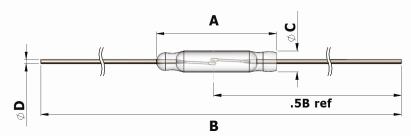


Product Solutions www.standexmeder.com

# **GR100** Reed Switch



**REACH & RoHS Compliant** 

#### **Contact Information:**

Standex-Meder Electronics World Headquarters 4538 Camberwell Road Cincinnati, OH 45209 USA

Standex Americas (OH) +1.866.STANDEX (+1.866.782.6339) info@standexelectronics.com

Meder Americas (MA) +1.800.870.5385 salesusa@standexmeder.com

**Standex**-Meder Asia (Shanghai) +86.21.37820625 salesasia@standexmeder.com

**Standex-Meder** Europe (Germany) +49.7731.8399.0 info@standexmeder.com

- Professional grade general purpose reed switch with rhodium contacts
- Designed to give superior life switching relatively heavy loads
- Normal applications include liquid level sensors, security systems, reed relays, proximity sensors and counting devices
- Ideally suited to handle normal 120 VAC loads.
- Maintains low contact resistance over life switching light duty logic level loads

#### **Physical Characteristics**

Α	Glass Length (Max.)	20.3 mm
В	Overall Length (Max.)	54.0 mm
С	Glass Diameter (Max.)	2.5 mm
D	Lead Diameter (Nom.)	0.6 mm

#### **Electrical Characteristics**

Contact Arrangement	Form A (SPST), Center Gap		
Contact Material	Rhodium		
Power Rating <sup>1</sup>	10VA maximum		
Switching Current (Max.)	1.0 Amp. DC, 1.0 Amp. AC		
Carry Current (Max.)	1.5 Amp. DC, 1.5 Amp. AC		
Switching Voltage (Max.)	100 VDC, 150 VAC		
Breakdown Voltage (Min. @20AT) <sup>2</sup>	250 Volts DC		
Contact Resistance <sup>3</sup>	100 Milliohms		
Insulation Resistance (Min.)	10 <sup>12</sup> ohms		
Contact Capacitance (pf Max.)	0.2 pf		

- 1. The specification for VA rating may sometimes be exceeded for less sensitive (higher AT) switches, and should be decreased for very sensitive (lower AT) switches. Standex-Meder Electronics will run life tests specific to a customer's load upon request.
- 2. Breakdown voltage is measured in the presence of a radioactive ionising source. Switch leakage current is limited to 100 microamperes
- 3. Contact resistance measurements are made at 10ma from a 1-volt source, with 50% overdrive, using a 4-wire (Kelvin) measuring system. Contact probes are located on 43 mm centres.

### Minimum Switching Life with Standard Test Loads, using 20AT switch

Voltage	5 VDC	10 VDC	12 VDC	24 VDC	100 VDC	125 VAC	150VAC
Current	2 mA	1 A	10 mA	10 mA	100 mA	80 mA	60 mA
Life	100 x 10 <sup>6</sup>	0.5 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	2 x 10 <sup>6</sup>	0.5 x 10 <sup>6</sup>	0.5 x 10 <sup>6</sup>	1 x 10 <sup>6</sup>
Note: End of life is defined as contact resistance exceeding one ohm and/or failure to operate.							

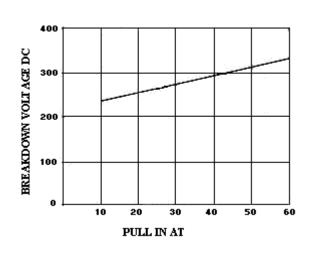
**GR100 Reed Switch** 

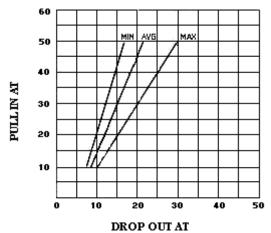
www.standexmeder.com

#### **Operating Characteristics**

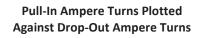
Magnetic Sensitivity (Range - Pull In)	10 to 60 Ampere Turns		
Magnetic Sensitivity (Range - Drop Out)	(See chart below)		
Operate Time, including bounce (typ.)	0.8 Milliseconds		
Release Time (typ.)	0.1 Milliseconds		
Resonant Frequency (typ.)	2.2 kHz		
Vibration, 10-2,000 Hz (G's Max.)	40 G		
Shock, 11-ms. 1/2 Sine wave (G's Max.)	100 G		
Operating Temperature	-40°C to + 125°C		
Storage Temperature	-50°C to + 155°C		

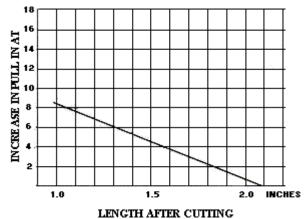
#### **Charts**

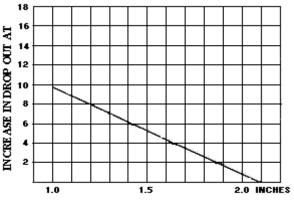




Breakdown Voltage Plotted Against Pull-In Ampere Turns







Change In Pull-In Ampere Turns
After Switch Lead Cutting

Change In Drop-Out Ampere Turns
After Switch Lead Cutting

LENGTH AFTER CUTTING

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

### **Standex Electronics:**

GR100152001 GR100202501 GR100101501 GR100303501