

# TEKNIC



CONTROL  
AND  
SIGNALLING  
DEVICES  
Ø 30.5

### SALIENT FEATURES

The Ø 30.5 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 pushbutton comprises of the actuator 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 construction. The different types of actuators include shrouded, unshrouded, booted, mushroom spring return or stayput type, 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 and **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 lights can also be provided with neon bulbs. Replacement of the bulbs is easily done by unscrewing the front ring, holding the lense. Pilot lights are provided with polycarbonate lenses in following standard colours :

- TRANSLUSCENT WHITE
- GREEN
- RED
- AMBER
- BLUE
- CLEAR
- YELLOW

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 Ø 30.5 can be fixed in any position on panels 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 devices to provide sufficient space for convenient terminal connections and assembly of legend plates.

The pushbuttons can either be mounted as a complete unit on the front of the panel or the contact element 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 (IS 6875(1) - 1973 and IEC337-I)	: AC 11 : 10A, 415A DC 11 : 1A, 220V at 10 milliseconds time constant.
Terminal capacity	: Maximum 2 x 1.5mm <sup>2</sup> Minimum 1 x 0.5mm <sup>2</sup>
Ambient temperature	: -25°C to 70°C
Altitude	: < 3000 meters
Operating positions	: All positions
Degree of protection	: IP 65
Mechanical life	: Over 1 million operations.

**ORDERING INSTRUCTIONS**

1. Actuators, illuminated actuators, contact elements, pilot lights can be ordered separately or in combination.
2. No prefix before all actuators and combinations indicates Ø 30.5 series.
3. 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	-	Blue	-	Yellow
Colour of Lense	: Transluscent white	-	Green	Red	Amber	Blue	Clear	Yellow
Colour code	: 1	2	3	4	5	6	7	8

4. 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 to S21 for 2NO + 2NC.

**BULBS**

Filament Bulbs type BA15d

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

**LEGEND PLATES**

Legend plates are supplied with the following standard 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 flush type actuator Ø 30.5 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 pushbutton RED with 1 NO + 1 NC
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- PSF411 means flush pushbutton with 1 NO + 1 NC contact element and with extra dust proofing cover.
  - Dust proof cover
  - 1 NO + 1 NC Element (S11)
  - Colour of Actuator Red
  - Ø 30.5 Flush type Pushbutton.

## Control and signalling devices Ø 30.5

Some common types

Description	Type of Actuator	Colour of Actuator or Lense	Contact Element S11 (1 NO + 1 NC)	Type of Complete Control Device	
Flush Pushbutton	AF3	Green	1 NO + 1 NC	PSF311	
	AF8	Yellow	2 NO + 2 NC	PSF822	
Projecting Pushbutton	AP2	Black	1 NO + 1 NC	PSP211	
	AP4	Red	3 NO + 3 NC	PSP433	
Booted Pushbutton	AB3	Green	1 NO + 1 NC	PSB311	
	AB4	Red	2 NO + 2 NC	PSB422	
Mushroom Pushbutton (Spring return)	AM2	Black	1 NO + 1 NC	PSM211	
Mushroom Jumbo Pushbutton (Spring return)	AMJ4	Red	4 NO + 4 NC	PSMJ444	
Mushroom Pushbutton Latching. Turn to Release.	AML2	Black	1 NO + 1 NC	PSML211	
	AML4	Red	2 NO + 2 NC	PSML422	
Mushroom Pushbutton Latching. Key to Release.	AMLKB4	Red	1 NO + 1 NC	PSMLKB411	
Selector Actuator (2 Pos.)	AS2-2P	Black	1 NO + 1 NC	PSS211-2P	
Selector Actuator (3 Pos.)	AS2-3P	Black	2 NO + 2 NC	PSS222-3P	
Key Actuator (2 Pos.)	AK2-2P		1 NO + 1 NC	PSK211-2P	
			2 NO + 2 NC	PSK222-3P	
Pilot Light for direct connection upto 230V		Red		PLB4 (230V)	
		Green		PLBR3 (230V)	
Illuminated Pushbutton direct connection upto 230V	AL5	Amber	1 NO + 1 NC	PSL511 (230V)	
Illuminated Pushbutton through series resistor for 230V.	ALR4	Red	1 NO + 1 NC	PSLR411 (230V)	

### OTHER PRODUCTS

Control Stations : Supplied in dust and vermin proof cast aluminium enclosures suitable for IP 65 level of protection, in grey hammertone synthetic enamel paint. Stations can also be supplied in epoxy paint. Different combinations of pushbuttons, pilot lights, ammeters, with/without terminals duly wired are supplied in standard size enclosures :

- ONE WAY : 90mm x 90mm
- THREE WAY : 90mm x 180mm
- SIX WAY : 200mm x 200mm
- TWO WAY : 90mm x 135mm
- FOUR WAY : 90mm x 225mm
- NINE WAY : 200mm x 250mm

Other products include terminals, appliance controlgear and Ø 22.5 controlgear products.

For further details please refer to us.

# TEKNIC

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