

Sensors

Selection Guide



Advanced sensors enhance productivity and profitability:

The latest range of advanced sensors from Parker Hannifin, the global leader in motion and control technologies, has been introduced to help manufacturers and end users of mobile hydraulic systems improve long term operating performance while reducing overall life cycle costs. Parker offers a full range of pressure, temperature, proximity, speed, rotary and tilt sensors. The sensors use proven, reliable technology, and are extremely compact and lightweight. They have been developed to meet the needs of the mobile and industrial sectors, where they can help to enhance equipment productivity and profitability.



Contact Information:

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Product Features:

- tough stainless steel or plastic housings
- sealed electrical connectors
- easy to install
- protected against shock, vibration and electro-magnetic interference
- wide range of operating conditions (IP67)
- excellent stability
- reduces build costs and maintenance costs
- full technical and after sales support



ENGINEERING YOUR SUCCESS.

Analog tip, tilt, and level sensors

Parker offers a variety of analog switches and sensors to meet your leveling needs.

Choose the tilt sensor that meets your requirements.

The RM50 rolling magnet switch will indicate a 10° or greater tilt in either direction. For proportional indication of the degree of tilt, use our single axis ATS50 sensor or dual axis ATS90 sensor.

Features	RM50	ATS50	ATS90
Switched output	1 A	No	No
Proportional output	No	0.5-4.5 vdc	0.5-4.5 vdc
Number of Axis	1	1	2
Working angle	±10°	±10°	±10°
Part number	01715ECD	01759ECD	01716ECD



RM50



ATS50



ATS90

Rotary angle sensors

Sophisticated Hall-effect technology makes any of our rotary sensors robust and reliable.

Features	RF50	RS52	RS53	RS70
Friction	Yes	No	No	No
Spring return	No	Yes	No	Yes
0.5-4.5 vdc sig.	1	1	1	2
Working angle	90°	90°	360°	170°
Coupling	1/4" shaft	5/16" tang	23/64" key	5/16" hex
Part number	01705ECD	01709ECD	01825ECD	01707ECD

A variety of working angles and shaft types to fit your specifications.

The RF50 is a friction rotary control with 90° travel. The RS52 is a spring-loaded 90° sensor. The RS53 has full 360° rotation working range.

For added safety, we offer sensors with redundant outputs.

The RS70 is a spring-loaded sensor with 170° travel and dual outputs.



RF50



RS52



RS53



RS70



CANbus tip, tilt, and level sensors

Robust J1939 sensors use multi-axis, MEMS (micro electro-mechanical systems) technology.

Multiple axis and angle ranges to fulfill your requirements.

The UTS is a multi-axis, MEMS (micro electro-mechanical systems) technology, tilt sensor. It has 2 operating angle ranges. The sensor communicates over a CAN bus using SAE J1939 protocol.

Features	UTS	UTS	UTS
Mounting	Tripod	Tripod	Tripod
Angle range	±10°	±90°	±90°
Supply voltage	5-16 vdc	5-24 vdc	5-16 vdc
Number of Axis	2	2	3
Part number	162703ECD	160736ECD	159456ECD



UTS

Ferrous proximity sensors

Reliable, simple, but effective reed switch technology has superior mechanical and electronic characteristics.

Features	FP2000	FP3000	FP3000adj	FP4000
Max output	300 mA	300 mA	300 mA	5 A
Switch type	NO	NO	NO	NO/NC
Max voltage	100 vdc	100 vdc	100 vdc	30 vdc
Air gap (max)	.45"	.70"	.70"	.28"
Part number	01695ECD	01699ECD	01778ECD	01703ECD

Ferrous proximity sensors for when you need to know where it is.

The FP2000 and FP3000 are flange mounted proximity switches which activate when a ferrous metal object comes into range. The sensing target may be on the top or side depending on P/N.

The FP4000 is a high powered version with an internal relay.



FP2000

FP3000

FP3000adj

FP4000



Speed sensors (geartooth)

Different mounting styles for the versatility to be used in any application.

Geartooth type speed sensors come in three mounting styles.

The GS50 is a flange mounted speed proximity sensor with an integral o-ring for sealed installations. The GS60 and GS70 are threaded speed proximity sensors, which makes installation and adjustment simple.

Features	GS50	GS60	GS70
Mounting	Flange	5/8"-18	ISO6149-1, M14x1.5
Frequency range	0-10 kHz	0-10 kHz	0-15 kHz
Supply voltage	5-16 vdc	5-24 vdc	5-27 vdc
Air gap (max)	.12"	.20"	.12"
Part number	01711ECD	01712ECD	154877ECD



GS50



GS60



GS70

Pressure sensors

Our reliable pressure transducers monitor the condition of your hydraulic system.

Features	SCP05-035	SCP05-250	SCP05-500
Pressure range	35 Bar	250 Bar	500 Bar
Thread interface	SAE-6	SAE-6	SAE-6
Connector	Deutsch	Deutsch	Deutsch
Supply voltage	5 vdc	5 vdc	5 vdc
Part number	2820012	2820016	2820013



SCP05

Three pressure ranges meet your low and high pressure needs.

The SCP05 is offered with 6 SAE threaded interface and an integral Deutsch connector. The signal range is between 0.5 - 4.5 VDC over the full scale of the sensor.

