

# Standard Product Capabilities

Pump solutions from a World Leader



## FS Series

### All-temperature rated, air-driven bellows pump

Iwaki America's FS is a compact, all-temperature rated, low-cost, air-driven, bellows pump series designed for the semiconductor industry, chemical delivery or recirculation. This pump handles high temperature nitride etch and piranha etch applications with ease. FS features intelligent drive technology and leak sensing, with a significant cost savings over previous models, and a 2-year warranty.

Iwaki America's FS is rated for liquid temperatures ranging from 5° to 180°C with discharge pressures up to 73 psi, making it the perfect pump for wet process tools, cleaning and chemical feed applications. Utilizing stroke rates up to 240 spm, FS is able to produce up to 50% higher flow rates in a significantly smaller space.

FS has a contamination-free design; all liquid contact parts are made of PTFE/PFA. The anti-torsion air chamber design eliminates the need for retorquing connecting rods.

The intelligent sensor drive system of Iwaki America's FS design uses proximity switches and an external solenoid valve allowing the pump operation to be easily controlled and monitored.

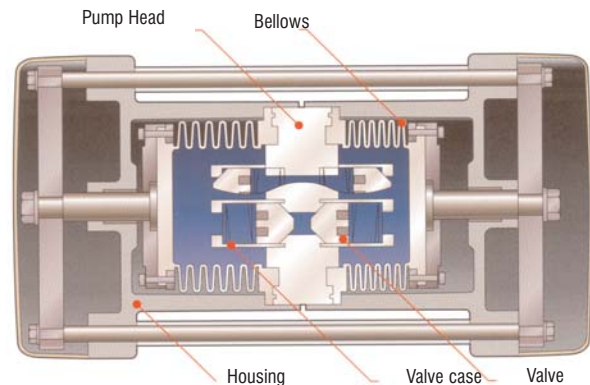
*Think twice. Spec once.*



3 SIZES TO 55 LPM / HIGH and LOW TEMPERATURE RATED

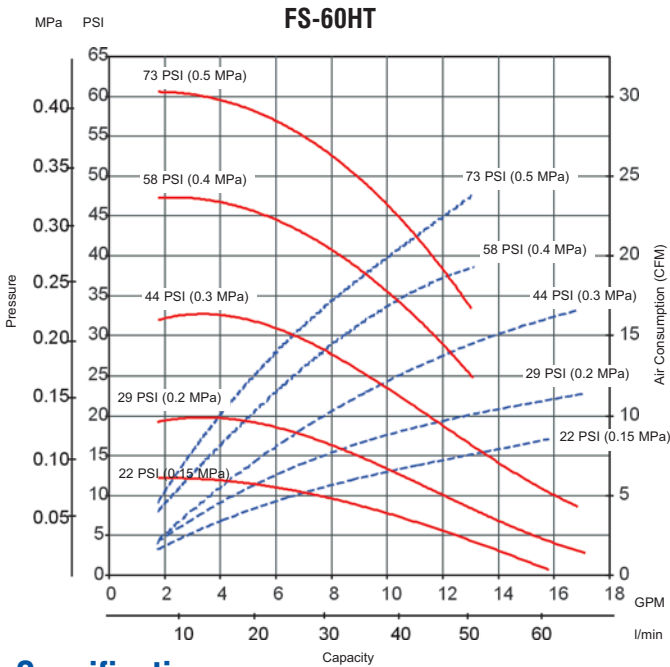
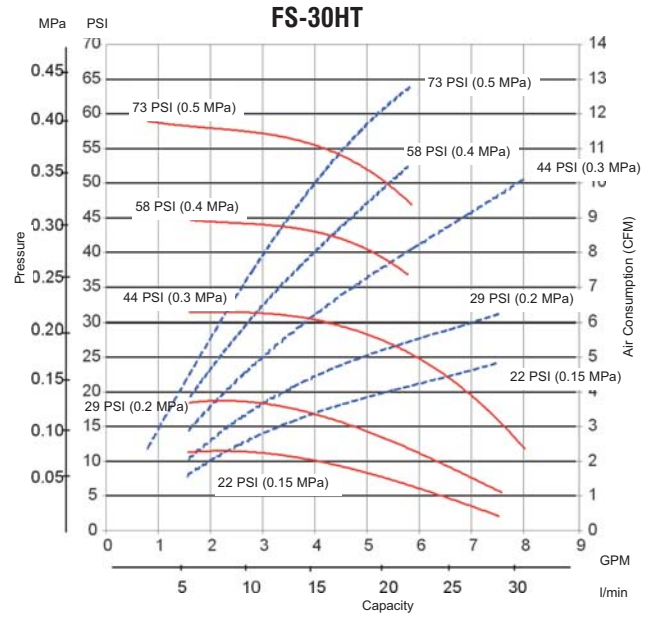
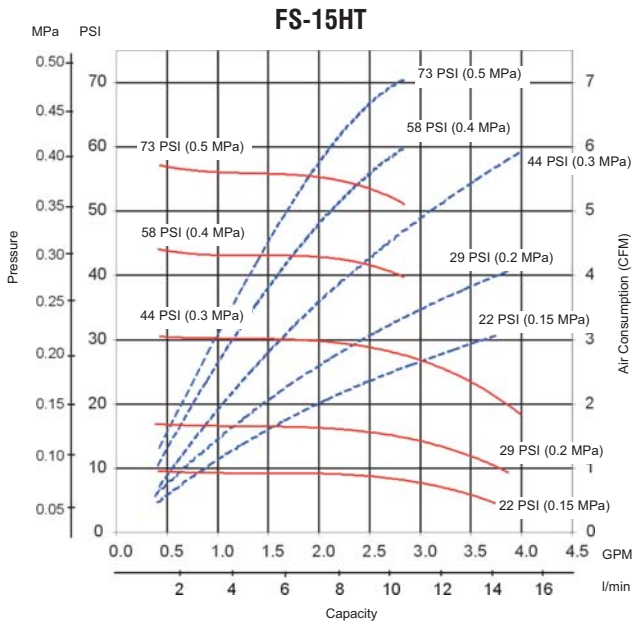
#### Wet End Materials

Pump head	PTFE (PFA tube)
Valve	PFA
Valve case	PFA
Housing	Al + PTFE coating
Bellows	PTFE



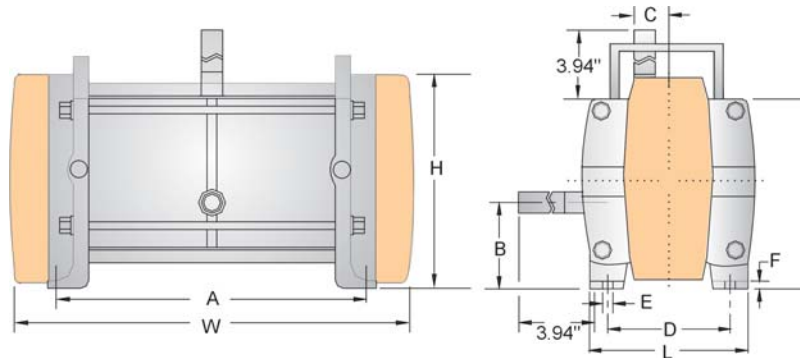
PROVEN  
RELIABILITY.  
ADVANCED  
TECHNOLOGY.





**Dimensions in inches**

FS Model	W	L	H	A	B	C	D	E	F	G
15HT1/2	12.4	4.7	6.5	8.4	3.0	.61	3.8	.39	.31	5.7
30HT1/2	15.4	5.9	8.2	10.7	3.7	.91	4.5	.39	.35	7.1
60HT1/2	17.4	7.6	9.9	12.5	4.2	1.1	6.0	.47	.43	8.8



**Specifications**

Model	FS-15HT1/T2			FS-30HT1/T2			FS-60HT1/T2		
Max. discharge capacity	4.0 GPM, 15 L/min			8.0 GPM, 30 L/min			14.5 GPM, 55 L/min		
Max. air supply pressure (MPa)	0.15 - 0.5	0.15 - 0.3	0.15 - 0.2	0.15 - 0.5	0.15 - 0.3	0.15 - 0.2	0.15 - 0.5	0.15 - 0.3	0.15 - 0.2
Max. air supply pressure (PSI)	22.5 - 75	22.5 - 45	22.5 - 30	22.5 - 75	22.5 - 45	22.5 - 30	22.5 - 75	22.5 - 45	22.5 - 30
Liquid temperature range (°C)	5 - 50	51 - 100	101 - 180	5 - 50	51 - 100	101 - 180	5 - 50	51 - 100	101 - 180
Liquid temperature range (°F)	41 - 122	123 - 212	213 - 356	41 - 122	123 - 212	213 - 356	41 - 122	123 - 212	213 - 356
Max. air consumption (NL/min)	200	160	110	200	160	110	200	160	110
Max. stroke speed (SPM)	240			220			200		
Pump connection size (PFA)	1/2", O.D.0.5" x I.D. 0.385"			3/4", O.D.0.75" x I.D. 0.63"			1", O.D.0.98" x I.D. 0.87"		
Air supply connection size	PT 1/4, Rc 1/4			PT 1/4, Rc 1/4			PT 3/8, Rc 3/8		
Ambient temperature	32 - 104°F (0-40°C)								
Drive system	by proximity switch or APT valve								
Self priming ability	3.3 ft. (1.0 m)			6.6 ft. (2.0 m)			6.5 ft. (2.0 m)		
Wetted materials	PTFE, PFA								

