6700 Liquid Level Indicator

Accurate gaugeboard indicator for level measurement in storage tanks





















The Model 6700 Liquid Level Indicator is an economical, easy to install measurement device utilising target and gaugeboard to indicate tank level. The indicator displays liquid level (product innage) to an accuracy 25 mm (1"). Designed for use on a variety of atmospheric and low pressure storage vessels, the 6700 may be installed on both in-service and out-of-service tanks.

Features

- Accurate to 25 mm (1")
- Durable aluminum gaugeboard with vinyl facing
- Level indication in feet/inches or metres/decimetres
- Full travel or half travel designs
- Standard and severe service configurations
- Vertical cone roof and bolted tank
 models





Measuring System

Operation

Changes in the liquid level in the tank raise or lower the float, which moves the indicator cable. Cable movement drives the indicator up and down the gaugeboard on the side of the tank. The liquid level in feet and inches, or metres and decimetres is shown by the indicator position on the gaugeboard. The user may then convert the liquid level to units of volume. This may be accomplished manually or Endress+Hauser's computer aided data acquisition system may perform the task.

Installation

Endress+Hauser offers a variety of models and installation kits to suit most applications for the 6700 Liquid Level Indicator. Included with each 6700 are all components necessary for installation, except for the 38 mm (1-1/2") pipe. A comprehensive instruction manual provides step by step details on installation.

The aluminum gaugeboard is provided in 2.1 m (7 ft) sections and includes the necessary number of splice brackets to connect the sections supplied per the measuring range ordered. The aluminum board is 2 mm (0.8") thick with a vinyl facing of Imperial or Metric units of measure.

Accessories



Oil Seal Unit







Oil Seals

Oil seals are used when the tank cannot be free vented to atmosphere.

Drive Elbow Modification Kit

This kit allows additional transmitters or limit switches to be driven by the 6700. The kit includes the drive elbow, which replaces the standard elbow, and sufficient tape/cable for a 14.4 m (48 ft) tank.

Manways and Inspection Covers

To facilitate initial installation and subsequent inspection and service, Endress+Hauser offers several inspection and manway covers.

Extension Bracket Kit

The extension bracket bolts to the standard bracket and provides an extension of approximately 50 mm (2") from the side of the tank. Slotted holes are provided for adjustment. The kit includes a single bracket and the necessary mounting hardware.

Reinforcing Bracket

The reinforcing bracket is installed between the standard mounting bracket and provides additional stiffness for the gaugeboard. This option is recommended for areas with high wind conditions.

Severe Service Kit

For corrosive chemical storage, Endress+Hauser offers a Severe Service Kit. All wetted parts are fabricated from fibre reinforced plastic (vinyl ester) or teflon coated stainless steel.

Stainless Steel Kit

For corrosive or clean liquids such as potable water, a Stainless Steel Kit is offered with all wetted parts, top anchors and elbows fabricated from 316 stainless steel.

Drive Elbow Modification Kit

Gaugeboard Extension Bracket 50.8 mm (2")

Center Gaugeboard Reinforcing Bracket





Left: Cone roof tank half travel bolted

Center: Cone roof tank full travel

Right: Cone roof tank full travel severe service shown with Oil Seal option





The 6700 can be installed using various manhole covers

Technical Data

Materials of Construction

Description	Standard Service	Stainless Steel	Severe Service	
Indicator board	2 mm (0.08") aluminum	2 mm (0.08") aluminum	2 mm (0.08") aluminum	
Sheave elbows	Aluminum	316 stainless steel	Cast iron	
Indicator target	316 SS/HMWPE	316 SS/HMWPE	316 SS/HMWPE	
Float	316 stainless steel	316 stainless steel	Fibre reinforced vinyl ester	
Float cable	316 stainless steel	316 stainless steel	Teflon coated 316 SS	
Guide cable	316 stainless steel	316 stainless steel	Teflon coated 316 SS	
Top anchors	Steel	316 stainless steel	Steel	
Bottom anchors	Steel	316 stainless steel	(Customer supplied)	
Cable fastener	316 stainless steel	316 stainless steel	Fibre reinforced vinyl ester	
Cable crimp	Nickel plated copper	Nickel plated copper Nickel plated copper		

Product Structure

0700 51 11-			
6700 Liquid Level			
Tank Ty			
BL	Bolted		
ST	Standar	d	
SV	Severe		
SS	Stainles	s steel	
	Board T	ype and Length – Imperial	
	06F	Tank to 6 ft	
	13F	Tank to 13 ft	
	20F	Tank to 20 ft	
	27F	Tank to 27 ft	
	34F	Tank to 34 ft	
	41F	Tank to 41 ft	
	48F	Tank to 48 ft	
	55F	Tank to 55 ft	
	63F	Tank to 63 ft	
		ype and Length – Metric	
	02M	Tank to 2 m (1.8 m)	
	04M	Tank to 4 m (4.0 m)	
	06M	Tank to 6 m (6.1 m)	
	08M	Tank to 8 m (8.2 m)	
	10M	Tank to 10 m (10.4 m)	
	12M	Tank to 12 m (12.5 m)	
	14M	Tank to 14 m (14.6 m)	
	16M	Tank to 16 m (16.5 m)	
	19M	Tank to 19 m (18.9 m)	
	Half Tra	vel – Vertical Tank	
	13H	Tank to 13 ft – half travel	
	27H	Tank to 27 ft - half travel	
	41H	Tank to 41 ft - half travel	
	55H	Tank to 55 ft – half travel	
	69H	Tank to 69 ft – half travel	
	83H	Tank to 83 ft – half travel	
	97H	Tank to 97 ft – half travel	
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6700		product designation	
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Oil Seals

Part Number	Description
10-01994-AAA	135° aluminum elbows, 216 mm (8.5") W.C. max. working pressure
10-01994-BAA	135° cast iron elbows, 216 mm (8.5") W.C. max. working pressure
10-02861-AAA	180° aluminum elbows, 689 mm (27") W.C. max. working pressure

Drive Elbow Modification Kit

Part Number	Description
13-08821	Drive Elbow Modification Kit, Imperial
13-08971	Drive Elbow Modification Kit, Metric

Extension Bracket Kit

Part Number	Description
13-10720-003	Extension Bracket Kit

Reinforcing Bracket

Part Number	Description
02-10721	Reinforcing Bracket

Locations

Endress+Hauser Systems & Gauging Ltd. Heighington Lane Newton Aycliffe Co Durham DL5 6XZ United Kingdom Tel: +44 (0)1325 321111 Fax: +44 (0)1325 300840

Endress+Hauser Systems & Gauging, Inc 2901 W. Sam Houston Parkway North Houston, TX 77043 USA Tel: +1 (832) 590-6200 Fax: +1 (832) 590-6201 Endress+Hauser Systems & Gauging S.A. Rue de Bitche 62100 Calais France Tel: +33 - (0)321-96-49-93 Fax: +33 - (0)321-34-36-12

Endress+Hauser Systems & Gauging, Inc. 1800 Diagonal Road Suite 300 Alexandria, VA 22314 USA Tel: +1 (703) 837-9202 Fax: +1 (703) 837-9209 Sakura Endress Co., Ltd. 862-1 Mitsukunugi Sakaigawa-mura Higashi-Yatsushiro-Gun Yamanashi Prefecture 406-0846 Japan Tel: +81 (0)552-66-4964 Fax: +81 (0)552-66-4969

Systems & Gauging Headquarters

Endress+Hauser Systems & Gauging, Inc. 5834 Peachtree Corners East Norcross (Atlanta), GA 30092 USA Tel: +1 (770) 447-9202 Fax: +1 (770) 662-8939 http://www.systems.endress.com

