

1.0 SPECIFICATIONS

Body:

Size: 1.50"
Material: Carbon Steel Pltd. or 316 SST

Pressure Rating: 1.50" 1000 PSIG, 2.00" 2000 PSIG

Float:

Material: 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, Polypropylene .70

Seals:

Material: 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

2.0 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

3.0 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.



4.0 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.

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 overtighten as this will bend the pilot pin.*)

3. Allow the Loctite to cure for one (1) hour before submerging the float.

5.0 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.

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.

6.0 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).

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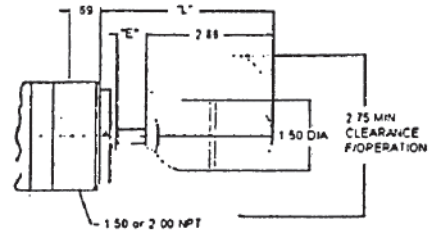
Series 1005E Electric Level Switch

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
0.626	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

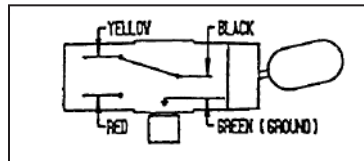
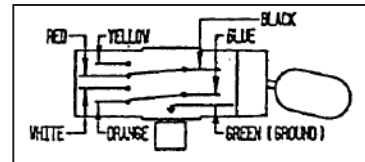
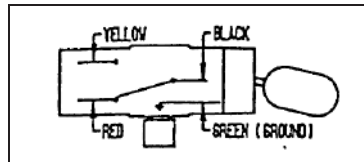
"E" – Extension Length
 "L" + .69 – Insertion Depth

"C.B." – Counterbalance
 "N/A" – Not Applicable

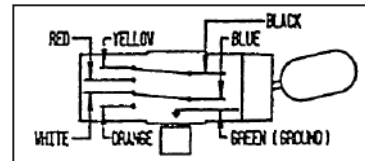


7.0 HOW TO WIRE THE 1005E

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 right.



SPDT



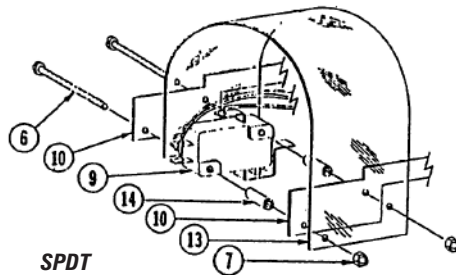
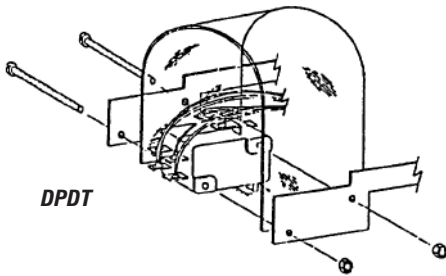
DPDT

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Series 1005E Electric Level Switch

8.0 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.

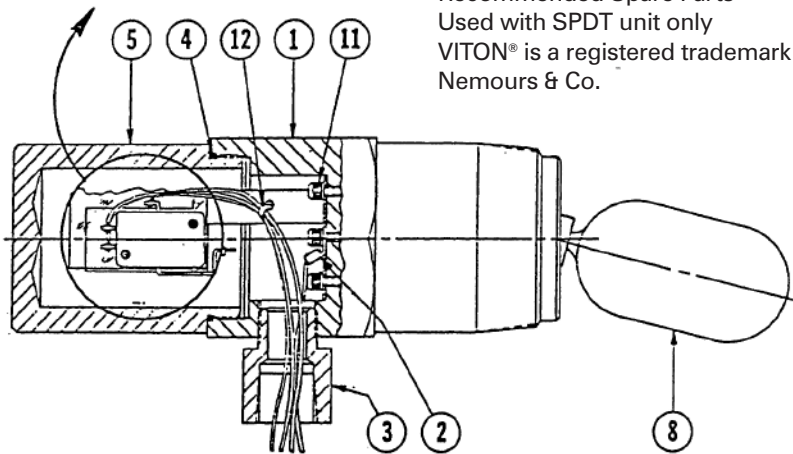


Item	Parts Description		Material	Stock No.	Qty	
1	Body NPT LLS w/Std. Counterbalance	1.50	1018 PLTD	432828	1	
		2.00		432830		
		Body NPT LLS w/Hvy. Counterbalance	1.50	316 SST		432829
			2.00			432831
		Body NPT LLS w/Std. Counterbalance	1.50	1018 PLTD		432860
			2.00			432862
		Body NPT LLS w/Hvy. Counterbalance	1.50	316 SST		432861
			2.00			432863
2	Wire Ground	Green		411448	1	
3	Adapter Conduit	.50 NPT	1215 PLTD	411456	1	
			316 SST	420689		
4	O-ring	Size 032	Viton	415513	1	
5	Cap Body		1018 PLTD	414434	1	
			316 SST	420690		
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. 1500WP Std. 950WP Nace	Polypro.	410982	1	
			316 SST	415674		
				418930		
9	Switch w/Leads		SPDT DPDT	Phenolic	411448	
				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)		304 SST 316 SST 316 SST 316 SST	411538	1	
				415927		
				412164		
				411481		
				411481		

Recommended Spare Parts

Used with SPDT unit only

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Series 1005E Electric Level Switch

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