



Emergency Stop Devices

E-Stop Buttons page 164

- Mechanical palm buttons push to stop and twist to release.
- Modular design makes assembly and installation easy.
- Kits simplify selection and ordering.



Rope Pull Switches page 168

- Available spans range from 6 to 100 m.
- Trip and latch switch models are available.
- Minimum switch life is 1 million operations.
- Heavy-duty switch housings withstand harsh environments.

E-Stop Button

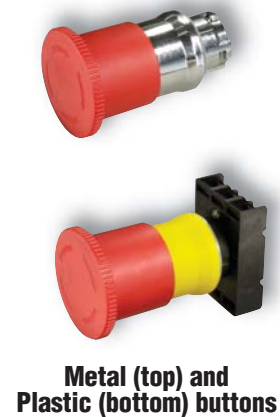
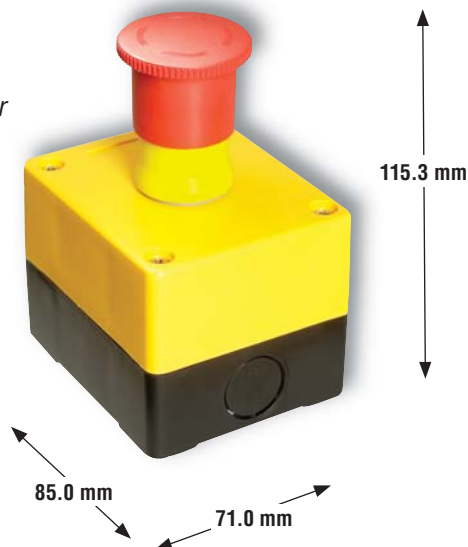
Emergency Stop Push Buttons

- Mechanical palm buttons push to stop and twist to release.
- Modular design makes assembly and installation easy.
- Kits simplify selection and ordering.
- Latching design complies with ISO 13850 (EN 418).
- Options include station enclosures, contact elements and disc labels.



E-Stop Buttons

- Choice of metal or plastic
- Rugged modular construction
- Choice of normally open and/or normally closed contacts
- Positive opening safety contacts (IEC 60947-5-1) →






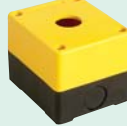



Metal (top) and Plastic (bottom) buttons

Emergency Stop Push Button with Enclosure
(Plastic button version shown)






E-Stop Push-Button Components

Models	Description	Product	Data Sheet
8-LP2T-B6644*	22.5 mm plastic button (mounting adapter included)		111880
8-LM2T-B6644*	22.5 mm metal button (mounting adapter sold separately)		
8-LM2T-AU120	Metal mounting adapter		
8-LM2T-C01**	Normally closed (NC) positively driven contact element		
8-LM2T-C10	Normally open (NO) auxiliary contact element		
8-L2PP-1A5	One-button enclosure—control stations have wire entry through the top or bottom; IP65 rating		
8-LM2T-AU115	60 mm diameter, non-adhesive plastic legend with “Emergency Stop” inscription		

* Twist to release, mechanical latching ISO 13850 (EN 418) compliant. Diameter 40 mm (without mounting adapter).









** Direct (positive) opening operation per IEC/EN 60947-5-1.

E-Stop Push-Button Kits

Models	E-Stop Button	Contacts	Enclosure	Legend
SSA-EBM-02L		2 NC	No	Yes
SSA-EBM-11L		1 NC & 1 NO		
SSA-EBM-12L		2 NC & 1 NO		

NC = Normally Closed Contact, NO = Normally Open Contact

E-Stop Push-Button Kits (cont'd)

Models	E-Stop Button	Contacts	Enclosure	Legend
SSA-EBP-02L		2 NC	No	Yes
SSA-EBP-11L		1 NC & 1 NO		
SSA-EBP-12L		2 NC & 1 NO		
SSA-EBM-02E		2 NC	Yes	Yes
SSA-EBM-11E		1 NC & 1 NO		
SSA-EBM-12E		2 NC & 1 NO		
SSA-EBP-02E		2 NC	Yes	Yes
SSA-EBP-11E		1 NC & 1 NO		
SSA-EBP-12E		2 NC & 1 NO		

NC = Normally Closed Contact, NO = Normally Open Contact

EMERGENCY STOP DEVICES

E-STOP BUTTONS

ROPE PULL SWITCHES

E-Stop Push-Button Specifications

Mechanical Life	300,000 operations
Operating Force	0.8 kg
Mounting Adapter	Plastic button: The adapter is fixed to the mounting surface by means of incorporated screws ($T_{max} = 0.6 \text{ Nm}$) Metal button: The adapter is fixed to the mounting surface by means of incorporated screws ($T_{max} = 0.8 \text{ Nm}$)
Construction	Plastic parts: Polyamide and polycarbonate Metal parts: Aluminum and zinc alloy
Environmental Rating	IP65; NEMA 4, 13
Operating Temperature	-25° to +60° C
Certifications	For a list of certifications see page 238.

Contact Specifications

European Rating	Utilization categories: AC15 and DC13 $U_i = 690\text{V ac}$ $I_{th} = 10\text{A}$ UL designation = A 600 Q600
Mechanical Life	1,000,000 operations
Connections	(1 or 2) 12 AWG (2.5 mm ²) maximum wire size
Construction	Polyamide and polycarbonate
Environmental Rating	IP20
Operating Temperature	-25° to +60° C
Certifications	For a list of certifications see page 238.

Rope Pull Switches

Multiple Location Emergency Shutdown

- Available spans range from 6 to 100 m.
- Trip and latch switch models are available.
- Minimum switch life is 1-million operations.
- Heavy-duty switch housings withstand harsh environments.
- Switch activates if the rope is pulled, becomes loose or breaks.



PAGE 182

RP-LM40 Models Page 168

RP-LS42 Models..... 169



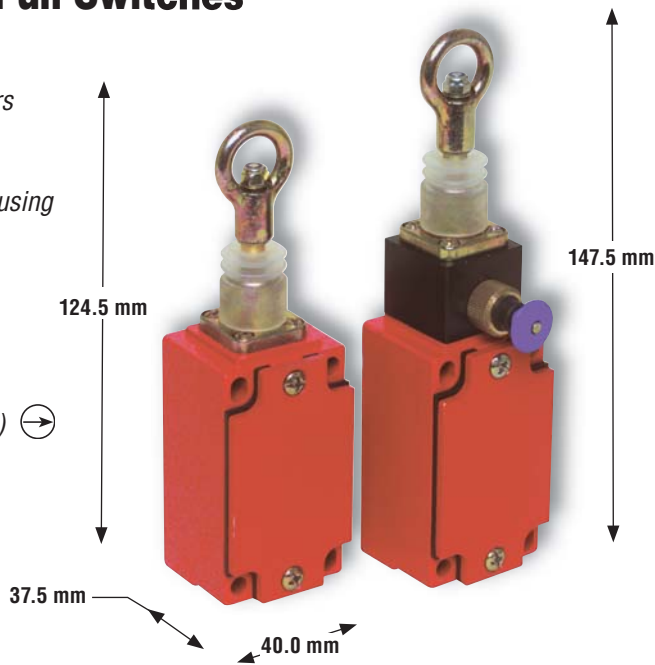
PAGE 225

RP-QM72/QMT72 Models..... 170

RP-QM90 Models..... 171

RP-LM40 Rope Pull Switches

- Limit-switch style
- Rope span up to 6 meters
- Trip and latch models
- Standard limit switch housing (EN 50041)
- Rugged metal housing
- 40 mm wide at base
- Positive opening safety contacts (IEC 60947-5-1) ⊕



RP-LM40D-6 Model RP-LM40D-6L Model





RP-LM40 Series, 40 mm

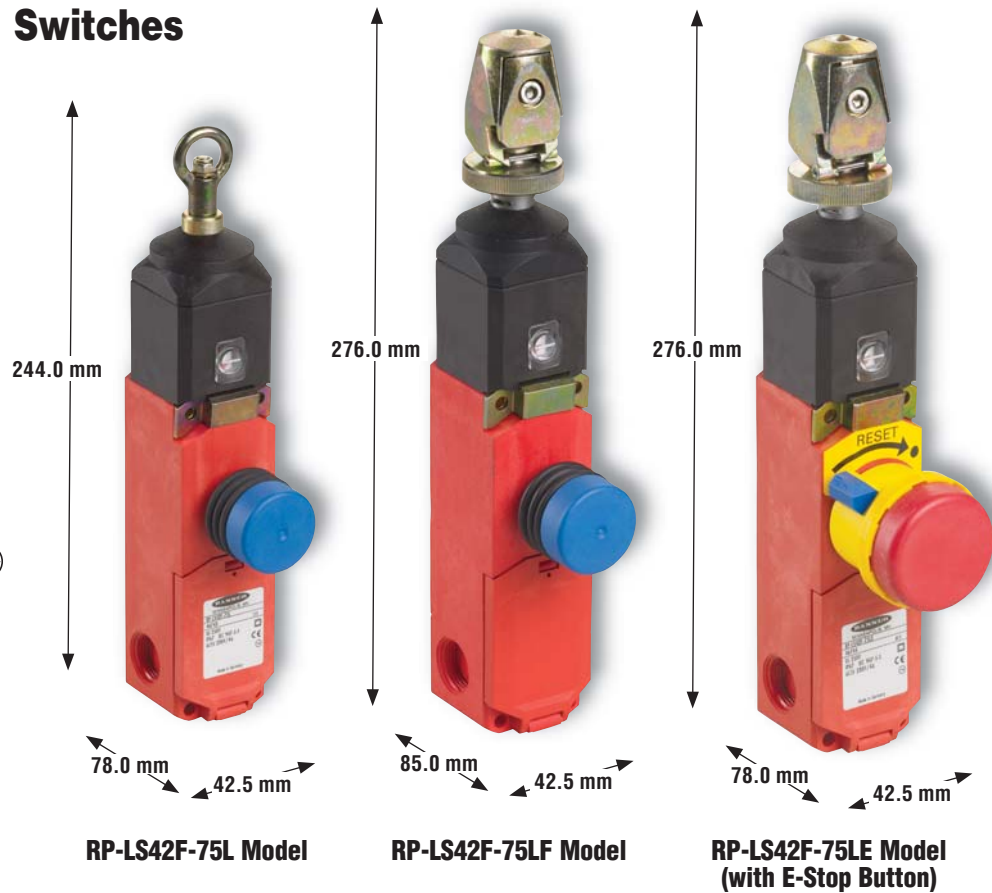
Model	Actuation	Max. Rope Length	Safety Contact*	Auxiliary Contact	Action/Contact State*	Contact Config. & Switch Diagram	Data Sheet
RP-LM40D-6	Trip	6 m	2 NC in	—	open closed	SD027 (p. 244)	62802
RP-LM40D-6L	Latch				closed open		

Run Position Cable Pulled Cable Break NC = Normally Closed Contact

* Jumper Contacts together for use in a single-channel E-stop application. See data sheet or Contact Configuration and Switching Diagrams for more information/clarification.

RP-LS42 Rope Pull Switches

- Rope span up to 75 meters
- Manual reset
- Extra contacts for switch monitoring
- Latch design
- Tension indicator
- Model with E-stop button and quick rope fixing and tensioning
- 42 mm wide at base
- Positive opening safety contacts (IEC 60947-5-1)



RP-LS42 Series, 42 mm



Model	Actuation	Max. Rope Length	Safety Contacts**	Auxiliary Contact	Action/Contact State**	Contact Config. & Switch Diagram	Data Sheet
RP-LS42F-75L	Latch (Rope Pulled)	75 m	2 NC in	2 NO in	Safety Auxiliary	SD029 (p. 244)	67709
open open closed closed							
open open closed closed							

Run Position Cable Pulled Cable Break NC = Normally Closed Contact, NO = Normally Open Contact


** See data sheet or Contact Configuration and Switching Diagrams for more information/clarification.

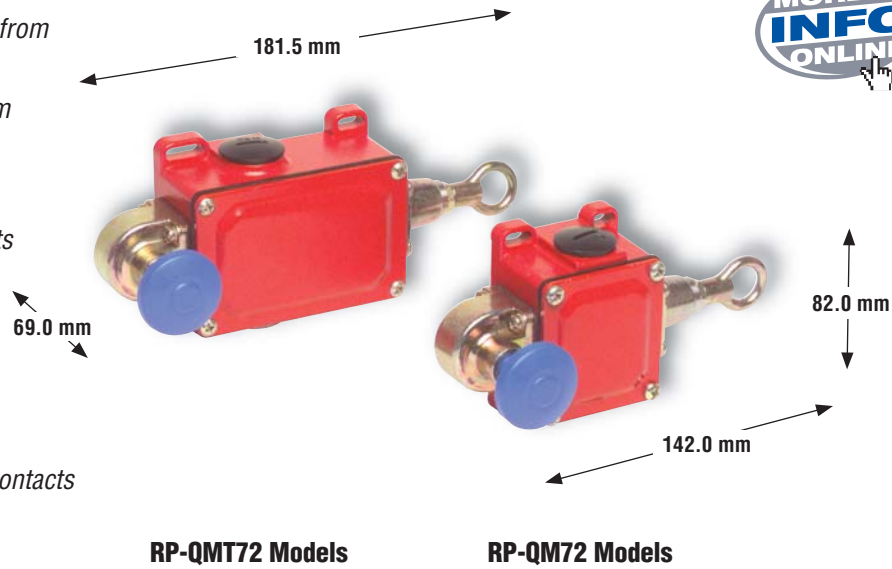
EMERGENCY STOP DEVICES
E-STOP BUTTONS
ROPE PULL SWITCHES

EMERGENCY STOP DEVICES

Rope Pull Switches











RP-QM72/QMT72 Rope Pull Switches

- Five latch-design models from which to choose
- Models with 6, 12 or 20 m rope spans
- Manual reset
- Models with extra contacts for monitoring or for dual-channel input to a safety device
- Tension indicator
- 82 mm wide at base
- Positive opening safety contacts (IEC 60947-5-1) 



RP-QM72/QMT72 Series, 72 mm



Model	Actuation	Max. Rope Length	Safety Contacts*	Auxiliary Contact	Action/Contact State*	Contact Config. & Switch Diagram	Data Sheet	
RP-QM72D-6L	Latch (Rope Pulled)	6 m	2 NC in 	—	 open  closed	Safety open closed closed open	SD030 (p. 244)	
RP-QM72D-12L		12 m						SD031 (p. 245)
RP-QMT72D-20L		20 m						
RP-QMT72F-12L		12 m	4 NC in 	—	 open  closed	Safety open open closed closed closed closed open open	SD033 (p. 245)	
RP-QMT72E-12L		12 m	2 NC in 	1 NO in 	 open  closed	Safety open closed closed closed open open	Auxiliary closed open	SD034 (p. 245)

62084

 Run Position  Cable Pulled  Cable Break NC = Normally Closed Contact


* Jumper Contacts together for use in a single-channel E-stop application. See data sheet or Contact Configuration and Switching Diagrams for more information/clarification.

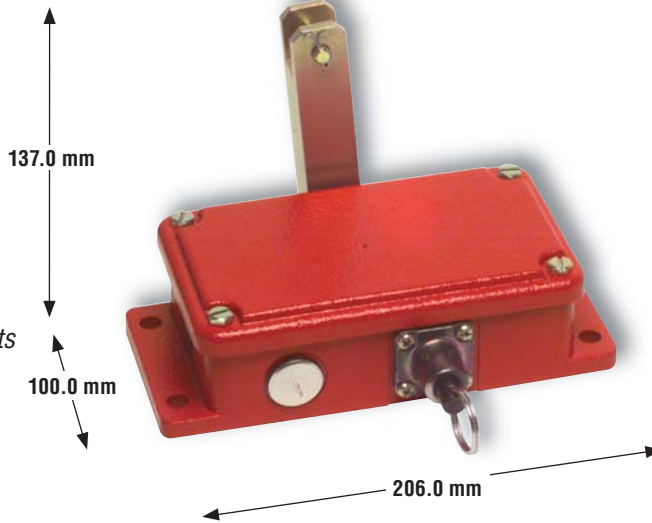
EMERGENCY STOP DEVICES

E-STOP BUTTONS

ROPE PULL SWITCHES

RP-QM90 Rope Pull Switch











- Latch design
- Rope span up to 100 m, with switch in center
- Manual reset
- Extra contacts for switch monitoring
- 90 mm wide at base
- Positive opening safety contacts (IEC 60947-5-1) 



RP-QM90 Model

RP-QM90 Series, 90 mm



Model	Actuation	Max. Rope Length	Safety Contacts**	Auxiliary Contacts	Action/Contact State**		Contact Config. & Switch Diagram	Data Sheet		
RP-QM90F-100L	Latch (Rope Pulled)	100 m	2 NC in 	2 NO in 	 open	 open	 closed	 closed	SD035 (p. 245)	62086
					 open	 open	 closed	 closed		

 Run Position  Cable Pulled  Cable Break NC = Normally Closed Contact, NO = Normally Open Contact

** See data sheet or Contact Configuration and Switching Diagrams for more information/clarification.

Rope Pull Switches Specifications

Contact Rating	10A @ 24V ac, 10A @ 110V ac, 6A @ 230V ac 6A @ 24V dc 2.5 kV max. transient tolerance NEMA A300 P300																	
European Rating	Utilization categories: AC15 and DC13 $U_i = 500V$ ac $I_{in} = 10A$	<table border="1"> <thead> <tr> <th colspan="3">40-60 Hz</th> </tr> <tr> <th>U_i V</th> <th>I_{AC-15} A</th> <th>I_{DC-13} A</th> </tr> </thead> <tbody> <tr> <td>24</td> <td>10</td> <td>6</td> </tr> <tr> <td>110</td> <td>10</td> <td>1</td> </tr> <tr> <td>230</td> <td>6</td> <td>0.4</td> </tr> </tbody> </table>		40-60 Hz			U_i V	I_{AC-15} A	I_{DC-13} A	24	10	6	110	10	1	230	6	0.4
40-60 Hz																		
U_i V	I_{AC-15} A	I_{DC-13} A																
24	10	6																
110	10	1																
230	6	0.4																
Contact Material	Silver-nickel alloy																	
Maximum Switching Speed	50 operations per minute																	
Recommended Rope Size	40 mm models: 2 mm diameter steel rope 42 & 72 mm models: 3 mm diameter steel rope 90 mm models: 4 mm diameter steel rope																	

EMERGENCY STOP DEVICES

E-STOP BUTTONS

ROPE PULL SWITCHES

Rope Pull Switches Specifications (cont'd)

Maximum Rope Pull Length	<p>RP-LM40D-6/6L: 6 m RP-LS42F-75L/75LE/75LF: 75 m RP-QM72D-6L: 6 m RP-QM72D-12L: 12 m RP-QMT72D-20L: 20 m RP-QMT72E-12L: 12 m RP-QMT72F-12L: 12 m RP-QM90F-100L: 100 mm; equal lengths up to 50 m on either side of switch</p>
Short Circuit Protection	10 amp Slow Blow, 15 amp Fast Blow. Recommended external fusing or overload protection.
Mechanical Life	1 million operations
Wire Connections	<p>Screw terminals with pressure plates accept the following wire sizes – Stranded and solid: 20 AWG (0.5 mm²) to 16 AWG (1.5 mm²) for one wire Stranded: 20 AWG (0.5 mm²) to 18 AWG (1.0 mm²) for two wires</p>
Cable Entry	<p>M20 x 1.5 threaded entrance Adapter supplied to convert M20 x 1.5 to ½" - 14 NPT threaded entrance</p>
Construction	<p>RP-LS42F-75L/75LE/75LF: High-impact thermoplastic housing; zinc die-cast actuator All others: Aluminum alloy die cast</p>
Environmental Rating	<p>RP-LS42F-75L/75LE/75LF: NEMA 4; IEC IP67 All other models: NEMA 4; IEC IP65</p>
Operating Temperature	<p>RP-LS42F-75L/75LE/75LF: -25° to +70° C All other models: -30° to +80° C</p>
Weight	<p>RP-LM40D-6: 0.22 Kg RP-LM40D-6L: 0.26 Kg RP-LS42F-75L: 0.48 Kg RP-LS42F-75LE and RP-LS42F-75LF: 0.65 Kg RP-QM72D-6L: 0.49 Kg RP-QM72D-12L: 0.52 Kg RP-QMT72D-20L, RP-QMT72E-12L and RP-QMT72F-12L: 0.64 Kg RP-QM90F-100L: 3.8 Kg</p>
Certifications	For a list of certifications see page 238.
Contact Configurations and Switching Diagrams	<p>RP-LM40 models: SD027 & SD028 (p. 244) RP-LS42 models: SD029 (p. 244) RP-QM72/QMT72 models: SD030, SD031, SD032, SD033 & SD034 (pp. 244-245) RP-QM90 models: SD035 (p. 244)</p>