

## Pneumatic Drive Bellows Pump



Iwaki America's FF Series pumps are economical solutions for low to medium temperature liquid applications (5 to 100°C). PTFE bellows and liquid end share the same proven design and manufacturing quality as the rest of the F Series family, ensuring high purity and long service life. All metal parts are fully encapsulated. The FF-10/20CT1 has a PVC housing coated with fluoroplastic, suitable for liquids up to 50°C; a fluoroplastic encapsulated housing allows the FF-10/20BT1 to pump fluids up to 100°C. Integral PFA tube connections mean there are no crevices or seams where particles can accumulate. A wide variety of fittings can be easily attached.

Intelligent sensor technology is a standard FF series feature: pressure, stroke and speed are optimized, maintaining accurate chemical delivery and extending pump life. Leak detection ensures immediate response to hazards.

\*NPT conversion fittings are available

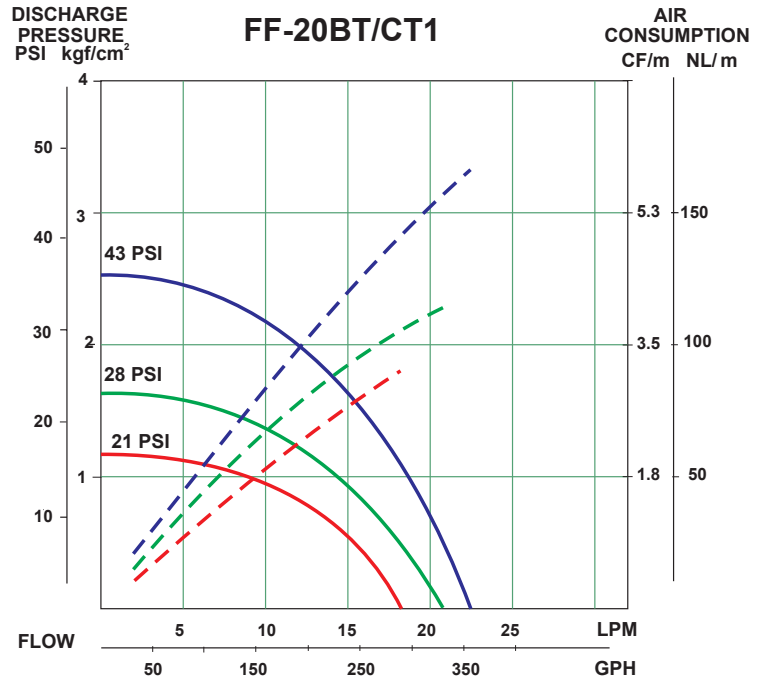
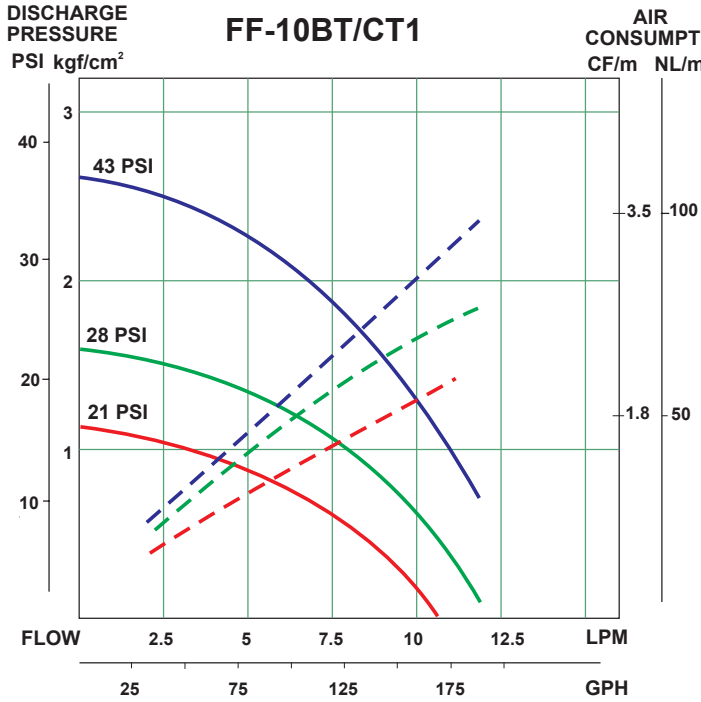
Model	FF-10BT1	FF-10CT1	FF-20BT1	FF-20CT1
Maximum discharge capacity <sup>1</sup>	2.6 gal/min (10 L/min)		5.8 gal/min(22 L/min)	
Maximum stroke speed	120 spm			
Maximum stroke length	0.7 in (18 mm)		0.9 in (24 mm)	
Self-priming ability <sup>2</sup>	3.28 ft. (1 m)		6.56 ft. (2 m)	
Liquid temperature range	41-212°F (5-100°C)	41-122°F (5-50°C)	41-212°F (5-100°C)	41-122°F (5-50°C)
Ambient temperature	32 - 104°F (0 - 40°C)			
Maximum air supply pressure	43 PSI (3 kg/cm <sup>2</sup> )			
Liquid contacting material	PFA / PTFE			
Maximum air consumption	3.2 CFM (90 NL/min)		6.4 CFM (180 NL/min)	
Pump connection size	PFA 1/2" tubing		PFA 3/4" tubing	
Supply air connection size*	PT 1/4"			

<sup>1</sup> The maximum discharge volume is based on pure water at room temperature.

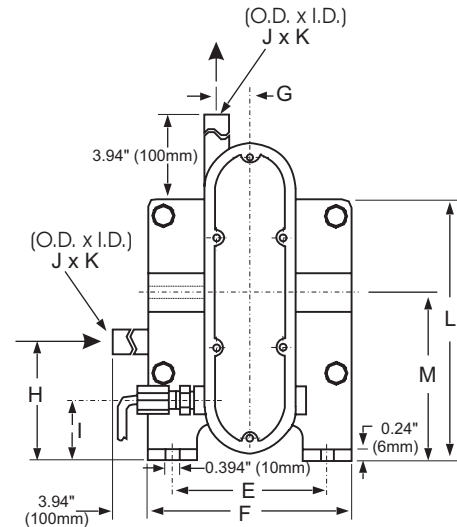
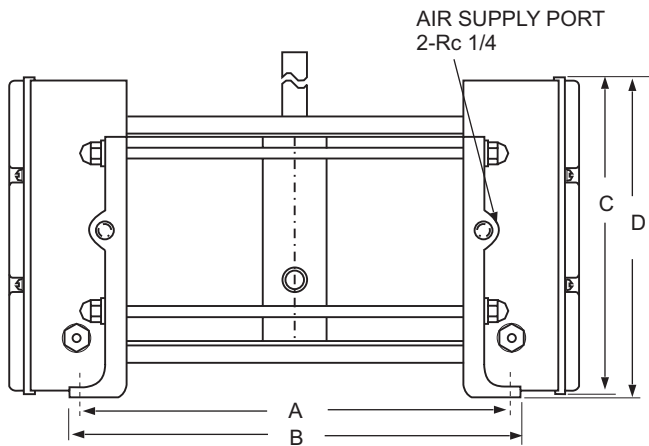
<sup>2</sup> The self-priming value is based on the maximum stroke rate with pure water at room temperature.



## Performance Curves



## Dimensions in inches (mm)



Model	A	B	C	D	E	F	G	H	I	J x K	L	M
FF-10BT/CT1	10.47 (266)	14.21 (361)	7.40 (188)	7.52 (191)	3.31 (84)	4.49 (114)	0.57 (14.5)	3.23 (82)	1.26 (32)	1/2" TUBING ( $\varnothing$ 12.7 x $\varnothing$ 9.5)	6.06 (154)	3.82 (97)
FF-20BT/CT1	11.34 (288)	15.75 (400)	8.58 (218)	8.70 (221)	4.13 (105)	5.51 (140)	0.79 (20)	3.58 (91)	1.38 (35)	3/4" TUBING ( $\varnothing$ 19.0 x $\varnothing$ 15.8)	7.17 (182)	4.41 (112)

Dimensions subject to change without notice. Consult your local distributor for current information.