



Rugged Inclinometers for Measuring Slope Angle & Grade

Description

A Clinometer is any of various surveying instruments for measuring angles of elevation, slope, or incline, with respect to gravity. Also known as an inclinometer, slope meter, or gradiometer, Rieker precision instruments provide accurate real-time measurement of slope angle in Degrees or Percent Grade.

Rieker Inc. manufactures commercial off-the-shelf mechanical type inclinometers using precision ball in tube construction. Each filled with a special damping fluid that controls ball movement, providing a smooth steady roll during static and dynamic applications. The fluid combined with large, clear number and degree markings make it easy to get quick, accurate readings under a wide variety of severe environmental conditions.

Rieker Clinometers are industry standard for providing real-time tilt of any object in most any environment.

Contact us today for a quote. OEMs welcome, quantity pricing available.

Features

- ALL-Weather - Will Not Rust or Hang Up
- Easy Installation - Field Retrofit
- Extreme Shock / Vibration Resistant
- UV Resistant
- Wide Operating Temperature Range
- Custom Warning Zones (Red/Green)
- 5, 10, 26, 45° ranges
- Backlit Option (12V-24VDC)

Applications

Quick Visual of...

- Boom Angle
- Slope Meter
- Pitch - Roll
- Heel - Trim
- Tip-over Warning
- Platform Leveling
- Load Balancing

Equipment Types

- Aerial lift trucks
- Aircraft
- Bucket/Utility trucks
- Cranes
- Construction Equipment
- Conveyor and Material Handling Equipment
- Emergency Vehicles
- Fire Aerial Ladder trucks
- Government and Military (wheeled or tracked) Vehicles
- Marine Vessels (including sailboats)
- Recreational Vehicles (RV)
- Trailers



2100 Series

Mechanical "Ball-in-Tube" Inclinometers

2105 GENERAL TECHNICAL DATA

Dimensions	6"w X 1.85"h X 0.375"d (152,4mm X 47mm X 9,6mm)
Case Material	100% Polycarbonate, IP68
Operating Temperature	-50° F to +180° F (-45°C to +82°C)
Measuring Scale	Lower in Degrees (default); Optional Upper in Percent Grade

2105 STANDARD PART NUMBERS*

2105-B

Degree Range	±5°
Degree Markings	0.5°
Background Color	Black
Markings Color	White



2105-C

Percent Range	±5°
Degree Range	0.5°
Background Color	White
Markings Color	Black



Customer Specified Warning Zones*

Zone Example	Zone 1	0..±3°	Green
Zone Example	Zone 2	±3..5°	Red
Background Color	Black		
Markings Color	White		



*Custom configurations available including adding an upper scale, color warning zones, and backlit housing. Please note that color zones are specified by the customer - your sales representative will be happy to assist.

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Rieker Rugged. Rieker Reliable.™

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2110 GENERAL TECHNICAL DATA

Dimensions	6"w X 1.94"h X 0.375"d (152,4mm X 49,28mm X 9,6mm)
Case Material	100% Polycarbonate, IP68
Operating Temperature	-50° F to +180° F (-45°C to +82°C)
Measuring Scale	Lower in Degrees (default); Optional Upper in Percent Grade

2110 STANDARD PART NUMBERS*

2110-A

Degree Range	±10°
Degree Markings	1°
Background Color	Black
Markings Color	White



2110-F

Percent Range	±10°
Degree Range	1°
Background Color	White
Markings Color	Black



Customer Specified Warning Zones*

Zone Example	Zone 1	0..±5°	Green
Zone Example	Zone 2	±5..10°	Red
Background Color	Black		
Markings Color	White		



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2126 GENERAL TECHNICAL DATA

Dimensions	6"W X 2.375"H X 0.375"D (152,4mm X 60,4mm X 9,6mm)
Case Material	100% Polycarbonate, Ip68
Operating Temperature	-50° F To +180° F (-45°c To +82°c)
Measuring Scale	Lower In Degrees (Default); Optional Upper In Percent Grade

2126 STANDARD PART NUMBERS*

Degree Range	±26°	
Degree Markings	2°	
Background Color	Black	
Markings Color	White	

2126-C



Percent Range	Upper Scale	±45%, 5%
Degree Range	Lower Scale	±26°, 2°
Background Color	Black	
Markings Color	White	

2126-D (Gradiometer)



Degree Range	±26°	
Degree Markings	2°	
Background Color	White	
Markings Color	Black	

2126-E



Zone Example	Upper Scale	±25% To 45%	Red
Zone Example	Lower Scale	±14 To 26°	Red
Background Color	Black		
Markings Color	White		

Customer Specified Warning Zones*



*Custom configurations available including adding an upper scale, color warning zones, and backlit housing. Please note that color zones are specified by the customer – your sales representative will be happy to assist. Set-up fee or minimum quantities may apply.

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2145-05 GENERAL TECHNICAL DATA

Dimensions	5.25" w X 2.29" h X 0.42" d (133,4mm X 58,2mm X 10,7mm)
Case Material	100% Polycarbonate, IP68
Operating Temperature	-50° F to +180° F (-45°C to +82°C)
Measuring Scale	±45° lower scale, ±5° upper scale

2145-05 STANDARD PART NUMBERS*

2145-05-A

Degree Range	Upper Scale	±5°
Degree Markings	Lower Scale	±45°
Background Color	Black	
Markings Color	White	



2145-05-B

Percent Range	Upper Scale	±5°
Degree Range	Lower Scale	±45°
Background Color	White	
Markings Color	Black	



CUSTOM

Customer Specified Options*:
background color | warning zones | backlit housing

2145-05-C

Color Zone 1	Green	0..30°
Color Zone 2	Yellow	n/a
Color Zone 3	Red	30..45°
Background Color	Black or White	
Markings Color	Black or White	



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2100 Series

Mechanical “Ball-in-Tube” Inclinometers

Available For Models	2105, 2110, 2126, 2145-05
LED (Default)	White
LED (Optional)	Green, Red, (NVIS available)
Input Voltage	12VDC or 24VDC
Electrical Connection	20" wire w/(DTM04-2P) connector
Outdoor Rating	IP67



Description

The newest addition to the 2100 Series of rugged and accurate inclinometers is the backlit housing option, adding a highly visible backlight case to the 2100 models for increased safety - especially at night!

This back lit version complies with FEMA and National Fire Protection Association (NFPA) 1901 Standards for Automotive Fire Apparatus.

Applications

The 2100 Series is recommended for use on equipment and vehicles where accurate inclination measurements must be taken under difficult conditions and harsh environments. Typical applications include aerial lifts, truck-mounted boom cranes, any fire truck with a mounted boom or ladder, telescoping off-road variable reach fork lifts, cranes and derricks, or any equipment that requires out-of-level or roll-over visual warning indication.

OEM quantity pricing available. Set-up fee or minimum quantities may apply.

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