
GSI-2200 Limit Switch

Mechanical Limit Switch Assembly

Gauging Systems Inc. manufactures low cost Limit Switch Assemblies for use with most manufacturers' mechanical float gauges, including the GSI - 2570 PJ, GSI - 2570 DX, and GSI - 2550 gauges.

- Both DC and AC Switch Ratings
- NC or NO Settings
- Various dwell times available
- Mounts to most manufacturers' mechanical gauges

The GSI - 2020 comes in two models, the LSA and the MALS. The LSA "Limit Switch Assembly" is the equivalent of other Cam activated limit switches found on the market with a 1/2" calibration accuracy. The MALS "Micro-adjustable Limit Switch" is designed for higher accuracy with 1/16" calibration accuracy. Both models support up to Six Cam activated single pole double throw (SPDT) switches per assembly, with two supplied on the base models.

The GSI-2020 provides the user with an indication when the alarm level is reached by the mechanical gauge. The GSI-2020 is designed for control applications based upon liquid level such as contactors for pumps, motor operated valves (MOV's), mixers, heaters, etc. and emergency shut down (ESD).

- UL Approved
- 2 - 6 SPDT Switches
- 0 - 80 Foot Range

Theory of Operation:



The mechanical gauge drives a limit switch shaft attached to a worm gear. The worm gear in turn drives another gear attached to the Cam mounting shaft. As the Cam shaft turns it rotates each Cam disk assembly. Each Cam disk has a raised area that represents a percentage of

the Cam's circumference. The rise represents the dwell time of the Cam, i.e., the duration of the alarm (by percentage).

As the Cam rotates toward the fixed switch, the roller on the switches arm assembly rides along the edge (circumference) of the Cam. As the arm rides up the dwell the switch is activated. Each Cam can be calibrated to within 1/2" (12.7 mm) of the actuation point. For higher accuracy the GSI - MALS Micro-Adjustable Limit Switch uses an adjustable switch assembly that can be adjusted in or out to calibrate the exact point of contact with the Cam's dwell or raised mound. With the MALS, each Cam can be calibrated to within 1/16" (1.5 mm) of the actuation point.

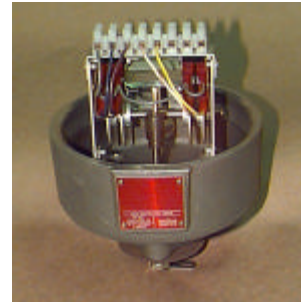
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Specifications:

Approvals:	Underwriters Laboratory (UL)	
Housing:	NEMA 7 Enclosure for Class 1, Division 1, Groups C & D classified areas	
Mounting:	GSI Standard (Four Bolt) Mechanical Gauge Mounting Optional; mounting adapters for other manufacturers mechanical gauges	
Accuracy:	GSI-2020 LSA	Calibration to 1/2" (12.7 mm)
	GSI-2025 MALS	Calibration to 1/16" (1.5 mm)
Range:	Maximum height	80 Feet (24.38 Meters)
Material:	Housing	Aluminum
	Bracket Assembly	Aluminum
	Fasteners	SS
Dimensions:	6" diameter x 7" Height (152.4 mm diameter x 177.8 mm Height)	
Weight:	6 lbs. (2.72 kilograms)	



GSI-2020 Ordering Information

Model Number Specification:

GSI - 202A - B - C - D - E - F

A = Number of Switches:

- (2) Two Switches (Standard)
- (3) Three Switches
- (4) Four Switches
- (5) Five Switches
- (6) Six Switches

B = Accuracy:

- (M) Micro Adjustable Limit Switch (MALS) 1/16"
- (S) Standard Limit Switch Assembly (LSA) 1"

C = Tank Height in Feet:

D = Switch Rating:

- (A) ½ Amp 125Vdc, ¼ Amp 250Vdc, 4 Amp 125 Vac "L", or 11 Amp 1/3 hp 125, 250, 277 Vac
 - (B) ½ Amp 125Vdc, ¼ Amp 250Vdc, 20 Amp 125 & 250Vac, 1 hp 125Vac, or 2 hp 250Vac.
- (NOTE: Available on the LSA Only, Maximum of Four (4) Switches)

E = Switch Configuration:

- (C) Normally Closed
- (O) Normally Open

F = Dwell Time (Degree / Percentage):

- (W) 10 Degree / 3 Percent
- (X) 30 Degree / 12 Percent
- (Y) 120 Degree / 30 Percent
- (Z) Custom (Please Specify)

Example:

Model Number: GSI - 2022 - S - 40 - A - C - W

2 = Two Switches (Standard)
 S = Standard Limit Switch Assembly (LSA) 1"
 40 = Tank Height in Feet
 A = ½ Amp 125Vdc, ¼ Amp 250Vdc,
 4 Amp 125 Vac "L",
 or 11 Amp 1/3 hp 125, 250, 277 Vac
 C = Normally Closed
 W = 10 Degree / 3 Percent

To order call Gauging Systems Inc. (GSI) at **1-800-444-1327** or your local GSI sales representative.