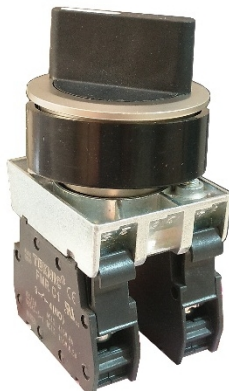


Model No.: **FMR4PSS2YY-2P**

Description: **Ø30.5 Metallic flush mounting series non illuminated 2 position selector pushbutton with regular handle**



### 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

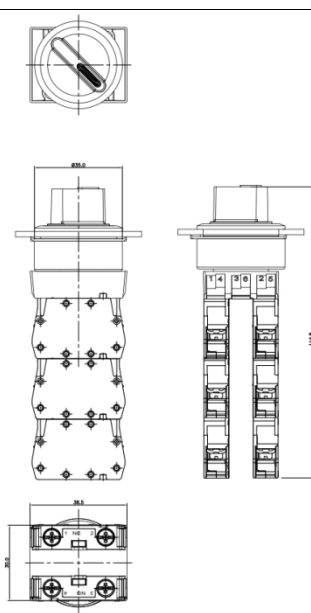
### General Characteristics:

It consists of one non illuminated FMR series 2 position selector actuator, suitable for Ø30.5 cutout, with Clip on metal bracket (4BRK) fitted with contact elements of FMR C... series. Refer Datasheet for FMR C1 element & Datasheet for FMR C2 element. The actuator has IP65 as degree of protection as per IEC 60529. A minimum of one contact element & a maximum of six 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	: <b>FMR4PSS2YY-2PSR (2 position spring return, 90° travel)</b> 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	CE
	: Contacts: CE cULus

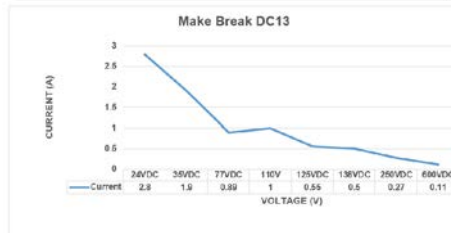
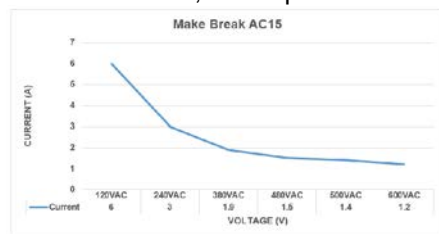
### Mechanical Characteristics:

Function indicator		<u>Front viewing:</u> Arrow provided on selector knob
Terminal Capacity		: Maximum 2X1.5mm <sup>2</sup> or 1X 2.5mm <sup>2</sup> : Minimum 1X0.5mm <sup>2</sup>
Terminal marking		: 1NC 2 & 3NO 4 : Customized markings on stickers available on request
Terminal Torque	Nm	: 0.8 Screw head compatible with Posidrive or Phillips screw driver
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	: NA
Positive operation Conforming to IEC/EN 60947-5-1 Appendix K		: All functions incorporating a NC contact are positive opening operation
Operating travel	mm	: NA
Mechanical life		: over 1 million operations
Ambient	°C	: -25 to +70
Storage	°C	: -25 to +40
Overall Dimensions with sketch (LXBXH)	mm	 : 115X40X30
Vibration resistance Conforming to IEC 60068-2-6	Hz	: Frequency 10Hz to 500Hz, Acceleration: 100m/s <sup>2</sup> , Amplitude: 0.75mm, Sweep: 1 octave/min
Shock resistance Conforming to IEC 60068-2-27		: Half sine wave, Acceleration: 300m/s <sup>2</sup> , Pulse: 11ms, 3 shock per axis, 12 shocks
Viewing Angle	°	: NA
Optical Axial intensity	mcd	: NA
Weight	gms	: Actuator: 58 : Pushbutton: 58 +10 for every single element

### Electrical Characteristics of contacts:

#### Make & Break Capacity

: AC15: 415VAC, 4A as per IEC 60947-5-1  
: DC13: 110VDC, 1A as per IEC 60947-5-1



: A600, Q600 (Upto 600V AC/DC)  
As per CSA C22.2 no. 14-10, UL 508

A500	IEC	120V, 6A	240V, 3A	380V, 1.9A	480V, 1.5A	500V, 1.4A	600V, 1.2A
Q600	IEC	125V, 0.55A	250V, 0.27A	400V, 0.15A	-	500V, 0.13	600V, 0.1A

A500	UL CSA	120V, 6A	240V, 3A	-	480V, 1.5A	-	600V, 1.2A
Q600	UL CSA	125V, 0.55A	250V, 0.27A	400V, 0.1A	480V, 0.1A	500V, 0.1A	600V, 0.1A

Electrical rating (for 1 million operation cycles at 3600 cycles per hour, load factor 0.5)

AC15		
V	24	230
A	4	2
DC13		
V	24	110
A	0.5	0.2

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  
Models: C1, C2 (cover mounting), C7 & C8 (Base mounting)  
(NO) (NC) (NO) (NC)

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 (with bracket):

<b>FMR</b> ↓ Flush Mounting Round	<b>4A</b> ↓ Metal Clip on Series Actuator	<b>S</b> ↓ Selector	<b>2</b> ↓ Indicates color 2-Black	<b>-2P</b> ↓ 2P= 2Position 2PSR=2Position Spring Return
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#### For actuator (without bracket):

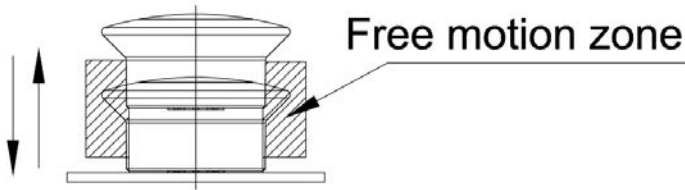
<b>FMR</b> ↓ Flush Mounting Round	<b>4A</b> ↓ Metal Clip on Series Actuator	<b>S</b> ↓ Selector	<b>2</b> ↓ Indicates color 2-Black	<b>-2P</b> ↓ 2P= 2Position 2PSR=2Position Spring Return	<b>NB</b> ↓ No Bracket
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#### For Pushbutton

<b>FMR</b> ↓ Flush Mounting Round	<b>4PS</b> ↓ Metal Clip on Series Pushbutton Switch	<b>S</b> ↓ Selector	<b>2</b> ↓ Indicates color 2-Black	<b>YY</b> ↓ 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	<b>-2P</b> ↓ 2P= 2Position 2PSR=2Position Spring Return
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### Mounting Instructions:

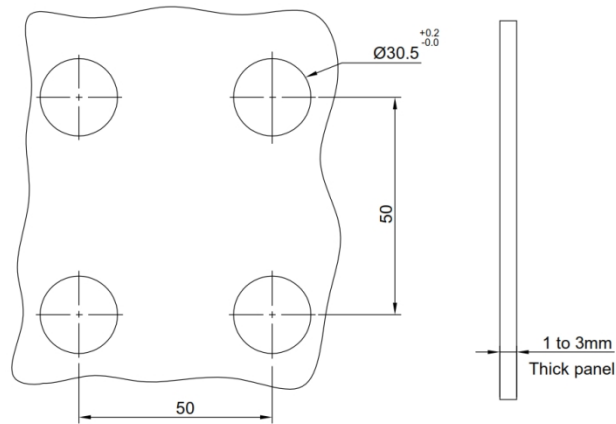
Safety regulations: This unit may be installed & commissioned by personnel who are familiar with current regulation for health & safety at work & accident prevention. Ensure local regulations are met especially those relating to safety. This is for use on flat surface of type 4X, 12 enclosure.



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

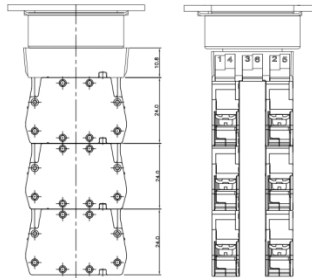
### Mounting

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



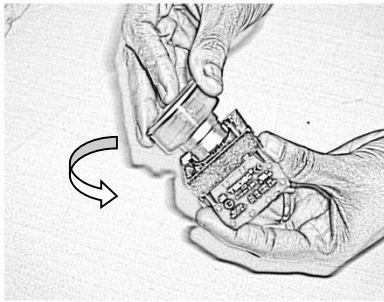
### No of elements possible

6 Nos. Max. Contact blocks can be mounted as shown below

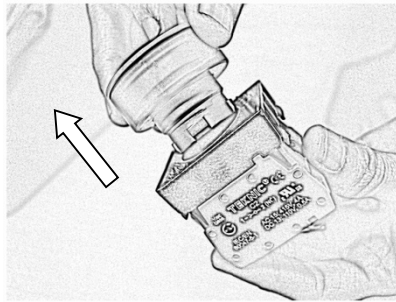


Elements are not to be mounted in the center position

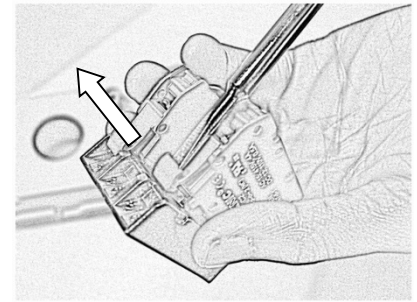
### To install:



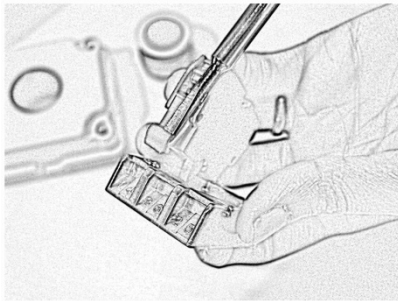
Turn the actuator in anticlockwise direction



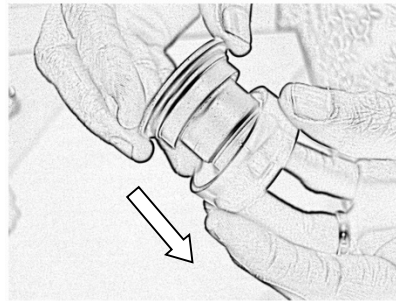
Remove the actuator from the bracket



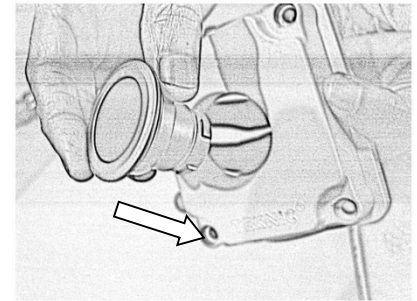
Insert screw driver in the element & twist the screw driver



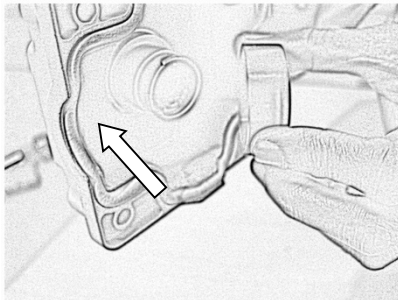
Release the contact element from the bracket



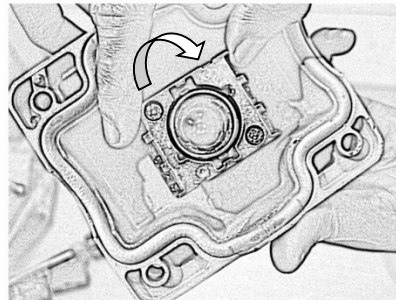
Remove the spacer from the actuator



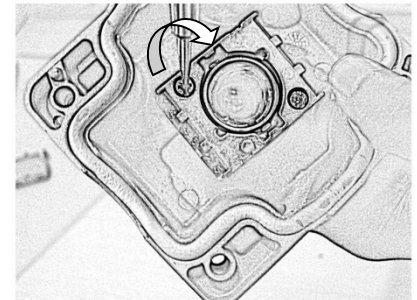
Insert the actuator in the Ø30.5 hole



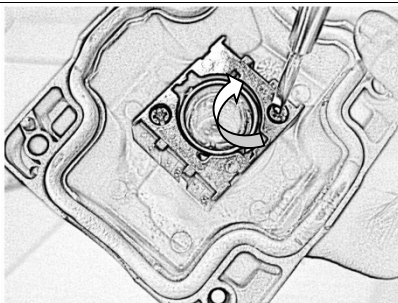
Insert the spacer from the rear side of the panel into the actuator



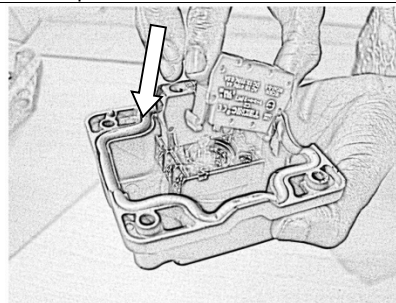
Insert the bracket in the actuator from the rear side of panel & turn in clockwise direction



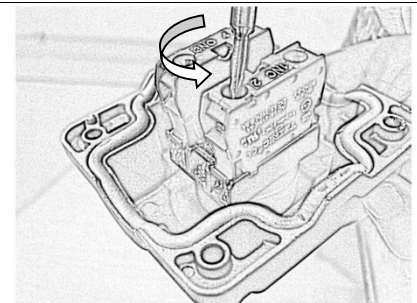
Tighten the lock screw with a torque of 1.2Nm



Tighten both the screws equally

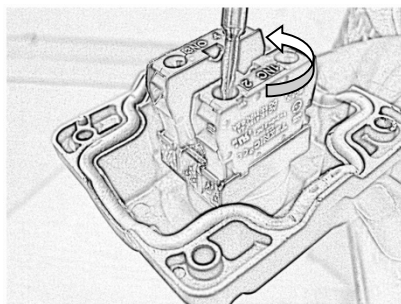


Press fit the element in the bracket

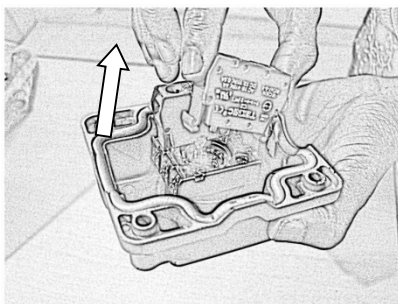


Open the terminal screws by turning in anticlockwise direction for wiring

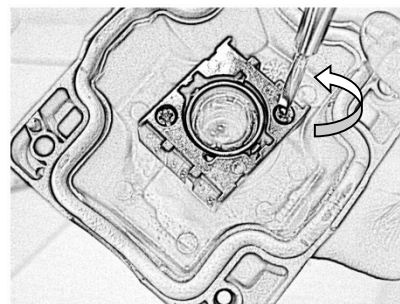
### To uninstall:



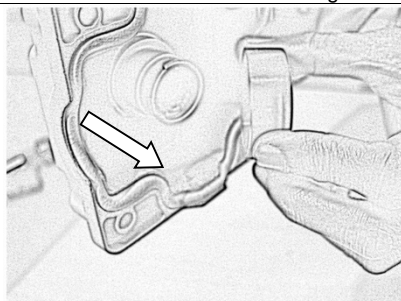
Open the terminal screws by turning in anticlockwise direction & release the wiring



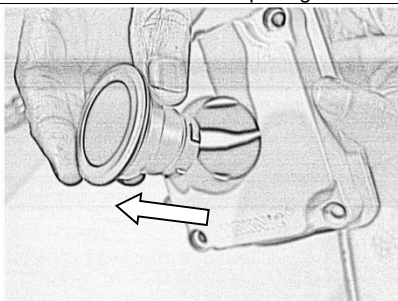
Remove the contact element by inserting the screw driver & pulling it



Loosen the lock screws in anticlockwise direction



Remove the spacer



Remove the actuator

Images are for representation only. Actual product may vary. If any more information is required, kindly contact our Marketing Department at +91-22-42532500 or email at [ram.talreja@teknico.in](mailto:ram.talreja@teknico.in)

Teknic Electric India Pvt Ltd may incorporate modification or improvements on its products at any time without notice, & therefore, in such events it is possible that the relevant part of this Data Sheet does not apply to your product.



# 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

#### **TEKNIC ELECTRIC (I) PRIVATE LIMITED**

65, Marol Co-operative Industrial Estate, M. Vasanji Road, Andheri(E), Mumbai 400059.  
Tel: 91-22-42534500; Fax: 91-22-28504273; Email: [mfg@teknico.co.in](mailto:mfg@teknico.co.in); <http://www.teknico.co.in>