

Low Energy Limit Switches

Improved capability for low voltage circuits

In today's age of low energy controls, electromechanical switches are more frequently interfacing directly with low energy circuits. But switching low energy loads presents a unique challenge, and the primary concern of low energy switching is contact contamination. Since low energy loads do not arc or burn the contacts clean, contaminants may cause erratic switch behavior. With the introduction of new Allen-Bradley 802T low energy limit switches, Rockwell Automation now offers a rugged, reliable solution for your low energy switching needs.



Design

Allen-Bradley 802T Low Energy Limit Switches from Rockwell Automation are intended for direct connection to PLCs and other low energy circuits. Designed with welded gold and silver alloy contacts to provide a protective barrier against surface oxides, the components and design of these low energy limit switches are optimized for reliability and long life. A stationary waffle shape contact optimizes contact pressure to stabilize the contact resistance in the region of the micro load, while a prism-shaped crossbar contact provides high pressure to penetrate foreign particles that could prevent contact closure. Allen-Bradley low energy limit switches are suitable for machine connectivity and low voltage facilities, featuring a low input voltage of 5-28V DC with contact ratings of 0.025 VA (min.) and 0.40 VA (max.) per pole.

Style Options

Bulletin 802T Low Energy Limit Switches are ideal for applications in which heavy duty pilot ratings, a high degree of versatility and a rugged NEMA Type 4, 13 and 6P rating are required. Similar to our full line of standard 802T Plug-In Style Limit Switches, Allen-Bradley Low Energy Limit Switches are available in Lever Type Spring Return and Push Type Spring Return operating styles. Operating heads can also be mounted in four positions, 90° apart, for optimal application flexibility.

Features

- Welded gold and silver alloy contacts provide a barrier against surface oxides
- Stationary Waffle Shape contact reduces the impact of contamination build-up
- Prism shaped crossbar contact provides high pressure to penetrate foreign particles which could prevent contact closure
- Snap acting spanner replicates same reliability performance of our legacy NEMA products

- Lever Type and Push Type operating styles.
- Plug-in Style for ease of wiring.
- Conduit and Mini-Receptacle wiring options
- Enclosure Rating NEMA 4, 13 and 6P.
- cULus listed and CE marked for applicable directives.
- 5-28 V DC and 0.025 VA min and 0.40 VA max load per pole applicable directives


Benefits

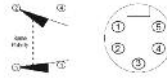
- Able to connect directly to PLC input
- Components and design are optimized to provide long life for low energy use.
- Provides an alternative to glass enclosed reed switches or solid state devices.
- An economical alternative to oversized power contacts.
- Suitable for machine connectivity and low voltage circuits.

LISTEN.
THINK.
SOLVE.™

General Ordering Information

Low Energy Limit Switches, Lever Type*, Spring Return

Number of Circuits	Contact Operation for clockwise or counter clockwise movement	Torque to Operate (Max.)	Travel to Operate Contacts (Max.)	Max. Travel (degrees)	Travel to Reset (degrees)	Switch Style	Catalog Number for Switch w/o Lever ¹
2		0.29N.m (2.6lb in)	13°	90°	7°	Conduit	802T-AGP
All Low Energy Limit Switches are designed to operate in an ambient temperature range of -18°C to +110°C (0°F to +230°F). This 802T-AGPE limit switch is modified for low temperature operation at -40°C to +110°C (-40°F to +230°F). Based on the absence of freezing moisture or water. All other specifications are identical to the 802T-AGP.						Conduit/ Low Temp.	802T-AGPE
Identical to 802T-AGP but with pre-wired five pin mini connector.						Mini Connector	802T-AGPJ ³
2		0.147N.m (1.30lb in)	13°	90°	7°	Conduit/ Low Torque ²	802T-ALGP

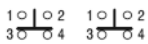


1 For lever selection see Rockwell Automation Sensors Catalog.

2 Use levers recommended with low operating torque switches.

3 Recommended standard cordset to be used with 802T-AGPJ1 is 889N-F5AFC-6F: straight female 5 pin mini to flying leads, 6 feet long. See Sensors Catalog for other cordset and patchcord choices.

Low Energy Limit Switches, Push Type, Spring Return

Number of Circuits	Contact Operation Normal Operate	Operator Type	Force to Operate (Max.)	Travel to Operate Contacts (Max.)	Max. Travel	Travel to Reset	Catalog Number
2		Side Push Rod	16.4N (3.7lb)	3.3mm (0.131in)	5.7mm (0.226in)	1.3mm (0.052in)	802T-CGP
		Top Push Roller	13.8N(3.1lb) (3.1lb)	1.4mm (0.057in)	6.0mm (0.236in)	0.7mm (0.028in)	802T-DGP
		Side Push	16.4N (3.7lb)	3.3mm (0.131in)	5.7mm (0.226in)	1.3mm (0.052in)	802T-KGP
		Vertical Roller					

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