Paddlewheel Selection Guide






Model No.	FP7001A	FP-5300/5100	FP-5600	FP2000	FP7002	FPB100
Flowmeter Type	Paddlewheel	Paddlewheel	Paddlewheel	Paddlewheel	Paddlewheel	Paddlewheel
Standard Calibration	Water	Water	Water	Water	Water	Water
Accuracy	2% of Full Scale	1% of Full Scale	1% of Full Scale	2% of Full Scale	2% of Full Scale	1% of Full Scale
Repeatability (Full Scale)	1% of Full Scale	—	—	—	1% of Full Scale	0.5% of Full Scale
Minimum Flowrate (GPM)	2	1 FPS	0.3 FPS	0.4	2	0.3 FPS
Maximum Flowrate (GPM)	460	20 FPS	20 FPS	200	460	20 FPS
Maximum Pressure (psig)	150	200	200	300	150	200
Maximum Temperature °C (°F)	60 (140)	90 (194)	85 (185)	93 (200)	60 (140)	85 (185)
Minimum Temperature °C (°F)	0 (32)	0 (32)	0 (32)	0 (32)	0 (32)	0 (32)
Standard Output	Frequency Squarewave	Frequency Sinewave	Frequency Squarewave	—	4 to 20 mA	4 to 20 mA or Frequency
Optional Outputs with Integral Signal Conditioner	10 mV/°C	4 to 20 mA	4 to 20 mA	—	—	—
Required Power	5 to 18 Vdc	Self powered, 12 to 24 Vdc power with signal conditioner	Self powered, 12 to 24 Vdc power with signal conditioner	2 “AAA” batteries (included)	12 to 18 Vdc	12 to 32 Vdc
Connection	½, ¾, 1, 1¼, 1½, 2, 2½, 3 NPT or PVC Fittings	½, ¾, 1, 1¼, 1½, 2, 2½, 3, 4, 5, 6, 8, 10, 12" Metal or Plastic Fittings	½, ¾, 1, 1¼, 1½, 2, 2½, 3, 4, 5, 6, 8, 10, 12" Metal or Plastic Fittings	⅜, ½, ¾ 1, 1½, 2 NPT	¾, 1, 1¼ 1½, 2, 2½, 3 NPT or PVC Fittings	½, ¾, 1, 1¼, 1½, 2, 2½, 3, 4, 5, 6, 8, 10, 12" Metal or Plastic Fittings
Calibration Certificates	CAL-2 (no points)	CAL-2 (no points)	CAL-2 (no points)	CAL-2 (no points)	CAL-2 (no points)	CAL-2 (no points)
Materials of Construction	Polypropylene body, PVDF paddle, FKM O-ring, 316SS shaft. Galvanized iron tee includes brass insert and locking nut. PVC tee has PVC insert and locking nut.	Transducer Housing: glass-filled polypropylene O-Rings: FKM Shaft: Titanium (PVDF opt.) Rotor: PVDF	Transducer Housing: glass-filled polypropylene O-Rings: FKM Shaft: Titanium (PVDF opt.) Rotor: PVDF	Polypropylene or PVDF housing, FKM O-Rings	Polypropylene body, PVDF paddle, FKM O-Ring, galvanized iron tee includes brass insert and locking PVC tee has PVC insert and locking nut.	Polypropylene or PVDF body, FKM O-Rings, rotor pin and rotor Polypropylene and PVDF nut. PVC tee has PVC insert and locking nut.
Integral Display Available	—	✓	✓	✓	—	—
Popular Compatible Meters (See M Section)	DPF700, DPF75	DPF700, DPF75, FP90	DPF700, DPF75,	—	DPi8, DPF66,	DPF66, DPF700,
Additional Features	Economical	Integral transmitter optional	Low flow/integral transmitter optional	Rate, total or rate and total models	Temperature measurement	Pulse divider output

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.	FP-2541	FP-6000	FP90	FP-5200	FP6500	FPM-5500	FPM-9020A
Flowmeter Type	Paddlewheel	Paddlewheel	Paddlewheel Transmitter	Paddlewheel	Paddlewheel	Flow Indicator and Totalizer	Batch Controller
Standard Calibration	Water	Water	Water	Water	Water	—	—
Accuracy	1% of FS	1% of FS	0.5% of Rdg	1% of Full Scale	1.5%	0.5% of Rdg	0.5% of Rdg
Repeatability (Full Scale)	0.5% of FS	—	Compatible Sensors: FP5300, FP6000 FP5600, FP8501, FP5200	—	—	Compatible Sensors: FP5300, FP6000 FP5600, FP8501, FP5200	Compatible Sensors: FP5300, FP6000 FP5600, FP8501, FP5200
Minimum Flowrate (GPM)	0.3 FPS	1.6 FPS		1.5 FPS	0.3 FPS		
Maximum Flowrate (GPH)	20 FPS	20 FPS		20 FPS	30 FPS		
Maximum Pressure (psig)	250	225		1500	200		
Maximum Temp °C (°F)	82 (180)	100 (212)		150 (300)	93 (200)		
Minimum Temp °C (°F)	0 (32)	0 (32)		0 (32)	0 (32)		
Standard Output	Frequency Squarewave	Frequency Sinewave	4 to 20 mA SPDT Relays	Frequency Sinewave	Frequency Squarewave	4 to 20 mA, Relays	4 to 20 mA
Optional Outputs with Integral Signal Conditioner	—	—	—	4 to 20 mA	—	—	—
Required Power	5 to 24 Vdc	—	12 to 24 Vdc	Self Powered, 12 to 24 Vdc Power with Signal Conditioner	5 to 24 Vdc	12 to 24 Vdc/Vac	12 to 24 Vdc/Vac
Connection	1½" NPT for Pipes 1½ to 36"	1½ NPT for Pipes 1½ to 36"	½, ¾, 1, 1¼, 1½, 2, 2½, 3, 4, 5, 6, 8, 10, 12" Metal or Plastic Fittings	½, ¾, 1, 1¼, 1½, 2, 2½, 3, 4, 5, 6, 8, 10 12" Metal	1½, 2 NPT for Pipes 1½ to 48"	—	—
Calibration Certificates	CAL-2 (no points)	CAL-2 (no points)	CAL-2 (no points)	CAL-2 (no points)	CAL-2 (no points)	CAL-1 (no points)	CAL-1 (no points)
Materials of Construction	Sensor Fitting: 316SS O-rings: FKM (EPR optional) Rotor: CD4MCu Rotor Bearings: PEEK™	Rotor: CD4MCu SS; Rotor Shaft: Tungsten Carbide Steel; Transducer Body: C 36000 Brass; Bearing: Carbon/graphite filled fluoroplastic (Fluoroloy B); Fitting Housing & Cover: Brass; Seal: FKM O-Ring	Enclosure Rating: NEMA 4X (IP65) front Case: PBT Window: Polyurethane coated polycarbonate Keypad: Sealed 4-key silicone rubber	Rotor: CD4MCU SS; Rotor Housing: 316SS; Rotor Shaft: 316SS; Transducer Body: 347SS; Top Flange: 316SS; Cap: 316SS; Rotor Bearing: Fluoroloy B (PTFE-based fluoroplastic)	Probe Body: Brass or Type 316SS or PVC; Rotor: Polypropylene; Shaft: Tungsten Carbide; Bearings: Ruby ring, ruby end stone, set in PVDF bearing holder	Enclosure Rating: NEMA 4X (IP65) front Case: ABS plastic Keypad: 4-key Silicone Rubber Window: Hard-Coated Polycarbonate	Enclosure Rating: NEMA 4X (IP65) front Case: ABS plastic Keypad: 4-key Silicone Rubber Window: Hard-Coated Polycarbonate
Integral Display Avail.	—	—	✓	—	—	✓	✓
Popular Compatible Meters (See M Section)	DPF700, DPF75	DPF700, DPF75, FP90	DPF60, DP25B-E	DPF700, DPF75, FP90	DPF700, DPF75	—	—
Additional Features	Insertion Style/Hot Tap	Insertion Style/Hot Tap	Totalizer and Rate Measurement	High pressure/ temperature	Insertion style	2 SPDT relays	2 SPDT relays

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.