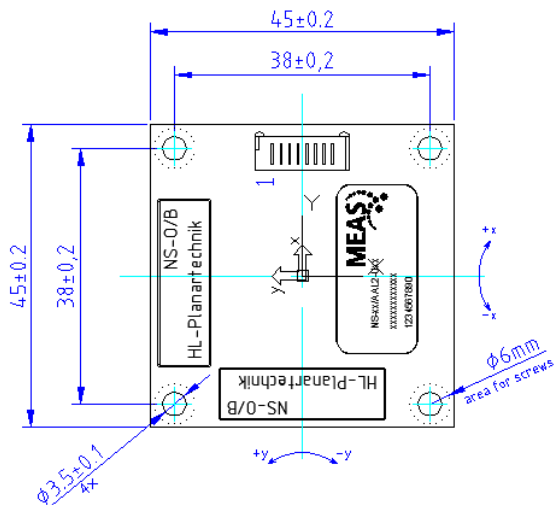
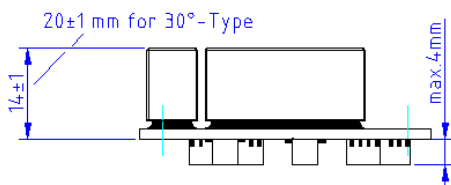
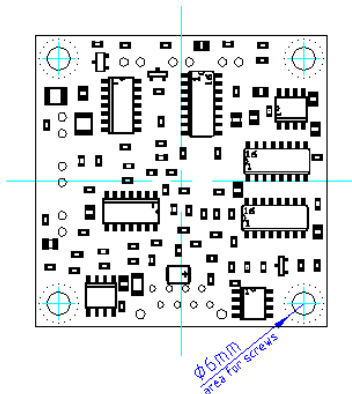




Dimensions [mm]



AAL-SERIES INCLINOMETER

SPECIFICATIONS

Dual axis inclinometer

Measurement range

± 2 to $\pm 30^\circ$

Analog output signal

The **AAL-Series** conductive inclination sensor offers a full calibrated inclination sensor module on a PCB. The sensor provides voltage output depending on the inclination angle and related to the specific axis, as well as a voltage based temperature output signal. An optional integrated e2-prom contains data on the characteristic curve resp. calibration data. This allows for a high integration into a specific application with excellent performance regarding accuracy and long-term stability.

FEATURES

- PCB level
- High accuracy
- Temperature compensated
- High resolution
- Analog output signal
- e2-prom on board

APPLICATIONS

- Building control
- Weighing systems
- Truck chassis levelling
- Mobile and stationary cranes
- Lift platforms
- Road construction machines
- Vehicle applications

PARAMETERS

	Conditions	Min	Type	Max	Unit
Measurement range (1)		-2 (-30)		+2 (+30)	°
Resolution (2)		0.001		0.01	°
Accuracy (absolute) (3)	Ta = 0°...50°C	0.08	0.1	0.3	°
Tempertur drift offset			8		mV
Non-linearity			1.5		%[FS]
Cross sensitivity			0.15		%[FS]
Voltage output signal		0.3		4.7	V
Current consumption			15		mA
Power supply		4.75	5	5.25	VDC
Operation temperature range		-40		+85	°C
Storage temperature range		-40		+85	°C
Weight			20		g
Dimensions	W x D x H		45 x 45 x 14(20)		mm

(1) measurement ranges available: +/-2°, +/-5°, +/-10°, +/-15°, +/-30°
 (2),(3) depend on measurement range

PINNING:

Pin	Name	Description	Type
1	Vcc	Positive power supply +5VDC	Supply, Input
2	Vref	Reference potential +2.5VDC	Output
3	GND	Ground (negative supply voltage)	Supply, Input
4	Out X	Output signal X axis	Output
5	Out Y	Output signal Y axis	Output
6	Out T	Output Signal Temperature in use	Output
7	Data	I2C like bus for EEPROM	Input/Output
8	Clock	I2C like bus for EEPROM	Input

For more details please use the product specification/ application note / instruction manual.

ORDERING INFORMATION

PART NUMBERING	UNIT	SHORT DESCRIPTION
G-NSAAL-006	NS- 2/AAL2-UDD	Range +/-2°, Vcc +5 VDC, voltage output , T-signal, e ² -prom
G-NSAAL-017	NS- 5/AAL2-UDD	Range +/-5°, Vcc +5 VDC, voltage output , T-signal, e ² -prom
G-NSAAL-003	NS-10/AAL2-UFG	Range +/-10°, Vcc +5 VDC, voltage output
G-NSAAL-010	NS-10/AAL2-UDG	Range +/-10°, Vcc +5 VDC, voltage output , T-signal, e ² -prom
G-NSAAL-018	NS-15/AAL2-UDG	Range +/-15°, Vcc +5 VDC, voltage output , T-signal, e ² -prom
G-NSAAL-019	NS-30/AAL2-UDN	Range +/-30°, Vcc +5 VDC, voltage output , T-signal, e ² -prom
G-NSMIS-004	Connector,cable	Connector, 8 pin, 20 cm ribbon cable for AAL-series

NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
1000 Lucas Way
Hampton, VA 23666
United States
Phone: +1-800-745-8008
Fax: +1-757-766-4297
Email: sales@meas-spec.com

EUROPE

MEAS Deutschland GmbH (Europe)
a TE Connectivity Company
Hauert 13
D-44227 Dortmund
Germany
Phone: +49-(0)231-9740-0
Fax: +49-(0)231-9740-20
Email: info.de@meas-spec.com

ASIA

Measurement Specialties (China), Ltd.,
a TE Connectivity Company
No. 26 Langshan Road
Shenzhen High-Tech Park (North)
Nanshan District, Shenzhen 518057
China
Phone: +86-755-33305088
Fax: +86-755-33305099
Email: info.cn@meas-spec.com

TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2016 TE Connectivity Ltd. family of companies All Rights Reserved.