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ACC50 Sensors

Catalog HY33-2360/US



ENGINEERING YOUR SUCCESS.

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**

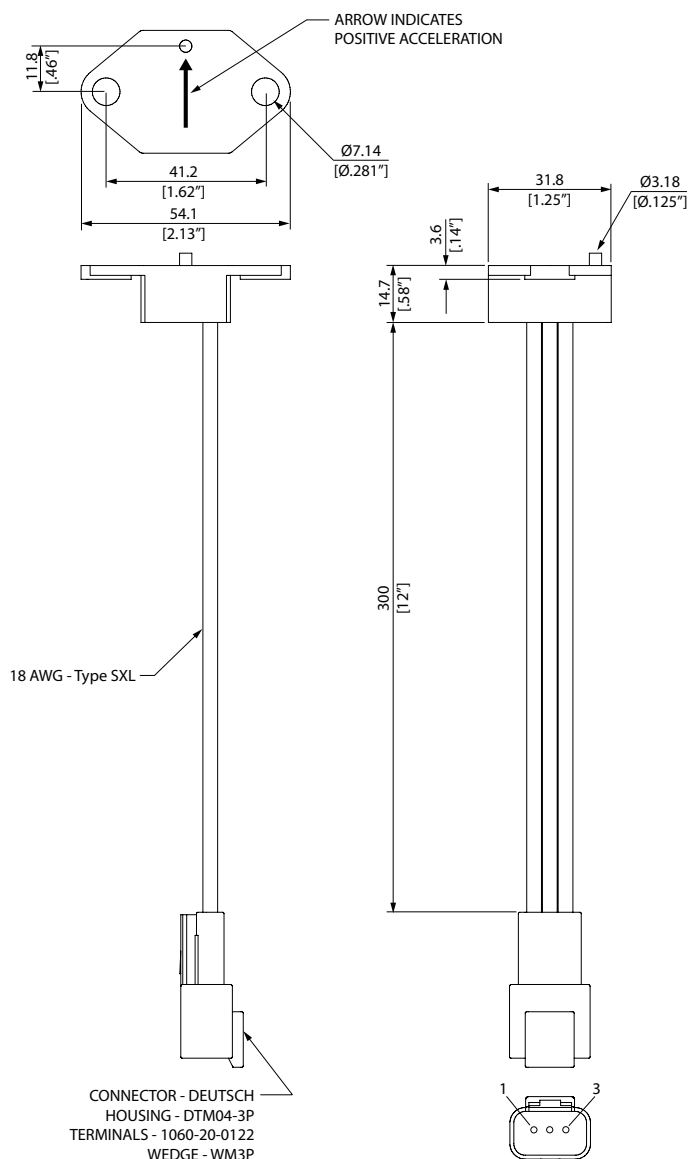
The ACC50 has a glass-filled nylon plastic construction for sturdiness and corrosion resistance. The sensor uses micro-machined technology for trouble free operation. The sensor is very robust and able to withstand rugged applications.

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.



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	01767
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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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