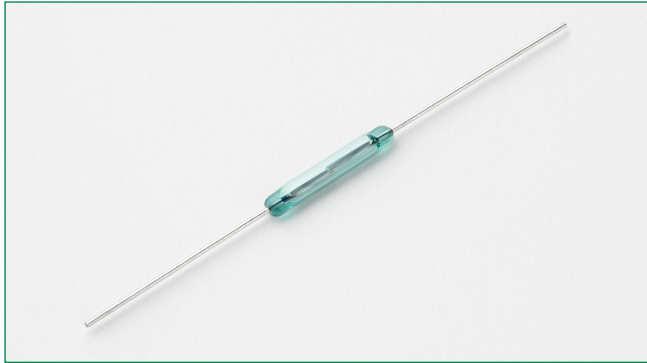


# MLRR-3 15.2mm Miniature Close Differential Reed Switch



## Description

The MLRR-3 Reed Switch is a miniature, normally open switch with a 15.24mm long x 2.54mm diameter (0.600" x 0.100") glass envelope, capable of switching 200Vdc at 20W with close differential (CD) characteristics. It has high insulation resistance of  $10^{10}$  ohms minimum and contact resistance less than 100 milli-ohms.

This reed switch is also available in a surface mount version, that is, MLSM-3. It can handle light inductive loads.

## Features

- Miniature normally open switch
- Capable of switching 200Vdc or 01.0A at up to 20W.
- Available sensitivity range 17-38 AT
- Close differential AT between PI and DO value
- Maximum switched current of 1.0Amps

## Benefits

- Hermetically sealed switch contacts are not affected by and have no effect on their external environment
- Zero operating power required for contact closure

## Applications

- Security
- Limit Switching
- Office Equipments
- Light Inductive Loads

## Switch Type

Contact Form	A (SPST-NO)
Materials	Body: Glass Leads: Tin Plated Nickel Iron

**Note:** SPST-NO = Single-pole, single-throw, normally open

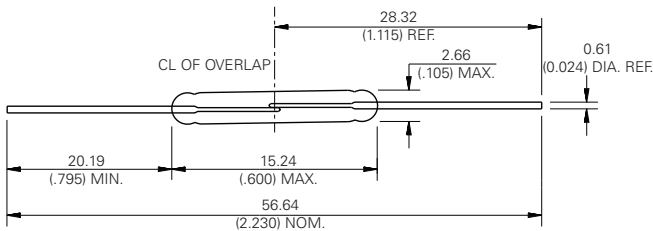
## Agency Approvals

Agency	Agency File Number	Ampere-Turns Range
<b>cULUS</b>	E47258 E471070	17-38 AT

**Note:** Contact Littelfuse for specific agency approval ratings.

## Dimensions

Dimensions in mm



## Electrical Ratings

Contact Rating <sup>1</sup>		Watt - max.	20
Voltage <sup>3</sup>	Switching <sup>2</sup>	Vdc - max.	200
	Breakdown <sup>4</sup>	Vac - max.	140
		Vdc - min.	250
Current <sup>3</sup>	Switching <sup>2</sup>	Adc - max.	1.0
	Carry	Aac - max.	0.7
		Adc - max.	1.2
Resistance	Contact, Initial Insulation	$\Omega$ - max.	0.100
		$\Omega$ - min.	$10^{10}$
Capacitance	Contact	pF - typ.	0.4
Temperature	Operating Storage <sup>5</sup>	$^{\circ}\text{C}$	-40 to +125
		$^{\circ}\text{C}$	-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.

# MLRR-3 15.2mm Miniature Close Differential Reed Switch

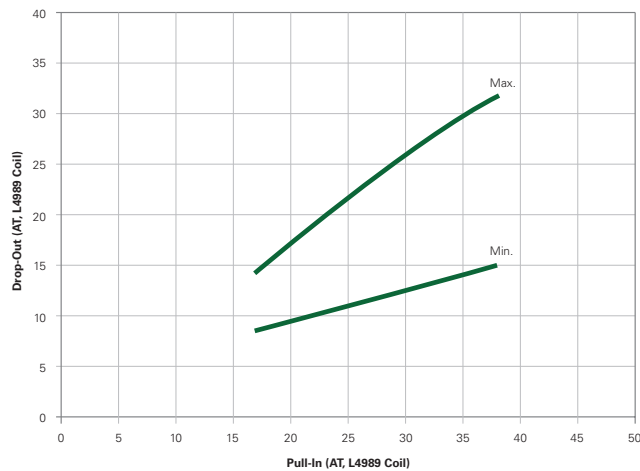
## Product Characteristics

Operating Characteristics		
Operate Time <sup>1</sup>		0.7ms - max.
Release Time <sup>1</sup>		0.2ms - max.
Shock <sup>2</sup>	11ms 1/2 sine wave	100G - max.
Vibration <sup>2</sup>	50-2000 Hertz	30G - max.
Resonant Frequency		6.25kHz - typ.
Magnetic Characteristics		
Pull-In Range <sup>3</sup>	Ampere Turns	17-38
Rating Sensitivity <sup>4</sup>	Ampere Turns	20
Test Coil		L4989

### Notes:

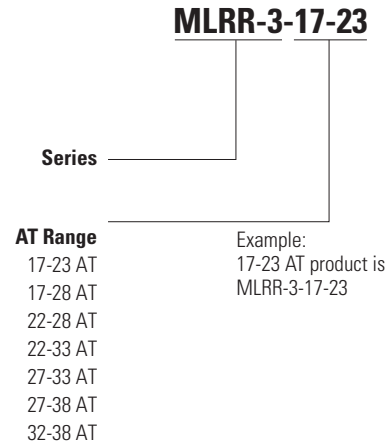
- Operate (including bounce)/Release Time - per EIA/NARM RS-421-A, diode suppressed coil (Coil II).
- Shock and Vibration - per EIA/NARM RS-421-A and MIL-STD-202.
- Pull-In Range - Contact Littelfuse for narrower AT ranges available.
- Rating Sensitivity - The value at which contact ratings and operating 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:** The chart represents the range of Drop-Out, minimum to maximum 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	3000	N/A	N/A

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Magnetic/Reed Switches](#) category:*

*Click to view products by [Littelfuse](#) manufacturer:*

Other Similar products are found below :

[PSW-21](#) [AMS-20MG](#) [AMS-37-G\\_W/Brk](#) [AMS-38S-I](#) [AMS-38SW](#) [AMS-39B-B](#) [HRB10030](#) [2116900170](#) [AMS-10S-B](#) [AMS-25B-B](#) [AMS-37BROWN](#) [AMS-37L](#) [AMS-38MG](#) [AMS-38SB](#) [AMS-9-B](#) [AMS-T10C\(B\)](#) [505-171W](#) [WHITE](#) [505-211B](#) [505-70B](#) [HM00-01800](#) [4350186](#) [505-101-GC](#) [505-101-GS](#) [505-101-WS](#) [505-392W](#) [505-90G](#) [505-90I](#) [507-381BB](#) [RSW-21A-I](#) [ODC-56B](#) [RI-90GP1020](#) [FF6-21-DC-03-SS](#) [FF6-11-AC-06](#) [FF6-21-AC-06](#) [AMS-10MGW](#) [AMS-37B](#) [GRAY](#) [HM00-01608LF](#) [HM00-04603LF](#) [HM00-02441BLFTR](#) [KSK-1A80/1-1015](#) [44531-0110](#) [44531-0200](#) [44531-0260](#) [35-756](#) [KSK-1A52-1520](#) [KSK-1C90U-1530](#) [KSK-1E85-BV470](#) [MLRR-4-22-28](#) [MLRR-3-42-48](#) [MISM-3V1R-8-12.5](#)