



Electronic Control Systems Sensors

ACC50 Acceleration Sensor





Electronic Control Systems ACC50 Sensors

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

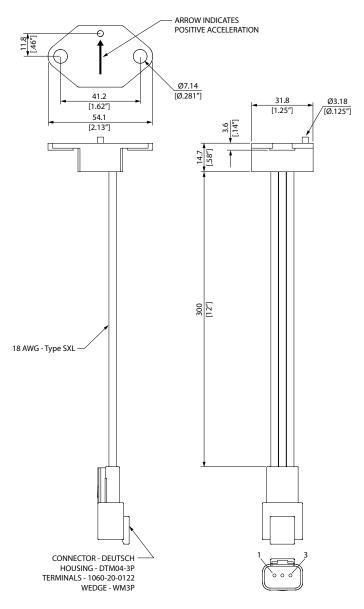
The ACC50 has a glass-filled nylon plastic construction for sturdiness and corrosion resistance. The sensor uses micro-machined technology for trouble free operation. The sensor is very robust and able to withstand rugged applications.

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.





Catalog HY14-2360/US **Technical data**

Electronic Control Systems ACC50 Sensors

General		Environmental protection	
Weight Temperature range Operating life	62 g -40°C to 125°C 1 billion cycles	EMI ISO 11452-2	100 V/m
Measuring range Total error	(1kHz@10G peak) ±1.5 G ±3.5%@0G	ESD EN 61000-4-2	7 kV
(temperature+sensitivity)	±5.2%@±1G ±6.0%@±1.5G	Mechanical Shock	50 Gs
Mechanical characteristics Mounting plane	Vertical	Vibration Climate	30 Gs
Connector	Deutsch DTM	Sealing (electronics)	IP67
Electrical specifications Zero point Supply Voltage(Vs) Current supply Output range	2.5 Vdc 5.0 Vdc Max 10 mA 0.5 - 4.5 Vdc	Chemical environment Liquids (resistance)	standard automotive
Ordering part number ACC50	01767		



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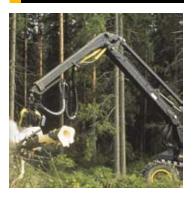
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Electronic Control Systems Sensors

ATS90 Tilt Sensor





Application

The ATS90 sensor belongs to the Parker family of accessories provided to complement electronic control systems. The ATS90 is a non-contact, Hall effect angle/tilt sensor for mobile hydraulic applications. The ATS90 will sense angular movement in two axes and output a ratiometric 0-5 VDC signal for each axis based on position. The sensor has twelve inch leads and 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

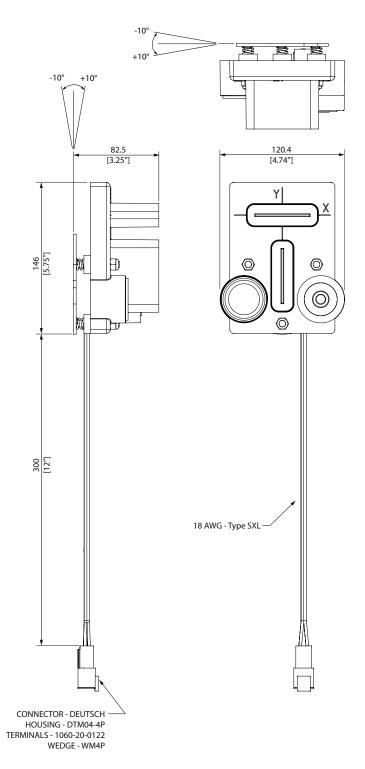
The ATS90 has a tough ABS plastic construction for strength and corrosion resistance. The sensor uses noncontact, Hall effect technology for trouble free operation. The sensor is very robust and able to withstand rugged applications.

Electromagnetic immunity

The design of the ATS90 has a high level of EMI protection.

Installation

The ATS90 is well designed for the mobile hydraulics industry. The 4 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. Simply attach the 3 point spring loaded bracket to a level surface. The adjustable mount makes it easy to install and setup. These features provide for easy installation and removal, even in field conditions.





General		Environmental protection	
Weight Temperature range Operating life	1.23 kg -35°C to 85°C 10 million cycles	EMI ISO 11452-2	150 V/m
Working angle Hysteresis	±10° each axis <0.5%	ESD EN 61000-4-2	3 kV
Linearity Mechanical characteristics	±0.3% FS	Mechanical	
Mounting Connector	3 point bracket Deutsch DTM	Shock Vibration	1m drop 10 Gs
Electrical characteristics	Deutsch D him	Climate Sealing (electronics)	IP67
Supply voltage Supply current	12 VDC nominal Max 100 mA	Chemical environment	
Output range Output current	0.5 - 4.5 VDC Max 5 mA each output	Liquids (resistance)	standard automotive
Ordering part number ATS90	01716		



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Electronic Control Systems Sensors

ATS50 Tilt Sensor





Application

The ATS50 sensor belongs to the Parker family of accessories provided to complement electronic control systems. The ATS50 is a non-contact, Hall effect angle/ tilt sensor for mobile hydraulic applications. The ATS50 will sense angular movement in one axis and output a ratiometric 0-5 VDC signal. 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

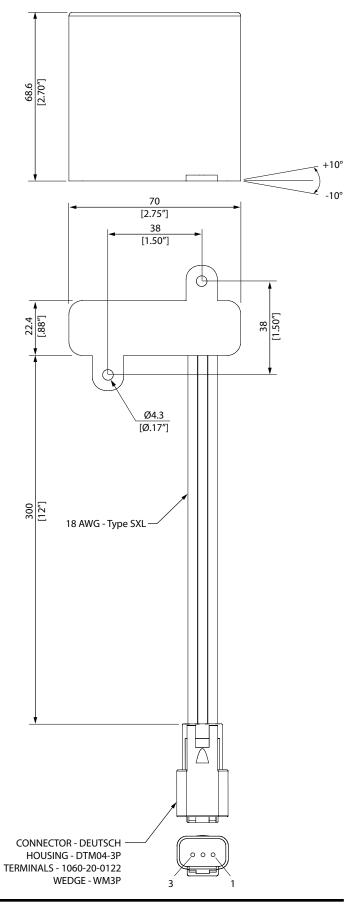
The ATS50 has a tough ABS plastic construction for strength and corrosion resistance. The sensor uses noncontact, Hall effect technology for trouble free operation. The sensor is very robust and able to withstand rugged applications.

Electromagnetic immunity

The design of the ATS50 has a high level of EMI protection.

Installation

The ATS50 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 extra large for easy alignment. These features provide for easy installation and removal, even in field conditions.





General	114 ~	Environmental protection	
Weight Temperature range Operating life	114 g -35°C to 85°C 10 million cycles	EMI ISO 11452-2	150 V/m
Working angle Hysteresis Linearity	±10° <0.5% ±0.6% FS	ESD EN 61000-4-2	3 kV
Mechanical characteristics Mounting Connector	Flange Deutsch DTM	Mechanical Shock Vibration	1m drop 10 Gs
Electrical characteristics Supply voltage	5 VDC	Climate Sealing (electronics)	IP67
Supply currentMax 12 mAOutput range0.5 - 4.5 VDCOutput currentMax 2 mA	0.5 - 4.5 VDC	Chemical environment Liquids (resistance)	standard automotive
Ordering part number ATS50	01759		



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Electronic Control Systems Sensors

RM50 Rolling Magnet Sensor





Application

The RM50 sensor belongs to the Parker family of accessories provided to complement electronic control systems. The RM50 is a tilt switch for mobile hydraulic applications and will sense angular movement in one axis. The sensor has twelve inch leads and an attached Deutsch connector. To make the sensor suitable for mobile equipment, we have focused upon properties such as reliability and ease of installation.

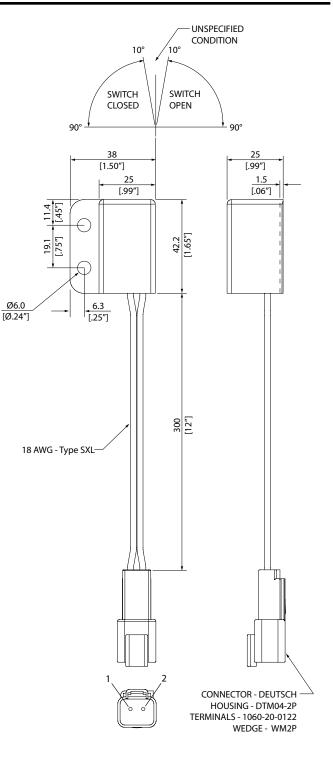
Properties

Reliability

The RM50 has a glass-filled nylon plastic construction for strength and corrosion resistance. The sensor uses reed switch technology for trouble free operation. The sensor is very robust and able to withstand rugged applications.

Installation

The RM50 is well designed for the mobile hydraulics industry. The 2 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.





Electronic Control Systems **RM50 Sensors**

General		Environmental protection	
Weight Temperature range Operating life Hysteresis	48 g -40°C to 105°C 30 million cycles ±10°	Mechanical Shock Vibration	1m drop 10 Gs
Mechanical characteristics Switch type	Reed (magnet)	Climate Sealing (electronics)	IP67
Connector	Deutsch DTM	Chemical environment	
Electrical characteristics		Liquids (resistance)	standard automotive
Voltage	Max 100 VDC		
Current	Max 1 A		
Power	Max 20 w		
Ordering part number RM50	01715		



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