



## KPFS PNEUMATIC FLOAT SWITCH

(U.S. PATENT 9, 046 190 B1 & U.S. PATENT 8, 564, 390 B1)

### OVERVIEW

The Model KPFS uses a float to determine the presence or absence of liquid in a vessel at the process connection. The float arm assembly consists of a float at one end and a magnet at the other. As the liquid level in the vessel rises, the float rises, and the magnet falls. The magnet actuates a second magnet on the other side of the pressure boundary. This second magnet is the reactive component in the snap acting switch that opens and closes the pneumatic valve. Because of the nature of the design, adjustment is rarely, if ever needed. In the event that adjustment is needed, an easy to use adjustment screw is provided. The model KPFS is used to actuate pneumatic dump valves, such as the Kenco Model KDV series dump valve, to control liquids in separators, scrubbers, etc.

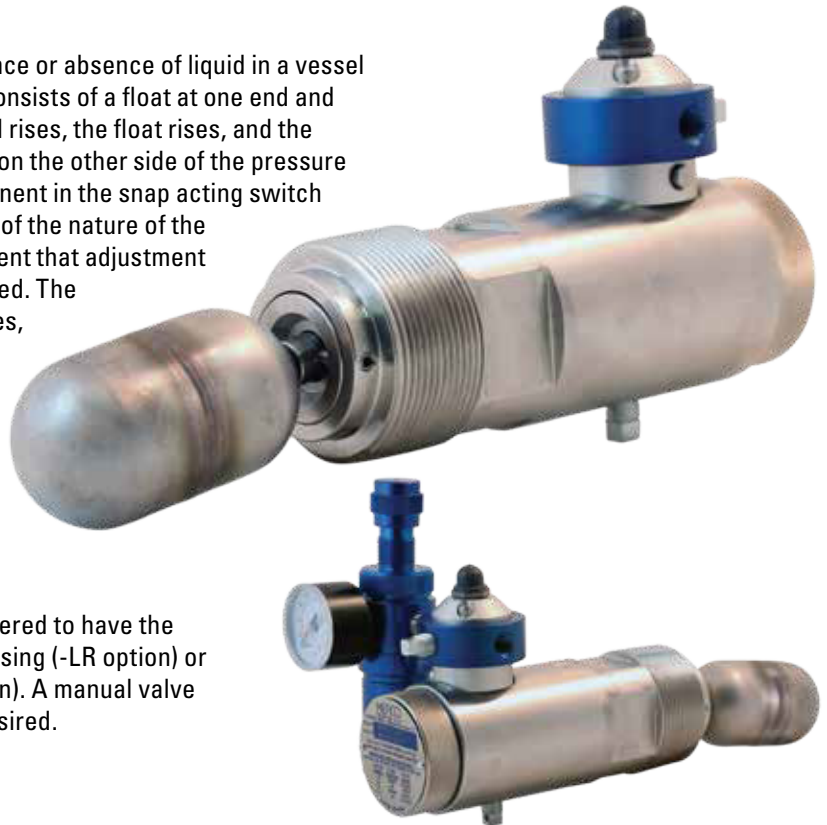
The pressure boundary contains no seals; it is a solid stainless steel barrier that passes a magnetic field, but no liquids. It is impossible for the process liquid to enter the switch enclosure through this barrier.

The Model KPFS Pneumatic Float Switch can be ordered to have the pneumatic valve open when it senses a liquid level rising (-LR option) or open when it senses the liquid level falling (-LF option). A manual valve actuator is provided to open the valve manually if desired.

### SPECIFICATIONS

- Maximum operating pressure of 2000 psi
- Minimum operating specific gravity of 0.53
- Pneumatic valve pressure range of 30 psi to 75 psi
- All wetted parts including switch body are manufactured from 303/304 Stainless Steel. 316 Stainless Steel wetted parts option available.
- Magnetic Switch actuator operates through a solid stainless steel barrier. There are no seals between the process and the switch compartment that could potentially cause a switch failure.

Note: The KPFS Pneumatic Float Switch requires clean, dry instrument quality air or gas. A pressure regulator with filter is available for improved valve life and trouble free operation.



### PRESSURE REGULATOR SPECIFICATIONS

- Maximum inlet pressure of 300 psi.
- Maximum regulated outlet pressure range of 10 to 160 psi.

Note: Although the regulator is capable of regulating the pressure as high as 160 psi, it must not be set any greater than the maximum valve pressure rating of 75 psi. Factory setting on the regulator will be 0 psi. An adjustment knob and pressure gage is provided with the regulator to allow adjustment of the regulator within the 30 psi to 75 psi range required by the pneumatic valve on the model KPFS.

### FEATURES



#### Optional Filter/Pressure Regulator

Ensures supplied air or gas is filtered and regulated to improve system life and performance.



#### Manual Valve Actuator

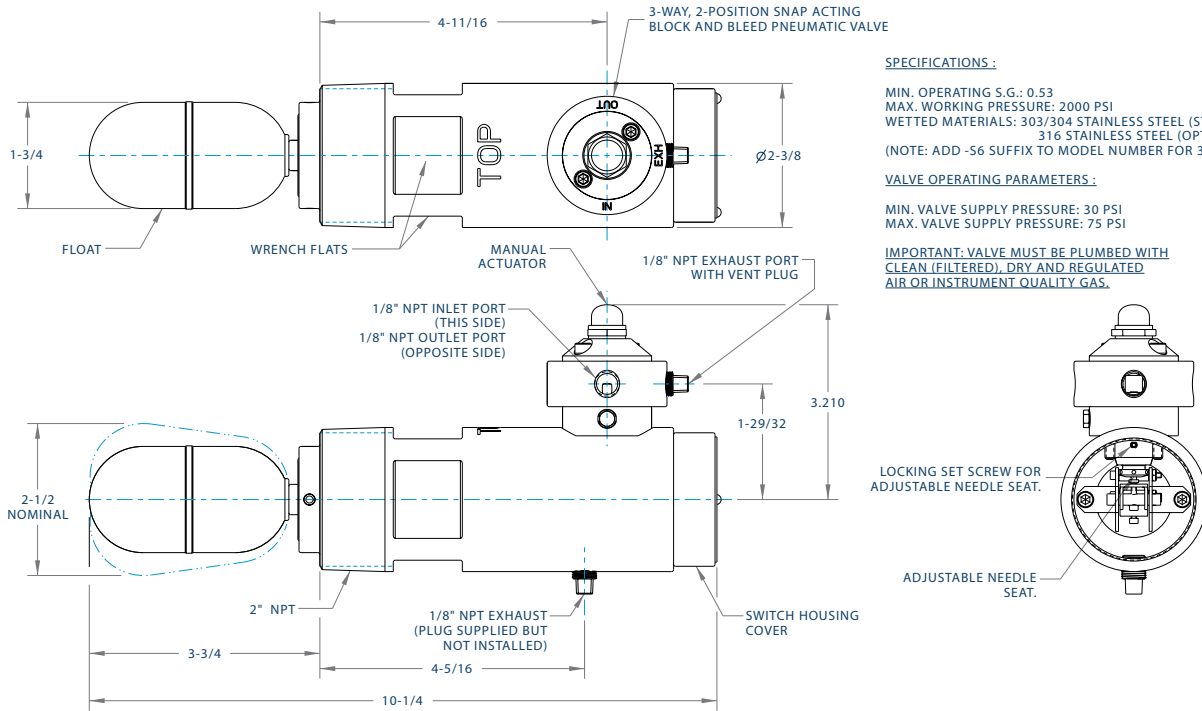
Provides a means to manually open the pneumatic valve.



#### Debris Guard

Factory installed debris guard supplied at no additional charge on all units.

# MODEL KPFS



**SPECIFICATIONS :**

MIN. OPERATING S.G.: 0.53  
 MAX. WORKING PRESSURE: 2000 PSI  
 WETTED MATERIALS: 303/304 STAINLESS STEEL (STANDARD)  
 316 STAINLESS STEEL (OPTIONAL)  
 (NOTE: ADD -S6 SUFFIX TO MODEL NUMBER FOR 316 OPTION.)

**VALVE OPERATING PARAMETERS :**

MIN. VALVE SUPPLY PRESSURE: 30 PSI  
 MAX. VALVE SUPPLY PRESSURE: 75 PSI

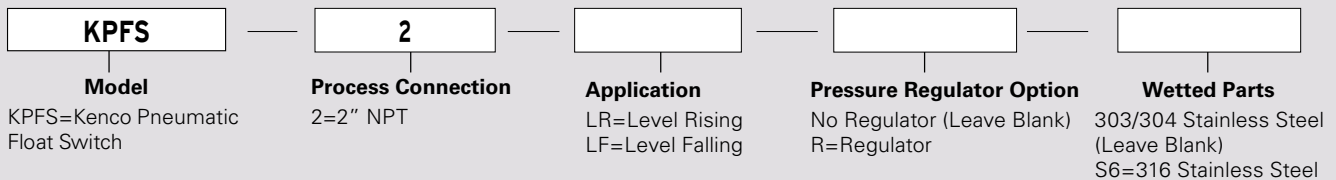
**IMPORTANT: VALVE MUST BE PLUMBED WITH CLEAN (FILTERED), DRY AND REGULATED AIR OR INSTRUMENT QUALITY GAS.**

MODEL NUMBER SHOWN : KPFS-2-LR

Description		Specification
Specific Gravity		≥ 0.53
Wetted Parts	Standard	303/304 Stainless Steel
	Optional	316 Stainless Steel
Process Connection Size	Standard	2" NPT
Pneumatic Valve Connection Size	Inlet	1/8" NPT
	Outlet	1/8" NPT
	Exhaust	1/8" NPT
Maximum Temperature Rating		257°F
Process Pressure Range		Vacuum to 2000 psi
Valve Inlet Pressure Range		30 to 75 psi

## ORDERING SYSTEM

### Kenco Pneumatic Float Switch



• Example Order Number: KPFS-2-LR

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