



Eliminates management
of calibration data



Precisely Measure Rates Over Temperature

FEATURES AND BENEFITS

IdentiCal™ Interchangeable Sensor

IdentiCal™ Interchangeable Sensors eliminate the management of calibration data and allow convenient interchangeability of individual sensors. With



standardized sensitivity and offset, there is no need to enter new parameters for each unit.

Perfect for high volume use.

Rugged for Harsh Environment The 11206AC is robust to perform well in harsh environments. The 6061-T6 case with electroless nickel finish plus a PTFE cable with a shield bonded to the case provide improved resistance to EMI, lightning, or other disturbances. The enclosure is rated IP65. The unit has resilient power and will survive 1500 g powered and unpowered.

High Accuracy and Linearity over Wide

Temperature Range The output of the 11206AC is directly proportional to the rotational rate about its axis. The DC-coupled output is fully scaled, referenced, and temperature compensated. When used in demanding temperature environments, gain compensation makes the 11206AC one of the most accurate angular rate gyros available.

Built-In Power Supply Regulation Unregulated DC power from +8.5 to +36 Volts is all that is required to measure rotational rates (min. 12 V for Option L001). The 11206AC is operational with transients of +80 V for 550 ms compatible with MIL-STD-704A.



11206AC

Angular Rate Sensor

SPECIFICATIONS

- ♦ Interchangeable
- ♦ Rugged Uniaxial Angular Rate Gyro with 0.5% Typical Accuracy over -40 to +85°C range

The Measurement Specialties' 11206AC rugged uniaxial angular rate gyro is capable of accurately measuring angular rate under varied environmental conditions. A tough, compact housing holds potted electronics and a shielded 22 AWG cable. Its cubical form allows mounting with the sensing axis oriented in any direction.

The 11206AC provides enhanced accuracy and durability features to meet the challenges of your application. In addition to its robust construction, increased precision is achieved through improved offset and gain compensation.

Each axial sensor has been tested over the -40 to +85°C temperature range and has a nominal full scale output swing of ± 2.25 Volts. The zero rate output level is nominally +2.5 Volts. The 11206AC can be ordered in configurations with different ranges, bandwidths, or other I/O considerations.

SPECIFICATIONS FOR 11206AC - improved specifications available upon request

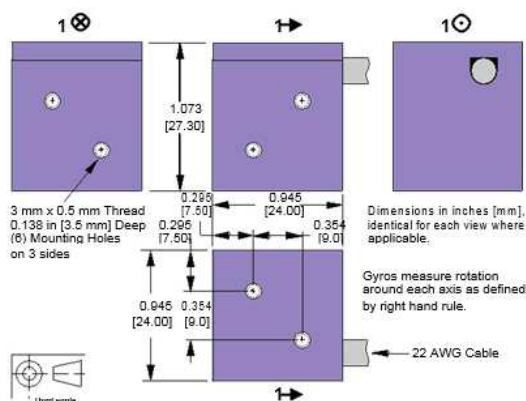
$T_a = T_{min}$ to T_{max} ; $8.5 \leq V_s \leq 36$ V; Acceleration = ± 1 g, Angular Rate = $0^\circ/\text{sec}$ unless otherwise noted; within one year of calibration.

Parameter	Min	Typical	Max	Units	Conditions/Notes
Range & Sensitivity* at 25°C					Must specify via Option Rnnn, see Ordering Info
Option R600		3.0		mV/°/sec	
Option R300		6.0		mV/°/sec	
Option R180		10.0		mV/°/sec	
Option R050		25.0		mV/°/sec	
Sensitivity Drift 25°C to T_{min} or T_{max}			1.0	% FSR	
Offset at 25°C Zero g Bias Level		2.500		V	
Offset Drift 25°C to T_{min} or T_{max}		± 3.0	± 6.0	°/sec	
Alignment					
Deviation from Ideal Axes		± 1.5		degrees	
g Sensitivity		0.2		°/sec/g	Affects offset
Nonlinearity		0.1		% FSR	Best fit straight line
Frequency Response	0		100	Hz	Upper cutoff per Option Bnnn, -3dB pt $\pm 10\%$
Noise Density		0.05		°/sec/ $\sqrt{\text{Hz}}$	$T_a = 25^\circ\text{C}$
Outputs					
Output Voltage Swing	0.25		4.75	V	$I_{out} = 1$ mA, Capacitive load < 1000 pF
Power Supply (Vs)					
Input Voltage Limits	-80		+80	V	-80V continuous, >38 V if ≤ 550 ms, duty <1%
Input Voltage - Operating, Option L000	+8.5		+36	V	
Input Voltage - Operating, Option L001	+12		+36	V	
Input Current		10		mA	No load, quiescent
Rejection Ratio		>120		dB	DC
Temperature Range (T_a)	-40		+85	°C	
Mass		38		grams	
Shock Survival	-1500		+1500	g	Any axis for 0.5 ms, powered or unpowered

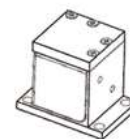
Data subject to change without notice

*Identical sensors are interchangeable, any with same range have same value

11206AC MECHANICAL

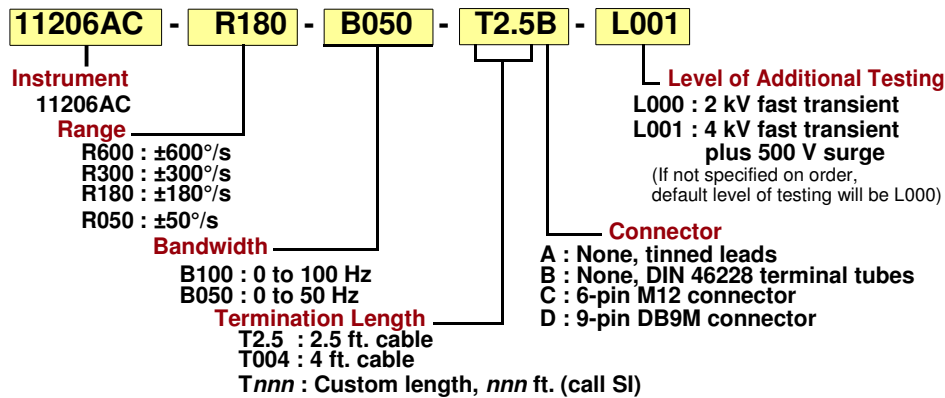


6061-T6 aluminum case with electroless nickel finish plus integrated cable with shield bonded at the case.

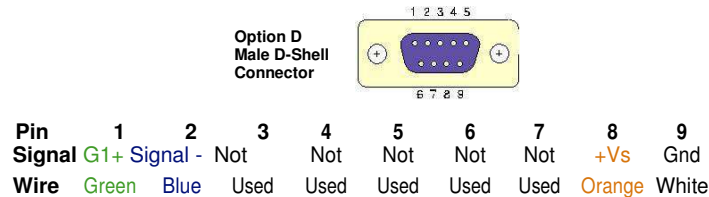


Shown with mounting adapter 34170B (sold separately)

ORDERING INFORMATION



CONNECTIONS



NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
Phone: +1-800-522-6752
Email: customercare.akrn@te.com

EUROPE

MEAS France SAS
a TE Connectivity Company
Phone: +49-800-440-5100
Email: customercare.tlse@te.com

ASIA

Measurement Specialties (China), Ltd.,
a TE Connectivity Company
Phone: +86-400-820-6015
Email: customercare.shzn@te.com

TE.com/sensorsolutions

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