

Control & Signalling devices Ø 22.5 plastic construction  
Monoblock Series

MRP with effect from 10.07.2022



## Control and Signalling Device in plastic construction

### Salient Features

This range of Ø 22.5 devices plastic series namely Push Button switches, Selector Switches, Emergency Switches, Pilot Lights in engineering Plastic Construction, have been designed to provide our OEM customers and Panel Builders a compact series of products with a competitive edge. This range ensures cost efficiency and provides a high level of reliability and economy. Technical Features includes:

- Safe in Operation • Enables Control on inventory • Reliable performance • All in one function - complete function in one order code • Low built in Depth
- Single or two built in electrically separated contacts are provided (either 1 NO, 1NC, 2NO, 2NC or 1NO+1NC) • Economy of Space • Aesthically elegant
- Robust design • Larger operating surface than Ø 30.5 • Easy Mounting

### PUSH BUTTONS

The monoblock push buttons are circular in design, Ø 22.5. The combination is of an actuator and contact element, single or two built in electrically separated contacts 1NO, 1NC, 2NO, 2NC or 1NO+1NC. Different varieties / colours of Actuators available are described separately herewith with their images, where the respective dimensions of the devices are also given.

### PILOT LIGHTS:

Pilot Lights are available with integral LEDs, suitable for operating at various voltages, namely 6V, 12V, 24V, 30V, 48V, 63V, 110V, 125V AC/DC, 240VAC & 220VDC. Any other voltage & test function available on request. The pilot lights can also be offered with dual colour LEDs with different colour combinations for 12V to 240V AC/DC. The pilot lights with integral LEDs are also available suitable for operating at any universal voltage between 24V and 240V AC/DC.

### Terminals

Push Button Contacts and Pilot Lights are designed to have shrouded terminals with Combi Screws.

### Fixing

The integrated push button and pilot light range can be fixed in any position on panels of 1 to 5 mm thickness. The recommended fixing centres are 30 mm x 40 mm. The push button and pilot light are fixed on the panel with the help of locking nut.

### Specifications of 103 series:

Details of these control devices, Ø 22.5 are detailed below:

#### A. Mechanical Durability

Push Button	Spring Return	Million Operations	1
	Selector		0.5
	Latching Type		0.1
	Mushroom Type		0.02

#### B. Standards & Conditions

Applicable Standard	UL 508, IEC 60947-5-1, CSA 22.2
Degree of Protection	IP54 (as per IEC 60947-5-1)
Operating Conditions	+70°C to -25°C
Mounting	Confirming to IEC 60947-5-1 Finished fixing hole: 22.5mm recommended (22.3+0.4/0) Fixing Centres: 30*40mm Min, (Unless otherwise indicated) Mounting Panel thickness: metal: 1 to 6mm, double insulated: 2 to 6mm

#### C. Electrical Characteristics


Rating		<b>For AC:</b> C300=120V, make current 15A & break current 1.5A (Thermal current = 2.5A) <b>For DC:</b> R300= 125V make or break current 0.22A, (Thermal current = 1.0A)
Type of contact		N/C or N/O or C/O Slow Break
Positive operation		All functions incorporating an NC contact have positive opening (IEC 60947-5-1)
Terminal Capacity	Cabling	2X1.5mm <sup>2</sup> (Pin type lugs) 1X0.5mm <sup>2</sup> (min) (Pin / fork type lugs) 1X2.5mm (max) (Pin / fork type lugs)
Screw Clamp tightening torque		0.8 N.m. (nominal recommended) 1.2 N.m(Max)
Short Circuit Protection		4A (gG cartridge fuse) (IEC 60947-5-1)
Rated insulation Voltage		Ui = 250V (Degree of pollution 3)
Rated impulse withstand voltage		Uimp = 6kV (IEC 60947-1)
Dielectric Test		2.5KV (IEC 60947-5-1)
Rated insulation resistance		50MΩ (IEC 60947-1)
Vibration Test		15 gn (Frequency 40-500 Hz) (IEC 60068-2-6)
Shock Test		70 gn (½ sine wave for 6ms) (IEC 60068-2-27)
	Emergency stop	15 g (½ sine wave for 11ms) (IEC 60068-2-27)

#### D. Pilot light with integral LED / multichip LED bulb (BA9S cap)

Current consumptions (applicable to all colours)	
24 VAC/DC, 110 VAC & 240 VAC	max. 20 mA
110 VDC	max. 10 mA
220 VDC	max. 10 mA
Service life (at nominal voltage & at ambient temperature of 25 °C)	50,000 hours
Voltage limits (nominal voltage)	< 20% of rated voltage >
Short circuit protection	on specific request
Terminal capacity	min. 1 x 0.5 mm <sup>2</sup> , max. 2 x 1.5 mm <sup>2</sup> or 1 x 2.5 mm <sup>2</sup>

MRP w.e.f. 10.07.2023

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PLASTIC SERIES (ECONOMY SERIES)


MOMENTARY FLUSH PUSH BUTTONS				
	TYPE	COLOUR	ORDERING CODE	PRICE IN Rs.
		White	3PSF110	110.00
	<b>Flush push</b>	Black	3PSF210	110.00
	button with 1NO	Green	3PSF310	110.00
	contact element	Red	3PSF410	110.00
		Blue	3PSF610	110.00
		Yellow	3PSF810	110.00
		White	3PSF101	110.00
	<b>Flush push</b>	Black	3PSF201	110.00
	button with 1NC	Green	3PSF301	110.00
	contact element	Red	3PSF401	110.00
		Blue	3PSF601	110.00
		Yellow	3PSF801	110.00
		White	3PSF111	150.00
	<b>Flush push</b>	Black	3PSF211	150.00
	button with	Green	3PSF311	150.00
	1NO+1NC	Red	3PSF411	150.00
	contact element	Blue	3PSF611	150.00
		Yellow	3PSF811	150.00
		White	3PSF120	150.00
	<b>Flush push</b>	Black	3PSF220	150.00
	button with 2NO	Green	3PSF320	150.00
	contact element	Red	3PSF420	150.00
		Blue	3PSF620	150.00
		Yellow	3PSF820	150.00
		White	3PSF102	150.00
		Black	3PSF202	150.00
	<b>Flush push</b>	Green	3PSF302	150.00
	button with 2NC	Red	3PSF402	150.00
	contact element	Blue	3PSF602	150.00
		Yellow	3PSF802	150.00



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**LATCHING FLUSH PUSH BUTTONS**

	TYPE	COLOUR	ORDERING CODE	PRICE IN Rs.
		White	3PSFPP110	125.00
	<b>Flush push -</b>	Black	3PSFPP210	125.00
	push button with	Green	3PSFPP310	125.00
	1NO contact element	Red	3PSFPP410	125.00
		Blue	3PSFPP610	125.00
		Yellow	3PSFPP810	125.00
		White	3PSFPP101	125.00
	<b>Flush push -</b>	Black	3PSFPP201	125.00
	push button with	Green	3PSFPP301	125.00
	1NC contact element	Red	3PSFPP401	125.00
		Blue	3PSFPP601	125.00
		Yellow	3PSFPP801	125.00
		White	3PSFPP111	165.00
	<b>Flush push -</b>	Black	3PSFPP211	165.00
	push button with	Green	3PSFPP311	165.00
	1NO+1NC	Red	3PSFPP411	165.00
	contact element	Blue	3PSFPP611	165.00
		Yellow	3PSFPP811	165.00
		White	3PSFPP120	165.00
	<b>Flush push -</b>	Black	3PSFPP220	165.00
	push button with	Green	3PSFPP320	165.00
	2NO contact element	Red	3PSFPP420	165.00
		Blue	3PSFPP620	165.00
		Yellow	3PSFPP820	165.00
		White	3PSFPP102	165.00
	<b>Flush push -</b>	Black	3PSFPP202	165.00
	push button with	Green	3PSFPP302	165.00
	2NC contact element	Red	3PSFPP402	165.00
	Blue	3PSFPP602	165.00	
	Yellow	3PSFPP802	165.00	



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MUSHROOM LATCHING PUSH BUTTONS				
	TYPE	COLOUR	ORDERING CODE	PRICE IN Rs.
	Mushroom Latching Ø 40mm with 1NO contact element	Red	3PSML410	180.00
	Mushroom Latching Ø 40mm with 1NC contact element	Red	3PSML401	180.00
	Mushroom Latching Ø 40mm with 1NO+1NC contact element	Red	3PSML411	220.00
	Mushroom Latching Ø 40mm with 2NO contact element	Red	3PSML420	220.00
	Mushroom Latching Ø 40mm with 2NC contact element	Red	3PSML402	220.00






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<b>SELECTOR PUSH BUTTONS</b>				
	<b>TYPE</b>	<b>COLOUR</b>	<b>ORDERING CODE</b>	<b>PRICE IN Rs.</b>
	Selector push button, 2 position, with 1 NO contact element	Black	3PSS210-2P	210.00
	Selector push button, 2 position, with 1 NC contact element	Black	3PSS201-2P	210.00
	Selector push button, 2 position, with 1 NO + 1 NC contact element	Black	3PSS211-2P	250.00
	Selector push button, 2 position, with 2 NO contact element	Black	3PSS220-2P	250.00
	Selector push button, 2 position, with 2 NC contact element	Black	3PSS202-2P	250.00



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SELECTOR PUSH BUTTONS				
	TYPE	COLOUR	ORDERING CODE	PRICE IN Rs.
	Selector push button, 3 position, with 1NO+1NC Contact Element	Black	3PSS211-3P	250.00
	Selector push button, 3 position, with 2NO contact element	Black	3PSS220-3P	250.00
	Selector push button, 3 position, with 2NC contact element	Black	3PSS202-3P	250.00

**GENERAL TERMS AND CONDITIONS**

General Terms : Prices are ex-works Mumbai  
HSN CODE : 85365010 for all the products of this MRP List  
GST : 18%

Prices are subject to revision without notice and ruling at the time of delivery.

This price list supersedes all previous Price Lists.

Warranty Policy : **TEKNIC equipment is guaranteed under the following terms:**

For a period of 12 months from the date of sale, TEKNIC guarantees that its products are free from defects in material and workmanship, with the exception of consumables rendered unserviceable through normal use. During the said period, TEKNIC will replace or repair all parts acknowledged as defective due to factory workmanship and which have been returned in a timely manner by Buyer to TEKNIC and all costs and duties paid, together with a detailed description of the failure and a certified declaration of the number of hours of operation. Repaired or replaced parts will be redelivered FCA (named place) as per INCOTERMS 2000. This warranty is subject to the provision of correct usage, proper maintenance and does not cover defects arising out of fire, faulty operation, accident, inefficient maintenance and willful or accidental damage.

TEKNIC guarantee applies to all equipment, parts and components stored, installed, protected, maintained and used in accordance with TEKNIC specifications and instructions, and respecting the rules for normal use, without any modification by Buyer.

All other conditions or warranties, whether express or implied, relating to the quality and operation of the equipment are excluded, as well as any liability for loss or damage caused directly or indirectly by the equipment or resulting from its use.

Proof of purchase to be provided to avail warranty.

**TEKNIC ELECTRIC (I) PVT. LTD.**

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