

Reed & Hall Effect Sensors

Standex Designed and Manufactured Switching Solutions



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From bare reed switches to finished, qualified assemblies designed and built in-house

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Standex Engineering & Manufacturing Legacy



*Center of Excellence - Engineering heritage
feeding one manufacturing platform*

OUR STORY

Standex Detect designs, manufactures, and qualifies reed switches in our own global facilities.

Our legacy brands—MEDER, OKI/KOFU, Sensor Solutions, and Sanyu represent engineering centers of excellence, unified under one manufacturing, quality, and testing system.

We build the reed switch, the sensor and relay, the tooling, and the test infrastructure—end to end **delivering the right design at the right time and at the optimal cost.**

This combination of scale, technical expertise, and global reach enables Standex Detect to support customers across a wide range of critical industries.

Standex Detect operates under the strategic leadership and corporate governance of Standex Electronics and Standex International Corporation (NYSE: SXI).



PRODUCTS

Proven performance
across three core
product categories:



From Reed Switch to Qualified System-Level Solution

Reed
metallurgy

Switch
fabrication

Sensor
design

Electronics
integration

Packaging

Testing

Customer
application

- **Reed Switches** - Hermetically sealed magnetic sensors delivering precise, reliable switching in compact form factors. Available across a wide range of sizes and power ratings to support applications from low-power miniaturized devices to high-voltage systems.
- **Sensors** - Reed and Hall effect based sensors providing accurate, contactless position, proximity, and speed sensing. Designed for harsh environments across automotive, transportation, renewable energy, industrial, and medical markets.
- **Relays** - Electromagnetic and solid-state relay solutions with excellent signal integrity. Our portfolio of reed, Photo-MOSFET, and optocoupler relays supports high-reliability switching for ATE, semiconductor test, EV, data centers, renewable energy, battery management, medical and industrial automation applications.

WHY ENGINEERS CHOOSE US AS THEIR MANUFACTURING PARTNER

World's largest reed switch manufacturer (>700M/year), proprietary life-cycle test systems, in-house tooling and automation



Custom Engineered

Designed to your exact mechanical, magnetic, electrical, environmental and cost requirements.



Proven Reed Switch Manufacturing Reliability

Industry-leading hermetic sealing and proven performance in extreme environments.



Multi-Technology Expertise

Reed, Hall Effect, solid-state, and other solid state technologies in one integrated partner.



Application Leadership

High-reliability reed switches, sensors, relays for critical applications requiring precision and reliability.



Global Manufacturing

Manufacturing across the U.S., Germany, China, Mexico, Japan, India & the U.K. in region for region support.



Co-Engineering Partnership

Direct integration with customer engineering teams from concept to production.

The Standex Detect Advantage : End-to-end design, unmatched reliability, and global scale engineered into every solution.

- 35,000+ custom solutions delivered
- Global manufacturing across 3 continents
- Decades of reed, sensor, and relay manufacturing leadership
- World's largest manufacturer of reed switches
- Proprietary life-cycle test systems
- In-house tooling and automation

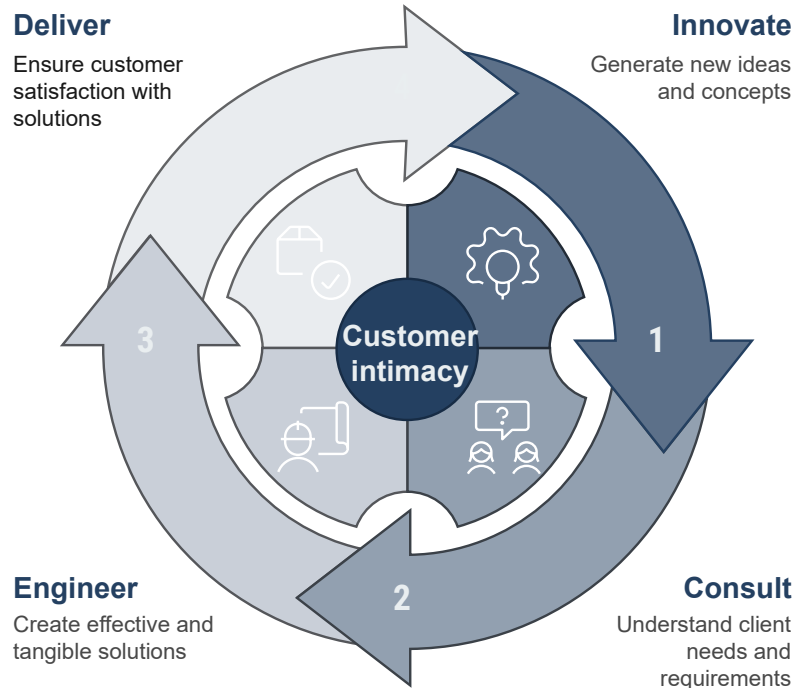
APPROACH

Partnering to Engineer What's Next

At Standex Detect, we go beyond components we engineer complete sensing, switching, and control solutions. Our global team collaborates with customers from concept through production, using deep technical expertise to transform application challenges into optimized, manufacturable designs.

Engineering Control from Design Through Production

- Application-specific magnetic design
- Testing based on real operating loads and lifetime requirements
- Coil, shielding, insulation, and creepage optimized for your system
- PPAP, qualification, and change control managed through a single partner



CAPABILITIES

Proprietary Tooling, Test, and Automation

SCAN TO
EXPLORE OUR
TOOL SHOP
CAPABILITIES



IATF 16949
CERTIFIED



MANUFACTURING

Automated Optical Inspection (AOI)
Auto AT Switch Sorting
SMT Line with Pick & Place & Reflow
Reed Switch Manufacturing
Reed Relay Design & Manufacturing
Automatic CNC Winding & Termination
Bobbin, Layer, & Self-Supporting Winding
Thermoplastic & Thermoset Overmolding
Wave & Selective Soldering
Low Pressure (Hot Melt) & Injection Molding
Potting - 2 Component
Reflow Oven – Multiple Zone Convection
Stainless Steel, Metal & Plastic Fabrication
Lean Manufacturing Principles
Complete, In-House Machine Shop

ENGINEERING

3-D Magnetic Sensor Mapping
3-D CAD Modeling & 3-D Printing
Electronic sensor engineering
Circuit Design and PCB Layout
Mechanical Design & Packaging
Rapid Prototyping
Magnetic Simulation Software
Mechanical, Thermal & FEA Analysis
Plastic Mold Flow Simulation
APQP Project Management

QUALITY & COMPLIANCE

AS9100, ISO9001 & IATF16949 Certifications
ITAR Compliance
Automotive Core Tools
RoHS, REACH, UL, ATEX, IEC-60810-4, IECEx,
VDE, Vds, AEC-Q

TESTING & LAB CAPABILITIES

High Voltage/Partial Discharge Testing
Specialized Lab Testing Equipment:
Network Analyzers, Nanovoltmeters, Gauss /
Teslameters, Fluxmeters, Picoammeters
Full Load & Temperature Rise Testing
2-D/3-D Microfocus X-ray Inspection
Digital Microscopic Inspection
Burn-In & Life Testing
Thermal Shock & Temperature Cycling
Humidity, Salt Fog, & Solderability
Moisture Resistance & Seal Testing

REED AND HALL TECHNOLOGIES

Fast, precise, and reliable magnetic non-contact sensing for demanding applications

Standex Detect designs and manufactures custom magnetic Reed and Hall effect sensors that deliver precision measurement, long-term reliability, and consistent performance in demanding environments. Our engineers develop application-specific sensors tailored to detect proximity, position, liquid level, and motion with unmatched stability and repeatability.

WHY REED SENSORS

- Easy, direct in line integration into circuits
- Open/closed output
- High Isolation capability
- Omnipolar sensing

WHY HALL EFFECT SENSORS

- Programmable operate and release points
- Solid state sensing for high vibration technology
- Unipolar and omnipolar sensing options
- Digital and analog output options available

WHY STANDEX

- Vertically integrated manufacturing and design capabilities allow us to custom design sensors to meet your application and operating environment.
- We provide comprehensive design support, simulation modeling, and prototype testing to validate performance under extreme temperatures, vibration, and contamination, ensuring seamless sensor integration into your application.
- Legacy expertise built on decades of innovation in Reed and Hall Effect sensing technologies
- Global manufacturing and supply-chain stability with global manufacturing in North America, Europe, and Asia



SMALLEST REED SWITCHES IN THE WORLD

Standex is the go-to partner for developing sensors that satisfy the compact size and space requirements of demanding industries.



fluid level sensors

- Single point, multi point, full range options
- Variety of float options and housing materials for liquid compatibility
- Wide variety of power options
- Vertical and side mount options



speed and direction

- Quadrature gear tooth and magnet sensors
- Calibrated to specific target
- Greater sensing distance from magnet vs. steel
- Magnets can be integrated into bolts, threaded targets, clamping collars

SENSING TARGETS

- Gears
- Rack Gears
- Ferrous Objects
- Multi-pole Magnet Tape
- Die Casting Shot Rods
- Permanent Magnets

MAGNETIC SENSING

Customer Focused
Engineering
Solutions

proximity, position, alignment

- Reed switch (open/close)
- Hall switches (single/dual output)
- Ferrous metal (analog/digital)
- Coded alignment sensors
- Magnetic tape tracking sensors
- Analog hall sensors
- Angular position sensors (analog)

SENSING TARGETS

- Gears
- Rack Gears
- Ferrous Objects
- Multi-pole Magnet Tape
- Die Casting Shot Rods
- Permanent Magnets



angular position

- Angular position of rotating targets
- Detects radial magnets
- Optional oriented target magnets
- Many housing and connection options
- Full scale analog output over full or limited range of rotation

SENSING TARGETS

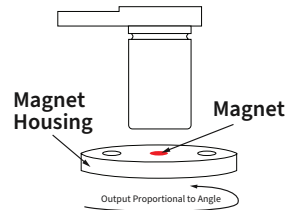
- Gears
- Magnets



REED AND HALL TECHNOLOGIES

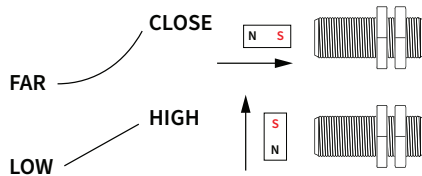
Sensor Types and Function Examples

Reed and Hall Effect technologies enable position, proximity, rotation, and gear detection. The following diagrams illustrate key sensing principles and applications for motion, speed, direction, and magnetic position measurement.



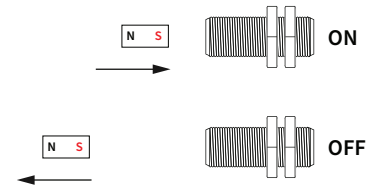
Magnet Rotation - Hall (APS)

- Hall sensors detect the magnetic field
- Provide analog voltage output based on target magnet
- Detects changes in magnetic fields during rotation



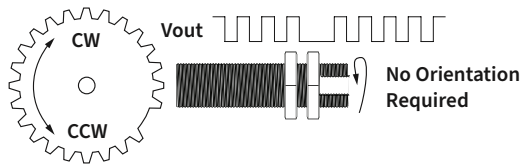
Magnet Position - Hall (AH)

- Hall sensors detect north and south poles
- Provide analog voltage output based on magnet position
- Can be used for equipment alignment



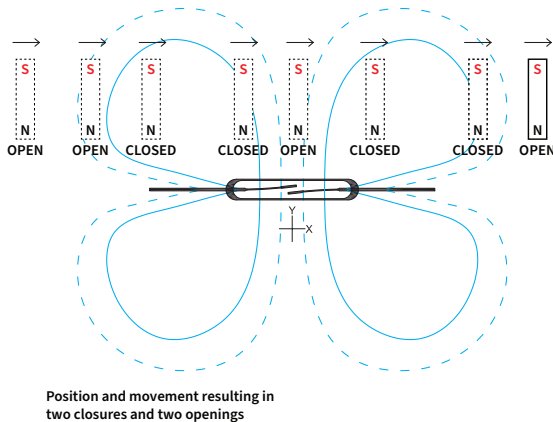
Magnet Proximity - Reed, Hall (HS, DHS)

- Reed switch and Hall sensors provide binary on/off
- Reed sensors are inline, omnipolar switches
- Hall sensors can be omnipolar or unipolar switches



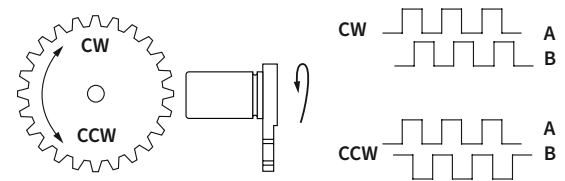
DSO Gear Tooth Speed Sensor

- Hall Effect Technology sensor for gear target detection
- Detects 0-32 pitch gears
- Resolves speed to a digital single output
- Detects ferrous targets and pitch between teeth



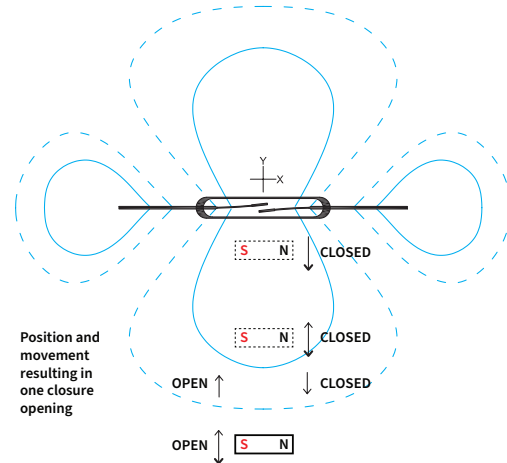
Reed Sensor - Perpendicular Magnet/Parallel Movement

The opening and closing points are shown for a vertically mounted magnet making an approach parallel to the Reed switch. Here the Reed switch will close and open two times.



DQ Quadrature Gear Detection Sensor

- Hall Effect Technology sensor for gear target detection
- Detects 0-32 pitch gears
- Resolves speed and direction with 2 digital outputs
- Detects ferrous targets and pitch between teeth



Reed Sensor - Parallel Magnet/Perpendicular Movement

The closing, holding, and opening are portrayed for a magnet parallel to the Reed switch, but moving perpendicular to the plane of the Reed Switch and being influenced by the center magnet lobe.

SENSOR SELECTION GUIDE

We are the World’s Largest Manufacturer of High-Quality Reed Switches

Standex Detect offers a robust portfolio of Hall effect and Reed sensors for precise position, proximity, and speed detection. Designed for demanding environments, our sensors provide contactless operation, long service life, high sensitivity, and reliable performance, enabling accurate magnetic field detection, non-contact switching, and rugged sensing for critical applications.

Selection Guides Are Starting Points—not Limitations

		REED PROXIMITY SENSORS																	
		MK03	MK08	MK14	MK18	MK20/1	MK20/2	NEW MK36	NEW MK37	NEW MK38	MK07	MK11 B	MK11 P	MK11 S	MK02	MK04	MK04R	MK05	MK13
KEY ATTRIBUTES	SENSOR SERIES																		
	Screw Flange																		
	Cylindrical																		
	Threaded Cylinder																		
	Switching Voltage >500 VDC																		
	Metal Detection																		
	Magnet Detection																		
	Multipole																		
	Gear Detection																		
	Rack Gear Detection																		
	Speed																		
	Speed/Direction																		
	Count																		
	Position																		
	Proximity																		
	Alignment																		
	Rotational Angle																		
	Magnetic Field Strength																		
Details on Page #		16	16	16	16	16	16	17	17	17	17	17	17	17	18	18	18	18	18

Can't find the exact fit?

60%+ of our programs begin with a standard series and end with a custom-engineered sensor or relay designed, validated, and manufactured by Standex Detect.



START A
CONVERSATION

SCAN FOR
REED SENSOR
ACTIVATION
DISTANCES



Selection Guides Are Starting Points—not Limitations

KEY ATTRIBUTES	REED PROXIMITY SENSORS				REED POSITION SENSORS			HALL PROXIMITY SENSORS					HALL POSITION SENSORS					
	MK21	MK21PR	MK26	MK27	KS01	MK25	MK28	VPD	MH21	MH04	HS	DHS	VPA	DSO	DQ	SD	APS	AH
SENSOR SERIES																		
Screw Flange																		
Cylindrical																		
Threaded Cylinder																		
Switching Voltage >500 VDC																		
Metal Detection																		
Magnet Detection																		
Multipole																		
Gear Detection																		
Rack Gear Detection																		
Speed																		
Speed/Direction																		
Count																		
Position																		
Proximity																		
Alignment																		
Rotational Angle																		
Magnetic Field Strength																		
Details on Page #	18	19	19	19	19	19	19	20	21	21	21	21	21	21	21	21	21	21

REED PROXIMITY SENSORS

Sensor Series		MK03	MK08	MK14	MK18	MK20/1	MK20/2
							
Highlights		• Install with an epoxy or glue • Has a paired magnet • Available in white and black housings	• ATEX and IECEx rated sensor	• Small OD cylindrical sensor	• Miniature cylindrical sensor	• Micro cylindrical sensor	• World's smallest cylindrical reed sensor
DIMENSIONS MM (INCHES)	Mating Magnet Available	M03	-	-	-	-	-
	Body Length Max.	25.5 (1.004)	100.0 (3.937)	25.5 (1.004)	17.0 (0.669)	10.0 (0.394)	7.5 (0.295)
	Body Width/Dia. Max.	5.9 (0.232)	21.6 (0.850)	4.0 (0.157)	5.0 (0.197)	3.0 (0.118)	2.7 (0.106)
	Body Height Max.	-	-	-	-	-	-
	Cable Length	200, 300, 500, 1000, 1500, 2000, 3000, 5000	200, 300, 500, 1000, 1500	200, 300, 500, 1000, 1500	100, 200, 300, 500, 1000, 1500	100, 200, 300, 500	100, 200, 300, 500
SPECIFICATIONS	Contact Form	A A B, C	A A	A B, C	A	A	A
	Switch Model	66 75 90	66 85	66 90	87	80	04
	Power Rating (W) Max.	10 10 10	10 100	10 10	10	10	3
	Switching Voltage (VDC) Max.	180 500 175	180 1000	180 175	200	170	30
	Switching Current (A) Max.	0.5 0.5 0.5	0.5 1.0	0.5 0.5	0.5	0.5	0.25
	Compliance						
	Product Page/ Datasheet Link						

Contact Form
Glossary

Form A

NO = Normally Open Contacts
SPST = Single Pole Single Throw



Form B

NC = Normally Closed Contacts
SPST = Single Pole Single Throw



Form C

Changeover
SPDT = Single Pole Double Throw



REED PROXIMITY SENSORS

Sensor Series		MK36	MK37	MK38	MK07	MK11 B	MK11 P	MK11 S
								
Highlights		- Miniature recessed sensor - Crush ribs for retention - Available in black and white	- Recessed sensor - Crush ribs for retention - Available in black and white	- Recessed sensor - Crush ribs for retention - High power option - Available in black and white	- Mounting flange option for repeatable assembly - Different length options available	- Brass body construction - Mating magnet available - M6, M8, M12, M12 thread options	- Mating magnet available - M8 thread available	- Stainless steel body construction - Mating magnet available - M5, M8, M12, M12 thread options
DIMENSIONS MM (INCHES)	Mating Magnet Available	M36	M36	M38	-	M11B	M11P	M11
	Body Length Max.	15.5 (0.610)	22.0 (0.866)	31.0 (1.220)	39.6 (1.559)	38.0 (1.496)	25.0 (0.984)	25.0 (0.984), 50 (1.969)
	Body Width/Dia. Max.	10.7 (0.421)	10.7 (0.421)	10.7 (0.421)	6.6 (0.260)	M6, M8, M10, M12	M8 x 1.25"	M5, M8, M12
	Body Height Max.	-	-	-	-	-	-	-
	Cable Length	300, 2000	300, 2000	300	200, 300, 500, 1000, 1500	200, 300, 500, 1000, 1500, 2000, 3000, 5000	200, 300, 500, 1000, 1500, 2000, 3000, 5000	200, 300, 500, 1000, 1500, 2000, 3000, 5000
SPECIFICATIONS	Contact Form	A	A B	A A B, C	A A B, C	A A B, C	A A B, C	A A B, C
	Switch Model	80	66 90	66 85 90	66 85 90	66 85 90	66 85 90	66 85 90
	Power Rating (W) Max.	10	10 10	10 100 10	10 100 10	10 100 10	10 100 10	10 100 10
	Switching Voltage (VDC) Max.	170	180 175	180 300 175	180 1000 175	180 1000 175	180 1000 175	180 1000 175
	Switching Current (A) Max.	0.5	0.5 0.5	0.5 1.0 0.5	0.5 1.0 0.5	0.5 1.0 0.5	0.5 1.0 0.5	0.5 1.0 0.5
	Compliance							
	Product Page/ Datasheet Link							

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REED PROXIMITY SENSORS

Sensor Series		MK02	MK04	MK04R	MK05	MK13	MK21
							
Highlights		• IP67 Rated • Ferrous target detection • Front and top sensing options • White, black, and blue housing options	• Low profile flange mount sensor • Left side cable exit • Has a paired magnet • Available in white and black housings	• Low profile flange mount sensor • Right side cable exit • Has a paired magnet • Available in white and black housings	• Flange mount sensor with one mounting slot • Left and right side cable exit options • Has a paired magnet • White and black housings	• Flange mount sensor with mounting slots for assembly addjustment	• Left side cable exit • High temperature over-molded option • Has a paired magnet • High power switch option
DIMENSIONS MM (INCHES)	Mating Magnet Available	-	M04	M04	M05	M13	M21
	Body Length Max.	46.0 (1.811)	23.0 (0.906)	23.0 (0.906)	23.0 (0.906)	23.0 (0.906)	28.5 (1.122)
	Body Width/Dia. Max.	18.35 (0.722)	13.9 (0.547)	13.9 (0.547)	19.4 (0.764)	13.9 (0.547)	19.0 (0.748)
	Body Height Max.	13.0 (0.512)	5.9 (0.232)	5.9 (0.232)	5.9 (0.232)	5.9 (0.232)	6.25 (0.246)
SPECIFICATIONS	Cable Length	200, 300, 500, 1000, 1500, 2000, 3000, 5000	200, 300, 500, 1000, 1500, 2000, 3000, 5000	200, 300, 500, 1000, 1500, 2000, 3000, 5000	200, 300, 500, 1000, 1500, 2000, 3000, 5000	200, 300, 500, 1000, 1500, 2000, 3000, 5000	500, 1000, 1500, 2000, 3000, 5000
	Contact Form	A B, C	A B, C	A B, C	A B, C	A B, C	A A B, C
	Switch Model	66 90	66 90	66 90	66 90	66 90	66 85 90
	Power Rating (W) Max.	10 10	10 10	10 10	10 10	10 10	10 100 10
	Switching Voltage (VDC) Max.	180 175	180 175	180 175	180 175	180 175	180 1000 175
	Switching Current (A) Max.	0.5 0.5	0.5 0.5	0.5 0.5	0.5 0.5	0.5 0.5	0.5 1.0 0.5
	Compliance	 					 
	Product Page/ Datasheet Link						

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REED PROXIMITY SENSORS

REED POSITION SENSORS

Sensor Series		MK21PR	MK26	MK27	KS01	MK25	MK28
							
Highlights		• Right side cable exit • Has a paired magnet • High Power switch option	• Low profile flange mount • High power switch option available • IP67 rated	• Aluminum housing • Cable protection with braided sleeve • Sensing distance up to 40mm (1.5")	• Rugged connectors • Flexible wiring	• Push button sensor • Accessory options • Meets ATEX and IECEx standards	• Ferrous vane detection • Sensor with integrated switch and magnet that utilizes a metal plate to interrupt magnetic field for position detection
DIMENSIONS MM (INCHES)	Mating Magnet Available	M21	M26	M27	-	-	-
	Body Length Max.	28.5 (1.122)	32.0 (1.260)	50.0 (1.969)	49.5 (1.940)	36.8 (1.449)	25.4 (1.004)
	Body Width/Dia. Max.	19.0 (0.748)	10.0 (0.394)	20.0 (0.787)	37.5 (1.480)	25.5 (1.004)	19.05 (0.750)
	Body Height Max.	6.25 (0.246)	6.0 (0.236)	10.0 (0.394)	-	-	6.35 (0.250)
SPECIFICATIONS	Cable Length	500, 1000, 1500, 2000, 3000, 5000	200, 300, 500, 1000, 1500, 2000, 3000, 5000	500	100	200, 300, 500, 1000, 1500, 2000, 3000, 5000	500
	Contact Form	A A B, C	A A A B, C	A, B, C	A 1A, 2A	A B, C	A, B, C
	Switch Model	66 85 90	35 66 85 90	85	88 66	46 90	90
	Power Rating (W) Max.	10 100 10	20 10 100 10	100W	100 10	10 10	10
	Switching Voltage (VDC) Max.	180 1000 175	200 180 1000 175	1000VDC	1000 180	200 175	175
	Switching Current (A) Max.	0.5 1.0 0.5	1.0 0.5 1.0 0.5	1.0A DC	1.5 0.5	0.5 0.5	0.5
	Compliance						
	Product Page/ Datasheet Link						

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Customer Focused Engineering + Modular Design

Modify, update, or enhance any Hall sensor series with our modular features and functionality.

Our Hall series offers versatile housing, mounting, material, and connection options for a wide range of applications. **Need something different? Standex can tailor a solution to your requirements**, from rugged industrial connectors to flexible wiring for compact assemblies.



Sensor Series

VPD



Highlights

- Ferrous proximity sensor with digital output and extended sensing gap

Product Page/ Datasheet Link



HOUSING

HOUSING MATERIALS

- Aluminum
- Plastic (Glass Filled Nylon)
- Stainless Steel

MOUNTING TYPE

- Threaded Barrel
- Flange Mount
- High Pressure
- Customer Specific

THREAD PITCH

- 1/2-20
- 15/32-32
- 3/4-20
- 5/8-18
- 7/16-20
- M12x1
- M16x1
- M16x1.5
- M18x1
- M18x1.5

SENSORS

Note: All dimensions are in mm and tolerances according to ISO 2768-m. Please refer to the product datasheets on our website for full dimensions, specifications, tolerances, etc.
Not all part number combinations are possible, consult the factory for more info. We reserve the right to make any changes according to technological progress or further developments.

HALL PROXIMITY SENSORS				HALL POSITION SENSORS			
HS	DHS	VPA	DSO	DQ NEW	SD NEW	APS	AH
							
Hall switch with programmable magnetic operate and release points	Dual Hall switch with two programmable independent outputs	Ferrous proximity sensor with analog voltage output	Gear tooth speed sensor with digital square-wave output	- Quadrature gear tooth speed and direction sensor - True zero-speed (DQ) - Near zero-speed (DQO)	- Quadrature gear tooth speed and direction sensor - True zero-speed (SD) - Near zero-speed (SDO)	Programmable angle position sensor with custom magnet options	Magnet-activated position sensor with ratiometric analog output
							

ELECTRICAL

ELECTRICAL OUTPUT LOGIC OPTIONS

- 5K - NPN + 5kOhm Pull-up Resistor
 - OD - Open Drain N Channel
 - L5 - Load Dump NPN + 5kOhm Pull-up Resistor
 - LN - Load Dump EMI Protection NPN Open Collector
 - P5 - PNP + 5kOhm Pull-up Resistor
 - 5V - 5V Operation
 - RG - Regulated Input 0-5V Digital
 - LA - Linear Analog
 - RI - Regulated Input PNP
 - OC - Open Collector NPN
 - LP - Load Dump Protection PNP
 - R5 - Linear Regulator
 - 50 - 5V Operation NPN
 - 51 - 5V Operation + 1kOhm
- DSO, DQ, HS, DHS
DSO, DQ
DSO, DQ, SD
DSO, DQ, SD
DSO, HS, DHS
VPA, AH, VPD
VPA, AH, VPD, SD
APS
VPD
DQ
DQ
SD
SD
SD

CONNECTION

CONNECTOR OPTIONS

- Deutsch & Amphenol: Industry-standard sealed connectors for harsh environments
- Other Brands Available: Custom connector integration upon request
- Integral Connectors: Built directly into the sensor housing for streamlined installation
- Pigtail Connectors: Short lead wires with pre-installed connectors for plug-and-play use

INSULATION MATERIALS

- PVC: Economical and flexible
- Teflon: High-temperature and chemical-resistant
- XLPE: Cross-linked polyethylene for enhanced thermal and abrasion resistance
- High-Temp Options: For extreme operating conditions

FREE-END WIRE OPTIONS

- Free-End Jacketed: Durable, protective outer layer for added mechanical strength
- Free-End Ribbon Cable: Flat, flexible cable ideal for tight spaces
- Free-End Shielded: EMI-resistant for electrically noisy environments
- Free-End Wires: Standard stripped leads for direct wiring
- PVC, XLPE, Teflon, and other insulation/jacket options
- Wire Gauges: 16-18, 20 AWG and 22 AWG standard
- Lengths: Available in 6", 1', 5', 10', 20', 50', 100' or custom lengths to suit your application

Not all options apply to all series. Consult the factory for specific requirements.



Magnets and Actuators

Explore our comprehensive range of sensor magnets in housing and precision permanent magnets designed to support advanced sensing and actuation technologies. Whether you're looking for compact actuator magnets or custom-shaped housings, our portfolio delivers consistent magnetic strength, durability, and design flexibility.



EXPLORE MAGNETS
& ACTUATORS

Engineered for your application

We have magnets in multiple forms for Hall Effect sensor targets.

Bare Magnets are available in a variety of shapes, sizes, grades, and materials to meet the requirements of the application environment.

Packaged Magnets are potted into threaded bolts, housings, and flange mount packages for easy installation and guaranteed pole orientation.

Angular Position Sensor Magnets are specially magnetized for use with our Angular Position Sensors, providing accurate angular position sensing of rotating targets.

Multi-Pole Magnet Strips are sold per foot and provide alternating North and South Pole fields for use with Quadrature Hall Effect Sensors to track speed and direction, or a count-based position.

Shaft Collars are available and feature integrated magnets for easy speed measurement with Hall Effect Sensors. Their split design enables quick installation on existing shafts.



MAGNETS AND ACTUATORS

Packaged Magnets

Series	Housing Material	Magnet Material	Magnetic Moment (Typ.)*	Length mm (inches)	Width mm (inches)	Height mm (inches)	Use with Sensor
AM	Black Acetal	NdFeB	16.2	25.4 (1.000)	12.7 (0.500)	-	APS
M02	PBT Glass Fiber Reinforced	AlNiCo	22.2	32.4 (1.276)	16.7 (0.657)	10.0 (0.394)	MK02
M03	PBT Glass Fiber Reinforced	AlNiCo	22.2	25.5 (1.004)	M5 x 0.5	-	MK03
M04	PBT Glass Fiber Reinforced	AlNiCo	22.2	23.0 (0.906)	13.9 (0.547)	5.9 (0.232)	MK04
M05	PBT Glass Fiber Reinforced	AlNiCo	22.2	23.0 (0.906)	19.4 (0.764)	5.9 (0.232)	MK05
M11 S	High Grade Steel (1.4305)	AlNiCo	18.0 / 22.2	25.0 (0.984)	M5/M8 x 0.5	-	MK11 S
M11 P	Plastic	AlNiCo	22.2	25.0 (0.984)	M8 x 1.25	-	MK11 P
M11 B	Brass	AlNiCo	18.0 / 22.2	38.0 (1.496)	M6, 8, 10, 12	-	MK11 B
M13	PBT Glass Fiber Reinforced	AlNiCo	22.2	23.0 (0.906)	13.9 (0.547)	-	MK13
M21P/1	Crastin SK655FR1	AlNiCo	22.2	28.5 (1.122)	19.0 (0.748)	6.5 (0.256)	MK21P/MK21PR
M21P/2	Crastin SK655FR1	AlNiCo	22.2	28.5 (1.122)	19.0 (0.748)	6.5 (0.256)	MK21P/MK21PR
M27	Aluminum	AlNiCo	95.4	50.0 (1.969)	20.0 (0.787)	10.0 (0.394)	MK27
M36	PBT	NdFeB	49	15.5 (0.610)	Ø10.7 (0.421)	-	MK36
M37	PBT	NdFeB	75	22.0 (0.866)	Ø10.7 (0.421)	-	MK37
M38	PBT	NdFeB	101.5	31.0 (1.220)	Ø10.7 (0.421)	-	MK38
PM	Stainless-Steel Socket Cap Screw	NdFeB		31.75 (1.250)	19.05 (0.75)	-	HS, DHS

* Unit for Magnetic Moment E-6 Vs*cm; Measured with MS150, ** Stands for Diameter or Thread Size



Bare Magnets

AlNiCo

AlNiCo Ø2.5 x 12.7
 AlNiCo Ø3.0 x 12.0
 AlNiCo Ø4.0 x 19.0
 AlNiCo Ø5.0 x 4.0
 AlNiCo Ø5.0 x 20.0
 AlNiCo Ø5.5 x 22.0
 AlNiCo Ø7.5 x 27.0
 AlNiCo 3.2 x 3.2 x 19.0



Rare Earth

SmCo5 Ø1.9 x 3
 SmCo5 Ø3 x 4
 NdFeB N35 Ø4 x 19
 NdFeB N35H Ø4 x 19
 NdFeB N45 Ø4 x 19
 NdFeB 250/175H Ø6 x 10
 NdFeB 250/175H 10 x 5 x 1.9



Hard Ferrite

Hf 28/26 2.6 x 2.6 x 4.0
 Hf 28/26 3.5 x 1.8 x 1.8
 Hf 28/26 6.7 x 6.7 x 2.7



Dimensions in mm

LIQUID LEVEL SENSOR SELECTION GUIDE

Liquid Level Sensors Engineered for Accuracy, Reliability, and Custom Fit

Built on decades of reed switch expertise, Standex Detect liquid level sensors deliver high reliability, environmental resilience, and flexible customization, even in demanding applications where other technologies struggle. Standex Detect specializes in application-specific liquid level sensor solutions, offering custom sensor lengths, switching points, float materials, housings, connectors, sealing solutions, and output formats from simple point detection to fully integrated continuous systems.

SINGLE-POINT

Provide a discrete ON/OFF signal when liquid reaches a defined level for simple, reliable, and cost-efficient solution.

MULTI-POINT

Integrates multiple switches and floats into a single sensor module, enabling detection of several discrete liquid levels.

CONTINUOUS

Provide a resistive, stepped, or analog output across the full measurement range for higher resolution, real-time monitoring

Selection Guides Are Starting Points—not Limitations

		R12456	R12431	FPS-B	FPS-L	FPS-T	LS01	LS02	LS03	LS03/GZ	LS03/DK	LS03/DL	LS04	LS05
KEY ATTRIBUTES	SENSOR SERIES													
	Single Point													
	Multi-Point													
	Continuous													
	Side Mount													
	Vertical Mount													
	Exterior Bottle Mount													
	HVAC/R													
	Stainless Steel													
Details on Page #		26	26	26	26	26	26	27	27	27	27	27	27	27

Can't find the exact fit?

Contact Standex Detect to collaborate on your liquid level sensor application!



START A
CONVERSATION



Float-based liquid level sensors provide highly reliable measurement by remaining in direct contact with the fluid. This direct interaction allows the sensor to **negate the effects of foaming, vapor buildup, and liquid turbulence**, delivering consistent performance even in challenging environments.



Reed switch-based designs offer additional advantages, including **no power requirement at the sensing point, high reliability, simple system integration, and cost efficiency** when compared to radar, ultrasonic, or capacitive technologies.

LIQUID LEVEL SENSORS

Sensor Series		R12456	R12431	FPS-T	FPS-L	FPS-B	LS01
							
Highlights		- Automotive washer fluid - Single point sensing - NO/NC configuration	- Automotive washer fluid - Single point sensing - NO/NC configuration	- Reducing tee integration - HVAC flood prevention - Auto shutoff switching	- In line integration - HVAC flood prevention - Auto shutoff switching	- Bracket-mounted flood prevention switch - Automatic overflow shutoff - UL508, NEC, and IMC compliant	- Compact single level - High power switch option, other cables and connectors - IP68 only up to screw in thread
DIMENSIONS MM (INCHES)	Body Length Max.	42.5 (1.673)	72.5 (2.854)	83.0 (3.268)	0=255 (10.039), 2=130	1=5, 2	42.5 (1.673)
	Body Dia. Max.	6.5 (0.256)	6.5 (0.256)	-	24-27 (0.945-1.063)	7-16 (0.276-0.630)	6.5 (0.256)
	Float Dia. Max.	23.5 (0.925)	23.5 (0.925)	16.5 (0.650)	8.5 (0.335)	23.5-38.3 (0.925-1.508))	23.5 (0.925)
	Cable Length	500, 1000, 5000	500, 1000, 5000	500, 1000, 5000	500, 1000, 5000	500, 1000, 5000	500, 1000, 5000
SPECIFICATIONS	Material Shaft (Float)	PA, PP (PA, PP, NBR)	PA, PP (PA, PP, NBR)	PA, PP (PA, PP)	PP (PA, PP, NBR)	SS (SS, PA, PP, NBR)	PA, PP (PA, PP, NBR)
	Contact Form	A ₁ B A ₂ B	A ₁ B A ₂ B	A ₁ B A ₂ B	A ₁ B A ₂ B	A	A ₁ B A ₂ B
		66 85	66 85	66 85	66 85	-	66 85
	Power Rating Max.	10 100	10 100	10 100	10 100	50	10 100
	Switching Voltage Max.	180 1000	180 1000	180 1000	180 1000	200	180 1000
	Switching Current Max.	0.5 1.0	0.5 1.0	0.5 1.0	0.5 1.0	1.5	0.5 1.0
	Compliance						
	Product Page/ Datasheet Link						

LIQUID LEVEL SENSORS AND FLOATS

Note: All dimensions are in mm and tolerances according to ISO 2768-m. Please refer to the product datasheets on our website for full dimensions, specifications, tolerances, etc.
Not all part number combinations are possible, consult the factory for more info. We reserve the right to make any changes according to technological progress or further developments.

LIQUID LEVEL SENSORS

Sensor Series		LS02	LS03	LS03/GZ	LS03/DL	LS04	LS05
							
Highlights		• Compact single level • High power switch option, other cables and connectors • IP68 only up to screw in thread	• Side mount level sensor • High power switch option, other cables and connectors	• Side mount level sensor • External thread 1/2"-14 NPT • Installation from outside bottle/container	• Side mount level sensor	• Up to 6 floats, 1W-100W rated power, other cables, connectors	• Multiple floats with a minimum 1.5" spacing • High temp up to 200°C (SS) • Pressure up to 12 bar
DIMENSIONS MM (INCHES)	Body Length Max.	72.5 (2.854)	83.0 (3.268)	83.0 (3.268)	83.0 (3.268)	0=255 (10.039), 2=130 (5.118), 4=178 (7.008), 5=190 (7.480)	1=55 (2.165), 2=114 (4.488), 5=152 (5.984), 7=220 (8.661)
	Body Dia. Max.	6.5 (0.256)	-	-	-	24-27 (0.945-1.063)	7-16 (0.276-0.630)
	Float Dia. Max.	23.5 (0.925)	16.5 (0.650)	16.5 (0.650)	16.5 (0.650)	8.5 (0.335)	23.5-38.3 (0.925-1.508)
	Cable Length	500, 1000, 5000	500, 1000, 5000	500, 1000, 5000	500, 1000, 5000	500, 1000, 5000	500, 1000, 5000
	Material Shaft (Float)	PA, PP (PA, PP, NBR)	PA, PP (PA, PP)	PA (PA)	PA, PP (PA, PP)	PP (PA, PP, NBR)	SS (SS, PA, PP, NBR)
SPECIFICATIONS	Contact Form	A ₁ B A ₂ B	A ₁ B A ₂ B	A ₁ B A ₂ B	A ₁ B A ₂ B	A ₁ B A ₂ B	A ₁ B A ₂ B
		66 85	66 85	66 85	66 85	66 85	66 85
	Power Rating Max.	10 100	10 100	10 100	10 100	10 100	10 100
	Switching Voltage Max.	180 1000	180 1000	180 1000	180 1000	180 1000	180 1000
	Switching Current Max.	0.5 1.0	0.5 1.0	0.5 1.0	0.5 1.0	0.5 1.0	0.5 1.0
Compliance							
Product Page/ Datasheet Link							

FLOATS



EXPLORE
FLOATS

Series	Material	Outside Dia. mm (inches)	Inside Dia. mm (inches)	Height mm (inches)	Use with sensor	Additional Information	EXPLORE FLOATS
MS01-NBR	NBR	24.5 (0.964)	8 (0.314)	19.0 (0.748)	LS01, LS02, LS02-S LS04, LS05	Excellent resistance to petroleum derived liquids	
MS02-NBR	NBR	25.0 (0.984)	9.15 (0.360)	16.5 (0.649)		High buoyancy and excellent resistance to petroleum derived liquids	
MS18-NBR	NBR	28.5 (1.122)	9 (0.354)	16.5 (0.649)			
MS19-NBR	NBR	25.5 (1.004)	15.6 (0.614)	20.5 (0.807)			
MS01-PA	PA	23.5 (0.925)	8.5 (0.334)	19.0 (0.748)	LS01, LS02-S LS05	High strength to weight ratio, shock and abrasion resistant	
MS02-PA	PA	25.0 (0.984)	9.15 (0.360)	16.55 (0.651)			
MS07-PA	PA	36.0 (1.417)	16.15 (0.635)	19.0 (0.748)			
MS01-PP	PP	23.5 (0.925)	8.4 (0.330)	19.0 (0.748)	LS01, LS02 LS02-S LS04, LS05	Highly resistant to chemical solvents, bases and acids	
MS02-PP	PP	25.2 (0.992)	9.15 (0.360)	16.55 (0.651)		Highly resistant to chemical solvents, bases and acids magnet direction radial	
MS02/R-PP	PP	25.0 (0.984)	9.15 (0.360)	16.55 (0.651)			
MS03-PP	PP	27.0 (1.062)	11 (0.433)	11.7 (0.460)		Highly resistant to chemical solvents, bases and acids	
MS04-PP	PP	18.5 (0.728)	10.2 (0.401)	20.0 (0.787)			
MS08-PP	PP	20.0 (0.787)	9.15 (0.360)	16.0 (0.630)			
MS06-PP	PP	30.0 (1.181)	N/A	8.0 (0.314)	All Reed Sensors	Highly resistant to chemical solvents, bases and acids; also for food and beverage industry	
MS09-S	V2A	24.0 (0.944)	9.5 (0.374)	24.0 (0.944)	LS02-S LS05	Resistant to high temperatures and ideal for food and beverage industry	
MS10-S	V2A	38.3 (1.507)	9.5 (0.374)	26.3 (1.035)			

PA (Polyamide) | PP (Polypropylene) | NBR (Nitrile Butadiene Rubber) | V2A (Stainless Steel)



Where You'll Find Standex Sensors



AGRICULTURAL & HEAVY EQUIPMENT

Reed and Hall Effect sensors deliver reliable position, speed, proximity, angle, and fluid sensing for agricultural and heavy equipment, including tractors, harvesters, construction machinery, and other off-highway vehicles.

APPLIANCES

Designed for reliable appliance operation, Reed and Hall Effect sensors provide contactless detection of doors and lids, fluid levels, safety interlocks, and motor position and speed. They help improve safety, efficiency, and performance in appliances and HVAC systems.

COMPUTING & DATA CENTERS

For critical infrastructure monitoring, Reed and Hall Effect sensors enable cabinet and rack access detection, tamper monitoring, airflow control, and actuator positioning. These capabilities support secure, efficient thermal and power management.

MEDICAL

Supporting advanced medical devices, Reed and Hall Effect sensors provide reliable position, proximity, motion, and fluid level sensing for diagnostic, laboratory, imaging, and patient care equipment.

EV / AUTOMOTIVE / TRANSPORTATION

From electrification to vehicle motion control, Reed and Hall Effect sensors deliver reliable position, speed, proximity, and fluid level sensing. They support charge ports, battery packs, doors, brakes, gear position, wheel speed monitoring, and other critical automotive systems.

INDUSTRIAL AND AUTOMATION

Enabling precise machine control, Reed and Hall Effect sensors provide contactless position, proximity, speed, and motion sensing for packaging equipment, conveyors, motor systems, and robotics.

RENEWABLE ENERGY

Designed for efficient energy systems, Reed and Hall Effect sensors support enclosure access detection, actuator positioning, current monitoring, and speed sensing in solar, wind, and energy storage applications.

SMART HOME & CONSUMER ELECTRONICS

From smart appliances to connected home devices, Reed and Hall Effect sensors deliver reliable sensing for doors, lids, locks, fluid levels, motor position, security systems, and lighting controls.

Agricultural/Heavy Equipment

Rugged sensors keep heavy-duty equipment running safely and efficiently to support electrification, automation, and precision control.



EXPLORE
E-RESOURCES

AGRICULTURAL/HEAVY EQUIPMENT

WHERE WE FIT IN YOUR SYSTEM

POSITION & PROXIMITY



- Doors, gates & compartments
- Linkages & working height
- Pedals, levers & operator controls
- Augers, spouts & implements

SPEED & MOTION



- Shaft & rotational speed
- Speed & direction
- Auger & harvester motion
- Angle & rotational position

FLUID MONITORING



- Fuel & coolant
- Hydraulic oil
- Brake & power steering fluid
- Gearbox / oil reservoirs

SAFETY & MACHINE STATUS



- Safety interlocks
- Operator / control status
- Open / closed detection
- Equipment position feedback

WHY SENSORS IN AGRICULTURAL/HEAVY EQUIPMENT?

Efficient Low Power Sensing

Reed sensors provide passive, low-power operation with long life.

Reliable Position & Control

Accurate detection of pedals, linkages, doors, implements, and attachments.

Precise Motion Feedback

Reed and Hall sensing supports speed, direction, angle, and rotational position monitoring.

Rugged Performance

Reliable sensing in vibration, dust, moisture, and temperature extremes.

RECOMMENDED PRODUCT FAMILIES



MK21 SERIES

Cab door and access panel detection



DQ, SD SERIES

Transmission speed, speed and direction detection



LS03 SERIES

Chemical level sensing detection for spray and fertilizer

DESIGN CONSIDERATIONS

Sensor Function: Position, proximity, angle, speed, direction or level?

Output logic: Is a simple on/off signal sufficient, or is an analog/digital measurement required?

Power: Is power-independent sensing important? Passive reed sensors can retain their sensing state through equipment power cycles.

Reliability: Consider exposure to vibration, dust, moisture and temperature extremes when determining sensor packaging and placement.

TYPICAL APPLICATIONS

- Door, gate & compartment position
- Pedal, lever & operator controls
- Linkage, implement & attachment position
- Boom, blade, bucket & working-height position
- Auger, spout & material-handling position
- Shaft, auger & machine speed
- Rotation, angle & direction sensing
- Fuel, coolant & oil level monitoring
- Hydraulic & brake fluid level monitoring
- Safety interlocks & machine-status detection

QUICK SELECTION GUIDE

Open/Closed	→ Reed
Fluid Level Detection	→ Reed
Position/Proximity	→ Reed/Hall
Speed/Direction/Angle/Rotation	→ Hall
Low/Zero Power	→ Reed

Computing and Data Centers

Sensors are the silent backbone of AI-ready data centers, enabling efficient cooling, physical security, and uninterrupted operation.



EXPLORE
E-RESOURCES

COMPUTING AND DATA CENTERS

WHERE WE FIT IN YOUR SYSTEM

AI WORKLOAD THERMAL STABILITY



- Precise coolant level control
- Continuous monitoring of immersion tanks
- Cooling redundancy and alerts

PHYSICAL SECURITY & ACCESS CONTROL



- Cabinet/rack door detection
- Gate and cage entry access control monitoring
- Power interlock triggering to turn power off for maintenance

ENERGY EFFICIENCY



- Reed based passive sensors eliminate standby power consumption, lowering operational energy cost.

ENVIRONMENTAL DURABILITY



- Designed to withstand temperature, humidity, vibration, and dust build-up that can inhibit other technologies such as photoelectric sensors

WHY SENSORS IN DATA CENTERS?

Zero Power Standby Operation

Reed sensors consume no power in their passive state, reducing overall facility energy load.

Enhanced Physical Security

Monitor racks, cabinets, cages, and controlled-access areas.

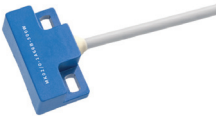
Cooling System Protection

Continuous liquid level monitoring for immersion cooling, CDUs, HVAC, and coolant reservoirs.

High Reliability

Long-life technologies built for harsh environments with vibration, humidity, and temperature fluctuations.

RECOMMENDED PRODUCT FAMILIES



MK02 SERIES

Ferrous target detection for rack monitoring



MK37 SERIES

Access control detection and monitoring



LS02 SERIES

Coolant system level detection

DESIGN CONSIDERATIONS

Cooling method: Liquid, or immersion cooling

Power strategy: Low-energy, passive monitoring solutions

Security level: Rack, cabinet, cage, and facility access control

Installation: Side mount, top mount, recessed, threaded, press-fit

Output options: NO, NC, digital Hall outputs

TYPICAL APPLICATIONS

- Rack door monitoring
- Cabinet access detection
- Security cage monitoring
- CDU coolant monitoring
- Immersion cooling systems
- HVAC monitoring
- Fire suppression liquid monitoring
- Power safety interlocks

QUICK SELECTION GUIDE

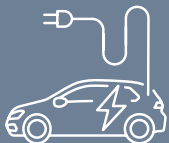
- Rack Door/Cabinet Position Detection → **MK02 / MK04 / MK26 Series**
- Security Gate Monitoring → **MK36 / MK37 / MK38 Series**
- CDU Coolant/ Tank Level Monitoring → **LS02 / LS03 Series**
- HVAC System → **FPS-L Series**
- Fire Suppression System → **LS05 Series**
- Electronic Position & Status Monitoring → **Hall Sensor Solutions**



EXPLORE
E-RESOURCES

Electric and Hybrid Vehicles

Electric vehicles rely on an increasing number of sensing points to monitor fluid levels, detect position and motion, improve safety and efficiency.



ZERO ENERGY CONSUMPTION IN PASSIVE STATE

Reed sensors do not draw consistent power, optimizing energy usage.

EV & HYBRID VEHICLES

WHERE WE FIT IN YOUR SYSTEM

AUTOMOTIVE SAFETY INTEGRITY LEVEL (ASIL)



- Airbag system monitoring
- Seatbelt/seat occupancy
- Brake pedal position
- System fault monitoring

CHARGING SYSTEM DETECTION



- Charge-port engagement
- Charging state
- Safety interlocks
- Connector lock position

COOLING & FLUID MONITORING



- Coolant level and flow
- Battery coolant level
- Leak detection
- Oil level
- Brake fluid detection

MOTION, SPEED, AND POSITION SENSING



- Wheel speed/engine RPMs
- Transmission speed and direction
- Crank/shaft/gear rotation
- Door, hood, and trunk detection
- Brake pedal engagement
- Door handle and lock system

WHY SENSORS IN EV & HYBRID VEHICLES?

Zero-Power Operation

Reed sensors consume no power until actuated

Precise Position Detection

Reliable sensing of doors, hoods, charge ports, pedals, etc.

Motion & Speed Feedback

Hall and gear-tooth sensors for accurate rotational and speed information.

Built for Harsh Environments

Designed to withstand vibration, moisture, dust, and shock encountered in automotive systems.

RECOMMENDED PRODUCT FAMILIES



AS01 SERIES

Charge-port, door, hood & compartment detection.



AS02 SERIES

Brake fluid level sensor detection for pressurized systems



REED FLOAT SENSOR SERIES

Washer fluid level detection

DESIGN CONSIDERATIONS

Power consumption: Passive reed sensors draw no power in their normally open state.

Environmental conditions: Sensors must operate reliably in vibration, shock, moisture, dust, and temperature extremes.

Space constraints: Compact packages support increasingly dense EV architectures.

Safety & reliability: Long operating life and hermetically sealed reed technology support automotive applications.

TYPICAL APPLICATIONS

- Charge ports, battery covers, doors, hoods, latches detection
- Battery pack cover detection
- Fluid (washer, brake, coolant, oil) monitoring
- Pedals, parking brakes, locking mechanisms
- Gear position sensing
- Shaft/Wheel speed sensing
- End-position detection

QUICK SELECTION GUIDE

- Proximity/Position Detection → **MK04 / MH04 Series**
- Fluid Level Monitoring → **Reed Float Level Series**
- Safety/Engagement Detection → **Reed Proximity Series**
- Motion/Speed Sensing → **Hall Speed / Gear Tooth Series**
- Position/Angular Feedback → **Hall Position Sensors**

Industrial and Automation

High-cycle automation sensors must be smart, scalable, and rugged while enabling optimal performance, reduced downtime, and intelligent control.



EXPLORE
E-RESOURCES

INDUSTRIAL & AUTOMATION

WHERE WE FIT IN YOUR SYSTEM

POSITION & PROXIMITY



- Actuators & cylinders
- Robotic equipment
- Doors & guards
- End-of-travel detection

MOTION & FEEDBACK



- Conveyors
- Automated assembly
- Robotics
- Motion control systems

FLUID MONITORING



- Cooling systems
- Lubrication systems
- Process fluids
- Liquid level detection

EQUIPMENT & PROCESS CONTROL



- High-cycle automation
- Motors & inductive loads
- Material handling
- Machine status detection

WHY SENSORS IN INDUSTRIAL/AUTOMATION?

Zero-Power Operation

Reed sensors consume no power until actuated

Precise Position Detection

Reliable sensing of doors, hoods, charge ports, pedals, etc.

Motion & Speed Feedback

Hall and gear-tooth sensors for accurate rotational and speed information.

Built for Harsh Environments

Designed to withstand vibration, moisture, dust, and shock encountered in automotive systems.

RECOMMENDED PRODUCT FAMILIES



MK26 SERIES

Door and gate guard monitoring



DSO SERIES

Pump speed detection to ensure fluid flow rates



LS05 SERIES

Hydraulic and lubrication system monitoring

DESIGN CONSIDERATIONS

Detection: Position, proximity, motion, or level

Environmental: Sensors must operate reliably in vibration, electrical stress & fluids.

Integration: Space, mounting & detection point

Duty cycle: Operating frequency & lifecycle

Output: Switching vs. continuous feedback

Load: Standard vs. high-inrush requirements

TYPICAL APPLICATIONS

- Robotic position sensing
- Conveyor monitoring
- Actuator position detection
- Automated assembly equipment
- Doors, guards & access points
- Material handling systems
- Motion control feedback
- Motor & inductive-load sensing
- Cooling fluid monitoring
- Lubrication & process fluid levels

QUICK SELECTION GUIDE

Proximity/Position Detection

Fluid Level Monitoring

Safety/Engagement Detection

Motion/Speed/Angular Feedback

High-Inrush Loads

- **Reed / Hall**
- **Reed Float Level Series**
- **Reed Proximity Series**
- **Hall**
- **High-Power Reed**

Home/Consumer Appliances



EXPLORE
E-RESOURCES

HOME/CONSUMER APPLIANCES

WHERE WE FIT IN YOUR SYSTEM

DOOR & ACCESS DETECTION



- Doors & lids
- Drawers & reservoirs
- Access panels
- Safety interlocks

POSITION & MOTION



- Drums & moving components
- Dampers & valves
- Motor position
- Speed feedback

LIQUID LEVEL & FLOOD MONITORING



- Water reservoirs
- Fluid level sensing
- Leak detection
- Flood monitoring

SMART APPLIANCE CONTROL



- HVAC modules
- Connected appliances
- Automated functions
- System status feedback

WHY SENSORS IN HOME/CONSUMER APPLIANCES?

Compact Integration

Reliable sensing for space-constrained appliance designs.

Reliable Wet-Environment Performance

Sealed sensing technology for moisture-prone applications.

Silent, Contactless Operation

Magnetic sensing minimizes wear while improving user experience.

Precise Position & Level Feedback

Accurate monitoring of doors, reservoirs, valves, fluid levels, and moving components.

RECOMMENDED PRODUCT FAMILIES



MK03 SERIES

Proximity sensor detects if doors, lids, compartments or locking systems are open



MK18 SERIES

Miniature sensor for appliance flap sensing



MK36 SERIES

Miniature recessed sensors for fridge and icemaker detection

DESIGN CONSIDERATIONS

Detection: Position, proximity, speed, or liquid level

Environment: Moisture, temperature & vibration

Integration: Space, mounting & sensor location

Lifecycle: Repeated use & long-term reliability

Output: Switching vs. analog feedback

Actuation: Magnet position & moving component

TYPICAL APPLICATIONS

- Door & lid detection
- Drawer & reservoir position
- Water level monitoring
- Flood & leak detection
- Drum position sensing
- Damper & valve position
- Motor speed feedback
- Moving component position tracking
- HVAC access panel detection
- Smart appliance status monitoring

QUICK SELECTION GUIDE

Open/Closed	→ Reed
Fluid Level/Leak Detection	→ Reed
Position/Proximity	→ Reed/Hall
Speed/Direction/Angle/Rotation	→ Hall
Low/Zero Power	→ Reed
Valve/Damper	→ Hall

Ready to Optimize Your Next Design?

For When it Matters - The Right Design, at the Right Time, at the Optimal Cost

Standex Detect designs and manufactures custom non-contact magnetic Reed and Hall effect sensors that deliver precision measurement, long-term reliability, and consistent performance in demanding environments. Our engineers develop application-specific sensor solutions tailored to detect proximity, position, liquid level, and motion with unmatched stability and repeatability.

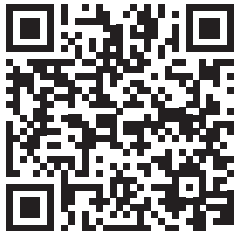
Each custom sensor is built to meet exact mechanical, electrical, and environmental requirements. From harsh automotive systems to sensitive medical devices and industrial automation, Standex Detect sensors deliver the proven durability and performance required for your application.

Let's Engineer What's Next Together!

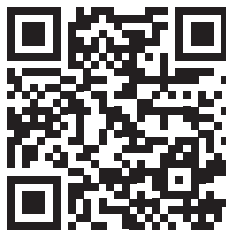
We do not ask customers to “fit” standard parts. We engineer parts that fit the application.

To learn more about how Standex Detect can support your projects with custom sensors, visit

standexdetect.com or contact our engineering team to discuss your specific application needs.



START A
CONVERSATION



REQUEST
A SAMPLE



FIND A
DISTRIBUTOR

Note: Product selection information is provided as general guidance only. Suitability depends on the customer's specific application, operating conditions, required reliability, and applicable standards. Final component selection and validation remain the responsibility of the user.



A Standex **Electronics** Business

The modern world pulses with silent signals that activate, safeguard, and synchronize the systems that underpin everyday life. As automation, renewable energy, transportation, and smart environments evolve into autonomous, adaptive networks, everything begins with one capability: the power to **Detect** what's next.

Standex Electronics delivers the high-performance sensing and switching solutions that enable this future. Through customer intimacy and deep technical collaboration, we listen, design, refine, and deliver solutions built for unwavering reliability.

Our expertise in reed switches, sensors, and relays enables equipment to sense position, measure speed, **Detect** presence, ensure safety, and control power with precision. We're advancing Detection at the speed of innovation for when it matters. Delivering the right design, at the right time, at the optimal cost.

Tomorrow's breakthroughs depend on our ability to Detect instantly, quietly, and reliably.

Welcome to **Standex Detect**.



STANDEX DETECT
LOCATIONS

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