

Model No.: FMR4PSLFLAXYY

Description: Ø30.5 Metallic flush mounting series non illuminated flush pushbutton momentary with lense



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 flush 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. It has transparent lens on top & a cap at the bottom to actuate the center element. A minimum of one contact element & a maximum of nine 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	: FMR4PSLFLAXYY X indicates color color=1-White,2-Black, 3-Green, 4-Red,5-Amber, 6-Blue, 7-Clear 8-Yellow 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	:(6	
	: Contacts: (& c Thus	

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Mechanical Characteristics:

Terminal Capacity : Maximum 2X1.5mm² or 1X 2.5mm² : Minimum 1X0.5mm² : Minimum 1X0.5mm² : 1NC 2 & 3NO 4 : Customized markings on stickers available on request : 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) : Slow break (NO/NC) Operating torque Operating force Positive operation Conforming to IEC/EN 60947-5-1 Appendix K Operating travel Mechanical life Ambient °C : -25 to +70 Storage Overall Dimensions with sketch (LXBXH) Vibration resistance Conforming to IEC 60068-2-6 Hz : Frequency 10Hz to 500Hz, Acceleration: 100m/s2, Amplitude: 0.75mm, Sweep: 1 octave/min	Function indicator		Front viewing: Marking can be provided on request			
Erminal marking : Minimum 1X0.5mm² : 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, Silver plated : Brass terminal, Silver rivet gold plated (Low Voltage application) : Slow break (NO/NC) Operating force N : 9 : All functions incorporating a NC contact are positive opening operation conforming to IEC/EN 60947-5-1 Appendix K Operating travel Mechanical life Ambient C C : 25 to +70 Storage C Verall Dimensions with sketch (LXBXH) Vibration resistance C Hz : Frequency 10Hz to 500Hz, Acceleration: 100m/s2, Amplitude: 0.75mm, Sweep: 1 octave/min	Terminal Capacity					
Customized markings on stickers available on request	,					
Customized markings on stickers available on request	Terminal marking		: 1NC 2 & 3NO 4			
Contact material Brass, Silver plated Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Brass terminal, Silver rivet gold plated (Low Voltage application) Br	C		: Customized markings on stickers available on request			
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Brass terminal, Silver rivet gold plated (Low Voltage application) Slow break (NO/NC)						
Operating torque Operating force Positive operation Conforming to IEC/EN 60947-5-1 Appendix K Operating travel Mechanical life Ambient Storage Overall Dimensions with sketch (LXBXH) Wibration resistance Conforming to IEC 60068-2-6 Slow break (NO/NC) : NA N : 9 : All functions incorporating a NC contact are positive opening operation : 2.5 : over 1 million operations : 2.5 to +70 : -25 to +70 : -25 to +40 mm Vibration resistance Conforming to IEC 60068-2-6	Contact material		: Brass, Silver plated			
Operating torque Operating force Positive operation Conforming to IEC/EN 60947-5-1 Appendix K Operating travel Mechanical life Ambient Storage Overall Dimensions with sketch (LXBXH) Vibration resistance Conforming to IEC 60068-2-6 Nn Signature			: Brass terminal, Silver rivet gold plated (Low Voltage application)			
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Storage Overall Dimensions with sketch (LXBXH) mm Vibration resistance Conforming to IEC 60068-2-6 C: -25 to +40 .: -25 to			: over 1 million operations			
Overall Dimensions with sketch (LXBXH) mm Vibration resistance Conforming to IEC 60068-2-6 mm Hz Frequency 10Hz to 500Hz, Acceleration: 100m/s2, Amplitude: 0.75mm, Sweep: 1 octave/min	Ambient	°C	: -25 to +70			
Vibration resistance Conforming to IEC 60068-2-6 Hz Frequency 10Hz to 500Hz, Acceleration: 100m/s2, Amplitude: 0.75mm, Sweep: 1 octave/min	Storage	°C	: -25 to +40			
Vibration resistance Conforming to IEC 60068-2-6 Hz Frequency 10Hz to 500Hz, Acceleration: 100m/s2, Amplitude: 0.75mm, Sweep: 1 octave/min	Overall Dimensions with sketch (LXBXH)	mm	935.0			
Conforming to IEC 60068-2-6 0.75mm, Sweep: 1 octave/min						
Conforming to IEC 60068-2-6 0.75mm, Sweep: 1 octave/min	Vibration resistance	Hz	: Frequency 10Hz to 500Hz, Acceleration; 100m/s2, Amplitude:			
	Shock resistance					
Conforming to IEC 60068-2-27 per axis, 12 shocks						
Viewing Angle : NA	Viewing Angle	0	: NA			
Optical Axial intensity mcd : NA		mcd				
Weight gms : Actuator: 55		gms	: Actuator: 55			
: Pushbutton: 55 +10 for every single element		_	: Pushbutton: 55 +10 for every single element			

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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 Make Break AC15 Make Break AC15		
		## 2400 SN/90 TY/90 1160 12800 2800 600 600 600 600 600 600 600 600 600		
Electrical rating (for 1 million operation cycles at 3600 cycles per hour, load factor 0.5)		AC15 V 24 120 230 A 4 3 2 DC13 V 24 110 A 0.5 0.2		
Rated insulation voltage	V	: 500		
Rated thermal current	Α	: 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		
District Test	10.7	prospective current		
Dielectric Test	KV	: 2.5		
Approvals regarding the part:		: CE		
Approvals regarding the material		· III. Popognized meterial		
Polymeric parts		: UL-Recognized material		
Rated Impulse Withstand		: NA		
Polarity protection	ma ^	: NA		
Current Consumption	mA	: NA		
Electrical Endurance		: Conforming to IEC/EN 60947-5-1 Annexure C		

Accessories & codes:

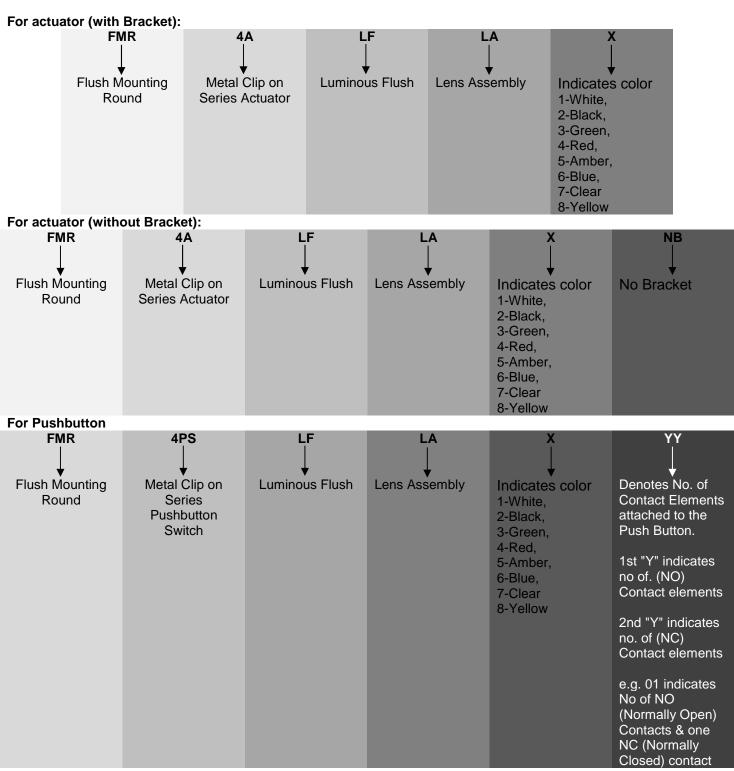
NA

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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.

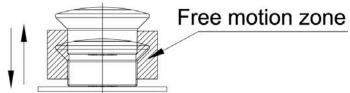


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Mounting Instructions:

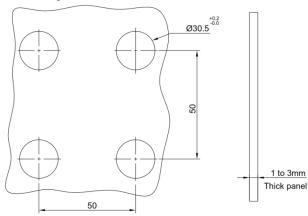
<u>Safety regulations:</u> This unit may be installed & commissioned by personnel who are familiar with current regulation for health & safety at work & accident prevention. Ensure local regulations are met especially those relating to safety. This is for use on flat surface of type 4X, 12 enclosure.



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

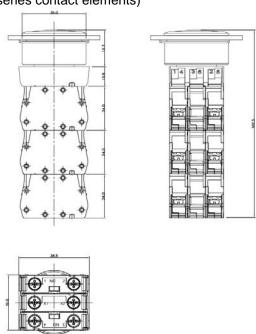
Mounting

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



No of elements possible

9 Nos. Max. Contact blocks can be mounted. (3*3 Nos.) (FMR C... series contact elements)

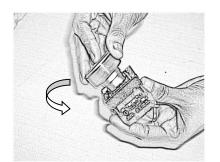


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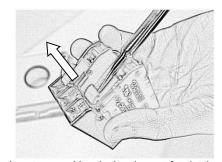
To install:



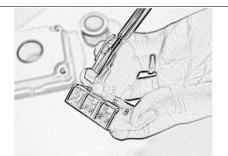
Turn the actuator in anticlockwise direction



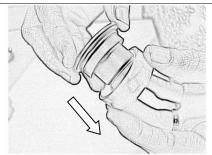
Remove the actuator from the bracket



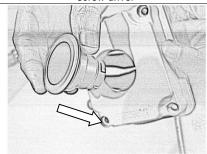
Insert screw driver in the element & twist the screw driver



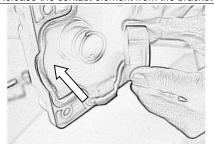
Release the contact element from the bracket



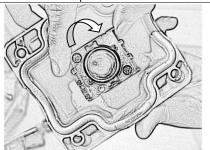
Remove the spacer from the actuator



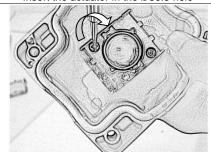
Insert the actuator in the Ø30.5 hole



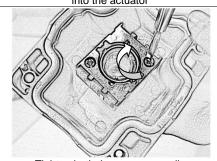
Insert the spacer from the rear side of the panel into the actuator



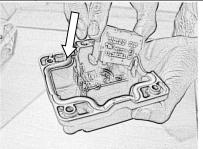
Insert the bracket in the actuator from the rear side of panel & turn in clockwise direction



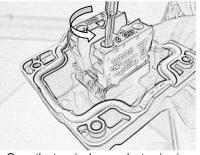
Tighten the lock screw with a torque of 1.2Nm



Tighten both the screws equally



Press fit the element in the bracket

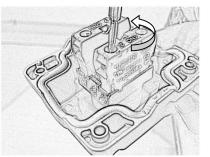


Open the terminal scews by turning in anticlockwise direction for wiring

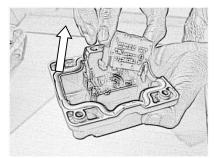
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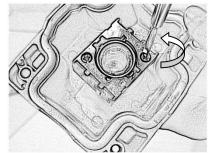
To uninstall:



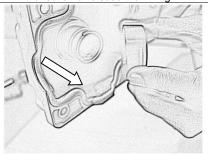
Open the terminal scews by turning in anticlockwise direction & release the wiring



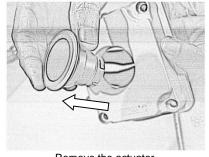
Remove the contact element by inserting the screw driver & pulling it



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@teknic.co.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.

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TEKNIC

MANUFACTURER DECLARATION

We.

TEKNIC ELECTRIC (I) PRIVATE LIMITED,

Marol Co-operative Industrial Estate,
 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	-Ø22.5	FMR4PSF
Flush pushbuttons		
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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