

DRS-DTH 39.7mm Standard Changeover Reed Switch



Description

The DRS-DTH Reed Switch is a large changeover switch with a 39.67mm long x 5.33mm diameter (1.562" x 0.210") glass envelope, capable high voltage and power switching up to 500Vdc at 2mA, or 0.5A up to 30W/VA. The DRS-DTH has an insulation resistance of 10⁹ ohms minimum and contact resistance of less than 125 milli-ohms.

Features

- Changeover switch
- Capable of switching 500Vdc or 0.5A at up to 30W
- Minimum voltage breakdown 1200Vdc
- Available sensitivity range 50-80 AT

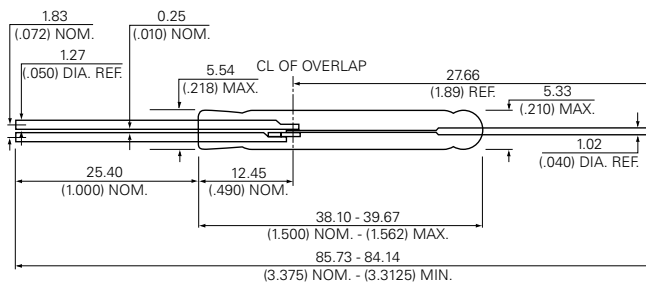
Agency Approvals

Agency	Agency File Number	Ampere-Turns Range
	E47258 E471070	50-80 AT
	DEMKO 14 ATEX 1393U	50-80 AT

Note: Contact Littelfuse for specific agency approval ratings.

Dimensions

Dimensions in mm (inch)



Benefits

- Hermetically sealed switch contacts are not affected by and have no effect on their external environment
- Can be used as changeover or normally closed contact
- Capable of switching European mains voltage
- Zero operating power required for contact closure

Applications

- Security
- Limit switching
- Industrial safety applications
- White goods applications

Switch Type

Contact Form	C (SPDT-CO)
Materials	Body: Glass Leads: Tin-plated Ni-Fe wire

Note: SPDT-CO = Single-Pole, Double-Throw, Change Over

Electrical Ratings

Contact Rating ¹		W/VA - max.	30
Voltage ³	Switching ²	Vdc - max.	500
	Breakdown ⁴	Vac - max. Vdc - min.	350 1200
Current ³	Switching ²	Adc - max.	0.50
		Aac - max.	0.35
	Carry	Adc - max.	3.0
Resistance	Contact, Initial Insulation	Ω - max.	0.125
		Ω - min.	10 ⁹
Capacitance	Contact	pF - typ.	2.0
Temperature	Operating Storage ⁵	°C	-20 to +125
		°C	-65 to +125

Notes:

1. Contact rating - Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
2. When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application Notes AN108A and AN107 for details.
3. Electrical Load Life Expectancy - Contact Littelfuse with voltage, current values along with type of load.
4. Breakdown Voltage - per MIL-STD-202, Method 301.
5. Storage Temperature - Long time exposure at elevated temperature may degrade solderability of the leads.

DRS-DTH 39.7mm Standard Changeover Reed Switch

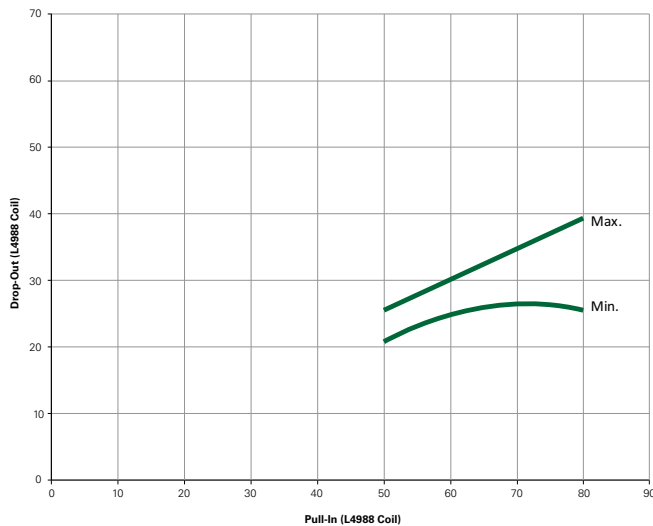
Product Characteristics

Operating Characteristics		
Operate Time ¹		4.5ms - max.
Release Time ¹		7.0ms - max.
Shock ²	11ms 1/2 sine wave	10G - max.
Vibration ²	50-2000 Hertz	15G - max.
Resonant Frequency	Hz - typ.	2.75kHz - typ.
Magnetic Characteristics		
Pull-In Range ³	Ampere Turns	50-80
Rating Sensitivity ⁴	Ampere Turns	60
Test Coil		L4988

Notes:

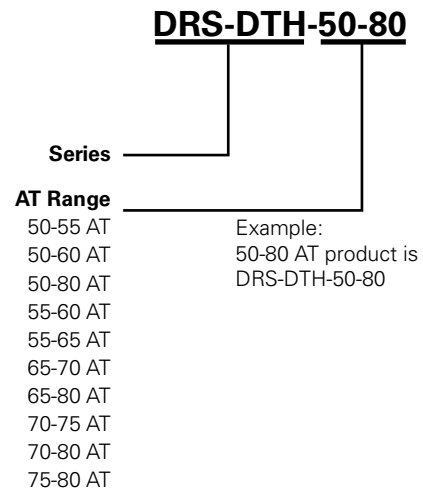
- Operate (including bounce)/Release Time - per EIA/NARM RS-421-A, diode suppressed coil (Coil IV).
- Shock and Vibration - per EIA/NARM RS-421-A and MIL-STD-202.
- Pull-In Range - Contact Littelfuse for narrower AT ranges available.
- Rating Sensitivity - The value at which contact ratings and operating characteristics are determined. Derating may be required below this value.
- Custom modifications of forming and/or cutting of reed switches are available. Please contact Littelfuse.

Drop-Out vs. Pull-In Chart



Note: Chart represents the range of Drop-Out, min to max for a given Pull-In value.

Part Numbering System



Note: These AT values are the before-modification values of the bare reed switch.

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
Bulk	Bulk	1000	N/A	N/A

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at www.littelfuse.com/disclaimier-electronics.