

Model Specification: FB2200 Flow Computers

Model & Seg	Description	Approval	Selection
Flow Computer			
00	FB2200 Flow Computer		FB2200
Hazardous Area Approvals			
10	Class 1 Div2 cUL _{US}		A4
	IEC Ex N		A5
	ATEX Ex N		A6
Metrology Approvals			
20	Not required		B0
Housing Options			
30	Powder-coated aluminum enclosure (for use with options J0 and J1)	A4, A5, A6	C5
	Powder-coated aluminum enclosure (for use with option J3)	Pending	C6
	Fiberglass enclosure (for use with options J0 and J1)	A4, A5, A6	C7
	Fiberglass enclosure (for use with option J3)	Pending	C8
Power Options			
40	DC supply (no internal battery, no solar regulator)	A4, A5, A6	D2
	Solar-ready: supplied with internal Power-Sonic® 12V 10.5 Ah battery, fuses, and 10 feet of cable (solar panel and solar regulator by others) Note: Available only with Hazardous Approval option A4.	A4	D4
	Solar-ready: supplied with internal Power-Sonic® 12V 10.5 Ah battery, fuses, internal SunSaver™ 6 solar regulator, and 10 feet of cable (solar panel by others) Note: Available only with Hazardous Approval option A4.	Pending	D8
Local Operator Interface Display			
50	Not required	A4, A5, A6	E0
	Display included	A4, A5, A6	E1
Measurement Type/Pressure Sensor			
60	Not Required; external transmitters being used	A4, A5, A6	F0
	Integral Multivariable; DP & Static P	A4, A5, A6	F1
	Integral Static Pressure Only; Inline (no DP)	A4, A5, A6	F2
Multivariable Sensor (includes Differential P, Static P, and Material/Flange Selections)			
Differential Pressure Range & Accuracy			
71	25 Inches H ₂ O (62.3 mbar) DP, 0.1% Accuracy Notes: <ul style="list-style-type: none"> ▪ 25" DP option is only available with static pressure options G4 or A4 and the maximum pressure is limited to 2000 psi. ▪ Available only with stainless steel sensor and coplanar flange. 	A4, A5, A6	B221
	250 Inches H ₂ O (623 mbar) DP, 0.1% Accuracy Note: 0.1% Accuracy is not available on traditional flange.	A4, A5, A6	B222
	250 Inches H ₂ O (623 mbar) DP, 0.075% Accuracy	A4, A5, A6	B122
	1000 Inches H ₂ O (2.5 bar) DP, 0.1% Accuracy Notes: <ul style="list-style-type: none"> ▪ 1000" DP range with 0.1% accuracy only available with stainless steel sensor and coplanar flange. ▪ 1000" DP range is not available with 300 psi static pressure. 	A4, A5, A6	B223
	1000 Inches H ₂ O (2.5 bar) DP, 0.075% Accuracy Note: 1000" DP range is not available with 300 psi static pressure.	A4, A5, A6	B123
	No Differential Pressure required, static pressure only accuracy 0.1% Note: Available only with inline sensor option (2K11).	A4, A5, A6	B2
	No Differential Pressure required, static pressure only accuracy 0.075% Note: Available only with inline sensor option (2K11).	A4, A5, A6	B1

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	No Differential Pressure required, no static pressure Note: Available only with option F0.	A4, A5, A6	NN	
Static Pressure Range (for use with multivariable sensor B22n or B12n above)				
72	MV 300 psi gauge (20.7 barg) Note: 1000" DP range is not available with 300 psi static pressure.	A4, A5, A6	G6	
	MV 300 psi absolute (20.7 bara) Note: 1000" DP range is not available with 300 psi static pressure.	A4, A5, A6	A6	
	MV 1500 psi gauge (103.4 barg)	A4, A5, A6	G7	
	MV 1500 psi absolute (103.4 bara)	A4, A5, A6	A7	
	MV 3600 psi gauge (250 barg) Note: When used with 25" DP option, maximum working pressure is 2000 psi/137.9 bar	A4, A5, A6	G4	
	MV 3600 psi absolute (250 bara) Note: When used with 25" DP option, maximum working pressure is 2000 psi/137.9 bar	A4, A5, A6	A4	
	Static Pressure Range (for use with Static P sensor only, B1 or B2 above)			
	SP 150 psi gauge (10.34 barg)	A4, A5, A6	G2	
	SP 150 psi absolute (10.34 bara)	A4, A5, A6	A2	
	SP 800 psi gauge (55.15 barg)	A4, A5, A6	G3	
	SP 800 psi absolute (55.15 bara)	A4, A5, A6	A3	
	SP 4000 psi gauge (275.79 barg)	A4, A5, A6	G4	
	SP 4000 psi absolute (275.79 bara)	A4, A5, A6	A4	
	No differential pressure or static pressure sensor required Note: Available only with F0.	A4, A5, A6	NN	
Sensor Material and Flange Type				
73	Stainless steel sensor and coplanar flange	A4, A5, A6	2E12	
	Hastelloy [®] diaphragm and Hastelloy coplanar flange Note: Not available with a 1000" 0.1% accuracy sensor or a 25" sensor	A4, A5, A6	3E13	
	Stainless steel sensor and traditional flange Note: 0.1% Accuracy is not available on traditional flange.	A4, A5, A6	2F12	
	Stainless steel inline connection 1/2" 14 NPT Female-(for use with option B1 or B2 above)	A4, A5, A6	2K11	
	No differential pressure or static pressure sensor required Note: Available only with F0.	A4, A5, A6	NN	
Sensor Material Certificates				
74	Not required	A4, A5, A6	Q0	
	3.1 B Traceability certs to EN 10205	A4, A5, A6	Q8	
	NACE MRO 175/ISO 15156; requires Hastelloy diaphragm option Note: Available only with 3E13.	A4, A5, A6	Q15	
	NACE MRO 103; requires Hastelloy diaphragm option Note: Available only with 3E13.	A4, A5, A6	Q25	
Base Inputs & Outputs				
80	PRT/RTD input (2-, 3-, or 4-wire) of 2 AI/AO & 2 DI/DO/PI	A4, A5, A6	G2	
Additional I/O				
90	Not required	A4, A5, A6	H0	
	Addition of 8-channel I/O (4 AI/AO, 4 DI/DO/PI), isolated from CPU	A4, A5, A6	H2	
	Addition of 14-channel I/O (6 AI/AO, 8 DI/DO/PI), isolated from CPU	A4, A5, A6	H3	

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Mobile SCADA™ (Wi-Fi®)			
100	Not required	A4, A5, A6	J0
	Mobile SCADA via Wi-Fi with internal antenna mounted inside enclosure	A4, A5, A6	J1
	Mobile SCADA via Wi-Fi with local antenna mounted on top of enclosure	Pending	J3
Radio Ready			
110	Not required	A4, A5, A6	K0
	Radio Mounting Bracket (no cables)	A4, A5, A6	K9
Integral Relay			
120	Not required	A4, A5, A6	L0
	Two internal relays mounted in enclosure (30 Vdc at 6.0A)	Pending	L2
Sensor Calibration Certificates			
130	Not required	A4, A5, A6	M0
	Pressure/MVS (DP &/or Static P) Sensor & PRT/RTD input calibration certificate	A4, A5, A6	M1
	Pressure/MVS (DP &/or Static P) Sensor & PRT/RTD input Analog I/O calibration certificate	A4, A5, A6	M2
	Analog I/O & PRT/RTD input calibration certificate Note: Available only with option F0	A4, A5, A6	M3
Security Intrusion Switch			
140	Not required	A4, A5, A6	N0
	Intrusion Switch on Door Entry Note: Intrusion switch functionality currently requires additional I/O option H2 or H3 to implement.	A4, A5, A6	N1
Local Serial Port (mounted on bottom of chassis)			
150	Not required	A4, A5, A6	P0
	Serial Port socket: compatible with ROC/FloBoss cable; cable (part no. W20008X0012) sold separately.	A4, A5, A6	P1
	Serial Port socket: compatible with ABB cable (cable not included)	A4, A5, A6	P2
Mounting Bracket			
160	Panel mount kit	A4, A5, A6	R0
	2" Pipe-mounting kit (stainless steel) for aluminum housing C5/C6 only)	A4, A5, A6	R5
	2" Pipe-mounting kit (stainless steel) for fiberglass housing C7/C8 only)	A4, A5, A6	R6
Meter Runs (Streams)			
170	Single Stream	A4, A5, A6	S1
	Dual Stream	A4, A5, A6	S2
Fluid Types & Calculations			
180	Natural Gas	A4, A5, A6	T1
Control, Additional Programming, and Customization			
190	Not required	A4, A5, A6	U0
	PID Control and Simple Logic Blocks	A4, A5, A6	U1
Reserved			
200	Not required		V0
Ethernet Port			
210	Not required	A4, A5, A6	W0
	Enabled	A4, A5, A6	W1

Sensor Summary for FB1000 and FB2000 Series Flow Computers

The following table identifies the available possible sensor combinations for the FB1000 and FB2000 Series Flow Computers.

DP	Accuracy	SP	Coplanar Flange Stainless Steel		Coplanar Flange Hastelloy		Traditional Flange Stainless Steel	
			Gauge	Absolute	Gauge	Absolute	Gauge	Absolute
25"	0.1%	2000 psi	Available ¹	Available ¹	N/A	N/A	N/A	N/A
250"	0.1%	300 psi	Available	Available	Available	Available	N/A	N/A
		1500 psi	Available	Available	Available	Available	N/A	N/A
		3626 psi	Available	Available	Available	Available	N/A	N/A
250"	0.075%	300 psi	Available	Available	Available	Available	Available	Available
		1500 psi	Available	Available	Available	Available	Available	Available
		3626 psi	Available	Available	Available	Available	Available	Available
1000"	0.1%	1500 psi	Available	Available	N/A	N/A	N/A	N/A
		3626 psi	Available	Available	N/A	N/A	N/A	N/A
1000"	0.075%	1500 psi	Available	Available	Available	Available	Available	Available
		3626 psi	Available	Available	Available	Available	Available	Available

Range	Accuracy	Coplanar Flange Inline Stainless Steel	
		Gauge	Absolute
150 psi	0.1%	Available	Available
800 psi	0.1%	Available	Available
4000 psi	0.1%	Available	Available
150 psi	0.075%	Available	Available
800 psi	0.075%	Available	Available
4000 psi	0.075%	Available	Available

Notes

1. Static pressure of 25" sensor is 2000 psi maximum.

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For customer service and technical support, visit www.EmersonProcess.com/Remote/Support.

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