

# Rope Switch

## Product Guide



## Overview

For small-to-large machine builders seeking to ensure accessible emergency stops for operators, Omron rope switches offer a cost-effective solution that can be installed along or around heavy machinery to ensure safety while providing continuous machine access. The compact, heavy-duty ER5018 Series is ideal for small to mid-size applications, while the ER6022 Series helps reduce the number of switches required for industrial applications and harsh environments. The latter offers two E-stop mounting positions and helps simplify installation and maintenance. See back page for a complete list of options.

### Applications

- Small-to-large production lines
- Conveyors
- Rotating machines
- Robotic cells
- Material handling

### Primary Benefits

- Give workers easy access to emergency stops, including in outdoor applications
- Simplify setup with a with a tension indicator for correct rope tension
- Reduce troubleshooting and maintenance efforts with an optional status indicator

## Key features

- Models with rope span up to 200m
- Heavy-duty and vibration-tolerant housing
- Left-, right- and center-mounted switch available
- The RK Series rope tension kit comes with all required hardware for most installations
- Models with optional E-stop pushbutton and status indicators
- Models available for extreme low temperatures
- Different contact configurations available
- Rubber bellows contain UV inhibitor



## Product Selection

Part Number	Model	Description	E-Stop	Cable Status Indicator	Contacts	Wiring Entry	Max. Rope Span
44506-4120	ER5018-021NE	Compact body	Included	-	2N/C+1N/O	3 x 1/2 in. NPT	40 m / 131 ft.
44506-4020	ER5018-021N		-	-			
44506-4040	ER5018-030N		-	-	3 N/C	3 x M20	
44506-5220	ER6022-021NE	Left or right mounting	Included	-	2N/C+1N/O	3 x 1/2 in. NPT	80 m / 262 ft.
44506-5420	ER6022-021NEL			Included (24VDC)			
44506-6520	ER1022-042NELR	Right operation mounting	Included	Included (24VDC)	4 N/C + 2 N/O	4 x 1/2 in. NPT	125 m / 410 ft.
44506-6420	ER1022-042NELL	Left operation mounting					
44506-7420	ER1032-042NEL	Center mounting	Included	Included (24VDC)	4N/C+2 N/O	4 x 1/2 in. NPT	200 m / 656 ft.
44506-7421	ER1032-042NELAC			Included (120VAC)			

## Accessories

Part Number	Short Product Description	Description
44506-2705	RK05	RK Rope Tension Kit, 5 m
44506-2710	RK10	RK Rope Tension Kit, 10 m
44506-2730	RK30	RK Rope Tension Kit, 30 m
44506-2750	RK50	RK Rope Tension Kit, 50 m
44506-4700	SM06-TG00	Tensioner Gripper, Stainless Steel
44506-4780	SM06-RPSS	Rope Pulley, Stainless Steel
44506-4750	SM06-SP50	Spring, Stainless Steel
44506-0730	SM06-SP30	Spring, Galvanized

## Related Products

These items can be added to complete a safety application for rope switches:

Part Number	Description
G9SE-201	Monitoring Relay, 24 VDC, Inputs: Dual or single CH, Auto or Manual reset. Outputs: Dual Safety (DPST-NO) and Aux Single (PNP)
G9SE-401	Monitoring Relay, 24 VDC, Inputs: Dual or single CH, Auto or Manual reset. Outputs: Dual Safety (4PST-NO) and Aux Single (PNP)
G9SP-N10S	Controller, 24 VDC, Inputs: 10 Safety Outputs: 4 safety outputs (Solid State), 4 Test
G9SP-N20S	Controller, 24 VDC, Inputs: 20 Safety Outputs: 8 safety outputs (Solid State), 6 Test
G7SA-3A1B DC24	Safety Relay, 24VDC Coil, 6A, 4-pole: 3PST-NOand SPST-NC
P7SA-10F-ND-PU DC24	Socket, DIN Rail mount, With LED indicator, Push-in Plus (For 4 pole relays)
A22NE-M-P202-N	E-Stop, 22E Series, 24V
A22Z-3466-1	60-dia. round plate with black letters on a yellow background
A22NE-M-P202-N-B	Switch with integrated control box, 2 NC