

DATA SHEET

FLOAT VALVES



Brass Model: 31013

Polyethylene Model: 32010



Model 31013

Model 32010

FEATURES

- Protects pump by maintaining liquid level in reservoir to assure constant flow to pump inlet.
- Compact easy installation with adjustable (Model 31013) or fixed (Model 32010) float.
- Low maintenance, economical pump protector.

SPECIFICATIONS

	U.S.	Metric
Model 31013		
Maximum Flow	7.5 gpm	29 lm
Maximum Inlet Pressure	145 psi	10 bar
Maximum Temperature	140° F	60° C
Inlet Port	3/8" BSP(M)	3/8" BSP(M)
Weight	10 oz.	0.28 kg
Dimensions	11.2 x 5.0 x 2.75"	285 x 127 x 70 mm
Model 32010		
Maximum Flow	8 gpm	30 lm
Maximum Inlet Pressure	145 psi	10 bar
Maximum Temperature	140° F	60° C
Inlet Port	3/4" BSP(M)	3/4" BSP(M)
Weight	2.8 oz.	0.08 kg
Dimensions	6.5 x 2.5 x 3.0"	165 x 63.5 x 76 mm

SELECTION

Select a float valve to match the system flow requirements. Exercise caution not to starve the pump.

INSTALLATION

Install the float valve in a properly baffled reservoir which is approximately 6 to 10 times the system flow.

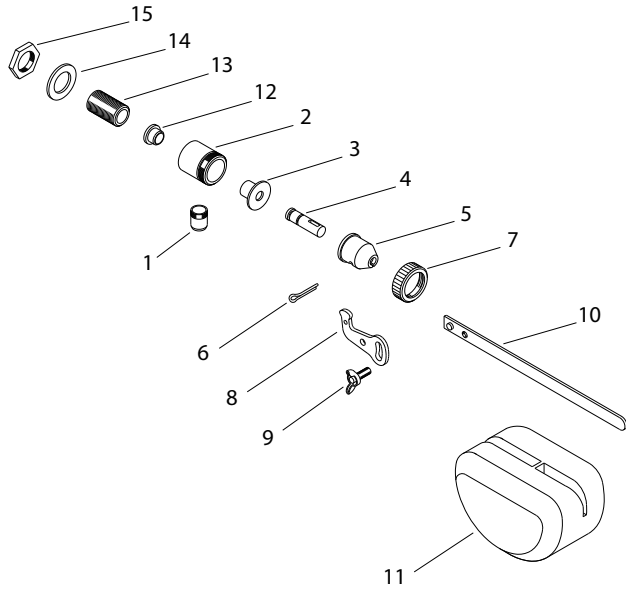
OPERATION

The float valve is designed to maintain adequate liquid level in the reservoir to assure consistent flow to the inlet of the pump. The liquid to be pumped is fed directly to the float valve connected to the side of the reservoir. As the float valve rises to a level position, the flow through the float valve is shut off. On the 31013 Float Valve, the float reaction time can be adjusted by different positions of the float arm. The float is preset on the 32010 Float Valve.

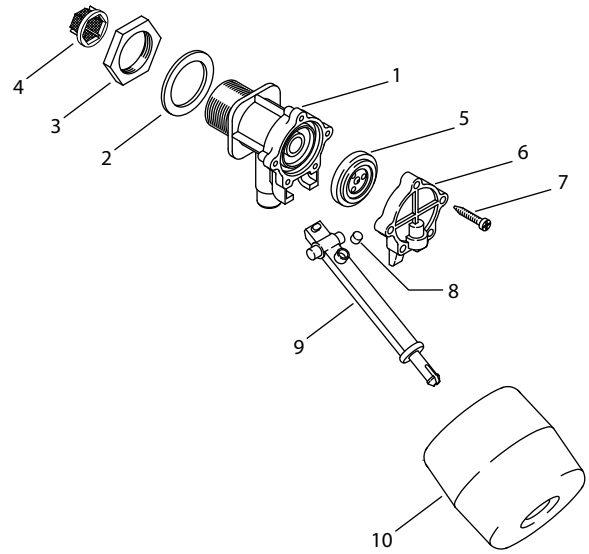
FLOW CHART

Inlet Pressure		331013 Flow		32010 Flow	
psi	bar	gpm	lm	gpm	lm
14.5	1	5.0	19	6.5	25
29	2	7.5	29	8.0	30
40	2.8	10.0	38	10.0	38

EXPLODED VIEW
Model 31013



EXPLODED VIEW
Model 32010



PARTS LIST

Model 31013

ITEM	PN	MATL	DESCRIPTION	QTY
1	—	BB	Pin	1
2	—	BB	Body	1
3	32809	NBR	Diaphragm	1
4	39056	PE	Rod, Piston	1
5	—	BB	Retainer, Diaphragm	1
6	—	BB	Cotterpin	1
7	—	BB	Cap, Retaining	1
8	—	BB	Arm, Pivot	1
9	—	BB	Nut, Wing	1
10	—	BB	Arm, Adjustment (6")	1
11	—	PE	Float, Grey	1
12	39057	POP	Seat	1
13	—	BB	Fitting [3/8" BSP(M)]	1
14	32841	RBR	Gasket (3/8")	1
15	—	BB	Hex Nut (3/8")	1

Material Codes (Not Part of Part Number):

BB=Brass, NBR=Medium Nitrile (Buna-N) PE=Polyethylene
POP=Polypropylene RBR=Rubber

PARTS LIST

Model 32010

ITEM	PN	MATL	DESCRIPTION	QTY
1	—	PE	Body	1
2	32841.34	RBR	Gasket (3/4")	1
3	—	BB	Hex Nut (3/4")	1
4	32799	PE	Filter, Inlet	1
5	—	BB	Diaphragm	1
6	—	PE	Retainer, Diaphragm	1
7	—	STZP	Screw (M3.5x18)	5
8	—	BB	Pin	1
9	—	NY	Arm, Adjustment	1
10	—	PE	Float, Black	1

Material Codes (Not Part of Part Number): BB=Brass,

NY=Nylon PE=Polyethylene RBR=Rubber STZP=Steel/Zinc Plated

TROUBLESHOOTING

PROBLEM	SOLUTION
Will not shut off	<ul style="list-style-type: none"> • Replace worn diaphragm. • Adjust float position. • Replace cracked float retaining liquid.
Leaking at fitting	<ul style="list-style-type: none"> • Secure hex nut hand tight and use PTFE tape.
Diaphragm frequently wears	<ul style="list-style-type: none"> • Reduce inlet pressure or liquid temperature.
Pulsation or low pump pressure	<ul style="list-style-type: none"> • Clean or replace clogged inlet filter • Use a baffled tank.

CAUTIONS AND WARNINGS

All High Pressure Systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. Cat Pumps does not assume any liability or responsibility for the operation of a customer's high pressure system.

Read all CAUTIONS and WARNINGS before commencing service or operation of any high pressure system. The CAUTIONS and WARNINGS are included in each service manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at www.catpumps.com/cautions-warnings or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty on-line at www.catpumps.com/warranty.