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ACC100 Sensors

Catalog HY33-2377/US



ENGINEERING YOUR SUCCESS.

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

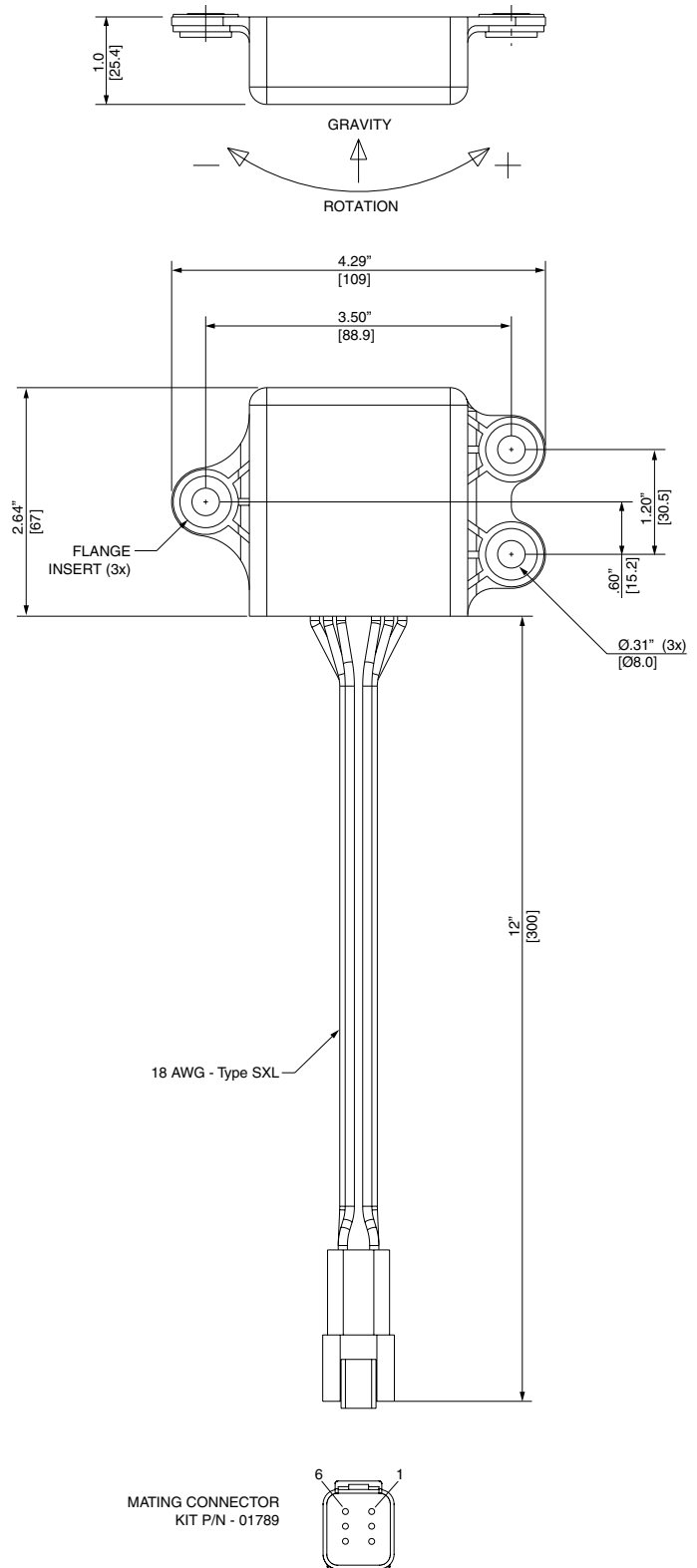
The ACC100 has a glass-filled nylon plastic construction for sturdiness and corrosion resistance. The sensor uses micro-machined technology for trouble free operation. The second output makes this sensor very reliable and adds redundancy. The sensor is very robust and able to withstand rugged applications.

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.



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	2.434 Vdc
+40 degrees (primary)	3.192 Vdc nominal
+40 degrees (secondary)	1.675 Vdc nominal
-40 degrees (primary)	1.675 Vdc nominal
-40 degrees (secondary)	3.192 Vdc nominal
Supply Voltage(Vs)	5.0 Vdc
Current supply	Max 5 mA
Output range	1.675 - 3.192 Vdc

Ordering part number

ACC100	155471
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Environmental protection

EMI	
ISO 11452-2	100 V/m
ESD	
EN 61000-4-2	7 kV

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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