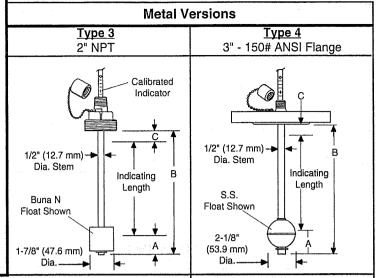


# TLU-72500 Series DIPTAPE and DRUMTAPE Liquid Level Indicators

Instruction Bulletin No. 72941

# General Purpose DIPTAPE Indicators TLU-72500 Series . . .



#### **Plastic Versions** Type C Type 4 - PVC Type B Type 3 - PVC 3" NPT 3" - 150# ANSI Flange 3" - 150# ANSI Flange 2" NPT 1/4" Ref. 1/2" I.P.S. -1/4" I.P.S. 1/2" I.P.S. -.840 Dia. Stem 1/4" I.P.S. .540 Dia. Stem-Indicating .540 Dia. Stem -.840 Dia. Stem Indicating Indicating Length Indicating PVC Length Length Length PVC Float Shown PVC **PVC** Float Shown Float Float 3" 3" Α Α 1-1/2" (38.1 mm) (76.2 mm) 1-1/2" (38.1 mm) (76.2 mm) Dia. \_\_ Dia. Dia. Ďίa.

#### Variable Dimensions . . .

	Model Type	Mounting		A Dim.* (Min. Indication)	C Dim.* (Min. Indication)	
Metal Versions	3	2" NPT		<b>Buna-N Float:</b> 1-1/4" (31.7 mm)	<b>Buna-N Float:</b> 11/16" (17.5 mm)	
	4	3" - 150# Flange		Stainless Steel Float: 1-3/8" (34.9 mm)	Stainless Steel Float: 3/4" (19.05 mm)	
	3	2" NPT, PVC		1-5/8" (41.2 mm)	1/2" (12.8 mm)	
	4	3" - 150# Flange, PVC				
		B 3" NPT	Polypropylene	1-3/8" (34.9 mm)	1-5/16" (33.3 mm)	
Plastic Versions	В		PVDF	2-3/16" (55.6 mm)	1/2" (12.7 mm)	
			PVC	1-3/4" (44.5 mm)	15/16" (23.8 mm)	
	3" C 150# Flange	<b>ე</b> II	Polypropylene	1-3/8" (34.9 mm)	1-5/16" (33.3 mm)	
		_	PVDF	2-3/16" (55.6 mm)	1/2" (12.7 mm)	
		PVC	1-3/4" (44.5 mm)	15/16" (23.8 mm)		

## Specifications - TLU-72500 Series DIPTAPE Indicators ...

Model Type	Stem	Mounting	Float/Fl. Stop Mat'l. Operating Temp.		Operating Press, Max.
Type 3	Brass or 316 SS			Buna N Float: -40°F to +230°F (-40°C to 110°C). Water to 180°F	Buna N Float: 150 psig SS Float: 750 psig
Type 4	316 SS	CS or 316 SS Flange	Buna N or 316 SS	(82.2°C) <u>SS Float</u> : -40°F to +300°F (-40°C to 148.9°C)	Buna N Float: 150 psig SS Float: 150 psi
Type 3 - PVC	PVC			0°F to +140°F (-17.8°C to 60°C)	15 psig
Type 4 - PVC					
Type B	PVC, PVDF or			+40°F to +140°F (4.4°C to 60°C)	
Type C	Polypropylene		ne	+40 F to +140 F (4.4 C to 80 C)	50 psig

# **Specifications - DRUMTAPE Indicators**

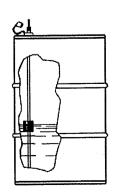
Material		Operating	Operating	Floor	Min.	Part Number	
Stem and Mounting	Float	Pressure (Max. PSI)	Temperature	Float Diameter	Indication in Sp. Gr. of 1.0	Horizontal Drum	Vertical Drum
For 55 Gallon Drums, 2" NPT Mounting							
Brass	Buna N	150	0°F to +230°F*	1-7/8"	1-1/4"	71150	71152
All 316	SS	750	0°F to +300°F	2-1/8"	1-3/8"	71146	71148
All PVC		15	0°F to +140°F	1-1/2"	1-5/8"	71142	71144
			For 30 Gallon Di	rums, 2" NP7	Mounting		
Brass	Buna N	150	0°F to +230°F*	1-7/8"	1-1/4"	71149	71151
All 316	SS	750	0°F to +300°F	2-1/8"	1-3/8"	71145	71147
All P	vc	15	0°F to +140°F	1-1/2"	1-5/8"	71141	71143

<sup>\*</sup>Temperature Shown is for Oil. For Water: +33°F to +180°F.

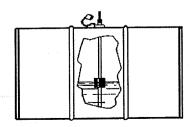
Indicating Lengths					
September 1988	Horizontal	Vertical			
For 55 Gallon Drum	22"	33"			
For 30 Gallon Drum	17 - 1/2"	26-1/2"			

Note: Standard Indicating Markings are 1/16".

DRUMTAPE shown in vertically positioned storage drum.



DRUMTAPE shown in horizontally positioned storage drum.

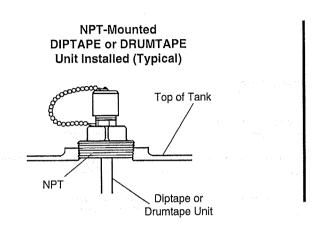


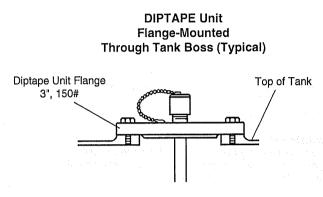
#### Installation . . .

GEMS DIPTAPE AND DRUMTAPE units are non-electrical and manually operated. Units are installed vertically, with mounting upward.

Install DIPTAPE unit in boss (NPT or flange-type, as appropriate) in tank top. See "Specifications" for NPT sizes.

Install DRUMTAPE unit in 2" NPT boss in top of drum as shown (below). See "Standard DRUMTAPE Models" for listing of unit part numbers, drum sizes and positions with which they are used.



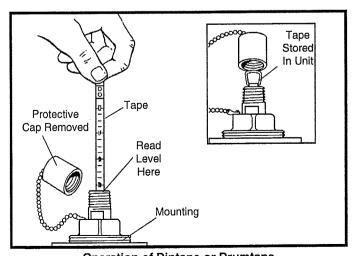


#### Standard DRUMTAPE Models . . .

Mounting	2" 1	NPT	2" NPT 30 Gallon		
Drum Size	55 G	iallon			
Drum Position	Horizontal	Vertical	Horizontal	Vertical	
Unit Length Overall	22" (558.8mm)	33" (838.2mm)	17-1/2" (444.5mm)	26-1/2" (673.1mm)	
Brass/Buna N	P/N 71150	P/N 71152	P/N 71149	P/N 71151	
Stainless Steel	P/N 71146	P/N 71148	P/N 71145	P/N 71147	
PVC	P/N 71142	P/N 71144	P/N 71141	P/N 71143	

### To Operate . . .

- 1. Unscrew and remove protective cap and pull tape out of unit until it stops.
- 2. Slowly lower tape into unit until slight pull is felt, as tape magnetically locks at float and stops.
- 3. Read level on tape at top of mounting.
- 4. Disengage tape from float with a quick flick of the wrist and lower tape back into unit. Replace protective cap.



Operation of Diptape or Drumtape Liquid Level Indicator

#### Maintenance . . .

An occasional "wipe-down" cleaning of unit stem and float, when excessive contamination is present in the liquid, is the only maintenance normally required.

#### **Important Points!**

Product must be maintained and installed in strict accordance with the National Electrical Code and GEMS product catalog and instruction bulletin. Failure to observe this warning could result in serious injuries or damages.

An appropriate explosion-proof enclosure or intrinsically safe interface device must be used for hazardous area applications involving such things as (but not limited to) ignitable mixtures, combustible dust and flammable materials.

Pressure and temperature limitations shown on individual catalog pages and drawings for the specified flow switches must not be exceeded. These pressures and temperatures take into consideration possible system surge pressures/temperatures and their frequencies.

Selection of materials for compatibility with the media is critical to the life and operation of GEMS level indicators. Take care in the proper selection of materials of construction; particularly wetted materials.

Life expectancy of switch contacts varies with applications. Contact GEMS if life cycle testing is required.

Ambient temperature changes do affect switch set points, since the specific gravity of a liquid can vary with temperature.

Level indicators have been designed to resist shock and vibration; however, shock and vibration should be minimized.

Liquid media containing particulate and/or debris should be filtered to ensure proper operation of GEMS products.

Electrical entries and mounting points may require liquid/vapor sealing if located in an enclosed tank.

Level Indicators must not be field repaired.

Physical damaged sustained by the product may render it unserviceable.



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