

### VAREC 2592 Series COVER POSITION INDICATOR GAUGEHEAD TYPE

The 2592 Series Cover Position Indicator is designed for use with vertically-guided or spirally-guided floating digester and gas storage/holder covers.

#### Introduction

The Varec Biogas 2592 Series Cover Position Indicator is designed for use with vertically-guided or spirally-guided floating digester and gas storage/holder covers. The unit incorporates the use of a gaugehead to continuously monitor the position of floating covers. Plant operators can easily monitor cover position, which provides an indication to the current status of the digester or gas storage/holder. This includes the addition of raw solids, withdrawal of liquor or digested solids, and changes in gas storage volume.

The 2592 Series provides a local readout of cover position. The gaugehead conveniently mounts to the digester wall, at eye-level. Transmitters are available to provide a remote signal in several different protocols including 4-20 mA, Modbus and Hart as examples. Limit switches can be added to control alarms or other equipment.

Cover position indicators for spirally-guided gas storage/holder covers require a Current Output Transmitter and a local display for proper cover position indication. Refer to Model 8200 literature for additional information.

#### Technical Data

- Continuous Monitoring Gaugehead Mounts at Eye-Level and Easily Readable
- Optional Transmitter Provides for Remote Read-Out
- Switches Available for High and Low Alarm



#### Features

A tape/cable assembly connected directly to the digester cover actuates the Varec Biogas 2592 Series gaugehead. The gaugehead uses a negator (spring) motor. It is designed to provide constant tension on the tape/cable. The motor automatically compensates for variations in the weight of the tape at different cover levels. As the cover moves, the perforated tape rotates a sprocket sheave in the gaugehead. This drives the counter mechanism to show cover position.

The negator motor is an improvement over the counter weights commonly used with the gaugeboard indicators because it provides simplified overall maintenance and improved accuracy in read-outs. The counter assembly is isolated from the main gaugehead housing.

Dial and counter wheels are black with large white numerals for easy reading. The standard gaugehead reads in feet, inches, and 1/16" increments. The standard 2592 Series is suitable for 25 feet (7m) maximum cover travel. A metric gaugehead, with readability to 1 mm, is available as an option. Please consult the factory for higher ranges.

For alarm capability or remote level indication, auxiliary equipment is also available. See "Optional Accessories" next page.

**Specifications**

**Construction**

All components are manufactured of corrosion-resistant material ideal for the waste treatment plant or digester environment.

GAUGEHEAD:

Aluminum

ELBOW ASSEMBLY:

Aluminum/ 316 SS

PERFORATED TAPE, SHEAVE ELBOW:

Stainless Steel

**Optional Accessories**

The following equipment is available for field installation. Accessories are to be mounted on the 2592 Series:

**LIMIT/ CONTROL SWITCH:**

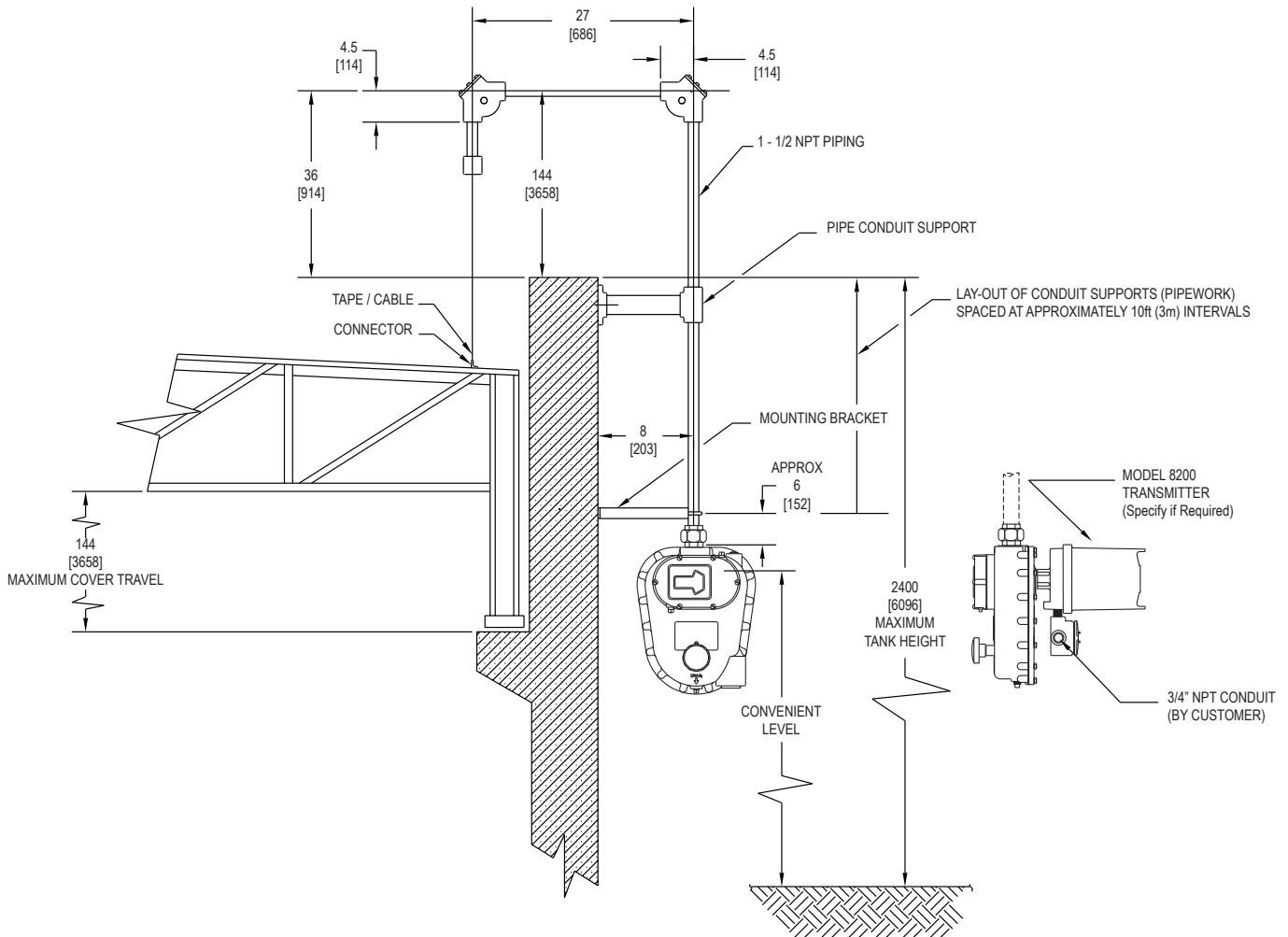
Used to signal high and low level alarms. It is also used to activate controls for operating pumps, valves or other equipment. Available with two or four sets of contacts. These switches are adjustable for the full range of cover travel. Must be ordered with a current output transmitter.

**4-20MA CURRENT OUTPUT TRANSMITTER:**

An analog device that transmits the cover level to a remote receiver or indicator. It can be configured with limit switches.

Contact factory if other protocols are required.

**Dimensions, inches [mm]**



**VERTICAL AND SPIRAL-GUIDED COVERS**

**Ordering Information - Pressure and Vacuum**

Model	Description
2592	Cover Position Indicator Gaugehead Type
<b>Code</b>	<b>Configuration</b> (Select One)
01	Vertically-Guided Cover, English Read-Out: Feet, Inches, 1/16" Increments
02	Vertically-Guided Cover, Metric Read-Out: Meters/ 10ths/ 100ths
03	Spirally-Guided Cover <sup>1</sup> , English Read-Out: Feet, Inches, 1/16" Increments
04	Spirally-Guided Cover <sup>1</sup> , Metric Read-Out: Meters/ 10ths/ 100ths
<b>Code</b>	<b>Options</b> (Refer to 8200 Product Data Sheet for Ordering Information)
0	Not Required
3	With Current Output Transmitter, 115 VAC - Integral DC, No Limit Switches, FM CL.1, Div. 1, Group C and D NEMA 4 Enclosure PN: N82001X100 (X signifies Level Range below), Choose Preferred Code. <u>MUST SPECIFY LEVEL RANGE ON PURCHASE ORDER:</u> 1. 0 - 12.5 ft    2. 0 - 25 ft    3. 0 - 50 ft    4. 0 - 100 ft
4	With Current Output Transmitter, 115 VAC - Integral DC, Two SPDT (Normally-Open) Switches, FM CL.1, Div. 1, Group C and D NEMA 4 Enclosure PN: N82001X111 (X signifies Level Range below), Choose Preferred Code. <u>MUST SPECIFY LEVEL RANGE ON PURCHASE ORDER:</u> 1. 0 - 12.5 ft    2. 0 - 25 ft    3. 0 - 50 ft    4. 0 - 100 ft
5	With Current Output Transmitter, 115 VAC - Integral DC, Four SPDT (Normally-Open) Switches, FM CL.1, Div. 1, Group C and D NEMA 4 Enclosure PN: N82001X121 (X signifies Level Range below), Choose Preferred Code. <u>MUST SPECIFY LEVEL RANGE ON PURCHASE ORDER:</u> 1. 0 - 12.5 ft    2. 0 - 25 ft    3. 0 - 50 ft    4. 0 - 100 ft
6	With Current Output Transmitter, 220 - 240 VAC - Integral DC, No Limit Switches, FM CL.1, Div. 1, Group C and D NEMA 4 Enclosure PN: N82002X200 (X signifies Level Range below), Choose Preferred Code. <u>MUST SPECIFY LEVEL RANGE ON PURCHASE ORDER:</u> 5. 0 - 3.75 m    6. 0 - 7.5 m    7. 0 - 15 m    8. 0 - 24 m
7	With Current Output Transmitter, 220 - 240 VAC - Integral DC, Two SPDT (Normally-Open) Switches, FM CL.1, Div. 1, Group C and D NEMA 4 Enclosure PN: N82002X211 (X signifies Level Range below), Choose Preferred Code. <u>MUST SPECIFY LEVEL RANGE ON PURCHASE ORDER:</u> 5. 0 - 3.75 m    6. 0 - 7.5 m    7. 0 - 15 m    8. 0 - 24 m
8	With Current Output Transmitter, 220 - 240 VAC - Integral DC, Four SPDT (Normally-Open) Switches, FM CL.1, Div. 1, Group C and D NEMA 4 Enclosure PN: N82002X221 (X signifies Level Range below), Choose Preferred Code. <u>MUST SPECIFY LEVEL RANGE ON PURCHASE ORDER:</u> 5. 0 - 3.75 m    6. 0 - 7.5 m    7. 0 - 15 m    8. 0 - 24 m
9	With Current Output Transmitter, Special Configuration. Use Ordering Information Provided in 8200 Product Data Sheet to Configure Specific Requirements.

2592    02    9    (Example)  
 Example: Vertical Guided Cover, Metric Read-Out: Meters/ 10ths/ 100ths with Current Output Transmitter of Special Configuration.

NOTE: 1 - Cover Position Indicator for Spiral Guided Covers (Options 03, 04) Require Model 8200 Output Transmitter for Proper Operation.  
 See Data Sheet for Model 8200.