

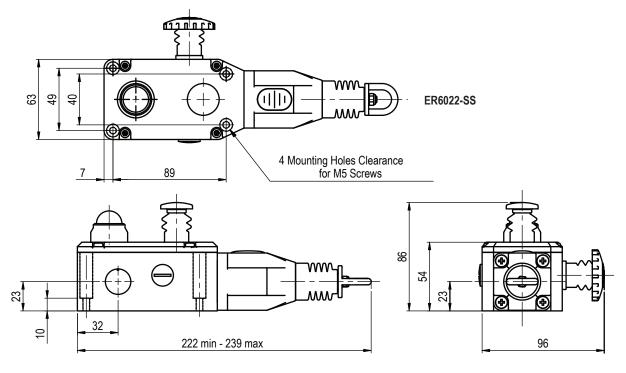
# **ER6022-SS**

# Operating Instructions for ER6022-SS

Installation must be in accordance with the following steps and stated specifications and should be carried out by suitably competent personnel. Adherence to the recommended maintenance instructions forms part of the warranty.



WARNING: Do not defeat, tamper, remove or bypass this unit. Severe injury to personnel could result.

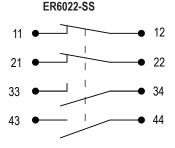


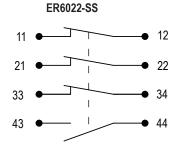
All Dimensions in mm

ER6022-SS		0mm	3.5m	m 14	.5mm 17.0m
	2NC+2NO versions	Rope	Slack	Tension Range	Rope Pulled
	11/12				
	21/22				
	33/34				
	43/44				

	ER6022-55	umm	3.5mm	14.5mm	17.Umr
ı	3NC+1NO versions	Rope Sla	ck Tension	Range Rope	Pulled
ı	11/12				
ı	21/22				
ı	33/34				
ı	43/44				

Contact Open	
Contact Closed	

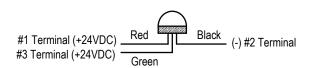




# **Optional Indicator Beacon**

When +24VDC or 120 VAC (depending on version used) is applied to the **red** wire, the beacon will illuminate **red** and flash.

When +24VDC or 120 VAC (depending on version used) is applied to the **green** wire, the beacon will illuminate green and flash.



# **ER6022-SS**

# Operating Instructions for ER6022-SS

- 1. Installation of all Safety Rope Switch systems must be in accordance with a risk assessment for the individual application. Installation must only be carried out by competent personnel and in accordance with these instructions.
- 2. Rope support eyebolts must be fitted at 2.5m. min. to 3m. max. intervals along all rope lengths between switches. The rope must be supported no more than 500mm from the switch eyebolt or Safety Spring (if used). It is important that this first 500mm is not used as part of the active protection coverage.
- 3. M5 mounting bolts must be used to fix the switches. Tightening torque for mounting bolts to ensure reliable fixing is 4Nm. Tightening torque for the lid screws, conduit entry plugs and cable glands must be 1.5Nm to ensure IP seal. Only use correct sizing glands for conduit entry and cable outside diameter.
- 4. Tensioning of rope is achieved by use of tensioner / gripper assemblies. Upon installation, tension to mid-position as indicated by the red arrows in the viewing window of each switch. Check operation for all switches and the control circuits by puling the rope at various locations along the active protection area and resetting each switch by depressing the Blue Reset button. Ensure each time that the switches latch off and require manual resetting by depressing the Blue Reset button. Increase the system tension further, if required, depending upon the checks along the active length of coverage. If fitted with a Mushroom type E-Stop button (Red) then test and reset each switch to ensure function of control circuits. Typical operational conditions for successful operation of system is less than 75N. pulling force and less than 150mm deflection of rope between eyebolt supports. If the optional LED is fitted but is not used, ensure that the conductors remain coiled and tied to the tie hole in the LED flange.
- 5. Every week: Check correct operation of system at locations along all coverage length. Check for nominal tension setting, re-tension rope if necessary. Every 6 months: Isolate power and remove cover. Check screw terminal tightness and check for signs of moisture ingress. Never attempt to repair any switch.

Approvals: cULusE195653, TUV Typed Approved, Certificate No. 968/EZ 350.00/09

Standards: See EC DofC, UL 508 (NKCR, NKCR7)

#### **Mechanical Features**

Enclosure / Cover 316 stainless steel External Parts 316 stainless steel

IP Rating IP67
Rope Spans Max 100M
Mounting 4 x M5
Mounting position Any

Conduit entries 3 X Mm20 or 3 X 1/2" NPT

Torque settings Mounting M5 4.0 Nm

Lid = Torx M4 1.5 Nm Terminals = 1.0 Nm -25C. to 80 C.

Ambient Operating Temperature
Vibration resistance
Shock resistance
Tension Force (typical mid setting)

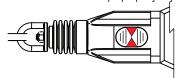
-25C. to 80 C.
10-500Hz 0.35mm
15g 11ms
130N

Typical Operating Force (Rope pulled) < 125N. < 300mm deflection Mechanical Life 1,000,000 operations

Weight 1635 g

#### Tension Indicator

Indicator shown with steel rope properly adjusted.



### **Exclusion of Liability Under the Following Circumstances**

incorrect use

non-compliance with safety regulations

installation and electrical connection not performed by authorized personnel.

failure to perform functional checks.

# **EC Declaration of Conformity**

The manufacturer named below herewith declares that the product fulfills the provisions of the directive(s) listed below and that the related standards have been applied.

OMRON Scientific Technologies Inc. 6550 Dumbarton Circle Fremont, CA 94555, U.S.A.

Directives applied: Machinery directive 2006/42/EC Low Voltage directive 2006/95/EC

RoHS directive 2011/65/EC

Standards applied: EN 60947-1:2007+A1:2011 EN 60947-5-1:2004:+A1:2009 EN 60947-5-5:1997+A1:2005 EN 60204-1:2006:+A1:2009 EN ISO 13850:2008

Fremont, May 2013

Marty Krikorian Director, Quality Control

The signed EC Declaration of Conformity is included with the product.





#### Electrical

Contact type EN 60947-5-1 double break type Zb snap action up to 3NC

Contact Material Silve

Termination Clamp up to 2.5 sq. mm conductors Switching Ability AC = 240V 3A, 120V 6A, inductive

(Safety positive break) 2NO (Auxiliary)
Max Switching Current / Volt / Amp 240V / 720 VA break

DC = 24V 2.5A, inductive

Information with regard to UL 508 Use polymeric conduit only. Use copper conductors only.

Electrical rating: A300. Type 1 enclosures



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# Safety

• Laser Scanners • Safety Mats • Edges and Bumpers • Programmable Safety Controllers • Light Curtains • Safety Relays • Safety Interlock Switches

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C325I-E-01 03/15 Note: Specifications are subject to change.