



# ACC100 Sensors

Catalog HY33-2377/US



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**Application**

The ACC100 inclinometer sensor belongs to the Parker family of accessories provided to complement electronic control systems. The ACC100 is a 5 Vdc, dual output inclinometer built with accelerometer technology for mobile hydraulic applications. The ACC100 can be used to sense tilt and motion of the equipment where it is mounted. The sensor has twelve inch leads with an attached Deutsch connector. To make the sensor suitable for mobile equipment, we have focused upon properties such as reliability, electromagnetic immunity and ease of installation.

**Properties**

**Reliability**

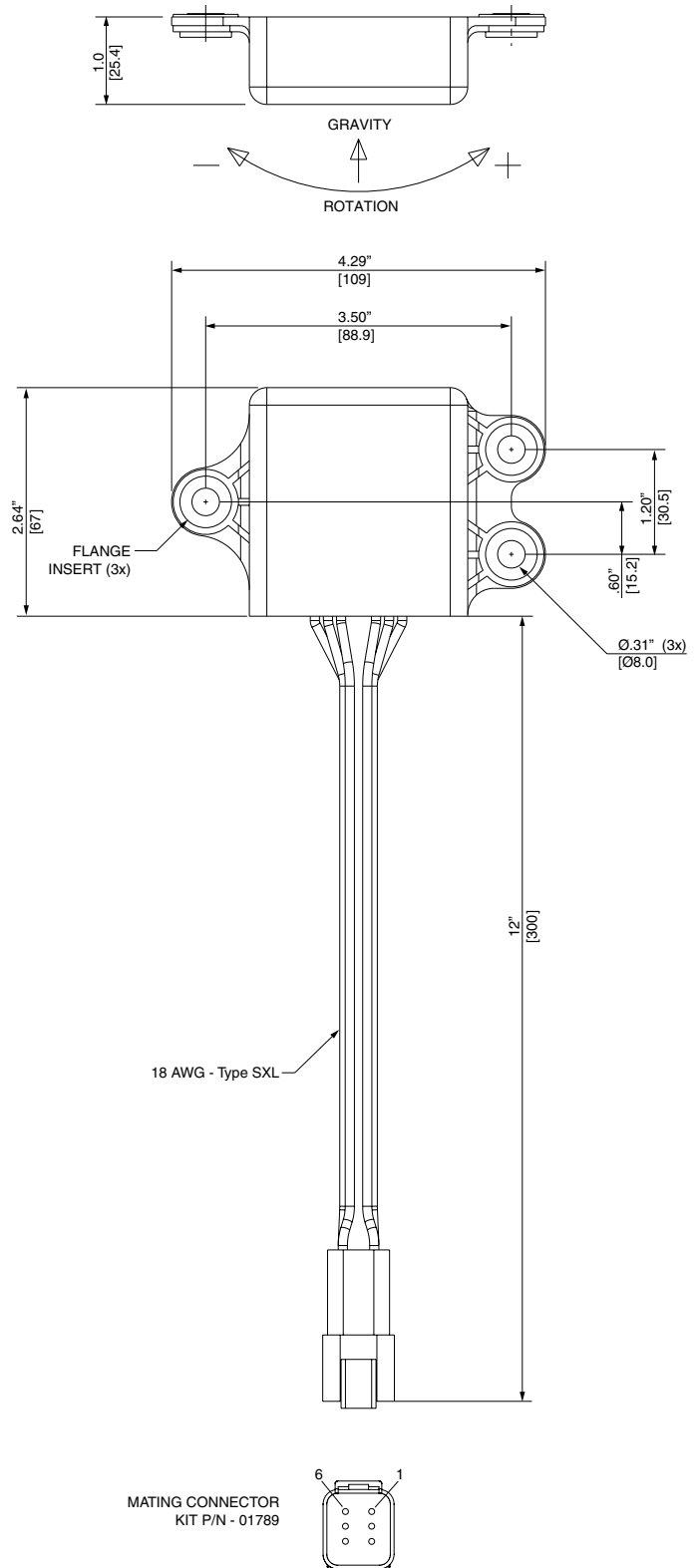
The ACC100 has a glass-filled nylon plastic construction for sturdiness and corrosion resistance. The sensor uses micro-machined technology for trouble free operation. The second output makes this sensor very reliable and adds redundancy. The sensor is very robust and able to withstand rugged applications.

**Electromagnetic immunity**

The design of the ACC100 has a high level of EMI protection.

**Installation**

The ACC100 is well designed for the mobile hydraulics industry. The 6 pin connector is a sealed Deutsch DTM type designed for automotive use. This connector combined with potted electronics gives the sensor IP67 protection for exposed outdoor applications. The 3 reinforced mounting holes are large, and the tripod mount simplifies leveling and alignment. These features provide for easy installation and removal, even in field conditions.



**Technical data****ACC100 Sensors****General**

Weight	0.22 kg
Temperature range	-40°C to 85°C
Operating life	1 billion cycles
Measuring range	±40 degrees
Total error	±0.1 V (±5.3 degrees)

**Mechanical characteristics**

Mounting plane	Horizontal
Connector	Deutsch DTM

**Electrical specifications**

Zero point	2.6175 Vdc
+40 degrees (primary)	3.132 Vdc nominal
+40 degrees (secondary)	2.103 Vdc nominal
-40 degrees (primary)	2.103 Vdc nominal
-40 degrees (secondary)	3.132 Vdc nominal
Supply Voltage(Vs)	5.0 Vdc ±0.25 V
Current supply	Max 5 mA
Output range	2.103 - 3.132 Vdc

**Ordering part number**

ACC100	158904ECD
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**Environmental protection****EMI**

ISO 11452-2	100 V/m
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**ESD**

EN 61000-4-2	7 kV
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**Mechanical**

Shock	50 Gs
Vibration	30 Gs

**Climate**

Sealing (electronics)	IP67
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**Chemical environment**

Liquids (resistance)	standard automotive
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**WARNING - USER RESPONSIBILITY**

**FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

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