

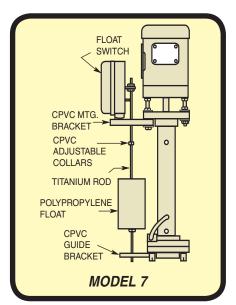
HI-LO LIQUID LEVEL CONTROLS

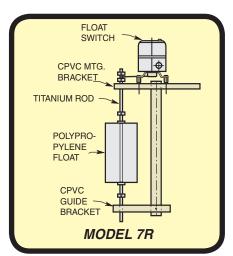
2900 MacArthur Blvd. Northbrook, IL. USA 60062 www.serfilco.com (800) 323 - 5431

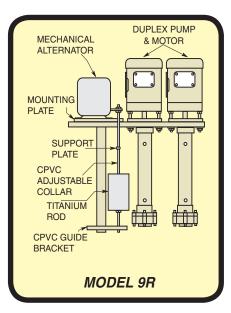
BULLETIN A-101_M JUNE 2013

MECHANICAL FLOAT SWITCHES

Refer to Bulletin A-103 for Motor Starters and order separately. One starter is required for each pump on duplex assembly.







MODEL 7 FLOAT SWITCH ASSEMBLY (for pump mounting)

Double pole switch for inline stop and start of 115-230V, 460-575V motors. Use as two-pole con troller on 3 phase circuit. Switch rating: 2 HP @ 115V/1 phase, 3 HP @ 230V/1 phase, 5 HP @ 230V/3 3 phase or 5 HP @ 460-575V/3 phase. This unit can be used as a pilot device for single or three phase magnetic and manual motor starters. Float assembly consists of a polypropylene float, titanium float guide rod, CPVC float guide brackets and adjustable CPVC collars. Standard length is 24".

DESCRIPTION	PRICE CODE NUMBER
NEMA 1 Float switch	66-0726A
NEMA 4 Float switch	66-1117A
NEMA 7 & 9 Float switch	66-1118A
(Class I, Group C, D & Class II, Group E, F, G)	

MODEL 7R FLOAT SWITCH ASSEMBLY (for independent tank mounting)

Similar to model above with the following additions: CPVC support column and CPVC switch mounting bracket. The switch mounting bracket can be clamped to the top of the tank or holes can be drilled through the mounting bracket for a permanent installation. Standard length is 24 inches.

NEMA 1 Float switch	66-0732A
NEMA 4 Float switch	66-1119A
NEMA 7 & 9 Float switch	66-1121A
(Class I, Group C, D & Class II, Group E, F, G)	

MODEL 9R ALTERNATOR FLOAT SWITCH ASSEMBLY (for independent mounting)

Double pole mechanical alternator switch alternates the operation of two pumps installed in a duplex pump system in a common tank or sump. If one pump cannot handle the flow demand, the second pump is automatically energized and continues to function until one pump can handle the load. The float switch assembly consists of a polypropylene float, titanium float guide rod, CPVC float guide brackets and adjustable CPVC collars. A high level alarm circuit is available. The assembly is mounted on a support plate independent of the pumps. Standard length is 24". Switch rating: 1-1/2 HP @ 115V single phase or 2 HP @ 230V single phase. Can also be used as a pilot device for single or three phase magnetic motor starters.

NEMA 1	Mechanical alternator	66-0730A	
NEMA 4	NEMA 4 Mechanical alternator		
NEMA 4	NEMA 4 Mechanical alternator with high level alarm circuit		
NEMA 7 & 9 Mechanical alternator		66-0963A	
NEMA 7 & 9	Mechanical alternator with high level alarm circuit	66-0964A	

OPTIONAL (for Models 7, 7R & 9R)

CPVC sleeve over titanium rod	Add 66-0830
High level alarm circuit (Models 7 & 7R) (Not for NEMA 1), 115-230V	Add 66-1211

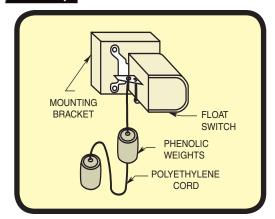
FOR LONGER FLOAT GUIDE, ADD			
TOTAL LENGTH	PRICE CODE NUMBER		
(INCHES)*	MODEL 7	MODEL 7R	MODEL 9R
36 48 60 72 84	66-1163A 66-1163B 66-1163C 66-1163D 66-1163E	66-1164A 66-1164B 66-1164C 66-1164D 66-1164E	66-1165A 66-1165B 66-1165C 66-1165D 66-1165E
96 108 120 132 144	66-1163F 66-1163G 66-1163H 66-1163J 66-1163K	66-1164F 66-1164G 66-1164H 66-1164J 66-1164K	66-1165F 66-1165G 66-1165H 66-1165J 66-1165K

^{*}This includes the standard 24" length. It is not a separate added length.



HI-LO LIQUID LEVEL CONTROL | FOR PUMPS

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MODEL 8 FLOAT SWITCH ASSEMBLY (Pump mounted for shallow tanks)

Double pole switch NEMA 1 enclosure for inline stop and start of single phase motor to 1 HP @ 115 or 230 volts. This unit can also be used as a pilot device for single or three phase magnetic starters. Operated by two phenolic weights sliding on a high density polyethylene cord. Float switch is fastened to a PVC bracket which is mounted to the pump-motor mounting plate. Maximum operating depth is 30 inches.

PRICE CODE **NUMBER** 66-0855A

LIQUID CONDUCTIVITY LEVEL CONTROLS

CAUTION: Probes function in a low energy control circuit. Possible electrical hazard exists at the probe tip. See Operating Instructions.

MODEL 6

PROBE SWITCH ASSEMBLY

Standard assembly consists of Hastelloy® C probes attached to insulated PVC wire. The wire suspended probes are mounted on a PVC holder by which the probe wire length can be adjusted to the various liquid levels. Standard length - 24"

The induction relay included in the system has the following rating: 1 HP @ 120 or 240 VAC single phase. For horsepower greater than 1 HP a corresponding magnetic motor starter is required. The 66-0230-2 & 66-0231-2 systems consist of two & three probes respectively. A ground probe is needed when the sump pump or tank is constructed of any material other than steel. The probe

holder and induction relay are each mounted PRICE CODE in a NEMA 4 watertight enclosure. NUMBER High & low level control without ground probe 66-0230-2 High & low level control with ground probe 66-0231-2

PROBE SWITCH ASSEMBLY - with Alarm Circuit

A choice of high or low level alarm control signals is available with four suspended probes and two induction relays, in a NEMA 4X enclosure. Ground probe is included as stan-

dard. The alarm mechanism is not supplied.	NUMBER
High & low level control without ground probe High & low level control with ground probe	66-0232-2 66-0244-2

ALTERNATOR PROBE SWITCH ASSEMBLY

Provides for the operation of two pumps installed in a duplex system. If one pump cannot handle the flow, the second pump automatically is activated until the low level 66-0236 is reached.

CAUTION: Probes and housing are not explosion-proof.

TO ORDER - SPECIFY: (1) AC line voltage to relay (2) Length of longest probe (3) Type of solution (4) pH of solution

AGITATION SHIELD

The agitation shield should be used to isolate the wire suspended probes from a solution in high velocity, thus preventing twisting of wire leads, resulting in misleading liquid level sensing. The shield is constructed of all CPVC material. The length of the shield corresponds to the "C" dimension of the sump pump and length of probe suspension. Standard length - 24" 66-0245B 36" and longer, refer to chart below.

	<u> </u>			
TOTAL	FOR LONGER PROBE WIRE, ADD			FOR LONGER
LENGTH	2-WIRE SET	3-WIRE SET	4-WIRE SET	AGITATION SHIELD, ADD
(INCHES)*	PRICE CODE NUMBERS			PRICE CODE NUMBERS
36	66-1166A	66-1167A	66-1168A	66-1169A
48	66-1166B	66-1167B	66-1168B	66-1169B
60	66-1166C	66-1167C	66-1168C	66-1169C
72	66-1166D	66-1167D	66-1168D	66-1169D
84	66-1166E	66-1167E	66-1168E	66-1169E
96	66-1166F	66-1167F	66-1168F	66-1169F
108	66-1166G	66-1167G	66-1168G	66-1169G
120	66-1166H	66-1167H	66-1168H	66-1169H
132	66-1166J	66-1167J	66-1168J	66-1169J
144	66-1166K	66-1167K	66-1168K	66-1169K

ENCLOSURE PVC **INSULATED** WIRE **PROBE** LIQUID CONDUCTIVITY PROBE SWITCH MODEL #6

RELAY

F.O.B. Northbrook, Illinois

Specifications subject to change without notice

Registered trademark: Hastelloy - Haynes, Intl.

^{*}This includes the standard 24" length. It is not a separate added length.