GEFRAN
BEYOND TECHNOLOGY

GIB Inclination Sensors

Single/Dual Axis Entry-Level Tilt Sensors (Z/XY)

GIB-XY-015-V-2A

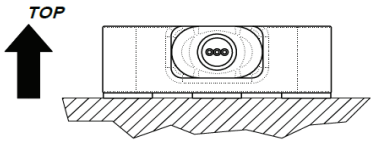
Overview

The entry- level tilt sensors offer a space-saving, high performance, and easy installation. Along with a high IP protection level, resistance to shock and vibration, and high electromagnetic compatibility, this product is suitable for mobile hydraulics applications, agricultural machines, construction machines and material handling equipment.

Features

- Voltage or current analog output
- 8 models available
- 2m axial cable
- IP67/IP69K rated
- PKIT312-1QJ Magnetic Pen included with Dual Axis GIB models
- 3-year warranty

GIB Inclination Sensors							
Part Number	*Price*	*Number of Axis*	*Measuring Range*	*Accuracy*	*Output*	*Connection*	*Drawing Link*
GIB-Z-360-V-2A	$198.00	1	+/- 180 degrees	+/-0.5 degrees	0-10 VDC	pigtail: 6.5ft/2m	PDF
GIB-Z-360-A-2A	$195.00	1	+/- 180 degrees	+/-0.5 degrees	4-20 mA	pigtail: 6.5ft/2m	PDF
GIB-XY-015-V-2A	$198.00	2	+/- 15 degrees	+/-0.5 degrees	0-10 VDC	pigtail: 6.5ft/2m	PDF
GIB-XY-015-A-2A	$195.00	2	+/- 15 degrees	+/-0.5 degrees	4-20 mA	pigtail: 6.5ft/2m	PDF
GIB-XY-045-V-2A	$198.00	2	+/- 45 degrees	+/-0.5 degrees	0-10 VDC	pigtail: 6.5ft/2m	PDF
GIB-XY-045-A-2A	$195.00	2	+/- 45 degrees	+/-0.5 degrees	4-20 mA	pigtail6.5ft/2m	PDF
GIB-XY-085-V-2A	$198.00	2	+/- 85 degrees	+/-0.5 degrees	0-10 VDC	pigtail: 6.5ft/2m	PDF
GIB-XY-085-A-2A	$195.00	2	+/- 85 degrees	+/-0.5 degrees	4-20 mA	pigtail: 6.5ft/2m	PDF



ANALOG CONNECTIONS DUAL AXIS X-Y

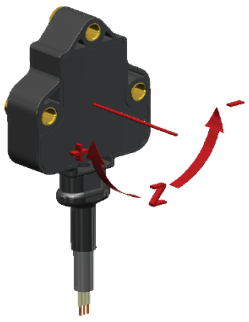
BLACK	GROUND
RED	+ SUPPLY
YELLOW	OUTPUT X
GREEN	OUTPUT Y
BLUE	n.c.
WHITE	n.c.

ANALOG CONNECTIONS SINGLE AXIS Z

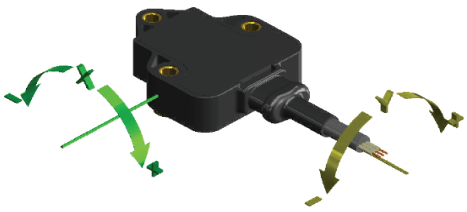
BLACK	GROUND
RED	+ SUPPLY
YELLOW	OUTPUT Z
GREEN	n.c.
BLUE	n.c.
WHITE	n.c.

ITEMS MARKED "n.c." MUST NOT BE CONNECTED

SINGLE AXIS



DUAL AXIS



GIB-XY Inclination Sensor Accessory

Accessory		
Part Number	*Price*	*Description*
PKIT312-1QJ	$35.00	Gefran magnetic pen, for use with Gefran GIB-XY inclination sensors.

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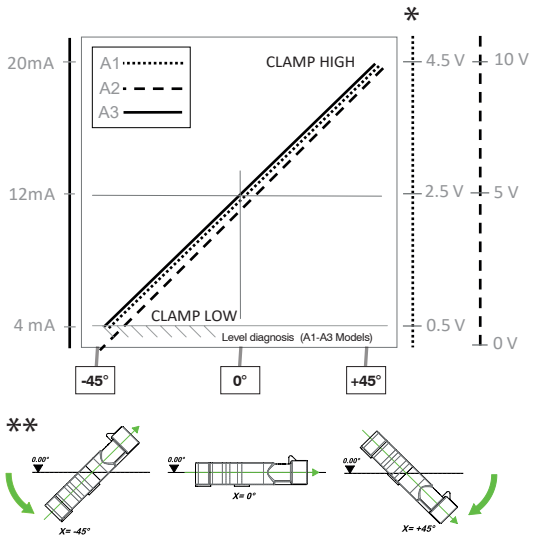
Specifications

GIB Inclination Sensor Specifications	
Specification	
Measurement Range	±15° ±45° ±85° (single axis Z for analog output-dual axis XY) 360° (±180°) single axis Z only
Supply Voltage	+10 to +36 VDC
Output Signal	0-10 VDC; 4-20mA
Electrical Connections	PUR cable 22 AWG
Resolution	12 bit
Accuracy (Factory Verification @ 25 °C)	< ±0.5% FS
Response Time	~650 ms
Working Temperature	-40 to +85°C [-40 to 185°F]
Temperature Coefficient at 0-deg inclination	Typical < ±0.006 deg/°C
Long Term Repeatability	Single Axis: Typical <±0.5 deg in the range of ±180 deg Dual Axis: Typical <±0.5 deg in the range ≤ ±60 deg, ± deg otherwise
Vibrations	20g 10Hz to 2000Hz IEC 60068-2-6
Shock	Impulsive on 3 axis: 50g 11ms IEC 60068-2-27
Electromagnetic Compatibility	2014/30/EU Electromagnetic Compatibility (EMC)
IP Protection Level	IP67-IP69X
Housing Material	PBT [Polybutylene Terephthalate]
Autozero Function	Dual Axis models only
Agency Approval	CE

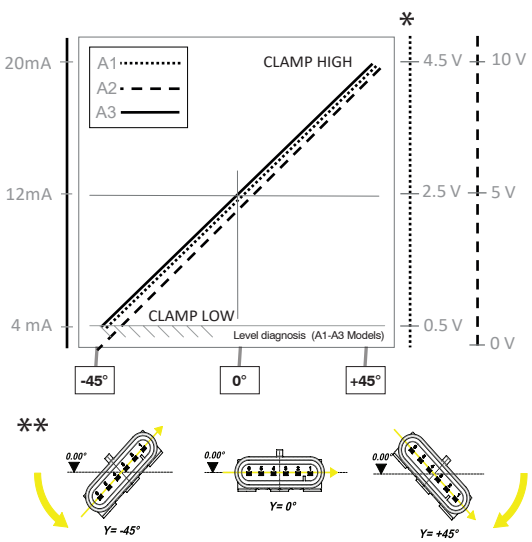
To obtain the latest agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

FUNCTIONS: SENSOR OUTPUT GRAPH

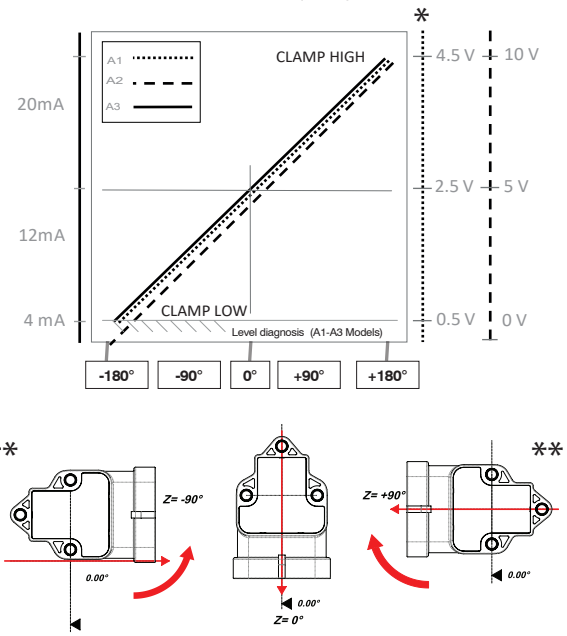
DUAL AXIS TILT SENSOR (XY) - X AXIS



DUAL AXIS TILT SENSOR (XY) - Y AXIS



SINGLE AXIS TILT SENSOR (±180°) - Z AXIS



LOAD CONDITIONS

* +0.5 VDC to +4.5 VDC output with power, +10 to 36 VDC and +0 to10 VDC output with power +11 to 36 VDC: load resistance> 100 kohm
* +0.5 VDC to +4.5 VDC output with power +5 VDC: load resistance > 100 kohm

+4 to 20mA output with power < 15 VDC up to 10 VDC: the maximum load resistance is admissible 200 ohm
+4 to 20mA output with power > 15 VDC up to 36 VDC: the maximum load resistance is admissible 500 ohm

* 0-5V models are not offered by AutomationDirect at this time.

** Rotation drawings shown with AMP Superseal 6P connections. AutomationDirect does not currently carry these models however, the cabled versions operate in the same fashion.