

# B|W Controls

## Liquid Level Float Switches

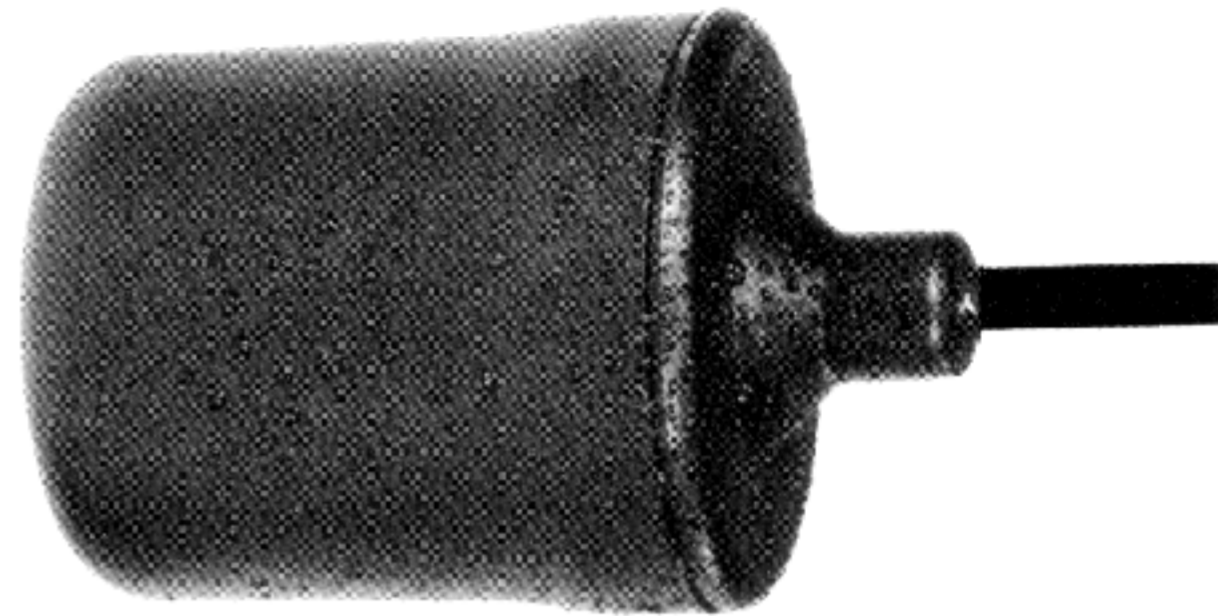
### FLOAT SWITCHES

#### DESCRIPTION

The BIW Float Switches are tilt actuated liquid level controls, designed to operate pumps, valves, multiple alternators, relays, contactors, alarms and similar equipment for industrial and commercial use.

A hermetically sealed, axially nonposition-sensitive mercury switch is used in the narrow angle option, while the wide angle option uses a mechanical switch inside the float. These floats provide a reliable, long-lasting level control suitable for most liquid environments up to 160°F.

The BIW Float Switches provide an ideal pilot device for the control of all BIW relays and control panels. The polypropylene float, PVC cable, and hermetically sealed mercury switch provide an economical liquid level solution for controlling sewage, effluent, many chemical solutions, as well as liquids in other hostile environments containing oil, grease or other similar industrial and municipal wastes where dependable liquid level control is essential.



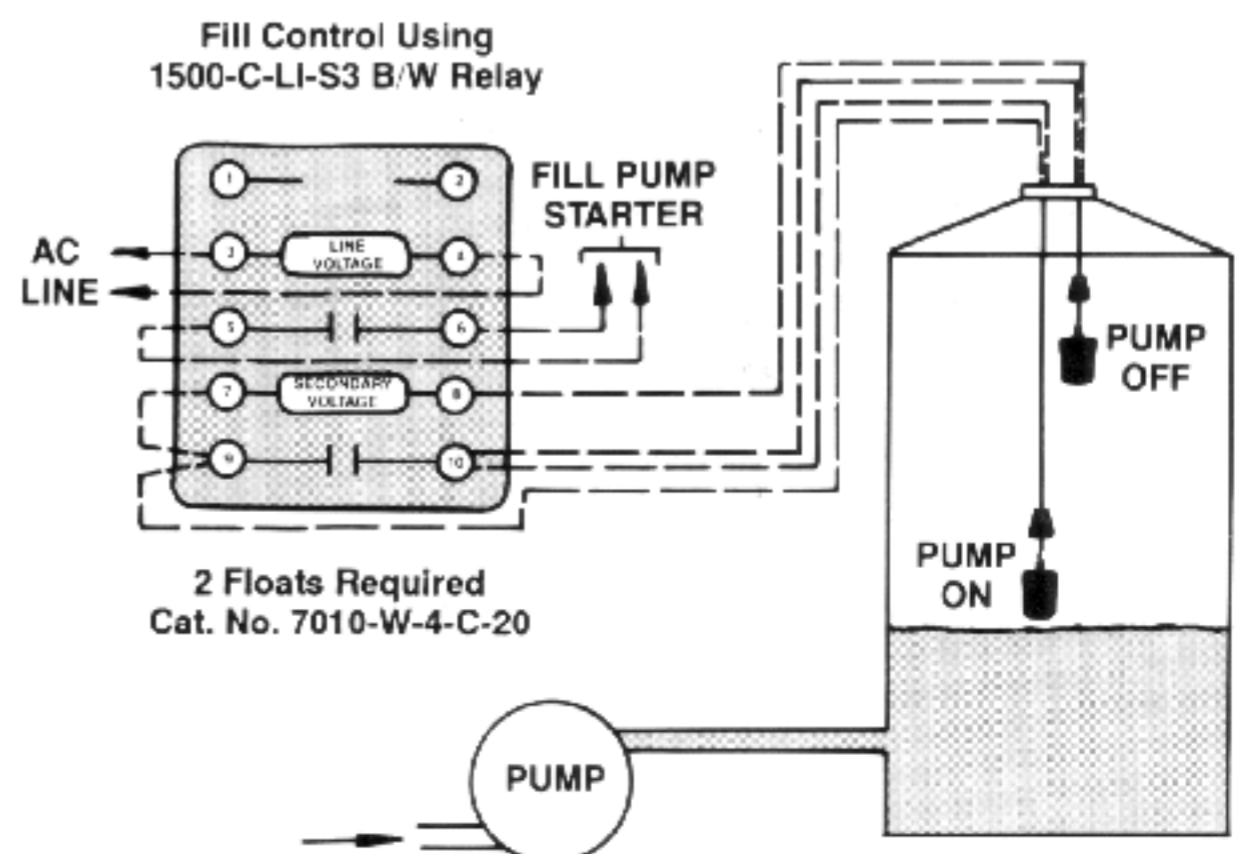
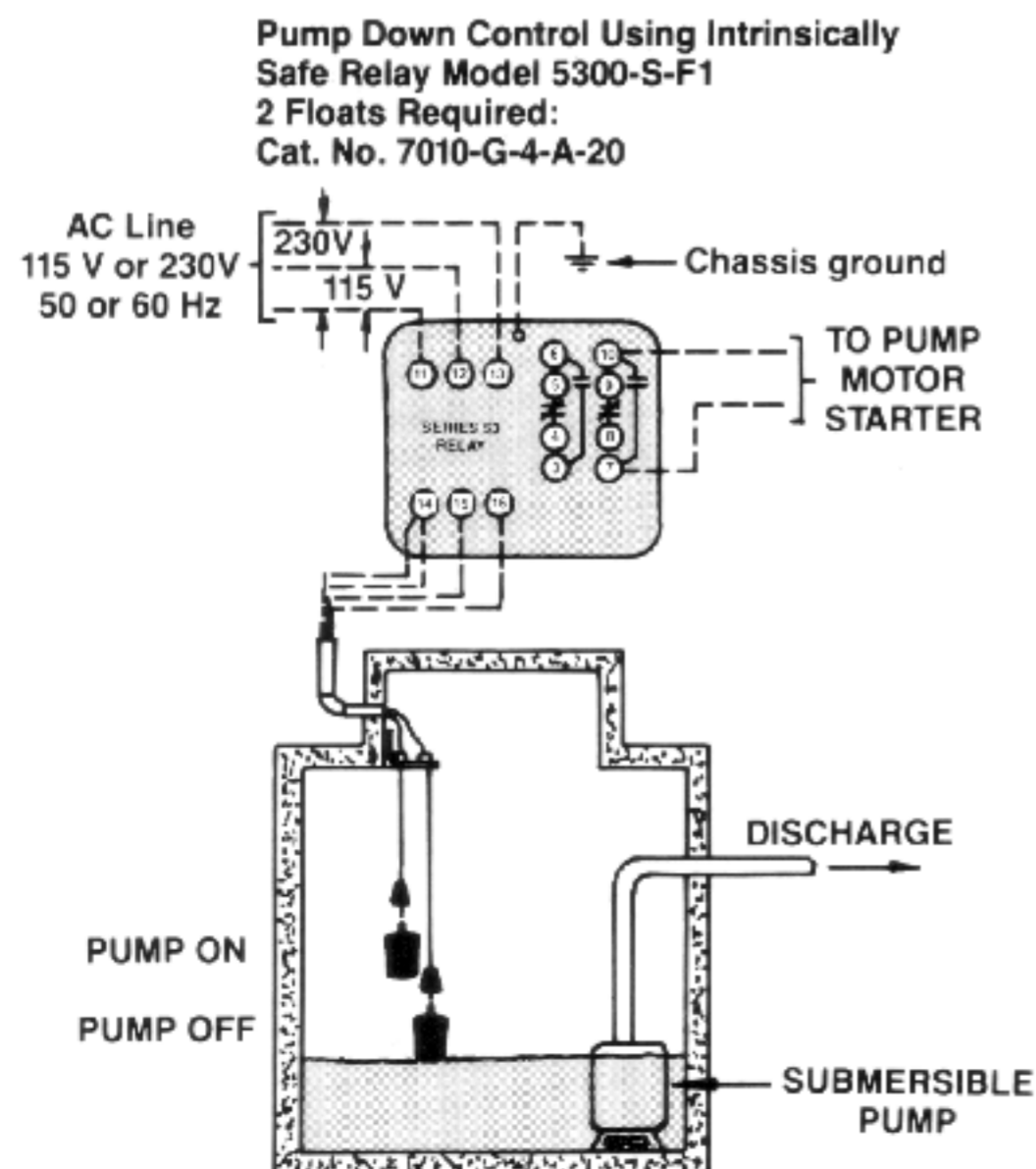
#### SPECIFICATIONS

<b>Float:</b>	Chemically Stable Polypropylene
<b>Float Dimensions:</b>	Length 3.4" Diameter 2.8" Strain Relief 1.0"
<b>Cord:</b>	16/3 for S.P.D.T. 16/2 for either N.O. or N.C. Operation
<b>Cord Length:</b>	20 ft.
<b>Operating Temperature:</b>	32°F to 160°F Materials are rated to 221°F
<b>Operating Pressure:</b>	Pressure tested to 60 feet of water (26 psi.)

#### Switch Ratings:

Switch Code		Running Current (Amps)	
		at 120 VAC	at 240 VAC
Wide Angle	A*	13.0	13.0
Narrow Angle (N.O.)	G	1.0	.7
	L	13.0	11.0
Narrow Angle S.P.D.T.	W	13.0	11.0

\* Mechanical Switch



### APPLICATIONS

B|W Float Switches are designed to be suspended vertically into the liquid being controlled. A movable weight can be attached to the multi-conductor suspension cord which keeps the cord taut, and also determines the tether length of the float.

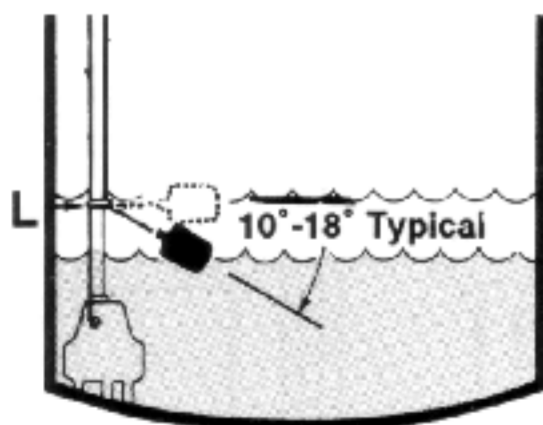
Two basic types of switches can be provided. A Wide Angle Switch (Product Code A) which operates between 60°-90° or, Narrow Angle Switches (Product Codes G, L & W) which operates at typically 10°-18°.

B|W Float Switches can be provided with the following contact configuration.

- A— Normally open for pump down operation.
- B— Normally closed for pump up operation.
- C— Single pole double throw for either operation.

#### Narrow Angle Switches

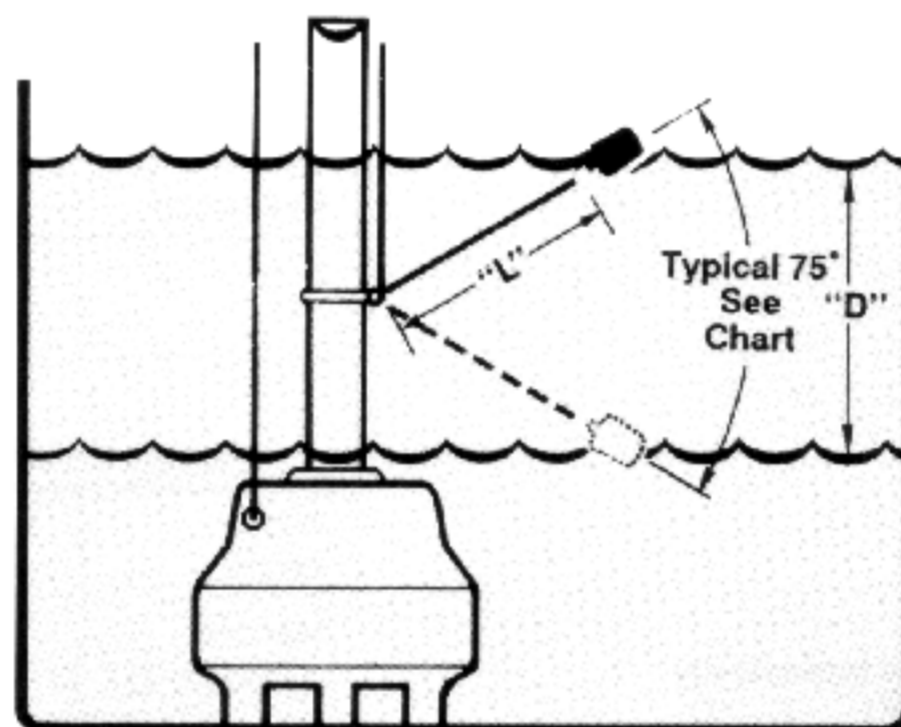
Catalog Number Code	Typical Switch Operating Angle
7010-G	15°
7010-L	10°
7010-W	18° SPDT



Note: Minimum tether length is 2 inches

All operating angles shown are approximate typical angles and are based on switch tests at full rated load.

#### Wide Angle Switch Catalog No. 7010-A

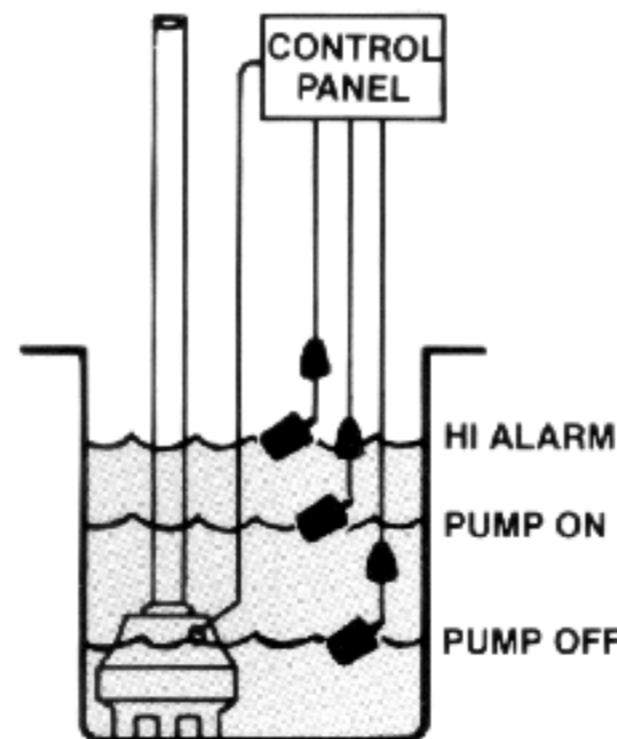


Float switch operates at typically 80°

- "L" = Tether length
- "D" = Switch operating differential as a function of tether length

"L"	3	4	6	8	10	12
"D"	7	8	11	14	17	21

Approximate length in inches



BIW Controls can provide the complete control system for a multiple float application including NEMA 1, 4 or 12 enclosures, disconnect switch, control transformer, relays, motor starters, alternators, alarms, etc.

With the BIW Series 53 Intrinsically Safe Control Relays (see Catalog Section 5300) an economical solution for controlling process functions in hazardous areas can be supplied.

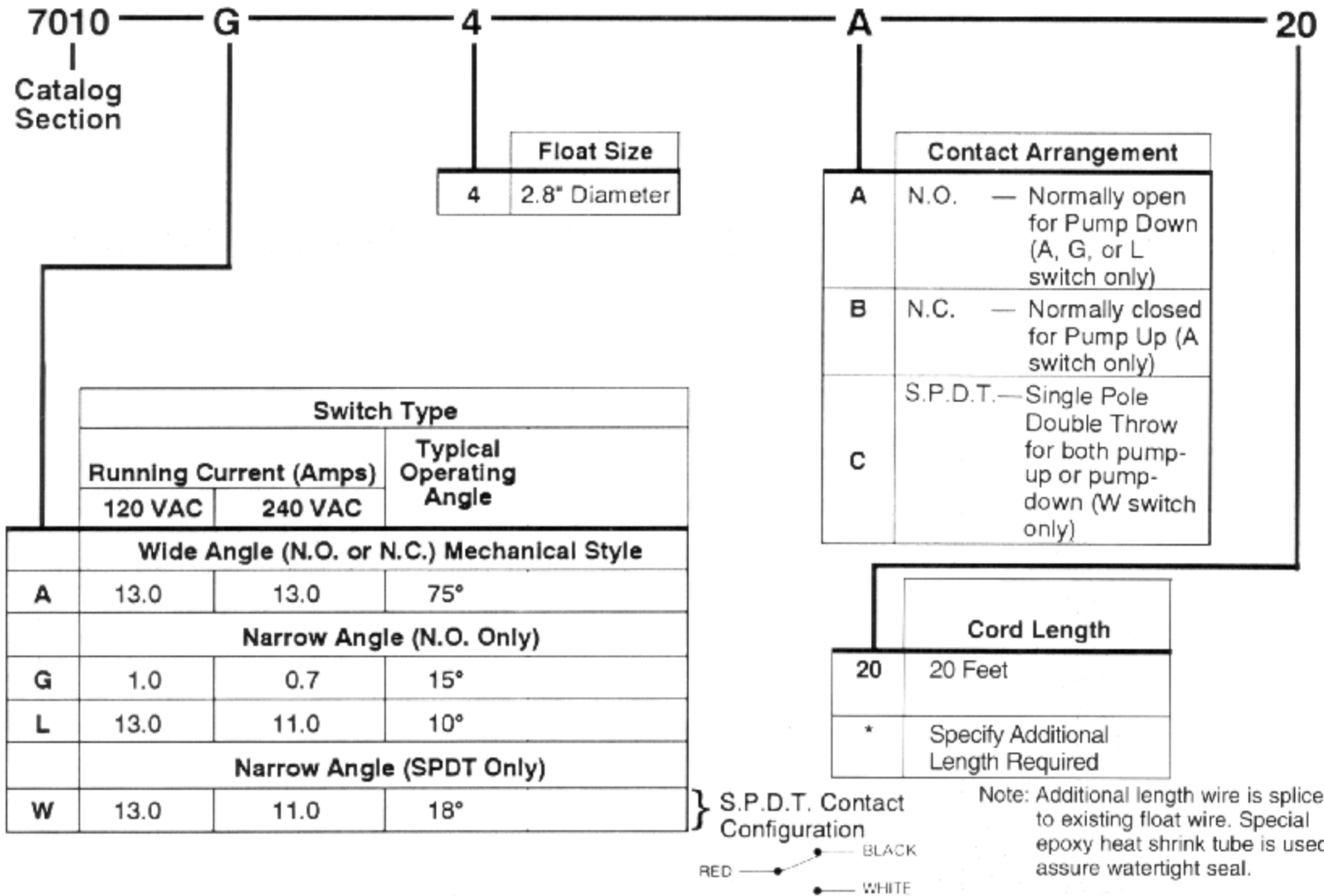
With over 60 years of experience in liquid level controls, our engineers can assist you to obtain the most economical and reliable system that's best for you.



# B|W Controls

## Liquid Level Float Switches

### CATALOG NUMBERING SYSTEM



### ACCESSORIES



Float Switch Weight  
(20 ounces)  
Part No. 12085000



1/2" Cord Grip for  
Single Float Switch  
Part No. 12084900



Wall Mount Bracket For  
up to 4 Float Switches  
Part No. 12085100



Wall Mount Bracket For  
Single Float Switch  
Part No. 12085200