



ACC50 Sensors

Catalog MSG33-2360/US



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Application

The ACC50 acceleration sensor belongs to the Parker family of accessories provided to complement electronic control systems. The ACC50 is a 0-5 Vdc output accelerometer and has a variety of uses for mobile hydraulic applications. The ACC50 can be used to sense vibration, impact, 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

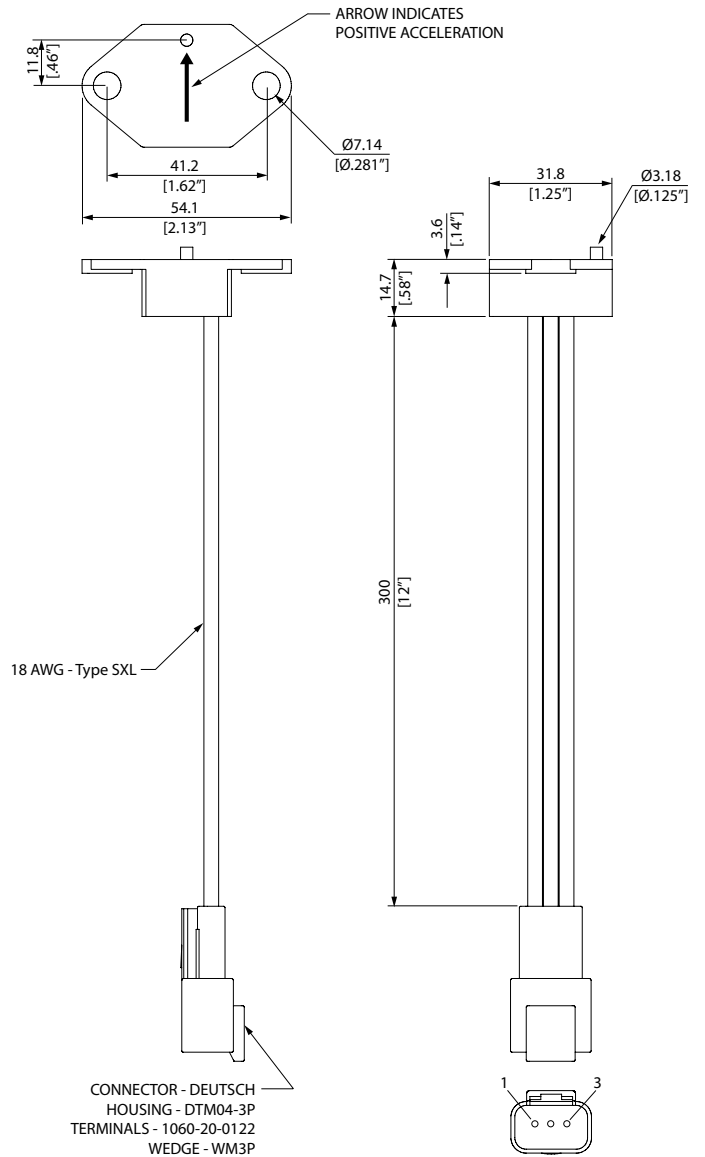
The ACC50 has a glass-filled nylon plastic construction for sturdiness and corrosion resistance. The sensor uses micro-machined technology for trouble free operation. The sensor is very robust and able to withstand rugged applications.

Electromagnetic immunity

The design of the ACC50 has a high level of EMI protection.

Installation

The ACC50 is well designed for the mobile hydraulics industry. The 3 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 mounting holes are large and a locating pin simplifies alignment. These features provide for easy installation and removal, even in field conditions.



Technical data

ACC50 Sensors

General

Weight 62 g
 Temperature range -40°C to 125°C
 Operating life 1 billion cycles
 (1kHz@10G peak)
 Measuring range ±1.5 G
 Total error ±3.5% @0G
 (temperature+sensitivity) ±5.2% @±1G
 ±6.0% @±1.5G

Mechanical characteristics

Mounting plane Vertical (bump, drop)
 Horizontal (bump, tilt)
 Connector Deutsch DTM

Electrical specifications

Zero point 2.5 Vdc
 +1G (arrow up) 3.8 Vdc nominal
 -1G (arrow down) 1.2 Vdc nominal
 Supply Voltage(Vs) 5.0 Vdc
 Current supply Max 10 mA
 Output range 0.5 - 4.5 Vdc

Ordering part number

ACC50 01767ECD

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

Chemical environment

Liquids (resistance) standard automotive



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.

- This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.
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WARNING - California Proposition 65

This product can expose you to chemicals including CARBON BLACK (AIRBORNE, UNBOUND PARTICLES OF RESPIRABLE SIZE), NICKEL COMPOUNDS, SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RESPIRABLE SIZE) (O2Si) which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

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