

# TEKNIC

CE 

Control and Signaling Devices Ø 30.5 Series



## SALIENT FEATURES

The Ø30.5 range of pushbuttons, selector actuators, pilot lights and illuminated pushbuttons have been designed to provide the following salient features:

- Aesthetically elegant
- Easy and rapid mounting
- Dust, moisture and oil tight
- Robust in material of construction
- SELF WIPING CONTACTS
- Safe in operation
- Long mechanical and electrical life

The control devices are designed for flush mounting on control panels, desks and machines with plate thickness upto 6mm. Their dust, moisture and oil tight construction make them specially suitable for application in power plants, steel plants, cement plants, coal handling plants, foundries machine tools etc. Booted pushbuttons are used in very dusty atmospheres.

The pushbuttons comprises of the actuators and contact element. The actuator is designed to contain a full umbrella type of special rubber diaphragm inside the actuator housing in order to provide dust, moisture and oil tight onstruction. The different types of actuators include shrouded, unshrouded booted, mushroom spring return or stayput, mushroom jumbo, selector, key, luminous. Different versions including dust proofing version are described in detail in TEKNIC price list.

The contact element comprises of a contact housing, fixed and moving silver tipped contacts, a slider and a transparent cover through which the contacts can be inspected in operation. Contacts are double break are **self wiping** which ensures long life. Each contact element provides 1NO and 1NC contact. Each unit can take upto 4 contact elements. Separate contact elements can be used on different phases or polarities.

The pilot lights and illuminated pushbuttons are suitable for direct supply or supply through series resistor, using bayonet cap filament bulb.

The pilot light can also be provided with neon bulbs. Replacement of the bulb is easily done by unscrewing the front ring, holding the lense. Pilot lights can be provided with either glass or polycarbonate lenses in the following standard colours

- TRANSLUCENT WHITE
- GREEN
- RED
- AMBER
- BLUE
- CLEAR

Supply voltage for direct connection or without series resistor: 6V-230V

Supply voltage for direct connection with series resistor : 24V-230V

Pilot lights can also be supplied with neon bulbs upto a voltage of 500V

## FIXING

The control devices Ø30.5 can be fixed in any position on panel of 1 to 6mm thickness. They are secured from the front by means of a fixing ring. A set of rubber gaskets is supplied to provide water proofing and tightness between the unit and the panel. The exact number of rubber gaskets is to be selected depending upon the panel thickness. Fixing centres of 60mm are recommended between control stations to provide sufficient space for convenient terminal connections and assembly of legend plates.

The pushbutton can be either be mounted as complete unit on the front of the panel or the contact can be individually mounted with the actuator on the panel front plate. Also the pilot light can either be mounted as a complete unit on the front of the panel or the pilot light holder can be individually mounted with the lense on the front of the panel.

### ELECTRICAL AND MECHANICAL CHARACTERISTICS

Rated insulation voltage	: 500V AC, 600V DC
Rated thermal current	: 10A
Contact operation	: Self wiping, slow double break, 1 NO + 1 NC
Make and break capacity (13947-5-1)	: AC15: 4A 415V : DC13: 0.5A 110V
Terminal capacity	: Maximum 2x1.5mm <sup>2</sup> : Minimum 1X0.5mm <sup>2</sup>
Ambient temperature	: -25°C to +70°C
Altitude	: < 3000 metres
Operating position	: All positions
Degree of protection	: IP 65
Mechanical life	: Over 1 million operations

### ORDERING INSTRUCTIONS

- Actuators, illuminated actuators, contact elements, pilot lights can be ordered separately or in combination.
- No prefix before all actuators and combinations indicates Ø30.5 series
- Numerical colour code has been added as suffix to indicate colour of the actuator or lense as follows:  

Colour of Actuator:	White	Black	Green	Red	Yellow	Blue	-
Colour of Lense:	Translucent white	-	Green	Red	Amber	Blue	Clear
Colour code:	1	2	3	4	5	6	7
- The type number of contact elements are S11, S12, S21, S22. All these have 1NO+1NC contacts. S11 is for mounting directly to actuator and S12 for coupling to S11 for obtaining 2NO+2NC. S21 is for individual mounting and S22 is for coupling for S21 for 2NO+2NC

### BULBS

Filament Bulbs type BA15d

Voltage:	6	12	24	48	110	220
Wattage (max)	5-7	5-7	5-7	5-7	5-7	5-7

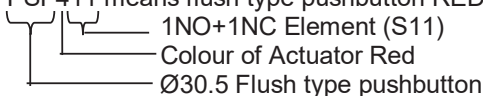
### LEGEND PLATES

Legend plates are supplied with the following standards texts

START	FORWARD	UP	ON	OPEN	AUTO	SLOW	RESET
STOP	REVERSE	DOWN	OFF	CLOSE	HAND	FAST	INCH

### TYPE NUMBERS

Some examples of type number

Actuator	Type AF3 means type actuator Ø30.5 GREEN
Pilot Light	Type PLB4 means pilot light without resistor RED Type PLBR3 means pilot light with series resistor GREEN
Complete Pushbutton	Type PSF411 means flush type pushbutton RED with 1NO+1NC 

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NON ILLUMINATED ACTUATOR			
	TYPE	COLOUR	ORDERING CODE
		White	AF1
	Flush Momentary	Black	AF2
		Green	AF3
		Red	AF4
		Blue	AF6
		Yellow	AF8
		White	AP1
	Projecting Momentary	Black	AP2
		Green	AP3
		Red	AP4
		Blue	AP6
		Yellow	AP8
		Black	AB2
	Booted Momentary	Green	AB3
		Red	AB4
		Blue	AB6
		Yellow	AB8
			
	Mushroom Momentary Head Ø 40mm	Black	AM2
		Red	AM4
			
	Jumbo Mushroom Momentary Head Ø 60mm	Black	AMJ2
		Red	AMJ4

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## NON ILLUMINATED ACTUATOR

	TYPE	COLOUR	ORDERING CODE
	Mushroom	Black	AML2
	Latching	Red	AML4
	Head Ø 40mm		
	Jumbo Mushroom	Black	AMLJ2
	Latching	Red	AMLJ4
	Head Ø 40mm		
	Key Mushroom		
	Latching	Red	AMLKB4
	Head Ø 40mm		
	<b>SELECTOR</b>		
	2 Position STAY PUT	Black	AS2-2P
			
	2 Position MOMENTARY	Black	AS2-2PSR
			
3 Position STAY PUT	Black	AS2-3P	
			

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## NON ILLUMINATED ACTUATOR



TYPE	COLOUR	ORDERING CODE
2 Position Stayput		AK-2PB
		AK-2PO
		AK-2PI
Spring Return		AK-2POSR
3 Position Key Stayput		AK-3PA
		AK-3PB
		AK-3PO
		AK-3PI
* X stands for position in which key is removable		





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ILLUMINATED FLUSH ACTUATOR WITH LED BULB			
	Type	Colour of LED / Lens	Ordering Code
<b>Illuminated Flush Actuator, Spring Return</b>			
	LED Bulb, MCB15 type	White LED Bulb / White Lens	ALF1LB(S)
	24V AC/DC,	Green LED Bulb / Green Lens	ALF3LB
	110VAC, 110VDC	Red LED Bulb / Red Lens	ALF4LB
	230VAC, 220VDC	Amber LED Bulb / Amber Lens	ALF5LB
		Blue LED Bulb / Blue Lens	ALF6LB
		White LED Bulb / Clear Lens	ALF7LB(S)
		Yellow LED Bulb / Yellow Lens	ALF8LB
Bayonet Bulb LED	Please mention the voltage required after the ordering code		
<b>PILOT LIGHT WITH INTEGRAL LED</b>			
	Integral LED	White LED / White Lens	PLBR1L(S)
	6V, 12V, 24V, 48V AC/DC	Green LED / Green Lens	PLBR3L
	110VAC, 110VDC,	Red LED / Red Lens	PLBR4L
	230VAC, 220VDC	Amber LED / Amber Lens	PLBR5L
		Blue LED / Blue Lens	PLBR6L
		White LED / Clear Lens	PLBR7L(S)
		Yellow LED / Yellow Lens	PLBR8L
Integral LED	Please mention the voltage required after the ordering code		
		White LED Bulb / White Lens	PLB1LB(S)
	LED Bulb, MCB15 type	Green LED Bulb / Green Lens	PLB3LB
	24V AC/DC,	Red LED Bulb / Red Lens	PLB4LB
	110VAC, 110VDC	Amber LED Bulb / Amber Lens	PLB5LB
	230VAC, 220VDC	Blue LED Bulb / Blue Lens	PLB6LB
		White LED Bulb / Clear Lens	PLB7LB(S)
		Yellow LED Bulb / Yellow Lens	PLB8LB
LED Bulb	Please mention the voltage required after the ordering code		

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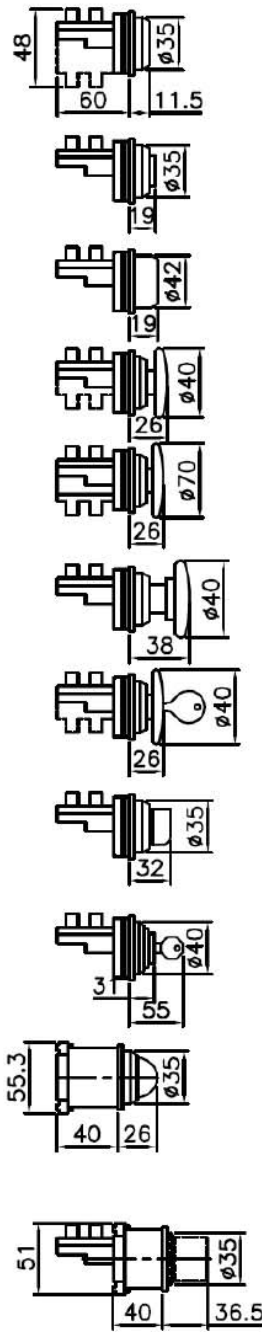
CONTACT ELEMENTS	
	TYPE
	ACTUATOR MOUNTING
 <p>S11                  S12</p>  <p>S11 + S12</p>	<p>1NO+1NC</p> <hr/> <p>1NO+1NC Coupled to S11 to provide 2NO+2NC</p>
	BASE MOUNTING
 <p>S21                  S22</p>  <p>S21 + S22</p>	<p>1NO+1NC</p> <hr/> <p>1NO+1NC Coupled to S21 to provide 2NO+2NC</p>



# Control and signalling devices $\phi 30.5$

## Some common types

Description	Type of Actuator	Type of Actuator or Lens	Colour of Element S11 (1NO + 1NC)	Type of Complete Control Device
Flush Pushbutton	AF3	Green	1NO + 1NC	PSF311
	AF8	Yellow	2NO + 2NC	PSF822
Projecting Pushbutton	AP2	Black	1NO + 1NC	PSP211
	AP4	Red	3NO + 3NC	PSP433
Booted Pushbutton	AB3	Green	1NO + 1NC	PSB311
	AB4	Red	2NO + 2NC	PSB422
Mushroom Pushbutton (Spring return)	AM2	Black	1NO + 1NC	PSM211
Mushroom Jumbo Pushbutton (Spring return)	AMJ4	Red	4NO + 4NC	PSMJ444
Mushroom Pushbutton Latching. Turn to Release.	AML2	Black	1NO + 1NC	PSML211
	AML4	Red	2NO + 2NC	PSML422
Mushroom Pushbutton Latching. Key to Release.	AMLKB4	Red	1NO + 1NC	PSMLKB411
Selector Actuator (2 Pos.)	AS2-2P	Black	1NO + 1NC	PSS211-2P
Selector Actuator (3 Pos.)	AS2-3P	Black	2NO + 2NC	PSS222-3P
Key Actuator (2 Pos.)	AK2-2P		1NO + 1NC	PSK211-2P
Key Actuator (3 Pos.)	AK2-3P		2NO + 2NC	PSK222-3P
Pilot Light for direct connection upto 230V (LED Bulb)		Red		PLB4LB (240V AC)
Pilot Light through series resistor for 230V (LED Bulb)		Green		PLBR3LB (240V AC)
Illuminated Pushbutton direct connection upto 230V (LED Bulb)	AL5LB	Amber	1NO + 1NC	PSL5LB11 (230V)



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