

Model No.: **FMR4PSMLXYY**
Description: **Ø30.5 Metallic flush mounting series non illuminated Mushroom pushbutton, Push to stop Turn to release**








Salient Features:

- Compact design
- Flush mounting
- Quick installation
- Safe operation
- Robust design
- Aesthetically elegant
- Available in variety of colors
- IP65 protection
- Can be used for elevator function
- All plastic raw material f1 UV stabilized as per UL746C
- HL3-R26 as per BS EN 45545-2

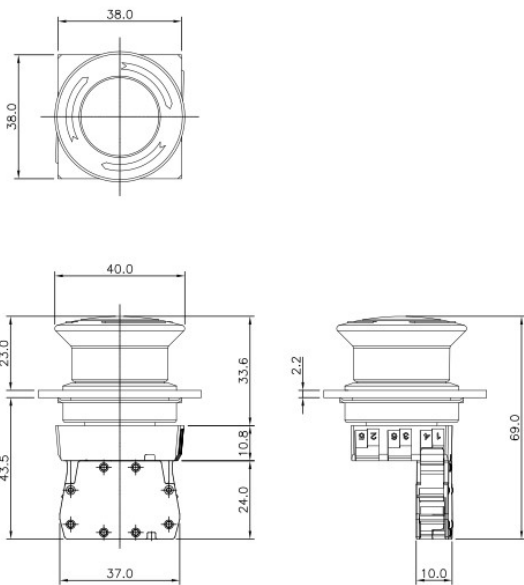
General Characteristics:

It consists of one non illuminated mushroom actuator, push to stop turn to release, flush mounting, suitable for Ø30.5 cutout, with Clip on metal bracket (4BRK) fitted with contact elements of C... series. Refer Datasheet for C1 element & Datasheet for C2 element. The actuator has IP65 as degree of protection as per IEC 60529. A minimum of one contact element & a maximum of four clip on contact elements can be stacked on the bracket of this actuator by a simple push action.

This unit can be used with any panel, ranging from 1mm to 3mm thickness. The actuator is bayonet locking into the bracket. Two screws are provided with the bracket. After assembly, the lock screws are to be tightened with a torque of 1.2Nm so that they pierce through the paint of the panel. This will ensure good earthing to the unit.

Available types	: FMR4PSMLXYY X indicates color color=1-White,2-Black, 3-Green, 4-Red,5-Amber, 6-Blue, 7-Clear 8-Yellow (red offered as standard) YY indicates number of NO & NC contact elements
Degree of protection	: IP65 as per IEC 60529
Degree of Pollution	: 3
Applicable standards	: Refer attached Manufacturer Declaration
Product Certification	
	: Contacts:    

Mechanical Characteristics:

Function indicator		Front viewing: Arrows provided on the knob
Terminal Capacity		: Maximum 2X1.5mm ² or 1X 2.5mm ² : Minimum 1X0.5mm ²
Terminal marking		: 1NC 2 & 3NO 4
Terminal Torque	Nm	: 0.8
Contact material		: Brass, Silver plated : Brass terminal, Silver rivet gold plated (Low Voltage application)
Operation		: Slow break (NO/NC)
Operating torque	Nm	: 0.3
Operating force	N	: 9
Positive operation Conforming to IEC/EN 60947-5-1 Appendix K		: All functions incorporating a NC contact are positive opening operation
Operating travel	mm	: 2.5
Mechanical life		: over 0.1 million operations
Ambient	°C	: -25 to +70
Storage	°C	: -25 to +40
Overall Dimensions with sketch (LXBXH)	mm	 <p>Technical drawings of the pushbutton showing front, side, and detail views with dimensions in mm.</p> <ul style="list-style-type: none"> Front view: 38.0 (width), 38.0 (height) Side view: 40.0 (top width), 23.0 (top height), 43.5 (bottom height), 33.6 (total height), 10.8 (flange thickness), 24.0 (base height), 37.0 (base width) Detail view: 2.2 (flange thickness), 69.0 (total height), 10.0 (base width)
Vibration resistance Conforming to IEC 60068-2-6	Hz	: Refer Clip on Element Data Sheet
Shock resistance Conforming to IEC 60068-2-27		: Refer Clip on Element Data Sheet
Viewing Angle	°	: NA
Optical Axial intensity	mcd	: NA
Weight	gms	: Actuator: 67 : Pushbutton: 67 +10 for every single element

Electrical Characteristics of contacts:

Make & Break Capacity		: AC 15 4A, 415 V AC : DC 13 0.5A, 110V DC with a time constant of 300ms
Rated insulation voltage	V	: 500
Rated thermal current	A	: 10
Low power application		: Gold plated NO & NC contact elements for low voltage low current switching circuits , <25mA
Short circuit protection		: 10A HRC cartridge fuse, rated for resistive loading at 1000A prospective current
Dielectric Test	KV	: 2.5
Approvals regarding the part:		: Pending
Approvals regarding the material		
Polymeric parts		: UL-Recognized material
Rated Impulse Withstand		: NA
Polarity protection		: NA
Current Consumption	mA	: NA
Electrical Endurance		: Conforming to IEC/EN 60947-5-1 Annexure C

Accessories & codes:

NA

Ordering codes

The ordering code for each product is mentioned in the Catalogue/Data Sheet and not indicated on each product because of the various combinations possible it becomes practically impossible to do so, more over the actuators, lamp unit and contact element, which together make a push button, are sold separately to OEM's as well as dealers. However the primary packing box always mentions the ordering code of the material it holds.

For actuator:

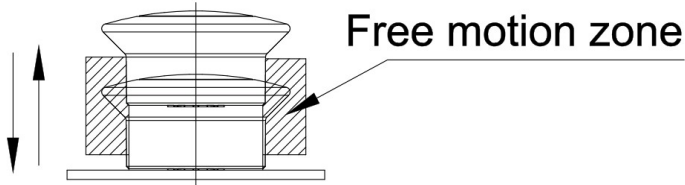
FMR ↓ Flush Mounting Round	4A ↓ Metal Clip on Series Actuator	ML ↓ Mushroom Latching	X ↓ Indicates color 1-White, 2-Black, 3-Green, 4-Red, 5-Amber, 6-Blue, 7-Clear 8-Yellow
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For Pushbutton

FMR ↓ Flush Mounting Round	4PS ↓ Metal Clip on Series Pushbutton Switch	ML ↓ Mushroom Latching	X ↓ Indicates color 1-White, 2-Black, 3-Green, 4-Red, 5-Amber, 6-Blue, 7-Clear 8-Yellow	YY ↓ Denotes No. of Contact Elements attached to the Push Button. 1st "Y" indicates no of. (NO) Contact elements 2nd "Y" indicates no. of (NC) Contact elements e.g. 01 indicates No of NO (Normally Open) Contacts & one NC (Normally Closed) contact
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Mounting Instructions:

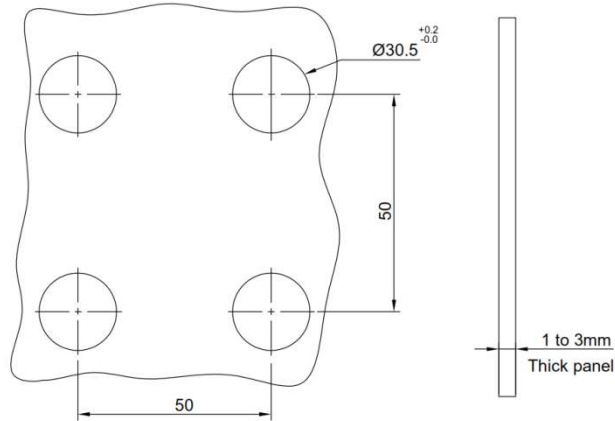
Safety regulations: This unit may be installed & commissioned by personnel who are familiar with current regulation for health & safety at work & accident prevention. Ensure local regulations are met especially those relating to safety. This is for use on flat surface of type 4X, 12 enclosure.



Ensure that this actuator will operate fully after installation. Failure to follow these will result in death or serious injury.

Mounting

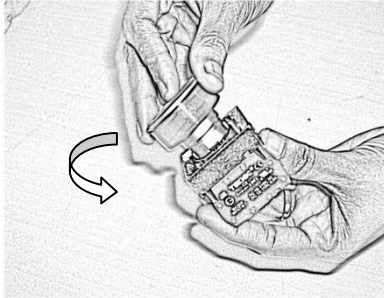
: Fixing Centers: 50mm X 50mm min.
Mounting Panel thickness: 1mm to 3mm



No of elements possible

4 Nos. Max. Contact blocks can be mounted. (2*2 Nos.) (C... series contact elements)

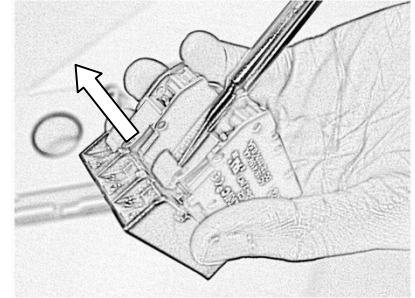
To install:



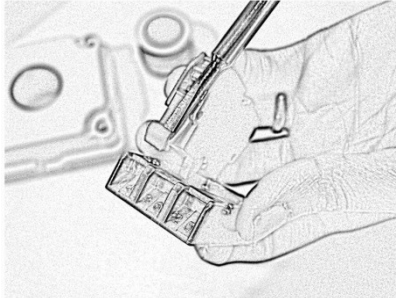
Turn the actuator in anticlockwise direction



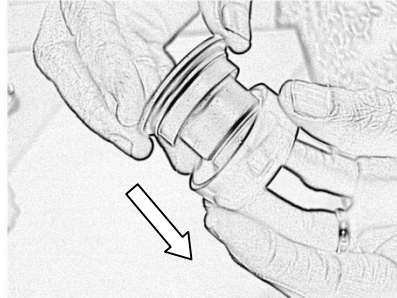
Remove the actuator from the bracket



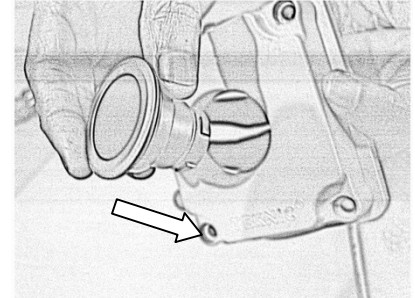
Insert screw driver in the element & twist the screw driver



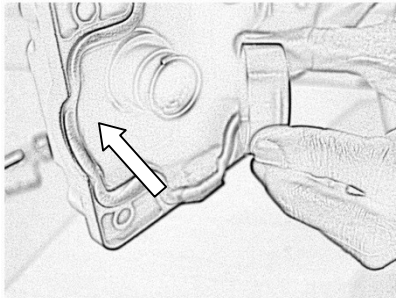
Release the contact element from the bracket



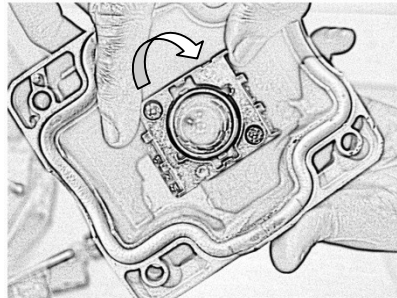
Remove the spacer from the actuator



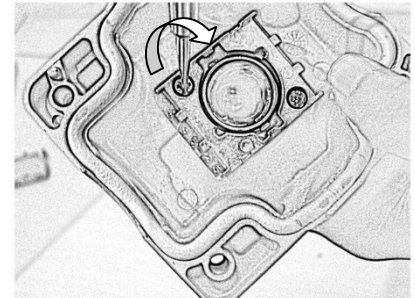
Insert the actuator in the Ø30.5 hole



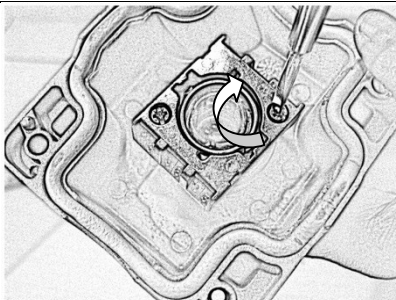
Insert the spacer from the rear side of the panel into the actuator



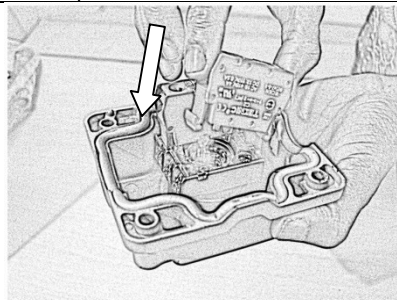
Insert the bracket in the actuator from the rear side of panel & turn in clockwise direction



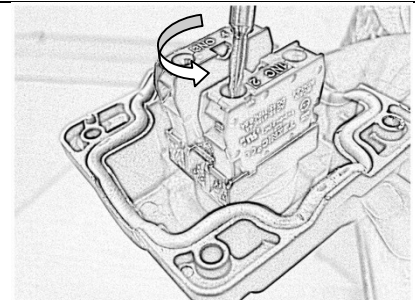
Tighten the lock screw with a torque of 1.2Nm



Tighten both the screws equally

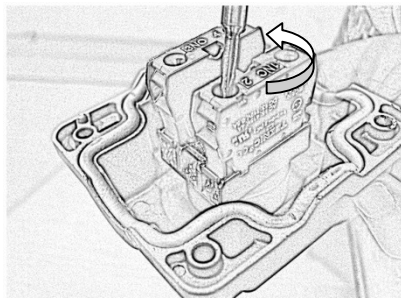


Press fit the element in the bracket

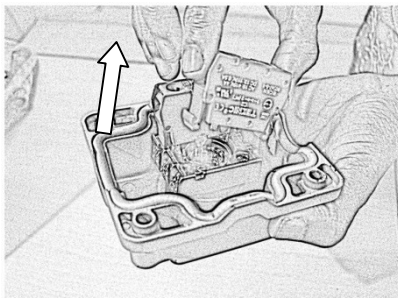


Open the terminal screws by turning in anticlockwise direction for wiring

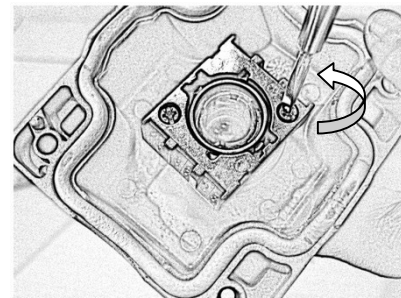
To uninstall:



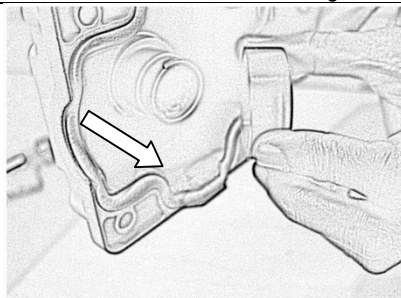
Open the terminal screws by turning in anticlockwise direction & release the wiring



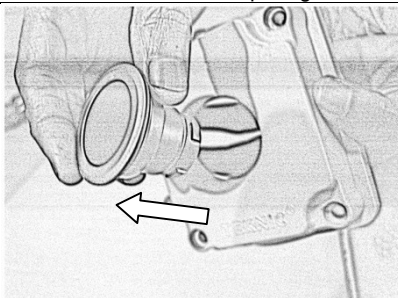
Remove the contact element by inserting the screw driver & pulling it



Loosen the lock screws in anticlockwise direction



Remove the spacer



Remove the actuator

If any more information is required, kindly contact our Marketing Department at +91-22-42532500 or email at ram.talreja@teknico.co.in

TEKNIC

MANUFACTURER DECLARATION

We,

TEKNIC ELECTRIC (I) PRIVATE LIMITED,
65, Marol Co-operative Industrial Estate,
M. Vasanji Road, Andheri (East),
Mumbai 400059, India.

Declare under sole responsibility that the following described products in our delivered version complies with the appropriate standards for Railways applications, based on its design & type as brought into circulation by us. In case of alteration of the product not agreed upon by us, this declaration will lose its validity.

Description of the Electrical Equipment:

Contact Elements	-Ø22.5	C...
Metallic Series Push Button Clip on Non illuminated Flush pushbuttons	-Ø22.5	FMR4PSF...
Metallic Series Push Button Clip on Non illuminated projecting pushbuttons	-Ø22.5	FMR4PSP...
Metallic Series Push Button Clip on Non illuminated Selector Pushbuttons	-Ø22.5	FMR4PSS...
Metallic Series Push Button Clip on illuminated Flush pushbuttons	-Ø22.5	FMR4PSLRF...
Metallic Series Push Button Clip on illuminated Selector Pushbuttons	-Ø22.5	FMR4PSSL...
Metallic Series Pilot Light	-Ø22.5	FMR4PL...
Metallic Series Push Button Clip on Non illuminated Key Selector Pushbuttons	-Ø22.5	FMR4PSK...
Metallic Series Push Button Clip on Non illuminated Mushroom Pushbuttons	-Ø22.5	FMR4PSM...
Metallic Series Push Button Clip on Non illuminated Selector Round knob Pushbuttons	-Ø22.5	FMR4PSSPB...

Applicable Standards:

BS EN 45545-2: 2013+A1: 2015

Railway application-Fire protection on Railway vehicles Part 2: Requirements for fire behavior of materials & components (HL3 – R26)

ASTM D635 & IEC60695-11-10
UL 746C & UL94

Rate of burning (V0 at 0.8mm, f1 UV stabilised)

IEC/EN 60947-1: IEC 60947-1:2007
+AMD1:2010+AMD2:2014

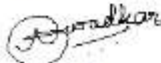
Low-voltage switchgear and controlgear - Part 1:
General rules

IEC/EN 60947-5-1: 2016

Low-voltage switchgear and controlgear - Part 5-1:
Control circuit devices and switching elements
- Electromechanical control circuit devices

2011/65/EU

ROHS 2 EU Directive



02/04/2019
Assistant Manager
Quality System & Standards

*Refer Annexures for certifications

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