

## 2557 Limit Switch

**Float & tape driven switch for  
the indication of alarms or relays**



### Applications

Model 2557 Limit Switches are cam-operated switches designed to mount directly to the 2500 Automatic Tank Gauge (ATG). The cam-operated switches can be used to activate alarms or relays at any level selected by the user.

### Features

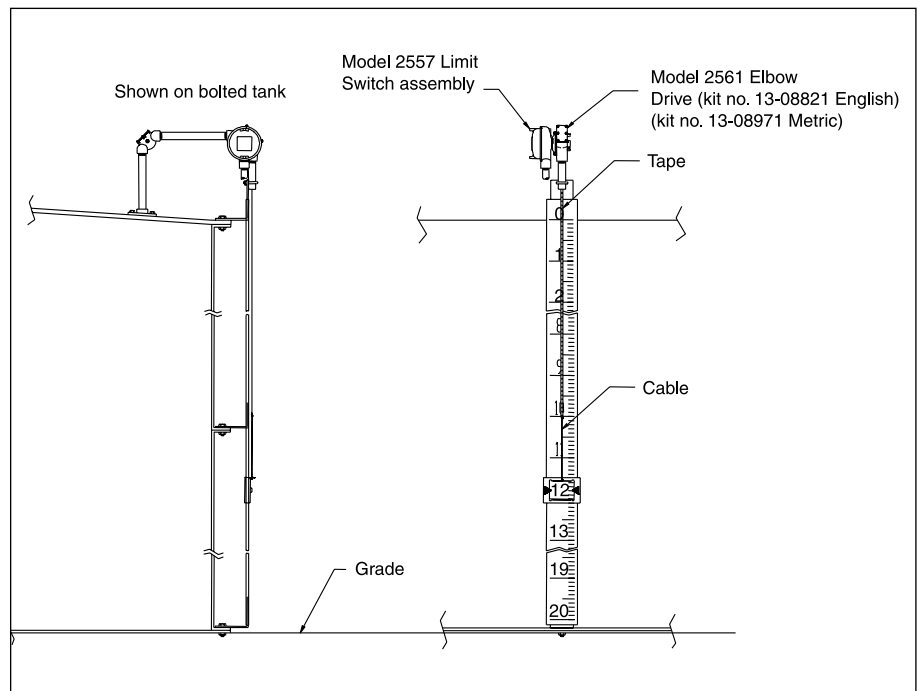
- Mounts directly to 2500 ATG
- Mounts to 6700 with the Elbow Drive Accessory Kit
- Two, four or six SPDT cam-operated switches
- UL/CSA approved/certified
- Actuates alarms or relays
- Cast aluminum enclosure with O-ring seal
- Switches operable in any desired sequence
- Independent adjustment of each switch in unit

## Measuring System

The primary issues to consider when selecting the options to be used involve the number of switch points to be initiated, and the height of the tank. Typically, the unit must operate over the range denoted by the height of the tank. Therefore, in most cases the range of the unit selected is equal or greater than the tank height. An application involving the closure of limit switches upon reaching high and low limits of tank capacity would involve two switches – one for the high set point and one for the low. The requirement for additional measurement points involves the subsequent use of additional limit switches.

The range is determined by the gear ratio. The three ranges available – 16, 32 and 64 ft (4.87, 9.75 and 19.50 m), correspond to gear ratios of 25:1, 50:1 and 100:1 respectively. Each revolution of the drive shaft is equal to one foot of gauge travel. Therefore, with a 25:1 gear ratio, 25 ft (7.62 m) of gauge travel is equal to one revolution of the cam. The cam has 235 degrees of travel between switch points and 125 degrees of dwell. With a 25:1 gear ratio, 235 degrees results in 16 ft (4.87 m) of travel. 125 degrees is equal to 9 ft (2.7 m) of dwell. Endress+Hauser strongly recommends using the 2557 with a redundant independent alarm system.

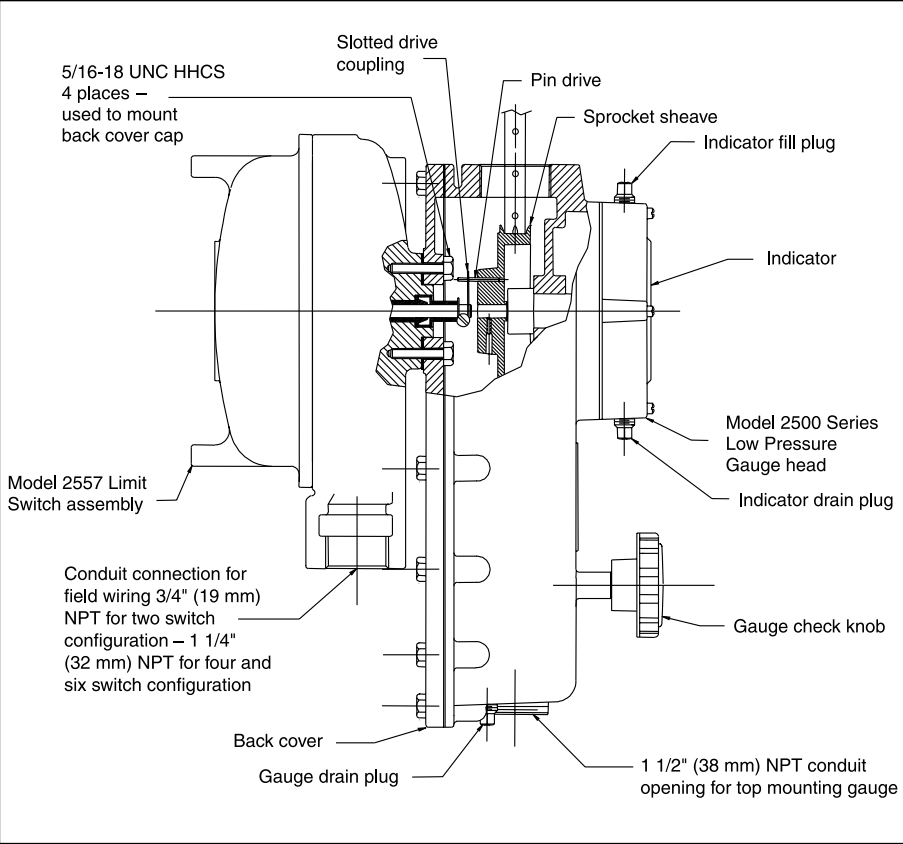
Typical 2557  
measuring system



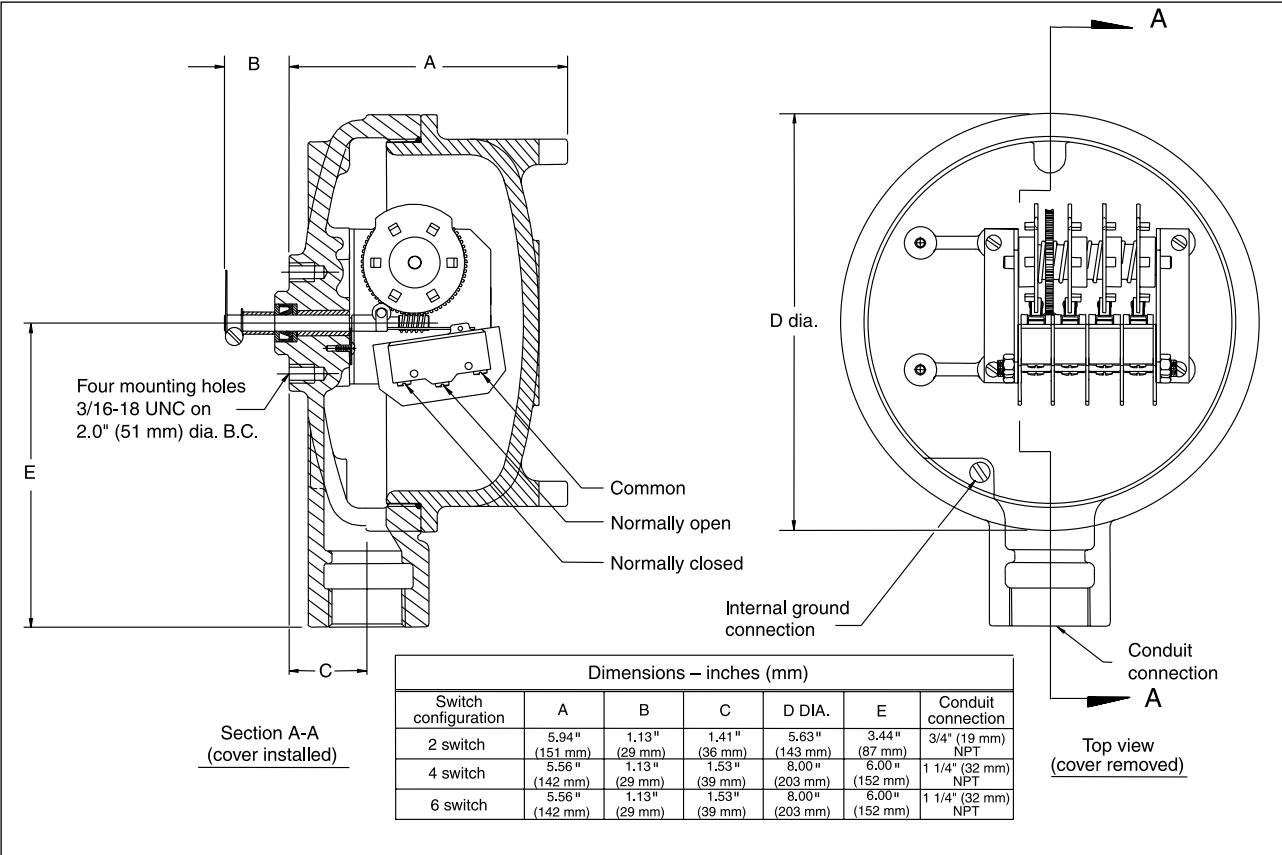
# Installation

The model 2557 bolts directly to the back of the 2500 ATG or to the 2520 High Pressure Gauge fitted with a 2581 Oil Tight Adapter. Adapters are also available for mounting to other float gauges. When used with the 6700 Indicator, the 2557 is bolted to the elbow drive assembly located at the top of the tank. The elbow drive may also be used with the 2500 and the 2557 used as secondary output.

2557 mounted on 2500 ATG



# Technical Data



2557 overall dimensions

## Environmental

Enclosure	Explosion proof: NEC Article 500 Class I, Division 1, Group D NEMA Type 4 rated
Electrical Ratings	20 Amp 125, 250 or 480 V <sub>ac</sub> 10 Amp 125 Volts when controlling tungsten filament lamp loads on AC circuits 1 HP 115/125 V <sub>ac</sub> , 2 HP 230/250 V <sub>ac</sub> 1/2 Amp 125 V <sub>dc</sub> , 1/4 Amp 250 V <sub>dc</sub>

## Physical

Material	Cast 356 aluminum base and cover
O-Ring	Buna N (Nitrile)

## Functional

Hazardous Location Approvals	UL, File No. E23827 (2, 4 and 6 switches) CSA, File No. LR4084 (4 and 6 switches)
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### Note!

Interposing relays may be required to maintain the circuit in pumping operations.

## Product Structure

2557	Level Range	
	G	0 to 16 ft (0 to 4.87 m)
	A	0 to 32 ft (0 to 9.75 m)
	B	0 to 64 ft (0 to 19.50 m)
		Number of SPDT Switches (select one)
	B	Two (UL listed)
	D	Four (UL and CSA listed)
	F	Six (UL and CSA listed)
2557		
		Product designation

### Mounting Adapters

Part Number	Description
13-05956-102	Adapter kit for mounting to Whessoe Varec/S&J/GPE 92513, 92514, 92020 and 92030
13-05956-202	Adapter kit for mounting to Whessoe Varec/S&J/GPE 92006, 2006
13-07231	Adapter kit for mounting to Sakura LT-1110 gauge

### 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 S.A.  
Rue de Bitche  
62100 Calais  
France  
Tel: +33 (0)3 21-96-49-93  
Fax: +33 (0)3 21-34-36-12

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>

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, Inc.  
1800 Diagonal Road  
Suite 300  
Alexandria, VA 22314  
USA  
Tel: +1 (703) 837-9202  
Fax: +1 (703) 837-9209

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