale)</b>	0.1% of Reading	0.1% of Reading	0.1% of Reading	—	—	—	0.5% of Full Scale
<b>Minimum Flowrate (GPM)</b>	0.35	0.35	0.5	0.35	0.2	0.07	5
<b>Maximum Flowrate (GPM)</b>	650	485	650	225	25	40	50
<b>Maximum Pressure (psig)</b>	1500	150	1500	5000	500	150	500
<b>Maximum Temp °C (°F)</b>	232 (450)	21 (70)	232 (450)	232 (450)	93 (200)	70 (160)	42 (225)
<b>Minimum Temp °C (°F)</b>	-268 (-450)	21 (70)	-73 (-100)	-268 (-450)	0 (32)	0 (32)	-7 (20)
<b>Standard Output</b>	Frequency Sinewave	Frequency Sinewave	Frequency Sinewave	Frequency Squarewave	Frequency Squarewave	Frequency Squarewave	Frequency Squarewave or 4 to 20 mA
<b>Optional Outputs with Integral Signal Conditioner</b>	—	—	4 to 20 mA, 0 to 5 V, 0 to 10 V	4 to 20 mA, 0 to 5 V, 0 to 10 V	—	—	—
<b>Required Power</b>	Self Powered	—	Self powered, 12 to 28 Vdc power with signal conditioner	Self powered, 12 to 28 Vdc power with signal conditioner	5 to 30 Vdc/ or 6 to 24 Vdc	6 to 24 Vdc	12 to 35 Vdc
<b>Connection</b>	Tri-Clamp Sanitary	Flange to 3	Tri-Clamp Sanitary	37 Flare, Fitting	1/2, 3/4, 1 NPT	3/8, 1/2, 3/4, 1 NPT	1/2, 3/4, 1 NPT
<b>Calibration Certificates</b>	NIST Included	NIST Included	NIST Included	NIST Included	CAL-2 (no points)	—	CAL-2 (no points)
<b>Materials of Construction</b>	Body: 304SS Rotor: 14-4 pHSS Bearings: Hard Carbon Composite	Bearings: PTFE Sleeve: PTFE	Body: 304SS Rotor: 17-4 pHSS Bearings: 440C SS	Body 304SS Rotor: 17-4 pHSS Bearings: 440C SS	Nickel plated brass model or 316SS Model	Polypropylene TFE, Acrylic, PVDF, Nickel, Tungsten, Zirconia, Ceramic	Casing: Stainless steel Cover: Stainless steel or clear polycarbonate  Seal: Buna-N EPR or FKM (optional) Turbine: Acetal copolymer Bearing: Igilde 250 Shaft: Stainless steel
<b>Integral Display Avail.</b>	—	—	—	—	—	—	—
<b>Popular Compatible Meters (See M Section)</b>	DPF700, DPF75	DPF700, DPF75	DPF700, DPF75, DPF60	DPF700, DPF75, DPF60	DPF701, DPF75	DPF701, DPF75	DPF700, DPF75, DPF60
<b>Additional Features</b>	3-A Sanitary	Corrosive resistant	CIP	High accuracy/ High pressure	Compact/ Economical	Corrosive Liquids	Visual Indication

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