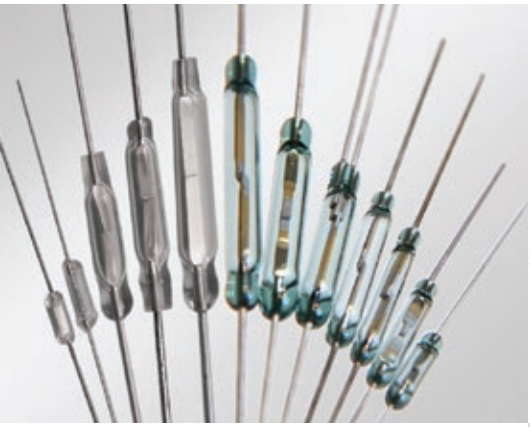
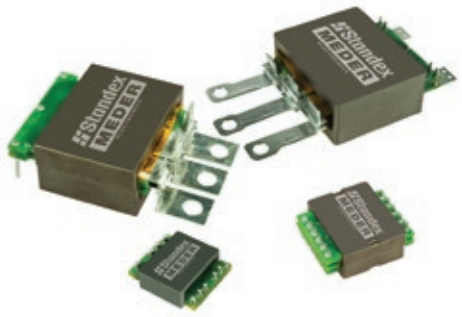
Standex MEDER ELECTRONICS

Custom Engineered Solutions for Tomorrow



SENSOR & MAGNETIC SOLUTIONS



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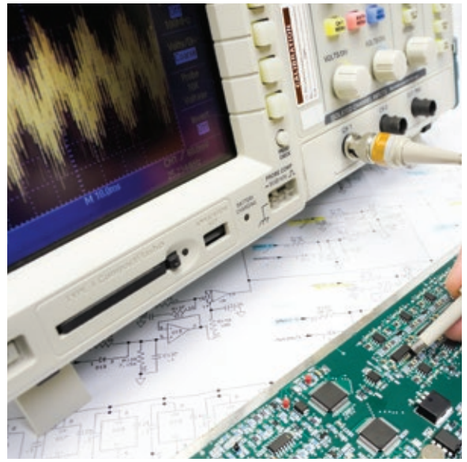


PRODUCT SOLUTIONS. AS DIVERSE AS THE MARKETS WE SERVE.

OUR COMPANY

Standex-Meder Electronics is a worldwide market leader in the design, development and manufacture of standard and custom electro-magnetic components, including magnetics products and reed switch-based solutions.

Our magnetic offerings include planar, Rogowski, current, and low- and high-frequency transformers and inductors. Our reed switch-based solutions include Meder, Standex and OKI brand reed switches, as well as a complete portfolio of reed relays, and a comprehensive array of fluid level, proximity, motion, water flow, HVAC condensate, hydraulic pressure differential, capacitive, conductive and inductive sensors.

MARKETS WE SERVE

We offer engineered product solutions for a broad spectrum of product applications in all major markets, including but not limited to:

- Aerospace
- Alternative Energy
- Automotive / Transportation
- Fluid Flow
- Food Service
- General Industrial
- Heavy Duty Truck
- Household / Appliances
- HVAC/R
- Hydraulics
- Industrial / Power
- Lighting
- Medical
- Metering
- Military
- Off Highway
- Pool / Spa
- Recreational
- Security / Safety
- Space
- Test & Measurement
- Utilities

CUSTOMER DRIVEN INNOVATION. PREMIER WORLDWIDE CAPABILITIES.

COMMITMENT & EXPERTISE

Standex-Meder Electronics has a commitment to absolute customer satisfaction and customer-driven innovation, with a global organization that offers premier sales support, engineering capabilities, and technical resources worldwide.

Headquartered in Cincinnati, Ohio, USA, Standex-Meder Electronics has eight manufacturing facilities in six countries, located in the United States, Germany, China, Mexico, the United Kingdom, and Canada.

MANUFACTURING

- Auto AT Switch Sorting
- Bobbin and Toroidal Winding
- Auto Termination
- Coil Molding & Packaging
- Insert and Thermoset Molding
- Low Pressure Molding (Hot Melt)
- Pick & Place – Vision & Camera System
- Plasma Surface Treatment
- Plastic Injection Molding
- Potting - 2 Component
- Progressive Stamping
- Reflow Oven – Multiple Zone Convection
- Reed Switch Manufacturing
- Reed Relay Design and Manufacturing - SMD, Low Thermal, High Insulation, High Voltage, High Frequency, Latching and Atex
- Selective Soldering
- Sensor Packaging
- Transformer Design And Manufacturing
- Wave soldering

ENGINEERING

- Electronic sensor engineering
- Circuit Design and PCB Layout
- Patented Conductivity Sensors
- Patented Inductive Sensors
- 3-D CAD Modeling
- 3-D Magnetic Sensor Mapping
- EMS Software
- PCB Prototyper
- Quick Turn Samples
- 3-D Printing

TESTING & TOOLING

- Automated Assembly and Test Systems
- Environmental and Durability Testing
- Life Testing

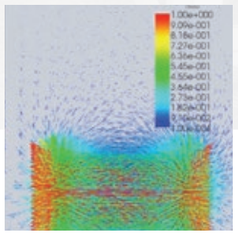
Specialized Lab Testing Equipment including but not limited to:

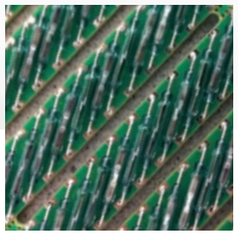
- Network Analyzers
- Fluxmeters
- Nanovoltmeters
- Picoammeters
- Destructive Pull Testers
- Gauss / Teslameters

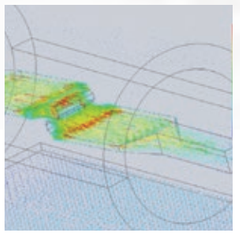
QUALITY/ LAB CAPABILITIES

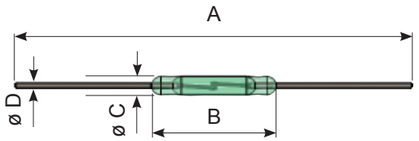
- Certifications: AS9100, ITAR, ISO9000, TS16949
- SPC Data Collection
- Fully Equipped Certified Test Labs
- Burn-in and Life Testing
- Complete, In-House Machine Shop
- Corona Discharge Testing Capabilities
- Microscopic Investigation / DPA
- Moisture Resistance and Seal Testing
- Radiographic
- Salt Fog and Solderability
- Scott T Angular Accuracy
- Terminal Strength
- Thermal Cycling
- Mechanical and Thermal Shock, Temperature Rise and Vibration

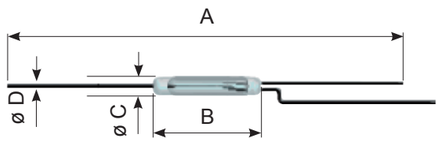










Reed Switch Technology

Standex-Meder offers the most comprehensive listing of reed switches that cover the majority of low power switching requirements. Reed relays and reed sensors both use the reed switch as the heart of their switching mechanism. New applications continue to arise at a significant pace for both products because of the reed switch's unique switching capability. What is driving these new applications is the ever broadening of new reed relay, reed sensor and fluid level designs by Standex-Meder.

For example, Standex-Meder offers a reed switch where the overall glass length is only 3.7 mm long (GR150) - the smallest in the industry. These small sizes pave the way for unique new applications in RF switching, medical applications and many more applications.

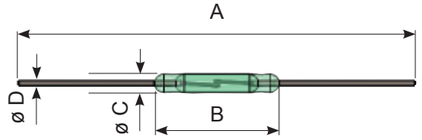
Because reed switches are hermetically sealed (glass to metal seal) they are impervious to almost all environments. This opens up a vast number of applications where they are the only technology capable of meeting specific requirements where certain mechanical switches and semiconductor switches are environmentally limited. Many thousands of reed switch applications currently exist with many more added on a regular basis. These applications span across all the major market segments.

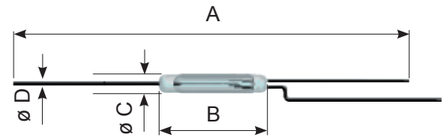
Our engineers are always available to discuss your design requirements where specialized packaging is available in a very economical manner.

Dimensions in mm (inches)	**MEDER KSK-1A04-**	**MEDER KSK-1A35-**	**MEDER KSK-1A35/1-**	**MEDER KSK-1A41-**
Overall Length	A - 30 (1.181)	A - 34.5 (1.358)	A - 34.5 (1.358)	A - 56.7 (2.232)
Glass Length max.	B - 3.95 (0.155)	B - 10.5 (0.413)	B - 10.5 (0.413)	B - 14 (0.551)
Glass Dia max.	C - 1.5 (0.059)	C - 2.1 (0.082)	C - 2.1 (0.082)	C - 2.2 (0.086)
Lead Dia.	D - 0.8 (0.031) x 0.15 (0.006) max	D - 1.2 (0.047) x 0.2 (0.008)	D - 1.2 (0.047) x 0.2 (0.008)	D - 0.5 (0.019)
Specifications				
Contact Form	1A (Flat Lead)	1A (Flat Lead)	1A (Flat Lead)	1A
Rated Power max.	3 W	20 W	10 W	16 W
Switching Voltage max.	30 VDC	200 VDC	350 VDC	200 VDC
Switching Current max.	0.3 Amp DC	1 Amp DC	1.25 Amp DC	0.5 Amp DC

Dimensions in mm (inches)	**MEDER KSK-1A46-**	**MEDER KSK-1A52-**	**MEDER KSK-1A53-**	**MEDER KSK-1A54-**
Overall Length	A - 44.1 (1.736)	A - 55.2 (2.173)	A - 55 (2.165)	A - 81.6 (3.212)
Glass Length max.	B - 12 (0.472)	B - 21 (0.826)	B - 20.5 (0.807)	B - 53.4 (2.102)
Glass Dia max.	C - 2 (0.078)	C - 2.75 (0.108)	C - 2.8 (0.110)	C - 5.4 (0.212)
Lead Dia.	D - 0.5 (0.019)	D - 0.6 (0.023)	D - 0.6 (0.023)	D - 1.3 (0.051)
Specifications				
Contact Form	1A	1A	1A	1A
Rated Power max.	10 W	50 W	10 W	25 W
Switching Voltage max.	200 VDC	350 VDC	220 VDC	500 VDC
Switching Current max.	0.5 Amp DC	0.7 Amp DC	1 Amp DC	1.5 Amp DC

Dimensions in mm (inches)	**MEDER KSK-1A55-**	**MEDER KSK-1A66-**	**MEDER KSK-1A69-**	**MEDER KSK-1A76/2-**
Overall Length	A - 43.9 (1.728)	A - 44.1 (1.736)	A - 81.6 (3.212)	A - 83.4 (3.283)
Glass Length max.	B - 16.5 (0.649)	B - 14 (0.551)	B - 53.4 (2.102)	B - 50.8 (2)
Glass Dia max.	C - 2.8 (0.110)	C - 2.2 (0.086)	C - 5.4 (0.212)	C - 5.2 (0.204)
Lead Dia.	D - 0.6 (0.023)	D - 0.5 (0.019)	D - 2.49 (0.098) x 0.54 (0.213)	D - 2.5 (0.098)
Specifications				
Contact Form	1A	1A	1A (Flat Lead)	1A
Rated Power max.	50 W	10 W	50 W	120 W
Switching Voltage max.	200 VDC	200 VDC	10000 VDC	300 VDC
Switching Current max.	0.5 Amp DC	0.5 Amp DC	3 Amp DC	3 Amp DC





Dimensions in mm (inches)	**MEDER KSK-1A80-**	**MEDER KSK-1A82-**	**MEDER KSK-1A83-**	**MEDER KSK-1A85-**
Overall Length	A - 35.6 (1.401)	A - 44.1 (1.736)	A - 81.6 (3.212)	A - 55.5 (2.185)
Glass Length max.	B - 7 (0.275)	B - 16.5 (0.649)	B - 53.4 (2.102)	B - 21 (0.826)
Glass Dia max.	C - 1.8 (0.070)	C - 2.8 (0.110)	C - 5.4 (0.212)	C - 2.75 (0.108)
Lead Dia.	D - 0.3 (0.011)	D - 0.6 (0.023)	D - 2.49 (0.098) x 0.54 (0.213)	D - 0.6 (0.023)
Specifications				
Contact Form	1A	1A	1A (Flat Lead)	1A
Rated Power max.	10 W	100 W	50 W	100 W
Switching Voltage max.	170 VDC	120 VDC	7500 VDC	1000 VDC
Switching Current max.	0.25 Amp DC	3 Amp DC	3 Amp DC	1 Amp DC

Dimensions in mm (inches)	**MEDER KSK-1A87-**	**MEDER KSK-1C90U-**	**MEDER KSK-1C90F-**	**STANDEX GR100**
Overall Length	A - 35.5 (1.397)	A - 56.1 (2.208)	A - 54.5 (2.145)	A - 54 (2.125)
Glass Length max.	B - 10 (0.393)	B - 14 (0.551)	B - 14 (0.551)	B - 20.3 (0.799)
Glass Dia max.	C - 2 (0.078)	C - 2.54 (0.1)	C - 2.54 (0.1)	C - 2.5 (0.098)
Lead Dia.	D - 0.4 (0.015)	D - 0.5 (0.019)	D - 0.5 (0.019)	D - 0.6 (0.023)
Specifications				
Contact Form	1A	1C (Straight Leads)	1C (NC Dog Leg Bend)	1A
Rated Power max.	10 W	10 W	10 W	10 W
Switching Voltage max.	200 VDC	175 VDC	175 VDC	100 VDC
Switching Current max.	0.5 Amp DC	0.5 Amp DC	0.5 Amp DC	1.0 Amp DC/AC

Dimensions in mm (inches)	**STANDEX GR150**	**STANDEX GR200**	**STANDEX GR400**	**STANDEX GR501**
Overall Length	A - 36 (1.417)	A - 36 (1.417)	A - 54 (2.125)	A - 54 (2.125)
Glass Length max.	B - 3.7 (0.145)	B - 4.7 (0.185)	B - 10.0 (0.394)	B - 12.7 (0.5)
Glass Dia max.	C - 1.2 (0.047)	C - 1.5 (0.059)	C - 1.9 (0.075)	C - 2.3 (0.090)
Lead Dia.	D - 0.25 (0.009)	D - 0.25 (0.009)	D - 0.41 (0.016)	D - 0.45 (0.017)
Specifications				
Contact Form	1A	1A	1A	1A
Rated Power max.	1 W	3 W	5 W	10 W
Switching Voltage max.	30 VDC	30 VDC	50 VDC	100VDC/125VAC
Switching Current max.	0.05 Amp DC	0.05 Amp DC	0.5 Amp DC/AC	0.5 Amp DC/AC

Dimensions in mm (inches)	**STANDEX GP501**	**STANDEX GR560**	**STANDEX GP560**	**STANDEX NL126**
Overall Length	A - 54 (2.125)	A - 54 (2.125)	A - 54 (2.125)	A - 54 (2.125)
Glass Length max.	B - 12.7 (0.5)	B - 14.2 (0.559)	B - 14.2 (0.559)	B - 20.3 (0.799)
Glass Dia max.	C - 2.3 (0.090)	C - 2.3 (0.090)	C - 2.3 (0.090)	C - 2.5 (0.098)
Lead Dia.	D - 0.45 (0.017)	D - 0.6 (0.023)	D - 0.6 (0.023)	D - 0.7 (0.027)
Specifications				
Contact Form	1A	1A	1A	1A
Rated Power max.	10 W	10 W	10 W	50 W
Switching Voltage max.	100VDC/125VAC	100VDC/125VAC	100VDC/125VAC	200 VDC/150 VAC
Switching Current max.	0.5 Amp DC/AC	1.0 Amp DC/AC	1.0 Amp DC/AC	1.5 Amp DC/AC

Dimensions in mm (inches)	**STANDEX PR560**	**STANDEX PR126**
Overall Length	A - 54 (2.125)	A - 54 (2.125)
Glass Length max.	B - 14.2 (0.559)	B - 20.3 (0.799)
Glass Dia max.	C - 2.3 (0.090)	C - 2.5 (0.098)
Lead Dia.	D - 0.6 (0.023)	D - 0.7 (0.027)
Specifications		
Contact Form	1A	1A
Rated Power max.	10 W	70 W
Switching Voltage max.	250 VAC/100 VDC	300 VAC/200 VDC
Switching Current max.	1.0 Amp DC/AC	1.5 Amp DC/AC

MEDER BE

Dimensions in mm (inches)
L - 33 (1.299)
W - 10-19.7 (0.394-0.776)
H - 10 (0.393)

All purpose relay with up to 5 form A switches

Specifications
Switch Rating: 100W/1000VDC/1A max.
Contact Form: 1-5A, 2 (A,B,C,E), 2A+2B
Coil Resistance: 500-8000 Ohms
Coil VDC: 15,12,24

Features & [Options]
[Plastic, Metal, Pin-outs, High IR, Latching]

MEDER CRR

Dimensions in mm (inches)
L - 8.6 (0.338)
W - 4.4 (0.173)
H - 3.6-6.0 (0.142-0.246)

Miniature SMD relay with high IR typical 10^14 Ohms

Specifications
Switch Rating: 10W/170VDC/0.5A max.
Contact Form: 1A, 1B
Coil Resistance: 70-150 Ohms
Coil VDC: 3,5

Features & [Options]
T&R, [BGA, UL]

MEDER DIL

Dimensions in mm (inches)
L - 20.3 (0.799)
W - 10.4 (0.409)
H - 10.1 (0.397)

Dual In-Line relay

Specifications
Switch Rating: 15W/500VDC/1A max.
Contact Form: 1-4A, 1 (B,C), 2 (A,C)
Coil Resistance: 500-10000 Ohms
Coil VDC: 5,12,24

Features & [Options]
[Diode, Mag Shield, Dielectric Strength 4.25kVDC, UL]

MEDER DIP

Dimensions in mm (inches)
L - 19.3 (0.759)
W - 6.4 (0.251)
H - 5.1 (0.200)

Dual In-Line IC compatible relay

Specifications
Switch Rating: 50W/500VDC/2A max.
Contact Form: 1 (A,B,C), 2A
Coil Resistance: 500-2000 Ohms
Coil VDC: 3,5,12,15,24

Features & [Options]
[Diode, Dielectric Strength 4.25kVDC, UL]

MEDER MS

Dimensions in mm (inches)
L - 15.2 (0.598)
W - 3.9 (0.153)
H - 6.8 (0.267)

Micro single In-line relay w/optional RF to 1GHz

Specifications
Switch Rating: 10W/200VDC/0.5A max.
Contact Form: 1A, 1B
Coil Resistance: 280-700 Ohms
Coil VDC: 5,12

Features & [Options]
[Diode, RF to 1GHz, UL]

MEDER SIL

Dimensions in mm (inches)
L - 19.8 (0.779)
W - 5.08 (0.2)
H - 7.8 (0.307)

Single In-Line relay

Specifications
Switch Rating: 50W/500VDC/2A max.
Contact Form: 1A, 1B, 1C
Coil Resistance: 80-2000 Ohms
Coil VDC: 3,5,12,15,24

Features & [Options]
[Diode, Mag Shield, BV 1.5kVDC, UL]

MEDER UMS

Dimensions in mm (inches)
L - 6.85 (0.269)
W - 3.6 (0.141)
H - 9.5 (0.374)

Ultra mini single-In line relay w/ AEC-Q200 cert.

Specifications
Switch Rating: 10W/170VDC/0.5A max.
Contact Form: 1A
Coil Resistance: 400-500 Ohms
Coil VDC: 5

Features & [Options]
[UL]

MEDER CRF

Dimensions in mm (inches)
L - 8.6 (0.338)
W - 4.4 (0.173)
H - 3.4 (0.133)

Ultra miniature SMD 7GHz RF relay w/IR 10^14 Ohms

Specifications
Switch Rating: 10W/170VDC/0.5A max.
Contact Form: 1A, 1B
Coil Resistance: 70-150 Ohms
Coil VDC: 3,5

Features & [Options]
[BGA, UL]

Explosive Atmospheres Approval | High Frequency | High Insulation Resistance | High Voltage | Low Thermal

MEDER HF

Dimensions in mm (inches)
L - 53.7 (2.114)
W - 19 (0.748)
H - 20 (0.787)

High RF/power relay capable carry current 5A@30MHz

Specifications
Switch Rating: 25W/500VDC/1.5A max.
Contact Form: 1A, 1B
Coil Resistance: 250-1000 Ohms
Coil VDC: 12,24

Features & [Options]
Patented external electrostatic and mag shields

MEDER SIL HF

Dimensions in mm (inches)
L - 19.8 (0.779)
W - 5.08 (0.2)
H - 7.8 (0.307)

High RF single in-line relay w/RF switch to 1.5GHz

Specifications
Switch Rating: 15W/200VDC/1A max.
Contact Form: 1A
Coil Resistance: 500-1000 Ohms
Coil VDC: 5,12

Features & [Options]
[UL]

MEDER H

Dimensions in mm (inches)
L - 82 (3.228)
W - 18 (0.708)
H - 30 (1.181)

HV wire relay switching to 10kVDC/BV 15kVDC

Specifications
Switch Rating: 50W/10000VDC/3A max.
Contact Form: 1A, 1B
Coil Resistance: 40-700 Ohms
Coil VDC: 12,24

Features & [Options]
M4 screw mount

MEDER HE

Dimensions in mm (inches)
L - 65 (2.559)
W - 14.5 (0.570)
H - 15.8 (0.622)

HV relay switching to 10kVDC/BV 15kVDC

Specifications
Switch Rating: 50W/10000VDC/3A max.
Contact Form: 1A, 1B, 2A
Coil Resistance: 50-1500 Ohms
Coil VDC: 5,12,24

Features & [Options]
Leakage dist. >26mm, [Pin-outs, Latching]

MEDER HM

Dimensions in mm (inches)
L - 68 (2.677)
W - 19 (0.748)
H - 19.8 (0.779)

HV thru-hole/wire relay switch to 10kVDC/BV 15kVDC

Specifications
Switch Rating: 50W/10000VDC/3A max.
Contact Form: 1A, 1B, 1E
Coil Resistance: 10-1650 Ohms
Coil VDC: 5,12,24

Features & [Options]
Leakage dist. >32mm, [Pin-outs, Latching, ext. wires]

MEDER KT

Dimensions in mm (inches)
L - 30 (1.181)
W - 11 (0.433)
H - 9 (0.354)

HV thru-hole or SMD relay switch to 1kVDC/BV 4.2kVDC

Specifications
Switch Rating: 100W/1000VDC/1A max.
Contact Form: 1A
Coil Resistance: 100-2700 Ohms
Coil VDC: 5,12,24

Features & [Options]
AEC-Q200 cert., High IR >1 x 10^12 Ohms, [UL]

MEDER LI

Dimensions in mm (inches)
L - 30 (1.181)
W - 10 (0.393)
H - 10.4 (0.409)

Mini HV relay switch to 1kVDC/BV 4.2kVDC

Specifications
Switch Rating: 100W/1000VDC/1A max.
Contact Form: 1A
Coil Resistance: 200-3600 Ohms
Coil VDC: 5,12,24

Features & [Options]
Insulation resistance 10^13 Ohms, AEC-Q200 cert.

MEDER SIL HV

Dimensions in mm (inches)
L - 24-29 (0.945)
W - 6.4 (0.251)
H - 8.9 (0.350)

Ultra mini HV relay switch to 1kVDC/BV 4kVDC

Specifications
Switch Rating: 100W/1000VDC/1A max.
Contact Form: 1A
Coil Resistance: 150-220 Ohms
Coil VDC: 5,12

Features & [Options]
Insulation resistance >5 x 10^12 Ohms

Explosive Atmospheres Approval | High Frequency | High Insulation Resistance | High Voltage | Low Thermal

MEDER HI

Dimensions in mm (inches)
L - 28 (1.102)
W - 7.5 (0.295)
H - 7.9 (0.311)

High insulation relay with very high leak distance

Specifications
Switch Rating: 100W/1000VDC/1A max.
Contact Form: 1A
Coil Resistance: 140-900 Ohms
Coil VDC: 5,12

Features & [Options]
Insulation resistance 10^14 Ohms

MEDER BT/BTS

Dimensions in mm (inches)
L - 30.48-34.5 (1.200-1.358)
W - 12.7-16.5 (0.500-0.650)
H - 10-16.5 (0.394-0.650)

Low thermal relay w/offset voltages <5µV

Specifications
Switch Rating: 100W/1000VDC/1A max.
Contact Form: 2A
Coil Resistance: 350-5000 Ohms
Coil VDC: 5,12,24

Features & [Options]

MEDER RM05-4A

Dimensions in mm (inches)
L - 16 (0.629)
W - 11.2 (0.440)
H - 4 (0.157)

4-pole low profile SMD RF relay module

Specifications
Switch Rating: 10W/170VDC/0.5A max.
Contact Form: 2A+2B, 4A, 2B
Coil Resistance: 185 Ohms
Coil VDC: 5

Features & [Options]
<40ps rise times for switching fast pulses, BGA

MEDER RM05-6A

Dimensions in mm (inches)
L - 16 (0.629)
W - 20 (0.787)
H - 3.9 (0.153)

6-pole low profile SMD RF relay module

Specifications
Switch Rating: 10W/170VDC/0.5A max.
Contact Form: 6A
Coil Resistance: 185 Ohms
Coil VDC: 5

Features & [Options]
<40ps rise times for switching fast pulses, BGA

MEDER RM05-4-BV10641

Dimensions in mm (inches)
L - 22.5 (0.885)
W - 12.7 (0.5)
H - 4.5 (0.177)

4-pole low profile SMD w/socket RF relay module

Specifications
Switch Rating: 10W/100VDC/0.5A max.
Contact Form: 4A
Coil Resistance: 185 Ohms
Coil VDC: 5

Features & [Options]
Female socket mounting on 1.27mm (0.05) pitch

MEDER RM05-8A

Dimensions in mm (inches)
L - 38.5 (1.515)
W - 7.6 (0.299)
H - 15.3 (0.602)

8-pole low profile RF relay module

Specifications
Switch Rating: 10W/125VDC/1A max.
Contact Form: 8A (2C Matrix)
Coil Resistance: 500 Ohms
Coil VDC: 5

Features & [Options]
8 bit shift register 74 HC(T)595, new drivers

MEDER RM05-8A-S

Dimensions in mm (inches)
L - 33 (1.299)
W - 7 (0.275)
H - 14.7 (0.578)

Ultra mini 8-pole low profile RF relay module

Specifications
Switch Rating: 10W/170VDC/0.5A max.
Contact Form: 8A (2C Matrix)
Coil Resistance: 500 Ohms
Coil VDC: 5

Features & [Options]
8 bit shift register 74 HC(T)595, new drivers, [Parallel activation electronics]

Explosive Atmospheres Approval | High Frequency | High Insulation Resistance | High Voltage | Low Thermal

MEDER 522-03-i

Dimensions in mm (inches)
L - 16.5 (0.649)
W - 6.6 (0.259)
H - 9 (0.354)

Mini ATEX opto-coupler for intrisically safe circuits

Specifications
375V peak
to 50kHz cut-off
LED phototransistor output

Features & [Options]
11ATEX 0086, DIN EN 60062

MEDER 525-03-0-i/535-04-0-i

Dimensions in mm (inches)
L - 19 (0.748)
W - 10 (0.393)
H - 8 (0.314)

ATEX opto-coupler for intrisically safe circuits

Specifications
375V peak
to 50kHz cut-off
LED phototransistor output

Features & [Options]
11ATEX 0086, DIN EN 60062

MEDER 567-70-i

Dimensions in mm (inches)
L - 19 (0.748)
W - 10 (0.393)
H - 10 (0.393)

ATEX opto-coupler for intrisically safe circuits

Specifications
375V peak
to 500kHz cut-off (Fast switching <10µs)
LED Schmitt-trigger output

Features & [Options]
11ATEX 0086, DIN EN 60062

Explosive Atmospheres Approval

Often times electronic equipment is required to carry out certain functions in potentially explosive atmospheres. To prevent potential ignition of the explosive atmosphere via a spark or arc in these environments, all components must be selected very carefully. Components meeting these requirements are generally referred to as intrinsically safe. These components must be tested such that they will not become an ignition point when subjected to short circuits or adjacent component failures. They must also switch to a defined state when subjected to overload conditions.

Our 522-03-i, 525-03-0-i, 535-04-0-i, and 567-70-i Opto-coupler series are all ideal for this environment.

Important Notice:

The scope of the technical and application information included in this catalog is necessarily limited. Operating environments and conditions can materially affect the operating results of Standex-Meder products. Users must determine the suitability of any Standex-Meder component for their specific application, including the level of reliability required, and are solely responsible for the function of the end-use product.

Explosive Atmospheres Approval | High Frequency | High Insulation Resistance | High Voltage | Low Thermal

MEDER MK01

Dimensions in mm (inches)
L - 18.8 (0.740)
W - 3.7 (0.145)
H - 3.25 (0.127)

Unique Change-over Design SMT Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/200VDC/0.5A
Contact Form: 1A, 1B, 1C
Avail. Operating Range: 10-60 AT
Tape & Reel

Features & [Options]
[UL]

MEDER MK10

Dimensions in mm (inches)
L - 13.2 (0.519)
W - 5.0 (0.197)
H - 2.6 (0.102)

Internal Resistor Robust Molded SMT Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/170VDC/0.25A
Contact Form: 1A
Avail. Operating Range: 10-50 AT
Tape & Reel

Features & [Options]
[Different resistors available]

MEDER MK15

Dimensions in mm (inches)
L - 19.5 (0.767)
W - 2.5 (0.098)
H - 2.5 (0.098)

Robust Molded SMT Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/200VDC/0.5A
Contact Form: 1A, 1B
Avail. Operating Range: 10-60 AT
Tape & Reel

Features & [Options]
[UL, 2 lead designs: Axial, Gull-wing]

MEDER MK16

Dimensions in mm (inches)
L - 11.5 (0.452)
W - 2.3 (0.090)
H - 2.3 (0.090)

Robust Molded SMT Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/200VDC/0.5A
Contact Form: 1A
Avail. Operating Range: 10-60 AT
Tape & Reel

Features & [Options]
[UL, 2 lead designs: Axial, Gull-wing]

MEDER MK17

Dimensions in mm (inches)
L - 8.5 (0.334)
W - 2.1 (0.082)
H - 2.1 (0.082)

Ultra Miniature Robust Molded SMT Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/100VDC/0.5A
Contact Form: 1A
Avail. Operating Range: 10-40 AT
Tape & Reel

Features & [Options]
[UL, 3 lead designs: Axial, Gull-wing, J-lead]

MEDER MK22

Dimensions in mm (inches)
L - 11.6 (0.456)
W - 2.7 (0.106)
H - 2.3 (0.090)

Miniature Robust Molded SMT Proximity/Motion Sensor

Specifications
Switch Rating max.: 20W/200VDC/1A
Contact Form: 1A
Avail. Operating Range: 10-30 AT
Tape & Reel

Features & [Options]
[UL, 2 lead designs: Axial, Gull-wing]

MEDER MK24

Dimensions in mm (inches)
L - 5 (0.196)
W - 2.2 (0.086)
H - 1.5 (0.059)

Ultra Micro-Mini Robust Molded SMT Proximity/Motion Sensor

Specifications
Switch Rating max.: 3W/30VDC/0.3A
Contact Form: 1A, 1B
Avail. Operating Range: 5-20 AT
Tape & Reel

Features & [Options]
[UL, 3 lead designs: Axial, Gull-wing, J-lead]

MEDER MK30

Dimensions in mm (inches)
L - 22.5 (0.885)
W - 3.5 (0.137)
H - 3.5 (0.137)

High Voltage Robust Molded SMT Proximity/Motion Sensor

Specifications
Switch Rating max.: 100W/1000VDC/1A
Contact Form: 1A
Avail. Operating Range: 15-50 AT
Tape & Reel

Features & [Options]
[UL, Gull-wing]

High Temperature Resistant
Explosive Atmospheres Approval
Ferromagnetic Metal Detection

SENSOR PRODUCTS | Reed Sensors

STANDEX MK15-501

Dimensions in mm (inches)
L - 19.5 (0.767)
W - 2.5 (0.098)
H - 2.5 (0.098)

Low Cost Robust Molded SMT Proximity/Motion Sensor

Specifications
Switch Rating max.: 10VA/100VDC/0.5A
Contact Form: 1A
Avail. Operating Range: 7-30 AT
Tape & Reel

Features & [Options]

STANDEX SR4J

Dimensions in mm (inches)
L - 7.6 (0.299)
W - 2.4 (0.094)
H - 2.5 (0.098)

Ultra Miniature Robust Molded SMT Proximity/Motion Sensor

Specifications
Switch Rating max.: 3VA/50VDC/0.1A
Contact Form: 1A
Avail. Operating Range: 3-15 AT
Tape & Reel

Features & [Options]

MEDER MK23

Dimensions in mm (inches)
L - 7-21 (0.276-0.827)
Ø - 1.8-2.75 (0.071-0.108)
H - 1.9-2.5 (0.075-0.098)

Bare Glass Low Cost SMT Proximity/Motion Sensor

Specifications
Switch Rating max.: 100W/1000VDC/1A
Contact Form: 1A, 1C
Avail. Operating Range: 10-60 AT
Tape & Reel

Features & [Options]
[4 lead designs: Axial, Gull-wing, J-lead, Inverse Gull[

STANDEX SM501

Dimensions in mm (inches)
L - 18.1 (0.712)
W - 2.7 (0.106)
H - 2.5 (0.098)

Bare Glass Low Cost SMT Proximity/Motion Sensor

Specifications
Switch Rating max.: 10VA/100VDC/0.5A
Contact Form: 1A
Avail. Operating Range: 7-30 AT
Tape & Reel

Features & [Options]

MEDER MK02

Dimensions in mm (inches)
L - 24 (0.944)
W - 8.5 (0.334)
H - 7.7 (0.303)

Metal Detection THT Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/200VDC/1.25A
Contact Form: 1A
Avail. Operating Range: 4.5-15 MM

Features & [Options]
IP67 Rated, Built-in magnet, Ferrous Metal Detection, Front or above operation, [UL]

MEDER MK06

Dimensions in mm (inches)
L - 12.06-22.32 (0.475-0.879)
W - 3.3 (0.129)
H - 3.3-4.2 (0.130-0.165)

Epoxy Sealed THT Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/170-200VDC/0.25-0.5A
Contact Form: 1A, 1B, 1C, 1E
Avail. Operating Range: 10-60 AT

Features & [Options]
[UL, 2.54mm (1") PCB pin spacing]

STANDEX R11808

Dimensions in mm (inches)
L - 30.5 (1.200)
W - 15.5 (0.610)
H - 23.4 (0.921)

Miniature Robust Molded THT Proximity/Motion Sensor

Specifications
Switch Rating max.: 50VA/200VDC/1.5A
Contact Form: 1A
Avail. Operating Range: 10-30 AT

Features & [Options]
Design lifts switch off PCB

MEDER MK08

Dimensions in mm (inches)
L - 95.5 (3.759)
Ø - 21.5 (0.846)

ATEX (KEMA 00,1112) Panel Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 60W/400VDC/1A
Contact Form: 1A, 1B
Avail. Operating Range: 10-60 AT

Features & [Options]
Oil resistant wire, Operate -40°C to +130°C, KEMA 00ATEX1112 X, IECEx KEM09.0006 X according to DinEN60062

High Temperature Resistant
Explosive Atmospheres Approval
Ferromagnetic Metal Detection

MEDER MK25

Dimensions in mm (inches)

Ø - 40 (1.574)

ATEX (KEMA 05,1206 X) Push Button Reed Sensor

Specifications
Switch Rating max.: 10W/400VDC/0.5A
Contact Form: 1A, 1B, 1C
Operate Temperature -40°C to +60°C

Features & [Options]
[Button plate colors- sold seperate], Contact-less switching, KEMA 05ATEX1206 X according to EN 60062

MEDER MK03

Dimensions in mm (inches)
L - 25.5 (1.003)
Ø - 5.75 (0.226)

5.75mm Cylindrical Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/400VDC/0.5A
Contact Form: 1A, 1B, 1C
Avail. Operating Range: 10-60 AT

Features & [Options]
[UL, Internal switch options]

MEDER MK14

Dimensions in mm (inches)
L - 25.5 (1.003)
Ø - 4 (0.157)

4.0mm Cylindrical Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/400VDC/0.5A
Contact Form: 1A, 1B, 1C
Avail. Operating Range: 10-60 AT

Features & [Options]
[UL, Internal switch options]

MEDER MK18

Dimensions in mm (inches)
L - 17 (0.669)
Ø - 5 (0.196)

5.0mm Cylindrical Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/200VDC/0.5A
Contact Form: 1A
Avail. Operating Range: 10-60 AT

Features & [Options]
[UL, Internal switch options]

MEDER MK20/2

Dimensions in mm (inches)
L - 7.5 (0.295)
Ø - 2.7 (0.106)

2.7mm Cylindrical Proximity/Motion Sensor

Specifications
Switch Rating max.: 3W/30VDC/0.25A
Contact Form: 1A
Avail. Operating Range: 10-30 AT

Features & [Options]
[UL]

MEDER MK20/1

Dimensions in mm (inches)
L - 10 (0.393)
Ø - 3 (0.118)

3.0mm Cylindrical Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/30VDC/0.25A
Contact Form: 1A
Avail. Operating Range: 10-60 AT

Features & [Options]
[UL]

STANDEX R12575

Dimensions in mm (inches)
L - 9.6 (0.377)
Ø - 2.5 (0.098)

2.5mm Cylindrical Proximity/Motion Sensor

Specifications
Switch Rating max.: 3VA/50VDC/0.1A
Contact Form: 1A
Avail. Operating Range: 3-15 AT

Features & [Options]
[Internal switch options]

STANDEX R12584

Dimensions in mm (inches)
L - 12 (0.472)
Ø - 2.5 (0.098)

2.5mm Cylindrical Proximity/Motion Sensor

Specifications
Switch Rating max.: 3VA/50VDC/0.1A
Contact Form: 1A
Avail. Operating Range: 3-15 AT

Features & [Options]
High reliability with ext. operate/storage temps

High Temperature Resistant Explosive Atmospheres Approval Ferromagnetic Metal Detection

MEDER MK07

Dimensions in mm (inches)
L - 39.6 (1.559)
Ø - 6.6 (0.259)

Plastic M8 Threaded Panel Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/200VDC/0.5A
Contact Form: 1A, 1B, 1C
Avail. Operating Range: 10-60 AT

Features & [Options]

MEDER MK11 (SS)

Dimensions in mm (inches)
L - 25 (0.984)/ 38 (1.496)
Ø - M5 x 0.5/M8 x 1.25

Stainless M5/M8 Threaded Panel Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/200VDC/0.5A
Contact Form: 1A, 1B, 1C
Avail. Operating Range: 10-60 AT

Features & [Options]
IP67 Rated, [UL, Internal switch options]

MEDER MK11 (P)

Dimensions in mm (inches)
L - 38 (1.496)
Ø - M8 x 1.25

Plastic M8 Threaded Panel Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 100W/1000VDC/1A
Contact Form: 1A, 1B, 1C
Avail. Operating Range: 10-60 AT

Features & [Options]
IP67 Rated, [UL, Internal switch options]

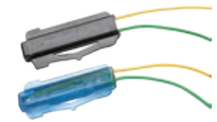
MEDER MK11 (B)

Dimensions in mm (inches)
L - 38 (1.496)
Ø - M6-M12

Brass M6-M12 Threaded Panel Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 100W/1000VDC/1A
Contact Form: 1A, 1B, 1C
Avail. Operating Range: 10-60 AT

Features & [Options]
IP67 Rated, [UL, Internal switch options]



STANDEX R12303

Dimensions in mm (inches)
L - 26.7 (1.051)
W - 3.7 (0.145)
H - 11.9 (0.468)

Miniature Snap Lock Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 10VA/100VDC/0.5A
Contact Form: 1A
Avail. Operating Range: 10-30 AT

Features & [Options]
Snap lock mounting

MEDER MK02

Dimensions in mm (inches)
L - 32.4-46 (1.276-1.811)
W - 16.7-18.35 (0.657-0.722)
H - 10-13 (0.394-0.512)

Metal Detection Screw Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/200VDC/0.5A
Contact Form: 1A, 1B, 1C
Avail. Operating Range: 4.5-15 MM

Features & [Options]
IP67 Rated, Built-in magnet, Ferrous Metal Detection

MEDER MK28

Dimensions in mm (inches)
L - 25.4 (1)
W - 6.35 (0.25)
H - 19.05 (0.75)

Vane Operated Screw Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/175VDC/0.5A
Contact Form: 1A, 1B, 1C

Features & [Options]
Built in magnet, exact operating range, mount with M3 or #4-40 screw

MEDER MK04

Dimensions in mm (inches)
L - 23 (0.905)
W - 13.9 (0.547)
H - 5.9 (0.232)

Low Cost Miniature M3 Screw Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/400VDC/0.5A
Contact Form: 1A, 1B, 1C
Avail. Operating Range: 10-60 AT

Features & [Options]
[UL, Internal switch options]

High Temperature Resistant Explosive Atmospheres Approval Ferromagnetic Metal Detection

MEDER MK05

Dimensions in mm (inches)
L - 23.2 (0.913)
W - 19.6 (0.771)
H - 5.9 (0.232)

Low Cost Miniature M5 Screw Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/400VDC/0.5A
Contact Form: 1A, 1B, 1C
Avail. Operating Range: 10-60 AT

Features & [Options]
[UL, Internal switch options]

MEDER MK12

Dimensions in mm (inches)
L - 32 (1.259)
W - 14.9 (0.586)
H - 6.9 (0.271)

M4 Screw Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 100W/1000VDC/1A
Contact Form: 1A, 1B, 1C, 1E
Avail. Operating Range: 10-60 AT

Features & [Options]
[UL, Internal switch options]

MEDER MK13

Dimensions in mm (inches)
L - 23 (0.905)
W - 13.9 (0.547)
H - 5.9 (0.232)

Low Cost Miniature M3 Screw Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/400VDC/0.5A
Contact Form: 1A, 1B, 1C
Avail. Operating Range: 10-60 AT

Features & [Options]
[UL, Internal switch options]

MEDER MK21M / MK21P

Dimensions in mm (inches)
L - 28.6 (1.125)
W - 19 (0.748)
H - 6.35 (0.25)

High Temp. Harsh Envir. Screw Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 10W/100VDC/0.5A
Contact Form: 1A, 1B, 1C
Avail. Operating Range: 10-60 AT

Features & [Options]
IP67 Rated, [M =molded version high temp up to +150°C]

MEDER MK26

Dimensions in mm (inches)
L - 32 (1.259)
W - 10 (0.393)
H - 6 (0.236)

High Power/Low Cost Screw Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 100W/1000VDC/1A
Contact Form: 1A, 1B, 1C
Avail. Operating Range: 10-60 AT

Features & [Options]
IP67 Rated, [Power switch options]

MEDER MK27 / M27

Dimensions in mm (inches)
L - 50 (1.968)
W - 20 (0.787)
H - 10 (0.393)

HV Harsh Envir. (Al) Screw Mount Proximity/Motion Sensor

Specifications
Switch Rating max.: 100W/1000VDC/1A
Contact Form: 1A, 1B, 1C, 1E
Avail. Operating Range: 10-60 AT
Sensing distance up to 40mm, magnet included

Features & [Options]
IP67 Rated, Sensing distance up to 40mm, magnet included

STANDEX R11883

Dimensions in mm (inches)
L - 28.7 (1.129)
W - 5.3 (0.208)
H - 5.3 (0.208)

Miniature Custom Proximity/Motion Sensor

Specifications
Switch Rating max.: 10VA/100VDC/0.5A
Contact Form: 1A
Avail. Operating Range: 10-30 AT

Features & [Options]
[Internal switch options]

High Temperature Resistant Explosive Atmospheres Approval Ferromagnetic Metal Detection

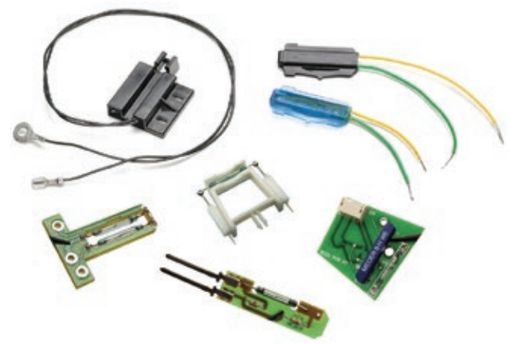
Custom Proximity & Motion Sensing Components

Reed Technology Sensors

Standex-Meder Electronics incorporates our magnetic reed switches into a wide variety of custom proximity sensors and switches. The reed sensors come in hundreds of different sizes and shapes to meet a multitude of different application requirements. Customers have the opportunity to work with our engineers to design or select the best packaging concept that will line up with their application.

Our unique and patented production process allows us to produce not only very small reed switches, but when we incorporate these into proximity sensors the result is a small sensor with big performance impact.

These ultra-miniature components allow big improvements in the performance of diverse products within medical devices, security systems, safes, and industrial control applications.



Inductive Technology Sensors

Standex-Meder Electronics manufactures custom inductive technology position, motion and speed sensors with the following features:

- Detect metallic objects without touching them -used for proximity sensing applications such as speed sensors
- Each project designed to exacting customer standards including the ability to withstand harsh environments
- Proven in appliance safety applications with thousands of cycles, and extreme “under hood” automotive applications

Fluid Level Sensors

Standex-Meder supplies fluid level sensors that use a wide range of technologies - from magnetic Reed Switch technology to conductive technology. Standex-Meder designs fluid level sensors that are appropriate for each individual application. From basic sensors which are driven by external electronics to turnkey sensor systems with switched outputs, Standex-Meder delivers solutions to the most demanding fluid level sensing applications.

MEDER LS01

Dimensions in mm (inches)
L - 42.5 (1.673)

Compact Single Level Vertical Mount Level Sensor

Specifications
Switch Rating: 10W/400VDC/0.5A max.
Contact Form: 1A, 1B, 1C
Shaft: PA or PP
Float: PA, PP, NBR

Features & [Options]
[High power switch option, other cables and connectors]

MEDER LS02 / LS02-S

Dimensions in mm (inches)
L - 75 (2.952)

Single Level Plastic or Stainless Vertical Mount Level Sensor

Specifications
Switch Rating: 100W/400VDC/1.0A max.
Contact Form: 1A, 1B, 1C
Shaft: PA, PP, SS
Float: PA (LS02-S), PP, NBR, SS (LS02-S)

Features & [Options]
IP68-only up to screw in thread, SS-High temp to 120°C, [High power switch option, other cables and connectors]

High Temperature Resistant Explosive Atmospheres Approval Ferromagnetic Metal Detection

MEDER LS03

Dimensions in mm (inches)

L - 80 (3.149)

MEDER LS04

Dimensions in mm (inches)

L - 100-280 (3.937-11.020)

Low Cost Robust Molded Horizontal Mount Level Sensor

Specifications

Switch Rating: 100W/400VDC/1.0A max.
Contact Form: 1A, 1B, 1C
Shaft: PA or PP

Features & [Options]

[High power switch option, other cables and connectors]

Plastic Multi-Level (<=5 Floats) Vertical Mount Level Sensor

Specifications

Switch Rating: 100W/400VDC/1.0A max.
Contact Form: 1A, 1B, 1C, 1E
Shaft: PA or PP
Float: PP, NBR

Features & [Options]

Standard PVC cable, [Shaft length 100-250mm, up to 5 floats per sensor, other connectors]

MEDER LS05

Dimensions in mm (inches)

L - 100-1000 (3.97-39.370)

Stainless Multi-Level (~Floats) Vertical Mount Level Sensor

Specifications

Switch Rating: 100W/400VDC/1.0A max.
Contact Form: 1A, 1B, 1C, 1E
Shaft: SS
Float: PA, PP, NBR, SS

Features & [Options]

High Temp to 200°C, Standard PVC cable, [Shaft 100-1000mm long, variable switching points, other connectors]

Custom Fluid Sensors - Level (Reed & Conductive), Flow & Pressure Differential

Fluid Level Sensors - Reed Technology

The fluid level reed sensors sense level changes in liquid in an assortment of liquid mediums. The sensors generally have an attached float with an embedded magnet that moves up and down on a encased stem where the reed switches are housed. The reed switches will change their closure state when the float comes within their magnetic influence. The closure initiates a sequence of events alerting the change of the liquid level.

We offer an extensive selection of different reed sensor packages, switch configurations, stem lengths, float density sensitivities allowing for diverse applications. Our engineers are ready to match custom designs to stringent requirements.

Our reed sensors are used in the automotive industry to measure fuel, oil, brake fluid, radiator, windshield washer level, and other fluids. They are also found in recreational vehicles, such as jet skis, sensing oil and fuel levels. Wherever a liquid exists or can accumulate, Standex-Meder offers a sensing solution.

High Temperature Resistant Explosive Atmospheres Approval Ferromagnetic Metal Detection

Custom Fluid Sensors - Level (Reed & Conductive), Flow & Pressure Differential

HVAC/R Series Flood Prevention Switches -Reed Technology

Truly Reliable, Plug-N-Play and Hassle Free

Standex-Meder provides the HVAC industry with high performing Flood Prevention Switches (FPS's) that are easy to install and service. Our expertise and capabilities allow for reliable innovations that prevent overflowing that causes damage to floors, walls, ceilings and the like. For example, if water levels in the auxiliary or main drain pipe rose due to a clogged air conditioning condensate, the switch shuts off the system.

Fluid Level Sensors - Conductive Technology

Standex-Meder manufactures state-of-the-art conductive liquid sensors that detect changes in levels without the use of a float. These sensors are used generally in water based conductive fluids when the application cannot use a float based system. Our conductive fluid level sensors have a patented false full protection and current level shift to indicate fluid level. They guard against electrolysis and conduction paths along the sensor packaging with high quality performance. Applications include the measurement of syrups and juices in the food industry, measurement of liquid soaps in washing applications, liquid waste products, storm drains, bilge pumps, sump water, and many other functions.

Flow Sensors - Reed Technology

Standex-Meder designs and manufactures custom reed switch and magnet based flow switches for specific customer applications. The designs often include harsh environments, significant durability requirements, and precise flow rate switching. Designs can be intrusive or non-intrusive with multiple custom packaging options for terminating and wiring and add-ons for temperature sensing, salinity, and multiple trip points.

Utilizing our vast experience in reed switch application engineering, mechanical packaging, and related manufacturing process, Standex-Meder provides quality flow switching products for markets such as home appliances and pool/spa.

Pressure Differential Sensors - Reed Technology

Differential pressure sensors are utilized in the hydraulics industry to alert equipment operators that their hydraulic fluid filter has reached the end of its life. Standex-Meder designs and manufactures many configurations of these "filter bypass" sensors with options for custom connection methods, varying trip and reset pressures, NO/NC/SPDT switch configurations, mounting and sealing to the filter head.

The hermetically sealed reed switch contacts are more reliable in these applications than other technologies such as open mechanical contacts, visual pop-up indicators, or snap action switch assemblies. The contact quality, switching life and non-intrusive sensing arrangement of reed switches increases indicator reliability. We partner with the customer to design and validate the custom indicators to specific OEM requirements, often creating a proprietary product line for each customer.

Magnetic Float

Group	*Series*	*Material*	*Outside* Dia. *mm (inches)*	*Inside* Dia. *mm (inches)*	*Height mm (inches)*	*Use with sensor*	*Additional Information*
MEDER	MS01-NBR	NBR	24.5 (0.964)	8 (0.314)	19 (0.748)	LS01, LS02 LS02-S LS04, LS05	Excellent resistance to petroleum derived liquids
MEDER	MS02-NBR	NBR	25 (0.984)	9.15 (0.360)	16.5 (0.649)		
MEDER	MS01-PA	PA	23.5 (0.925)	8.5 (0.334)	19 (0.748)	LS01, LS02-S LS05	High strength to weight ratio, shock and abrasion resistant
MEDER	MS02-PA	PA	25 (0.984)	9.15 (0.360)	16.55 (0.651)		
MEDER	MS07-PA	PA	36 (1.417)	16.15 (0.635)	19 (0.748)		
MEDER	MS01-PP	PP	23.5 (0.925)	8.4 (0.330)	19 (0.748)	LS01, LS02 LS02-S LS04, LS05	Highly resistant to chemical solvents, bases and acids
MEDER	MS02-PP	PP	25.2 (0.992)	9.15 (0.360)	16.55 (0.651)		
MEDER	MS03-PP	PP	27 (1.062)	11 (0.433)	11.7 (0.460)		
MEDER	MS04-PP	PP	18.5 (0.728)	10.2 (0.401)	20 (0.787)		
MEDER	MS08-PP	PP	20.0 (0.787)	9.15 (0.360)	16 (0.630)		
MEDER	MS06-PP	PP	30 (1.181)	8 (0.314)	8 (0.314)	All Meder reed sensors	Highly resistant to chemical solvents, bases and acids; also for food and beverage industry
STANDEX	B12469	PP	32.6 (1.283)	N/A	22.9 (0.901)	R12468	Float located in bottle assembly, specific gravity per application
STANDEX	B12482	PP	42 (1.653)	11.4 (0.448)	25 (0.984)	R12481	Float located in bottle assembly, specific gravity per application
STANDEX	B12450	PP	L - 17.5 (0.688)	W - 13.4 (0.527)	24.9 (0.980)	R11744 R12180	Float located in bottle assembly, operates with fluid specific gravity at 0.79 min
MEDER	MS09-S	V2A	24 (0.944)	9.5 (0.374)	24 (0.944)	LS02-S LS04, LS05	Resistant to high temperatures and ideal for food and beverage industry
MEDER	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)

Magnets In Housings

MEDER M02

Dimensions in mm (inches)
L - 32.4 (1.275)
W - 16.7 (0.657)
H - 10 (0.393)
Magnetic Moment: 2.22

MEDER M04

Dimensions in mm (inches)
L - 23 (0.905)
W - 13.9 (0.547)
H - 5.9 (0.232)
Magnetic Moment: 2.22

MEDER M13

Dimensions in mm (inches)
L - 23 (0.905)
W - 13.9 (0.547)
H - 5.9 (0.232)
Magnetic Moment: 2.22

MEDER M05

Dimensions in mm (inches)
L - 23.2 (0.913)
W - 19.6 (0.771)
H - 5.9 (0.232)
Magnetic Moment: 2.22

High Temperature Resistant | Explosive Atmospheres Approval | Ferromagnetic Metal Detection

Magnets In Housings

MEDER M06

Dimensions in mm (inches)
L - 12.06-22.32 (0.475-0.879)
W - 3.3 (0.129)
H - 4.2 (0.165)
Magnetic Moment: 0.53

MEDER M11 (SS)

Dimensions in mm (inches)
L - 25 (0.984)
Ø - M5 x 0.5

Magnetic Moment: 1.8

MEDER M11 (P)

Dimensions in mm (inches)
L - 38 (1.496)
Ø - M8 x 1.25

Magnetic Moment: 2.22

MEDER M11 (B)

Dimensions in mm (inches)
L - 38 (1.496)
Ø - M6-M12

Magnetic Moment: 2.22

MEDER M12

Dimensions in mm (inches)
L - 32 (1.259)
W - 14.9 (0.586)
H - 6.9 (0.271)
Magnetic Moment: 3.8

MEDER M21P

Dimensions in mm (inches)
L - 28.6 (1.125)
W - 19 (0.748)
H - 6.35 (0.25)
Magnetic Moment: 2.22

Magnetic Moment x10^{-5} Vs x cm | **Note:** Pair magnets in casing with most Meder reed sensors

Permanent Magnets

General Information

A Reed Switch requires either a permanent magnet or magnetic field in order to activate the switch, thus it is commonly called a Magnetic Reed Switch. Magnets have reversible and irreversible demagnetization specifications. Engineers should consider shock, vibration, strong external magnetic fields as well as high temperatures in their designs. All these factors influence the magnetic force and the long term stability in different ways.

Preferably the magnet is mounted on the moving part of the application. Professional tuning of magnet and reed switch pairing can improve the functionality of the whole sensor-magnet system.

We offer the following types of permanent magents:

- AlNiCo (Aluminum Nickel, Cobalt, Iron and Titanium)
- Rare Earth (SmCo and NdFeB)
- Hard Ferrite

These are some of our most widely used models, others available as required.

AlNiCo

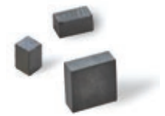
Ø2.5 x 12.7 mm
Ø3.0 x 12.0 mm
Ø4.0 x 19.0 mm
Ø5.0 x 4.0 mm
Ø5.0 x 20.0 mm
Ø5.5 x 22.0 mm
Ø7.5 x 27.0 mm
3.2 x 3.2 x 19.0 mm

Rare Earth

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

Hard Ferrite

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



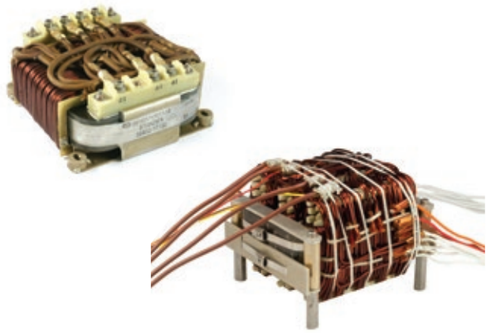
Custom Magnetic Products

Military/Aerospace

Military and aerospace design engineers trust Standex-Meder Electronics for planar transformers, Scott-T transformers, power supplies, current sense and custom electronic components. We have experience for applications such as aircraft controls, satellite / space applications, engine controls, Naval ship board power supplies, current transformers, and air core military radio antennas.

An example of our capabilities are the “flight” assemblies that are manufactured to the most stringent quality standards then proven in an industry leading environmental and electronic test lab.

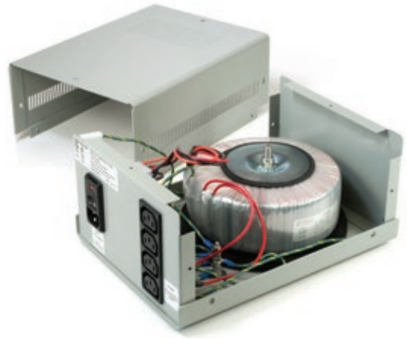
Manufacturing quality standards - Mil-Std 202, Mil-Std 981, Mil-PRF 27, NASA standard NHB 8739.3, AS9100, and ITAR



Medical Transformers

Standex-Meder manufactures key components for the medical industry. We assess every component to see whether custom designed solutions will better address a particular need.

From basic transformer coils to value added assemblies, Standex-Meder Electronics will engineer a custom solution that is on target and on budget. These transformers protect sensitive medical devices including those used in patient care environments. Compliant with UL/IEC 60601 specifications, these transformers feature extremely low leakage current between primary and secondary windings.



Current Sense Transformers

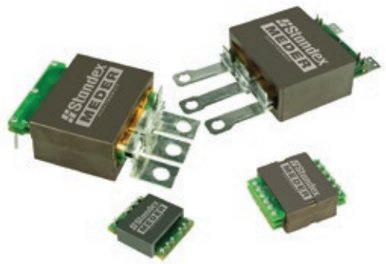
Standex-Meder Electronics has a long history of developing current sense transformers to solve unique customer challenges. We offer both standard products like CSB series plug-in solutions for PC board mounting - to custom engineered products designed for extreme conditions and hazards - like temperature, radiation, humidity and more.

Designs are available in open toroidal construction or custom moldings - with virtually any current ratio, output or capacitance desired. Many termination options are available - including P.C. mount, flying lead, custom leads, connectors, and more.

Planar Transformers

Standex-Meder Electronics manufactures planar transformers for critical applications like military and aerospace projects. We can manufacture custom products to exact standards with precise electrical characteristics such as capacitance, output, and aspect ratio. We have proven ourselves in an industry leading environmental and electrical test facility.

Mounting and termination options are available to suit virtually any application requirements. Designers of critical electronic components rely on Standex-Meder to supply their planar transformers.



Planar Transformers -Continued

For demanding applications like military and aerospace

- High-performance from a compact, low-profile package:
- SX-40 Series with power ratings to 180W/360W
- SX-55 Series with power ratings to 350W/700W
- SX-58 Series for 1KW to 5KW applications
- SX-64 Series for 1KW to 10KW applications
- Manufactured to exacting standards with precise electrical characteristics like capacitance, output and aspect ratio
- Mounting and termination options are available to suit virtually any application requirements

Other Products - Antennas & Coils, Hermetic Connectors, Custom Assemblies & Lighting

Antennas & Coils

Standex-Meder supplies antenna coils and components using leading edge design and manufacturing technologies. Our products are used throughout the world in automotive keyless entry, garage door openers, and military sonobuoys in remote locations. Our immobilizer security antennas are used in many automotive, motorcycle and marine ignition systems - while our antenna coils are found on in-home security systems. The 125 KHz RFID antenna receivers can be custom molded into any configuration for virtually limitless applications.

Hermetic Connectors

Standex-Meder can mold, crimp, form, stamp and create almost any type of terminal connection imaginable. Our team has the ability to lead these efforts in-house to expedite quickly, while ensuring that all components fit together and function properly. With high-volume progressive die stamping capabilities, wire prep and wire harness assembly, and connector and terminal engineering, we are prepared to address your connector challenges. We can even integrate into upstream/downstream components, such as sensors, to simplify installation and reduce costs.

Custom Assemblies & Lighting

Custom transformers and electronic assemblies from Standex-Meder have been in use for decades. Our solid state ignitors initiate the “turn on” sequence to light bulbs to illuminate roadways, outdoor sporting events, and facilities with high bay lighting. All components undergo rigorous lifecycle testing under severe conditions. Here is a sampling of custom assemblies:

- Ideal for high current metering applications
- Rogowski coils are wire wound “air” core toroids which are used to measure AC current
- The AC current that is measured creates a magnetic field which induces a voltage in the coil that is proportional to the change in current
- This innovative technology has been used in high current metering applications with a very high accuracy

Standex MEDER ELECTRONICS

Custom Engineered Solutions for Tomorrow

Reed Switches

Proximity Sensors and Magnets

Fluid Level Sensors

Transformers and Inductors

Current Sense Transformers

Planar Transformers

Antennas and Coils

Hermetic Connector Products

Reed Relays

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