

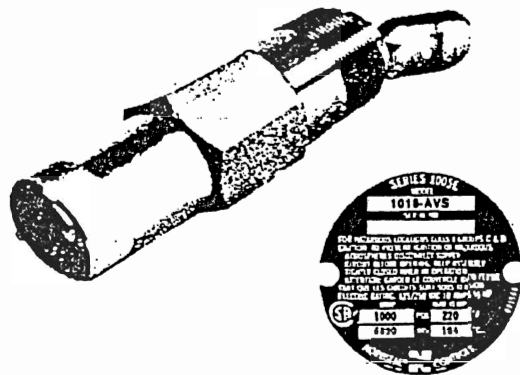


OPERATING and MAINTENANCE

SERIES 1005E ELECTRIC LEVEL SWITCH

SPECIFICATIONS

- BODY:** Size - 1.50" & 2.00"
 Mat'l - Carbon Steel Pltd. or 316 SST
 Pres Rating - 1.50" 1000 PSIG, 2.00" 2000 PSIG
- FLOAT:** Mat'l - 316 SST or Polypropylene
 Pressure Rating -
 316 SST 1500 PSIG, Polyp. 2000 PSIG
 Temperature Rating -
 316 SST 220° F, Polypropylene 140° F
 Specific Gravity - 316 SST .60, Polyp. .70
- SEALS:** Mat'l - Viton (Std), Buna-N or EPR (Opt)
- SWITCH:** SPDT - 10 AMP, 1/2 H.P. @ 125/250 VAC
 1/2 AMP, 1/2 VDC: 1/4 AMP @ 250 VDC
 DPDT - 10 AMP, 1/2 H.P. @ 125/250 VAC
 1/2 AMP @ 125 VDC: 1/4 AMP @ 250 VDC



PARTS LIST

The 1005E is shipped with the following parts:

1. 1005E LLS Assembly
2. Float (Unmounted)
3. Extension Arm
4. Tube of Loctite
5. Instruction Sheet

INSPECTION OF 1005E

The 1005E was inspected at the factory, however it should be inspected again before it is finally installed. Operation of the 1005E can be checked by installing the float on the counterbalance arm and lifting the float. The motion should be smooth with no binding of any parts. As the float is moved up and down the electric switch should click on and off.

INSTALLATION OF 1005E

The 1005E is installed by threading the body into the process connection. A suitable thread sealant should be used on the pipe threads. The conduit connection must be down and "TOP" up when the unit is completely tightened.

WHEN TO USE THE EXTENSION ARMS

When installing the 1005E in a NORRISEAL weld collar or external chamber, extension arms are not required. Installing in other fittings may require the use of extension arms (e.g. half coupling, thread-o-let, reducing bushing, full pipe coupling, etc.).

CAUTION: Use of extension arms will change minimum specific gravity and insertion depth. Please verify before installing. See Chart 1.

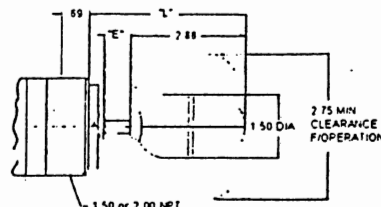
FLOAT and/or EXTENSION ARM INSTALLATION

1. Open the tube of loctite and place **two drops** on the 1/4" external threads (counterbalance/ext. arm).
 - 2a. Screw float to counterbalance and gently tighten.
 - 2b. Screw the extension arm to the counterbalance and the float to the extension arm, gently tighten. (DO NOT OVER TIGHTEN AS THIS WILL BEND THE PILOT PIN)
3. Allow the loctite to cure for one (1) hour before submerging the float.

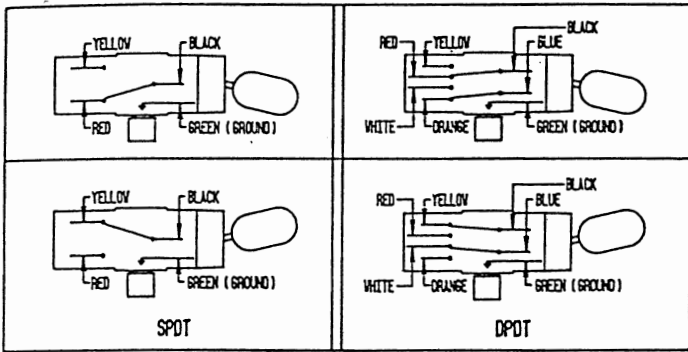
CHART 1 - SPECIFIC GRAVITY LIMITS (Minimum)

DIMENSIONS		SST FLOAT		POLY FLOAT
"E"	"L"	w/STD C.B.	w/HEAVY C.B.	w/STD C.B.
NO EXT	3.25	.60	N/A	.70
0.625	3.88	.65	N/A	.85
1.125	4.38	.69	.44	.87
1.500	4.75	.74	.48	.89
2.062	5.32	.79	.57	.92

"E" - Extension Length "C.B." - Counterbalance
 "L" + .69 - Insertion Depth "N/A" - Not Applicable



Caution: Before disassembly or maintenance, all pressures in this device must be relieved. Failure to relieve pressures may result in personal injury or device damage. The resulting uncontrolled venting or spilling of line fluids may cause personal injury, loss of process control or environmental contamination.



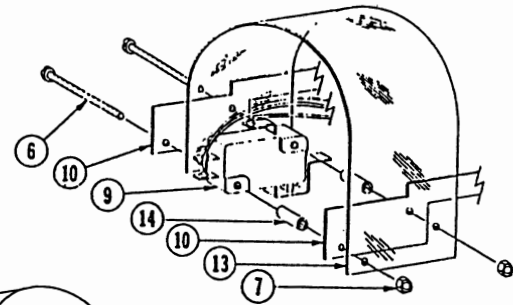
HOW TO WIRE THE 1005E

The series 1005E is equipped with either a single pole double throw or a double pole double throw switch. Wiring schematic for both switches are shown to the left.

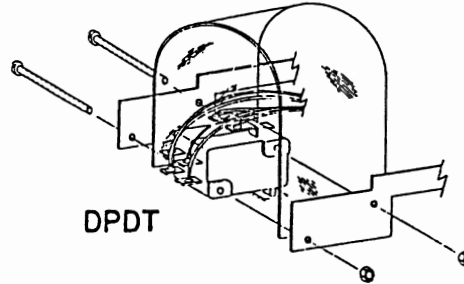
MAINTENANCE

The series 1005E requires minimal maintenance when operating in clean fluids. If operating in fluids capable of "gumming-up" the moving parts, the unit will have to be removed periodically and internally flushed.

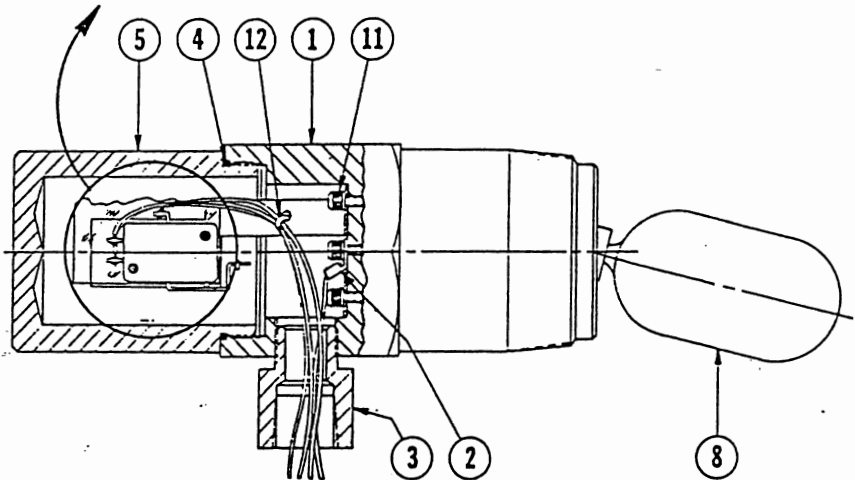
ITEM	PARTS DESCRIPTION	MATERIAL	STOCK No.	QTY	
1	BODY NPT LLS w/STD. COUNTERBALANCE	1.50	1018 PLTD	432828	1
		2.00	316 SST	432830	
	BODY NPT LLS w/HVY. COUNTERBALANCE	1.50	1018 PLTD	432829	
		2.00	316 SST	432831	
	BODY NPT LLS w/HVY. COUNTERBALANCE	1.50	1018 PLTD	432860	
		2.00	316 SST	432862	
2	WIRE GROUND	GREEN	411448	1	
3	ADAPTER CONDUIT .50 NPT	1215 PLTD 316 SST	411458 420689	1	
4	O-RING	SIZE 032	VITON	415513	1
5	CAP BODY	1018 PLTD 316 SST	414434 420690	1	
6	SCREW MACHINE 4-40 x 1.25	SST	415516	2	
7	NUT HEX REG. 4-40	SST	415517	2	
8	FLOAT LLS	3000WP STD	POLYPRO	410982	1
		1500WP STD	316 SST	415674	
		950WP NACE	316 SST	418930	
9	SWITCH w/LEADS	SPDT	PHENOLIC	411448	1
		DPDT	PHENOLIC	411442	
10	BRACKET SWITCH	1018 PLTD	415509	2	
11	SCREW CAP SOC 10-32 x .25	SST	415541	3	
12	TIE WRAP	NYLON	415518	1	
13	INSULATOR SWITCH	POLY	415549	1	
14	SPACER	ALUMINUM	415538	2	
	ARM EXTENSION (Not Shown)	.62	304 SST	411538	1
		1.12	316 SST	415927	
		1.50	316 SST	412164	
		2.06	316 SST	411481	



SPDT



DPDT



Recommended Spare Parts
Used with SPDT unit only

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Due to the constant improvement program at NORRISEAL CONTROLS, specifications are subject to change without notice or obligation.