

# REED SWITCH

## ORD2210

### High Power

#### ■ GENERAL DESCRIPTION

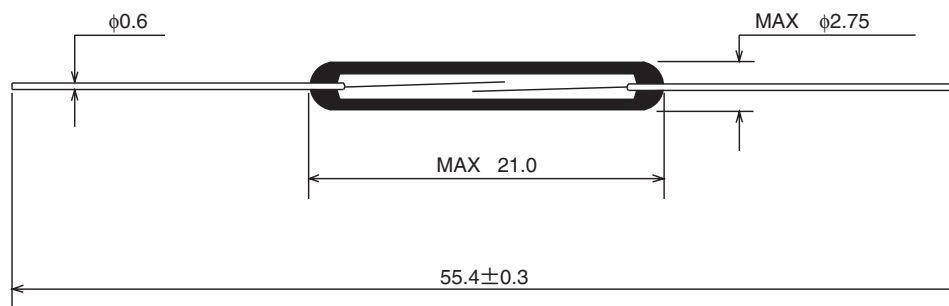
The ORD2210 is a single-contact reed switch designed for high current of 1.0 A DC and 0.7 A AC and high power of AC 70 VA and DC 50 W. The contacts are sealed within the glass tube with inert gas to maintain contact reliability.

#### ■ FEATURES

- (1) Reed contacts are hermetically sealed within a glass tube with inert gas and do not receive any influence from the external atmospheric environment.
- (2) Quick response
- (3) The structure comprises the operating parts and electrical circuits arranged coaxially. Reed switches are suited to applications in radio frequency operation.
- (4) Reed switches are compact and light weight.
- (5) Superior corrosion resistance and wear resistance of the contacts assures stable switching operation and long life.
- (6) With a permanent magnet installed, reed switches economically and easily become proximity switches.

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#### ■ EXTERNAL DIMENSIONS (Unit: mm)



#### ■ APPLICATIONS

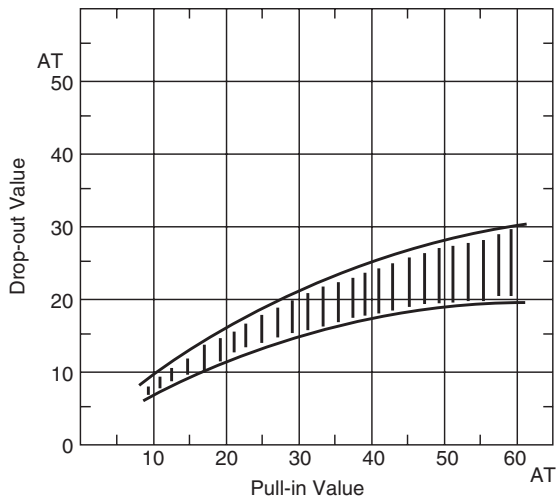
- Automotive electronic devices
- Control equipment
- Communication equipment
- Measurement equipment
- Household appliances

■ ELECTRICAL CHARACTERISTICS

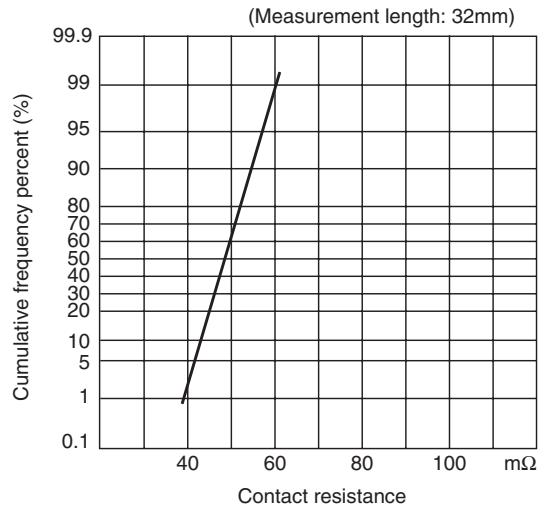
Parameter	Rated value	Unit
Pull-in Value (PI)	15~60	AT
Drop-out Value (DO)	7min	AT
Contact resistance (CR)	100	mΩ
Breakdown voltage	250min (PI ≥ 20)	VDC
	200min (PI < 20)	VDC
Insulation resistance	10 <sup>10</sup> min	Ω
Electrostatic capacitance	0.5max	pF
Contact rating	50	W
	70	VA
Maximum switching voltage	200DC	V
	150AC	V
Maximum switching current	1.0DC	A
	0.7AC	A
Maximum carry current	2.5	A

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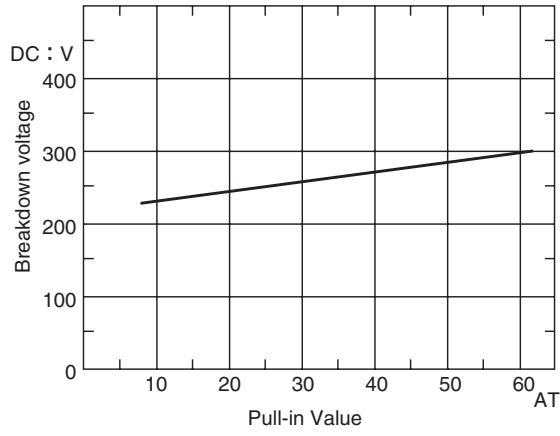
(1) Drop-out Value vs. Pull-in Value



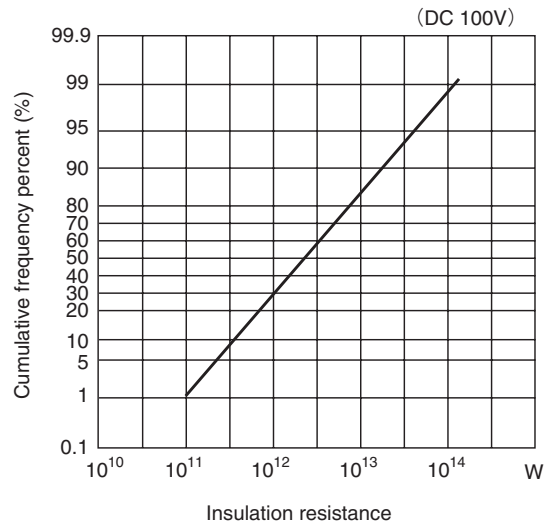
(2) Contact resistance



(3) Breakdown voltage

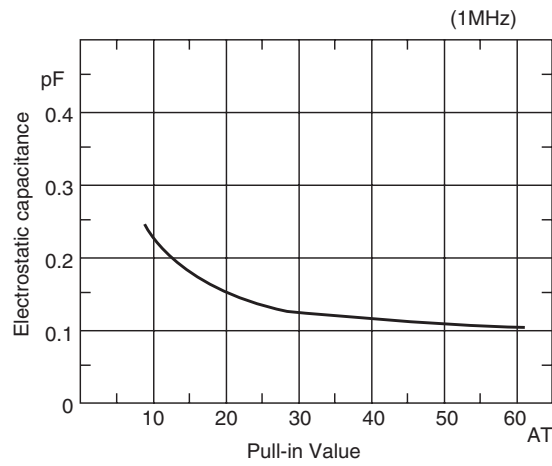


(4) Insulation resistance



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(5) Electrostatic capacitance

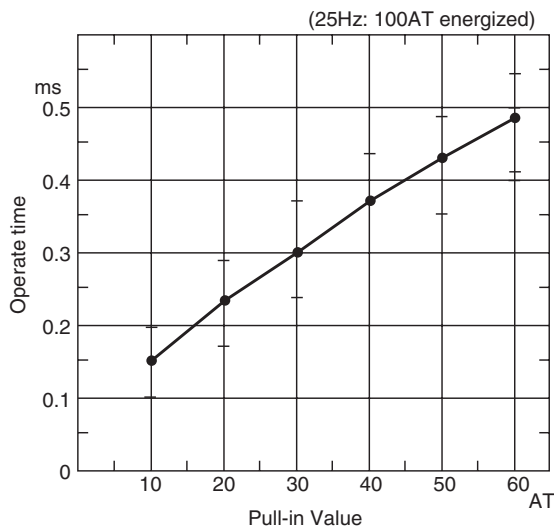


■ OPERATING CHARACTERISTICS

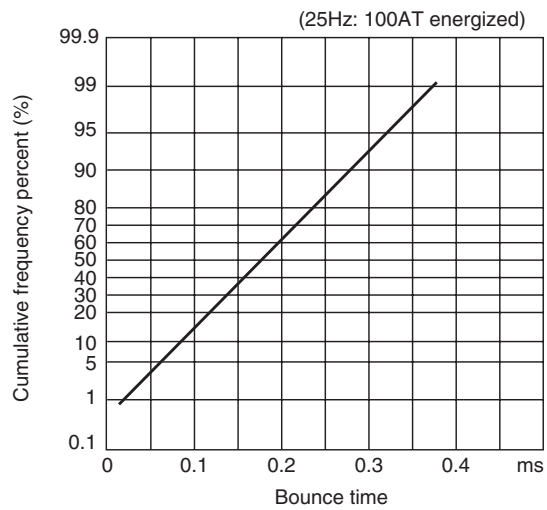
Parameter	Rated value	Unit
Operate time	0.6max	ms
Bounce time	0.5max	ms
Release time	0.05max	ms
Resonant frequency	2500±250	Hz
Maximum operating frequency	500	Hz

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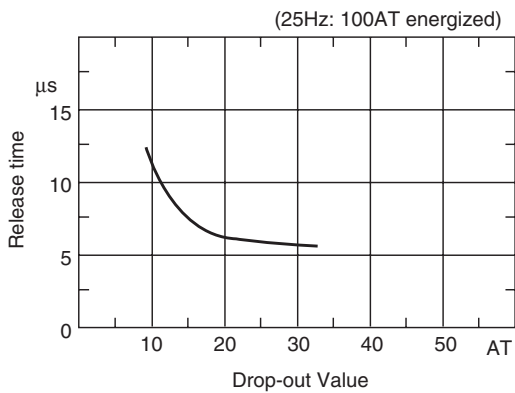
(1) Operate time



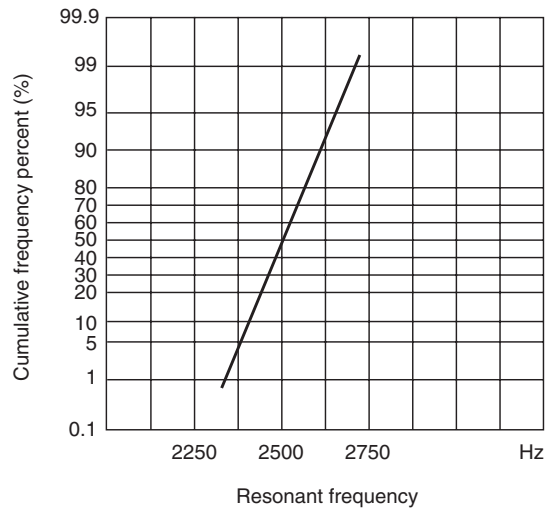
(2) Bounce time



(3) Release time

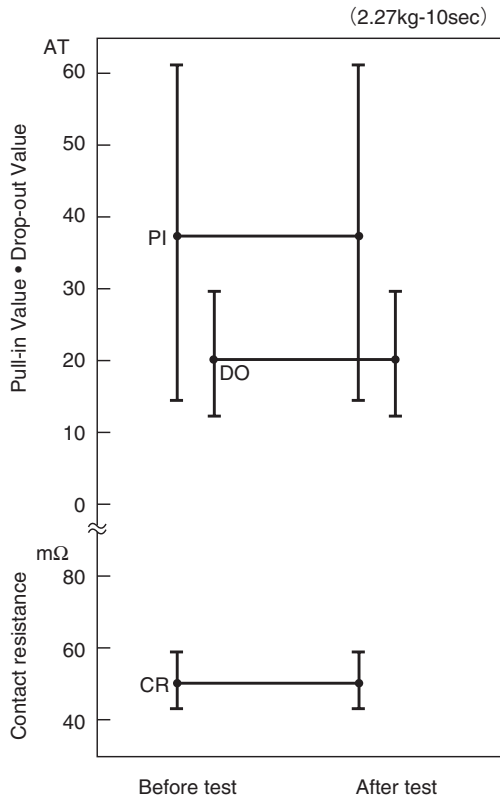


(4) Resonant frequency

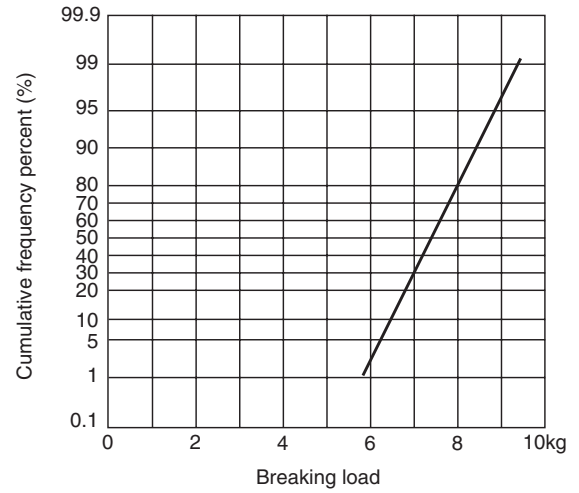


■ MECHANICAL CHARACTERISTICS

(1) Lead tensile test (static load)



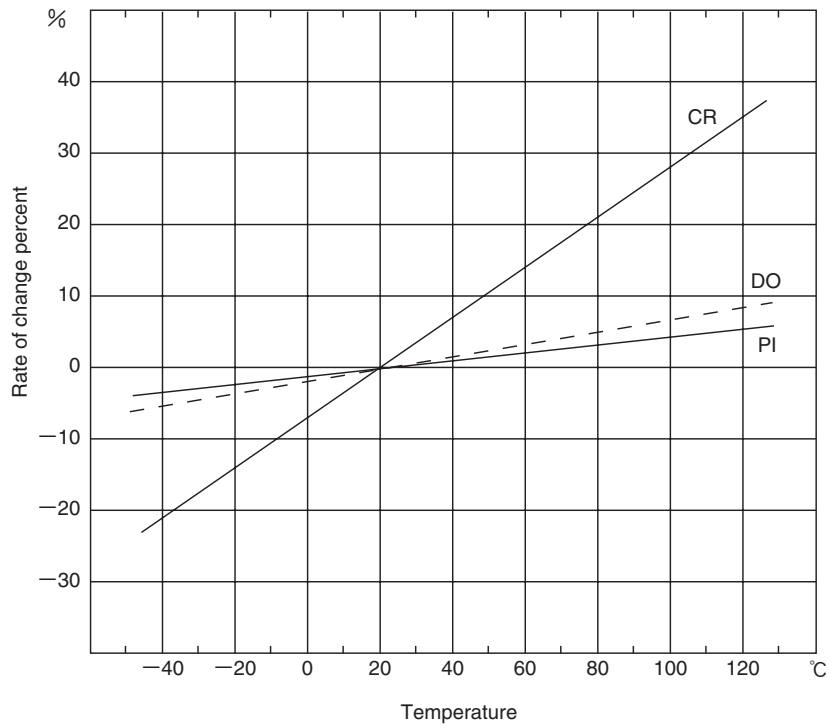
(2) Lead tensile strength



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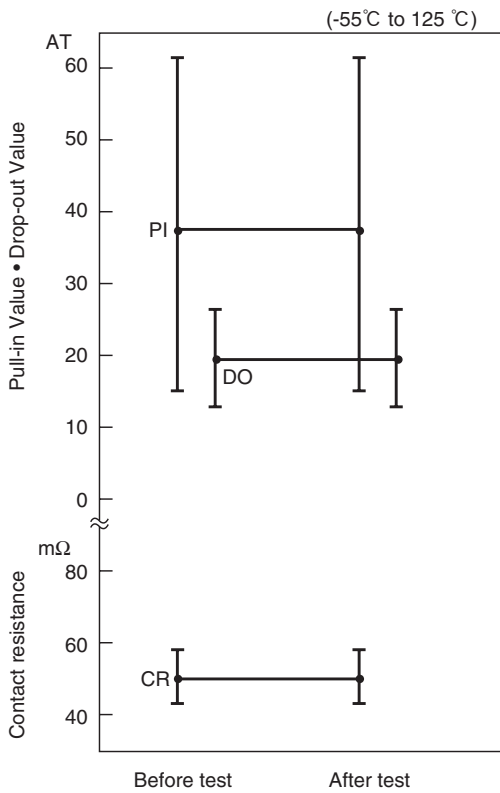
■ ENVIRONMENTAL CHARACTERISTICS

(1) Temperature characteristics

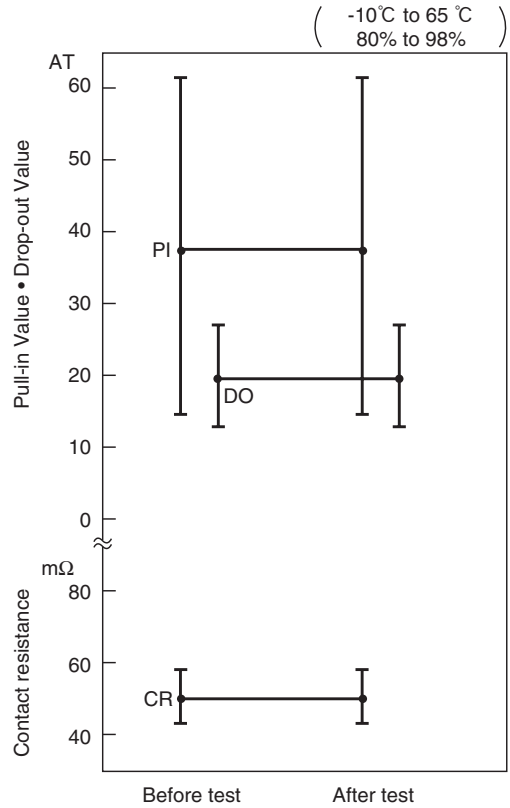


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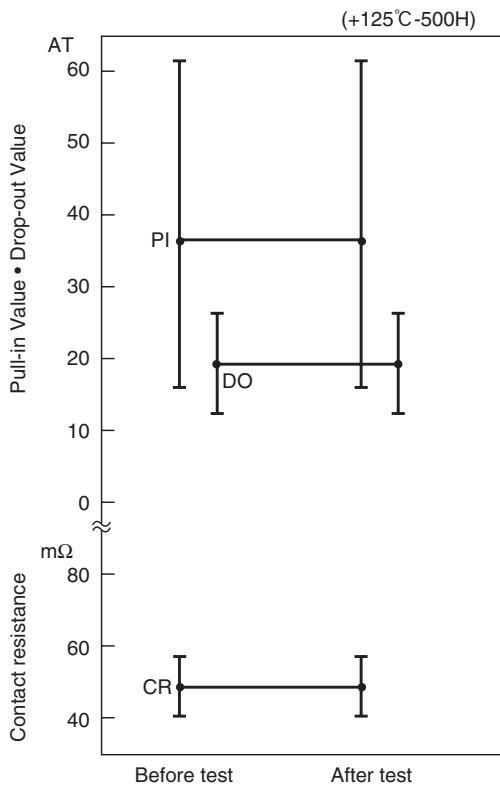
(2) Temperature cycle



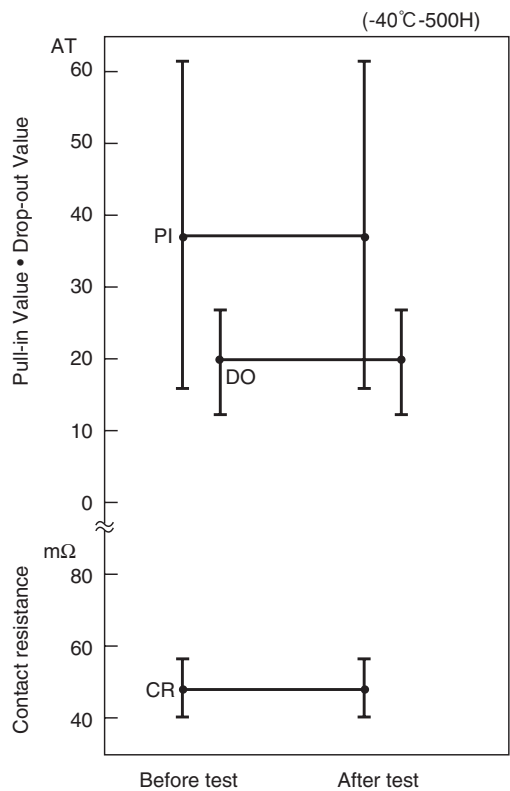
(3) Temperature and humidity cycle



(4) High temperature storage test

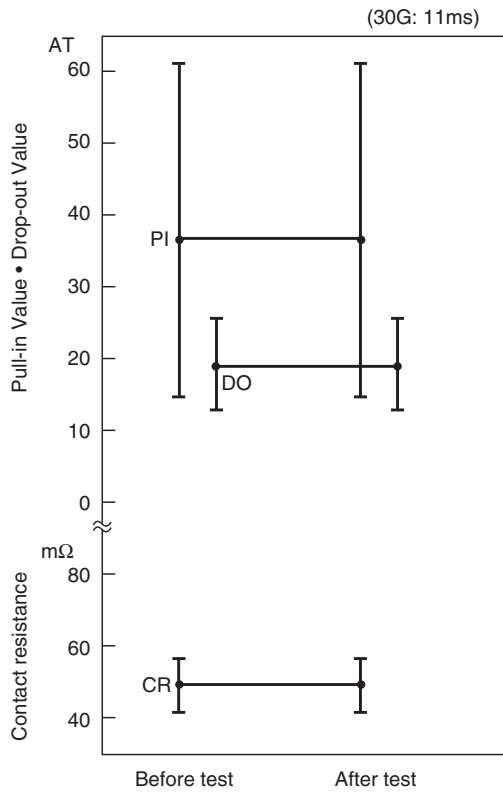


(5) Low temperature storage test

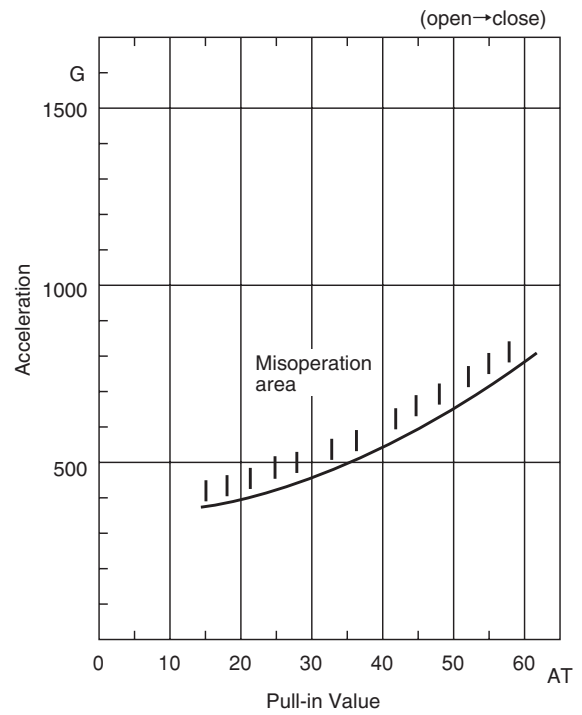


(6) Shock test

1) Electrical characteristics

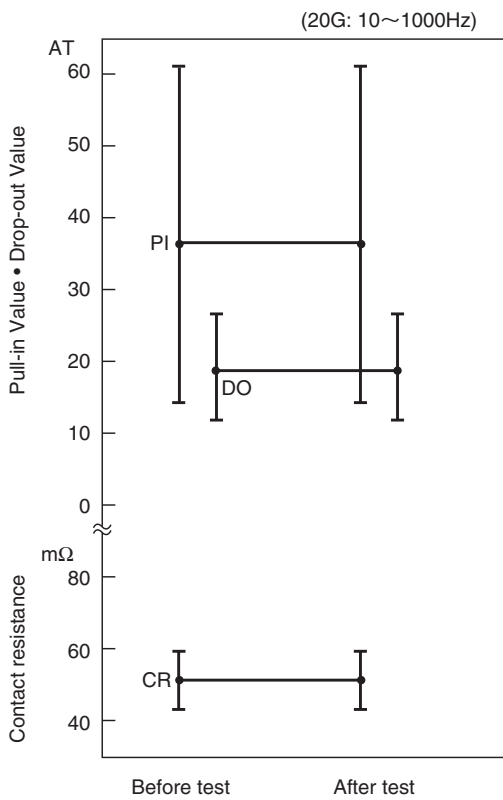


2) Misoperation area



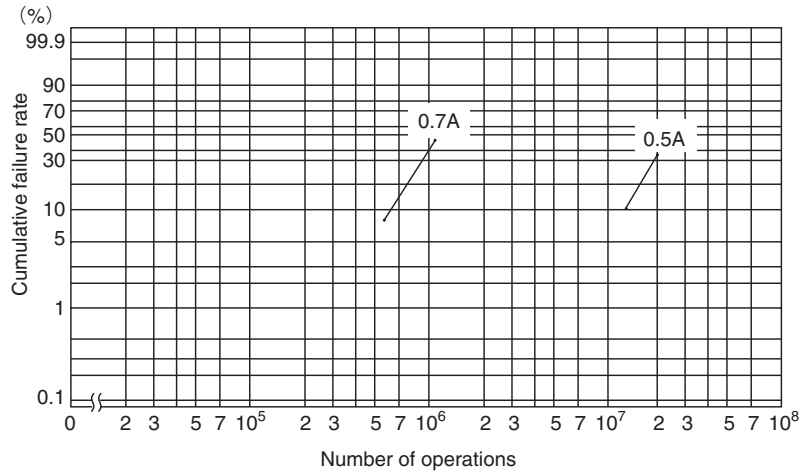
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(7) Vibration test



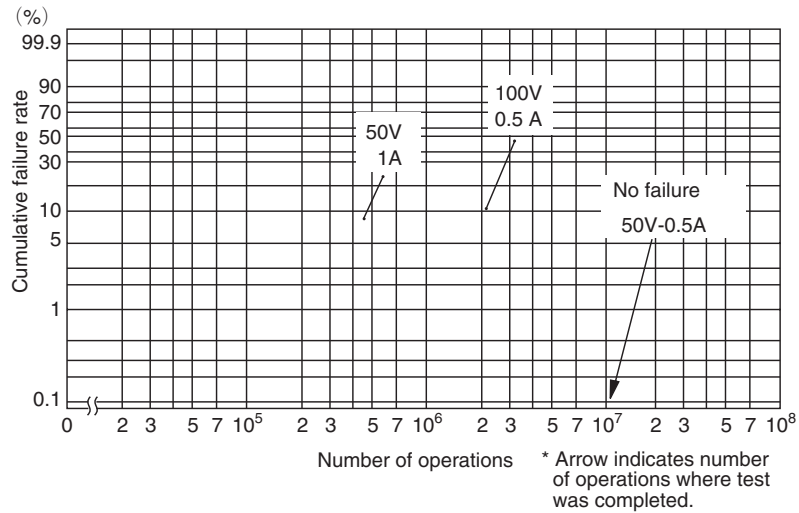
■ LIFE EXPECTANCY DATA: ORD2210

Load conditions  
 Voltage: 100VAC  
 Current: 0.7A, 0.5A  
 Load: Resistive load



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Load conditions  
 Voltage: 100VDC, 50VDC  
 Current: 0.5A, 1.0A, 0.5A  
 Load: Resistive load



Load conditions  
 Voltage: 15VDC  
 Current: 3mA  
 Load: Resistive load

