

Oil-resistant Limit Switch

# D4ER-2E22N



Image

**Oil-resistant Limit Switch, Sealed cross roller plunger, 0.1 A at 30 VDC, Left-hand cable**

<b>Shape/Structure</b>	Enclosed Limit switches
<b>Actuator</b>	Sealed cross roller plunger
<b>Electrical ratings</b>	0.1 A at 30 VDC
<b>Contact form</b>	SPDT
<b>Cable specifications</b>	Fluoro-insulated oil-resistance cable, 3 cores, 2 m

Ratings / Performance

As of August 8, 2024

<b>Shape/Structure</b>	Enclosed Limit switches
<b>actuator</b>	Sealed cross roller plunger 11 dia. x 4.7 Stainless sintered alloy rollers
<b>Electrical ratings</b>	0.1 A at 30 VDC
<b>Contact form</b>	SPDT
<b>Load</b>	Micro load
<b>Ratings (DC): Non-Inductive load</b>	Resistive load: 0.1 A at 8 VDC/0.1 A at 14 VDC/0.1 A at 30 VDC
<b>Cable specifications</b>	Fluoro-insulated oil-resistance cable, 3 cores, 2 m Diameter: 4 dia. Location of lead output: Left-hand Conductor cross section: 0.2 mm <sup>2</sup> (AWG25) Insulator diameter: 1.2 dia.
<b>Ambient temperature</b>	Operating: 5 to 70 °C (with no freezing or condensation) Storage: 5 to 70 °C (with no freezing or condensation)
<b>Ambient humidity</b>	35 to 95 % (with no condensation)

<b>Permissible operating speed</b>	0.1 mm/s to 0.5 m/s
<b>Permissible operating frequency</b>	Electrical: 30 operations / 1 minute max. Mechanical: 120 operations / 1 minute max.
<b>Contact resistance (Initial value)</b>	50 mΩ max. (initial value for the built-in switch whentested alone)
<b>Insulation resistance</b>	100 MΩ min. (at 500 VDC)
<b>Dielectric strength</b>	Between each terminal of the same polarities: 1,000 VAC 50/60 Hz 1 min Between each terminal and non-live-metallic part: 1,500 VAC 50/60 Hz 1 min
<b>Impulse withstand voltage</b>	Between each terminal and non-live-metallic part: 2.5 kV
<b>Durability</b>	Mechanical: 4,000,000 operations min.

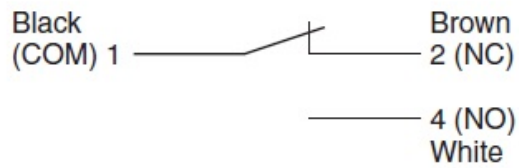
<b>Vibration resistance</b>	Malfunction: 10 to 55 Hz, 1.5 mm double amplitude
<b>Shock resistance</b>	Destruction: 1,000 m/s <sup>2</sup> max. Malfunction: 300 m/s <sup>2</sup> max.
<b>Classification of protection against electric shock</b>	Class II (Grounding not required with double) insulation

<b>Operating Force (OF)</b>	Standard value 11.77 N max.
<b>Release Force (RF)</b>	Standard value 4.9 N min.
<b>Pre-Travel (PT)</b>	Standard value 1.5 mm max.
<b>Movement Differential (MD)</b>	Reference value 0.1 mm
<b>Over-Travel (OT)</b>	Standard value 3 mm min.
<b>Operating Position (OP)</b>	Standard value 41.3±0.8 mm

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Circuits configuration

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