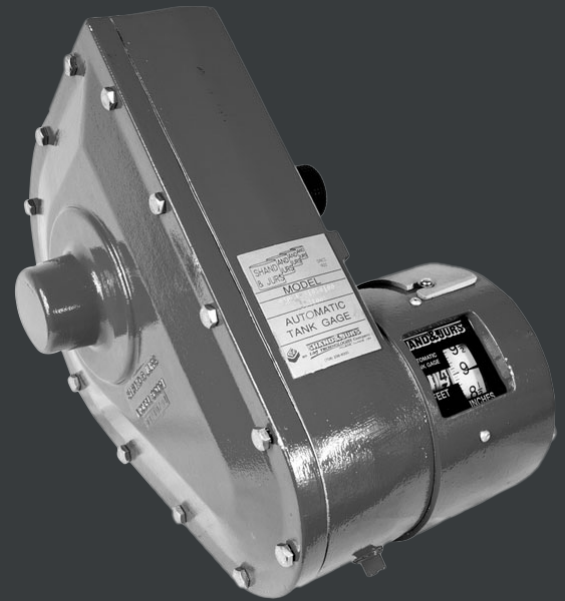


92021

Cover Position Indicator

The Shand & Jurs 92021 Cover Position Indicator is built for wastewater plant operators, biogas facility managers, maintenance teams, and consulting engineers who need direct confirmation of floating digester, gas holder, or low-pressure biogas cover movement. The 92021 uses proven tape/cable gaugehead mechanics to translate cover travel into a continuous, eye-level local readout, helping operators monitor gas storage status, verify normal movement, and identify restricted or abnormal travel before venting or pressure-protection events occur. Unlike gaugeboards, counterweight systems, or powered-only indication, the 92021 provides a rugged, power-free mechanical reference that is easy to read, simple to maintain, and naturally integrated with S&J Biogas digester cover equipment for wastewater and renewable gas applications.



Key Features

Direct Cover Indication

Converts actual floating cover travel into a mechanical readout, confirming movement that pressure or level instruments may only imply.

Independent Operation

Mechanical operation requires no external power, maintaining local position visibility regardless of electrical availability.

Continuous Eye-Level Reference

External counter display provides operators with a clear position reference for routine checks and troubleshooting.

Abnormal Travel Detection

Position changes can reveal binding, restricted movement, or unusual cover behavior before pressure protection devices actuate.

Vertical or Spiral Compatibility

Two 90 degree pullies (9399-13440) for vertically guided or a 45 degree pulley (9399-13470) for spirally guided roofs are available.

Accessory Flexibility

Optional transmitters, hand cranks, and installation kits adapt the unit to varied applications.



Typical Applications



DIGESTER COVER POSITION

Provides a direct mechanical reference for floating digester cover travel in wastewater and biogas systems.



GAS HOLDER MONITORING

Confirms gas holder cover elevation and movement without requiring vessel entry or electrical instrumentation.



BIOGAS STORAGE SYSTEMS

Supports operator visibility into cover position for low-pressure gas containment and troubleshooting.



FLOATING COVER VERIFICATION

Helps identify abnormal movement, restricted travel, or cover binding during routine operational checks.



REMOTE COVER READOUT

Optional transmitter and accessories can send cover position to control rooms or plant monitoring systems.



BACKUP POSITION REFERENCE

Offers independent local indication when electronic level, pressure, or remote monitoring systems are unavailable.

Benefits



Improved Operator Confidence

Operators can confirm actual cover movement directly, reducing uncertainty from pressure-only or inferred process readings.



Earlier Issue Detection

Restricted cover movement or abnormal travel trends can be identified before venting or pressure-protection events occur.



Reduced Inspection Burden

External position indication helps limit vessel openings or manual checks needed to verify cover behavior.



Outage Resilience

Mechanical indication remains available during outages, preserving local awareness when electronic systems are offline.



Control Room Visibility

Optional transmitters support remote monitoring, alarms, and integration with broader plant control strategies.



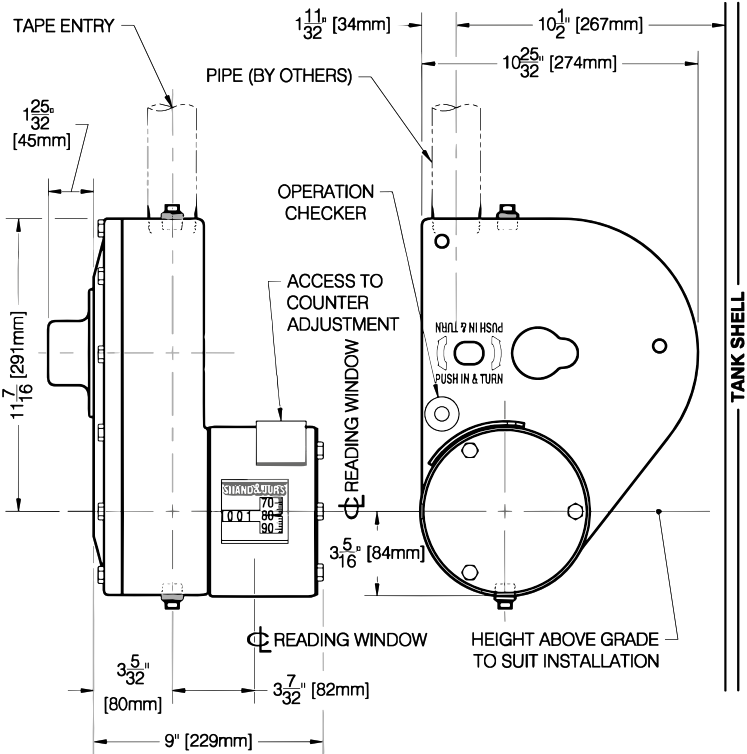
Lower Complexity

Rugged mechanical construction provides position visibility without adding powered transmitters, software, or complex instrumentation.

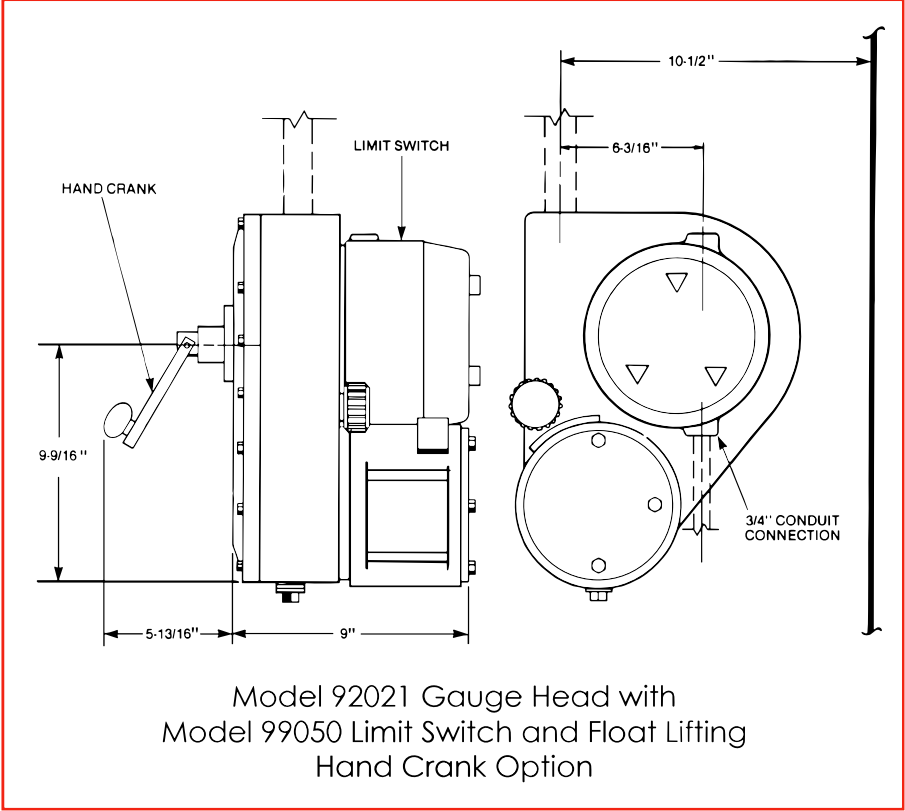
Specifications

Specification	Details
Product Name	Shand & Jurs Model 92021 Cover Position Indicator
Product Type	Mechanical gaugehead-type cover position indicator
Primary Application	Floating cover position indication for S&J Biogas, digester, and gas-holder applications
Measurement Principle/Indication	Tape/cable mechanical motion tracking driven by floating cover movement with external mechanical numeric counter
Maintenance	Acutrak 90 Cartridge for easy maintenance and tape replacement
Local Readout	Eye-level gaugehead-mounted mechanical counter with optional transmitter for digital monitoring
Typical Cover Service	Vertically or spirally moving floating covers, digester covers, gas holders, and biogas storage systems
Standard Gauging Range	Up to 90 feet / 27.4 meters
Extended Range	Consult factory for higher ranges
Materials of Construction	Cast aluminum housing and sprocket wheels. Stainless steel tape & spring. Delrin tape reels and storage hubs.

Dimensions



Shipping Weight: 46 LBS. Horizontal center line of reading window.
Install at any height above grade to suit installation.



Model Number Selection

The model number will have a base number 92021 followed by 8 digit numbers. These digits will represent 5 sets of option tables.

92021 - AB - CD - EF - GH

Specify:

- 1. Model 92021 Automatic Tank Gauge
- 2. Type of Service: Normal, Ammonia or Severe
- 3. Gauge Head Options: Gauge Head Only; with Limit Switch* Provisions; With Float Lifting Hand Crank; With Float Lifting Hand Crank; With Float Lifting Hand Crank and Limit Switch* Provisions.
- 4. Type of Calibration: Feet and Inches; Decimal Feet or Metric
- 5. Type of Readout: A) Innage or Outage
 B) Maximum Tank Height
- 6. Type of Installation: A) Gauge Head only (Without Tape for Ground Reading)
 B) Ground Reading (fixed roof tanks)
 C) Ground Reading (floating roof tanks)
 D) Roof Reading
 E) Turbulent Tanks**
- 7. Type of Accessory Kit and Class
- 8. Auxiliary Gauging Accessories, as Required
- 9. Specify CE for Ordinary EU Locations use Table G1 or G2
- 10. ATEX Certification for II 1 G Ex h II B T1...T6 Ga EU Locations, use Table G3 or G4

*Limit Switch Must Be Ordered Separately.

**Use Kits 3 or 14 Only.

Materials of Construction - Gauge Head

Service	Body	Cover	Counter Housing	Tape Reel	Sprocket	Hardware
Normal	CA	CA	CA	CA	CA	RP
Ammonia	CA	CA	CA	CA	CA	RP
Severe	NI	NI	CA	CA	CA	RP

Sprocket pins, negator, tapes, shafts, and Ball Bearings are Stainless Steel, Sleeve Bearings are Teflon.

- CA = Cast Aluminum
- SS = Stainless Steel
- RP = Rust Proof Steel
- NI = Nodular Iron

Pipe Support Bracket = Steel angle Brackets are furnished to fasten pipe to tank every 10'

Table AB - Gauge Head Options and Service (with Operation Checker)

Option AB	Description	Service
31	Gauge Head Only	Normal*
41		Ammonia**
51		Severe**
32	Gauge Head with Provision for Limit Switch Assembly Mounted to Side of Gauge Head***	Normal*
42		Ammonia**
52		Severe**
33	Gauge Head with Float Lifting Hand Crank	Normal*
43		Ammonia**
53		Severe**
34	Gauge Head with Float Lifting Hand Crank & Provision for Limit Switch Assembly Mounted to Side of Gauge Head***	Normal*
44		Ammonia**
54		Severe**

- * Maximum Pressure:15 psig
- ** Maximum Pressure: 50 psig.
Specify kits 12C or 14C when used for 3 to 50 psig service.
Select tape block valves from the 94321 product data sheet.
- *** When mounting limit switch assembly to counter housing there will be a charge applied to the gauge price. See the 99050 for selection of limit switch assembly and appropriate adapter.

Table C - Calibration Reading

Option C	Calibration	Reading
0	Feet and Inches	Innage
1		Outage
2	Decimal Feet	Innage
3		Outage
4	Metric	Innage
5		Outage

Table D - Maximum Tank Height

Option D	Maximum Tank Height
5	60 Feet or 18.2 Meters
8	90 Feet or 30 Meters
9	120 Feet*

*Does not have Acutrak Cartridge

Table EF - Type of Installation

Option EF	Description
01	Ground Reading (Fixed Roof)
02	Ground Reading (Internal Floating Roof)
03	Roof Reading
04	Turbulent Tanks*
05	Ground Reading (External Floating Roof)

*Use Kits 3 or 14 only

Table GH - Certification

Option GH	Description
00	Standard
10	CE
30	ATEX Certification

Summary

The Shand & Jurs Model 92021 Cover Position Indicator gives wastewater and biogas operators a direct mechanical reference for floating cover position. By connecting cover movement to a gaugehead-mounted counter, the 92021 helps operators monitor digester or gas-holder status, confirm cover travel, and recognize abnormal movement during changes in feed, withdrawal, and gas storage conditions. Optional transmitters can extend cover position awareness to alarms or control room monitoring. This makes the 92021 a natural fit alongside S&J Biogas cover equipment, where operators need rugged, local, power-free indication at the point of operation.

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This document is for information purposes only. All designs subject to change. Certified dimensions, specifications, and performance data available upon request