



# Push Buttons & Illuminated Push Buttons

## General Information

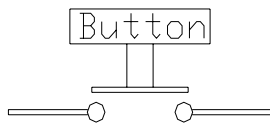
### Specification

Item	Push Buttons	Illuminated Push Buttons
Ambient Operating Temperature	-20 ~ +55°C	
Ambient Operating Humidity	45 ~ 85%RH	
Altitude	2,000m or less	
Degree of Protection	IP65(IEC529)	
Rated Insulation Voltage	AC,DC6000V	Full Voltage : 250V AC/DC Transformer : 600V AC/DC
Rated Operational Voltage	24V, 48V, 110, 220V	
Rated Operating Current	1.5A~10A	
Rated Thermal Current	10Amp	
Strength of operation part	250N.m/1min (Mushroom Type : 375N.m/1min)	
Terminal Screw size	M3.5	
Recommended Terminal Torque	0.8N.m	
Operation power	about 11N.m (1NO-1NC)	
Temperature Rise	400deg or less (Terminal)	
Insulation Resistance	100MΩ (500VMegger)	
Withstand Voltage (between live parts and ground)	AC2, 500V/1 min	Lighting part AC2, 000V/1 min Full Voltage Type AC2,000V/1min
Contact Resistance	30mΩ or less	
Mechanical life	1000000 (1800operation per 1 hour)	
Electric life	1,000,000	
Shock Resistance	100m/S <sup>2</sup>	
Impact resistance	15m/S <sup>2</sup>	



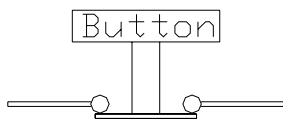
# Contact & Movement

## ○ NO Contact



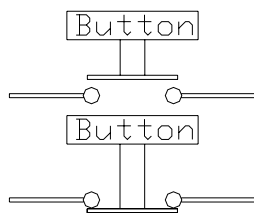
For **1NO**, the push button connection is as shown. When button is pushed in the line is connected but when release the line return to its original position.

## ○ NC Contact



For **1NC**, the push button connection is as shown. When current is supplied the line is connected. When button is pushed in the line will be disconnected but when release the line connection returns to its original position and the line will be connected again.

## ○ 1NO-1NC Contact



For **1NO-1NC**, the push button has two way of connections that is 1NO connection or 1NC connection. The user can choose the connections way by connecting to the point indicated in the buttons.

**Remarks** : For **2NO 2NC** the connections are the same as explained above, but it can control 2 lines at one time.

## Type of Movement

**Momentary** : When push the button the line connects and when release the connection is off.

**Alternating** : Push the button once and release, line is connected. Once again push and release the line return to its original position.



1NO



2NO


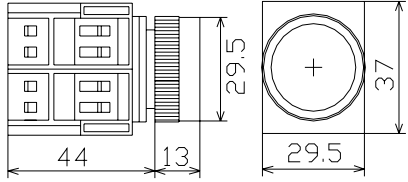

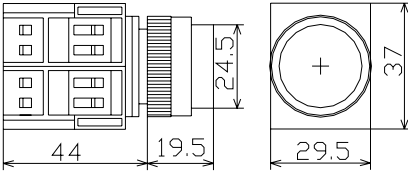

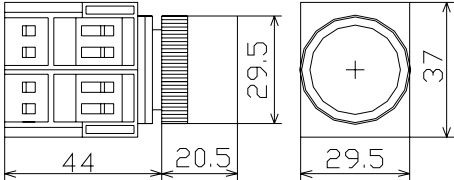

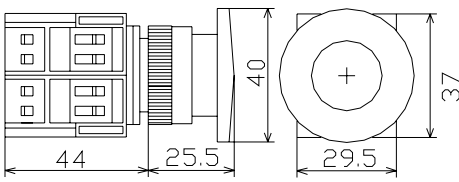

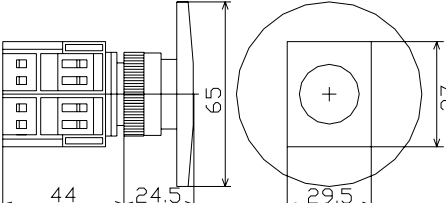


1NO 1NC


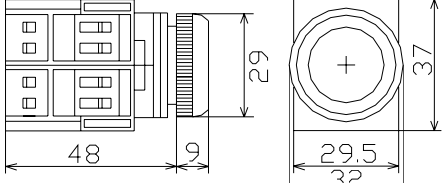

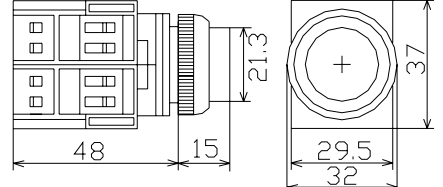

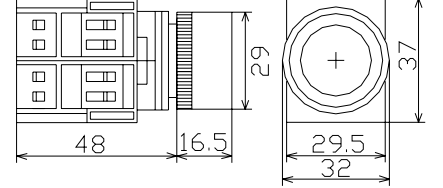

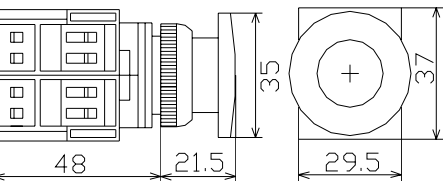

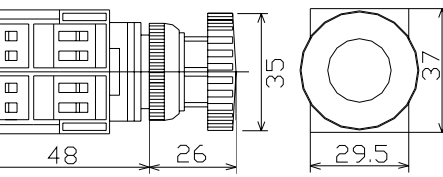


2NO 2NC


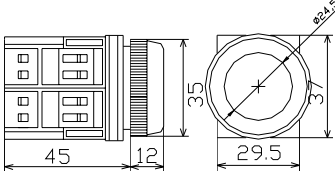

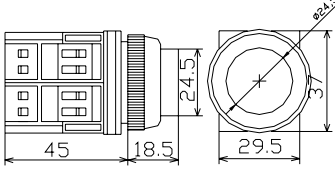

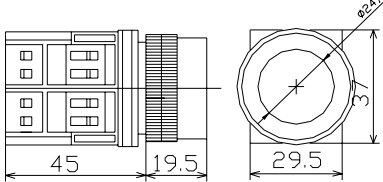

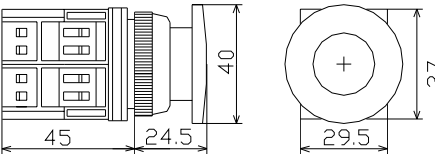

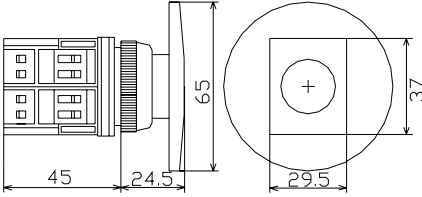

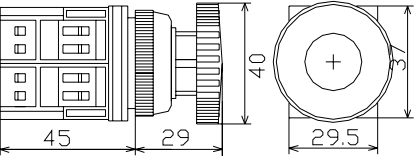
## T22 (φ 22mm) Push Button Model list

φ 22 Flush	Size	Form
		Momentary <b>T22PF③④⑤</b> Alternate <b>T22PFH③④⑤</b>
φ 22 Extended	Size	Form
		Momentary <b>T22PT③④⑤</b> Alternate <b>T22PTH③④⑤</b>
Extended with Full Shroud	Size	Form
		Momentary <b>T22PCM③④⑤</b> Alternate <b>T22PCMH③④⑤</b>
φ 22 Mushroom	Size	Form
		Momentary <b>T22PD③④⑤</b> Alternate <b>T22PDH③④⑤</b>
φ 22 Large Mushroom	Size	Form
		Momentary <b>T22PR③④⑤</b> Alternate <b>T22PRH③④⑤</b>

# T25 (φ 25mm) Push Button Model list

φ 25 Flush	Size	Form
		Momentary <b>T25PF③④⑤</b> Alternate <b>T25PFH③④⑤</b>
φ 25 Extended	Size	Form
		Momentary <b>T25PT③④⑤</b> Alternate <b>T25PTH③④⑤</b>
Extended with Full Shroud	Size	Form
		Momentary <b>T25PCM③④⑤</b> Alternate <b>T25PCMH③④⑤</b>
φ 25 Mushroom	Size	Form
		Momentary <b>T25PD③④⑤</b> Alternate <b>T25PDH③④⑤</b>
φ 25 Push Lock Turn Reset	Size	Form
		Momentary <b>T25PR③④⑤</b> Alternate <b>T25PRH③④⑤</b>

## T30 ( $\phi$ 30mm) Push Button Model list

<p><b><math>\phi</math> 30 Flush</b></p> 	<p><b>Size</b></p> 	<p><b>Form</b></p> <p>Momentary  <b>T30PF③④⑤</b>                      Alternate  <b>T30PFH③④⑤</b></p>
<p><b><math>\phi</math> 30 Extended</b></p> 	<p><b>Size</b></p> 	<p><b>Form</b></p> <p>Momentary  <b>T30PT③④⑤</b>                      Alternate  <b>T30PTH③④⑤</b></p>
<p><b>Extended with Full Shroud</b></p> 	<p><b>Size</b></p> 	<p><b>Form</b></p> <p>Momentary  <b>T30PCM③④⑤</b>                      Alternate  <b>T30PCMH③④⑤</b></p>
<p><b><math>\phi</math> 30 Mushroom</b></p> 	<p><b>Size</b></p> 	<p><b>Form</b></p> <p>Momentary  <b>T30PD③④⑤</b>                      Alternate  <b>T30PDH③④⑤</b></p>
<p><b><math>\phi</math> 30 Large Mushroom</b></p> 	<p><b>Size</b></p> 	<p><b>Form</b></p> <p>Momentary  <b>T30PR③④⑤</b>                      Alternate  <b>T30PRH③④⑤</b></p>
<p><b><math>\phi</math> 30 Push lock Turn Reset</b></p> 	<p><b>Size</b></p> 	<p><b>Form</b></p> <p>Momentary  <b>T30PR③④⑤</b>                      Alternate  <b>T30PRH③④⑤</b></p>

# Illuminated Push Buttons

T30    FA    ( )    24 11    R    LH  
 ①            ②            ③            ④    ⑤            ⑥            ⑦

## ① Series Type

T22..... φ 22

T25..... φ 25

T30..... φ 30

## ② Lens Shape

### ● Full Voltage Type

FA.....Extended

FAG...Extended with Full Shroud

FTD...Mushroom(T22 & T30 φ 40mm)  
(T25 φ 35mm)

FAM.... Push lock Turn Reset  
(T25 φ 35mm) (T30 φ 40mm)

### ● Transformer Type

FA.....Extended

FAG...Extended with Full Shroud

FTD...Mushroom(T22 & T30 φ 40mm)  
(T25 φ 35mm)

FAM.... Push lock Turn Reset  
(T25 φ 35mm) (T30 φ 40mm)

## ③ Function

Blank.....Momentary

H.....Maintained (Alternate)

## ④ Rated Operating Voltage

### ● Full Voltage

**Incandescent**

**LED**

18 : 18V AC/DC

12 : 12V AC/DC

24 : 24V AC/DC

24 : 24V AC/DC

30 : 30V AC/DC

48 : 48V AC/DC

100 : 100V AC/DC

### ● Transformer Type

100 : 100-110V AC

200 : 200-220V AC

.400 : 400-440V AC

## ⑤ Contact Arrangement

10 : 1NO

01 : 1NC

11 : 1NO1NC

20 : 2NO

02 : 2NC

22 : 2NO2NC

30 : 3NO

03 : 3NC

33 : 3NO3NC

44 : 4NO4NC

## ⑥ Color Code

R: Red

G: Green

Y: Yellow

W: White

H: Blue


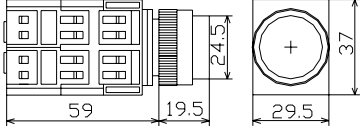

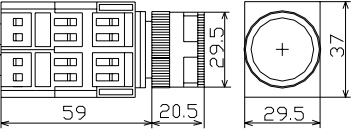

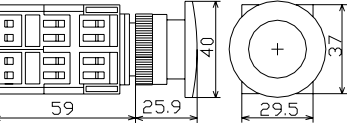
O: Orange

## ⑦ Lamp Type


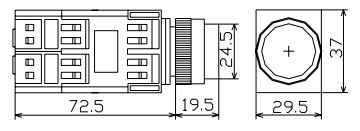

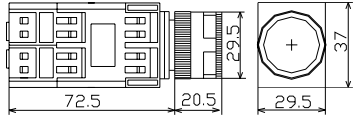

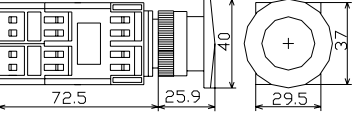
Blank.....Incandescent Lamp

LH.....LED


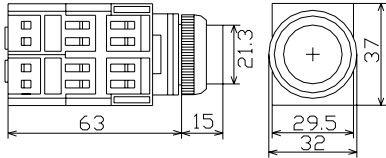

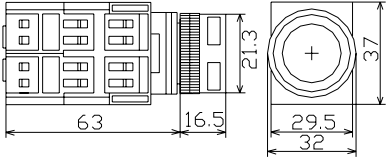

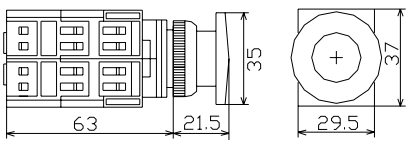

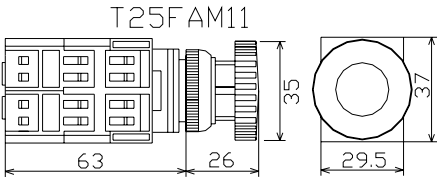
## φ 22mm Full Voltage type (AC/DC 6V – 100V)

<p><b>φ 22 Extended Lens</b></p> 	<p><b>Size</b></p> <p>T22FA11 / T22FAH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T22FA④⑤⑥⑦</p> <p><b>Maintained</b> T22FAH④⑤⑥⑦</p>
<p><b>Extended Lens with Full Shroud</b></p> 	<p><b>Size</b></p> <p>T22FA11 / T22FAH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T22FAG④⑤⑥⑦</p> <p><b>Maintained</b> T22FAGH④⑤⑥⑦</p>
<p><b>φ 22 Mushroom Lens</b></p> 	<p><b>Size</b></p> <p>T22FA11 / T22FAH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T22FAD④⑤⑥⑦</p> <p><b>Maintained</b> T22FADH④⑤⑥⑦</p>

## φ 22 Transformer Type (AC 100V – 440V)

<p><b>φ 22 Extended Lens</b></p> 	<p><b>Size</b></p> <p>T22FT11 / T22FTH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T22FT④⑤⑥⑦</p> <p><b>Maintained</b> T22FTH④⑤⑥⑦</p>
<p><b>Extended Lens with Full Shroud</b></p> 	<p><b>Size</b></p> <p>T22FTG11 / T22FTGH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T22FTG④⑤⑥⑦</p> <p><b>Maintained</b> T22FTGH④⑤⑥⑦</p>
<p><b>φ 22Mushroom Lens</b></p> 	<p><b>Size</b></p> <p>T22FTD11 / T22FTDH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T22FTD④⑤⑥⑦</p> <p><b>Maintained</b> T22FTDH④⑤⑥⑦</p>


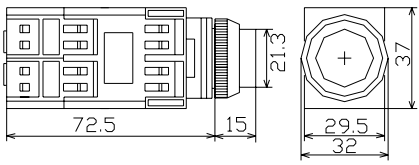

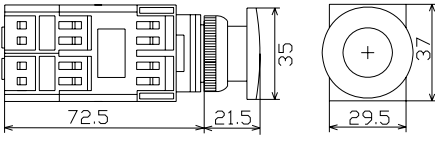

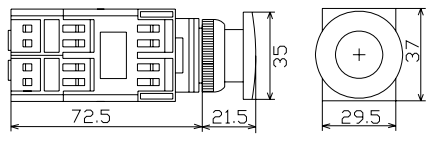

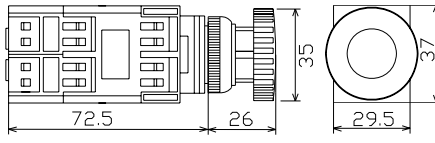
## φ 25mm Full Voltage type (AC/DC 6V – 100V)

<p><b>φ 25 Extended Lens</b></p> 	<p><b>Size</b></p> <p>T25FA11 / T25FAH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T25FA④⑤⑥⑦</p> <p><b>Maintained</b> T25FAH④⑤⑥⑦</p>
<p><b>Extended Lens with Full Shroud</b></p> 	<p><b>Size</b></p> <p>T25FAG11 / T25FAGH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T25FAG④⑤⑥⑦</p> <p><b>Maintained</b> T25FAGH④⑤⑥⑦</p>
<p><b>φ 25 Mushroom Lens</b></p> 	<p><b>Size</b></p> <p>T25FAD11 / T25FADH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T25FAD④⑤⑥⑦</p> <p><b>Maintained</b> T25FADH④⑤⑥⑦</p>
<p><b>φ 25 Push lock turn Reset</b></p> 	<p><b>Size</b></p> <p>T25FAM11</p> 	<p><b>Form</b></p> <p>T25FAM④⑤⑥⑦</p>

### EX) T25FAG2411LH

Size	: φ 25.....T25
Button Shape	: Extended with Full Shroud.....FAG(Full Voltage)
Function	: Momentary.....(Blank)
Rated Operating Voltage	: 24V DC.....24
Contact Arrangement	: 1NO-1NC.....11
Lamp type	: LED Lamp.....LH


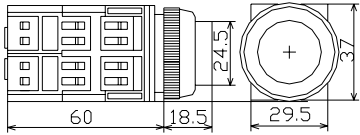

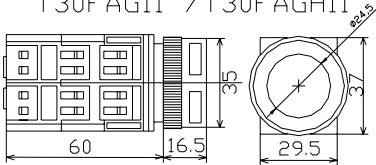

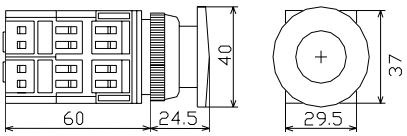

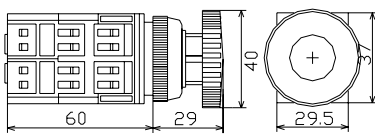
## φ 25mm Transformer Type (AC 100V – 440V)

<p><b>φ 25 Extended Lens</b></p> 	<p><b>Size</b></p> <p>T25FT11 / T25FTH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T25FT④⑤⑥⑦</p> <p><b>Maintained</b> T25FTH④⑤⑥⑦</p>
<p><b>Extended Lens with Full Shroud</b></p> 	<p><b>Size</b></p> <p>T25FTD11 / T25FTDH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T25FTG④⑤⑥⑦</p> <p><b>Maintained</b> T25FTGH④⑤⑥⑦</p>
<p><b>φ 25 Mushroom Lens</b></p> 	<p><b>Size</b></p> <p>T25FTD11 / T25FTDH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T25FTD④⑤⑥⑦</p> <p><b>Maintained</b> T25FTDH④⑤⑥⑦</p>
<p><b>φ 25 Push lock turn Reset</b></p> 	<p><b>Size</b></p> <p>T25FTM11</p> 	<p><b>Form</b></p> <p>T25FTM④⑤⑥⑦</p>


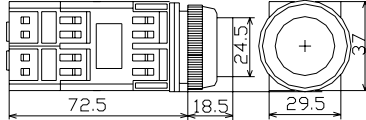

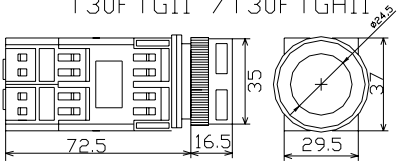

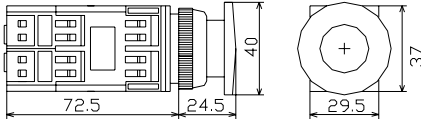

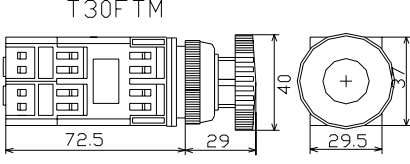
### EX) T25FT2422

Size	: φ 25.....T25
Button Shape	: Extended.....FT(Transformer Type)
Function	: Momentary.....(Blank)
Rated Operating Voltage	: 200V AC.....200-220V AC
Contact Arrangement	: 2NO-2NC.....22
Lamp type	: Incandescent Lamp.....(Blank)

## φ 30mm Full Voltage type (AC/DC 6V – 100V)

<p><b>φ 30 Extended Lens</b></p> 	<p><b>Size</b></p> <p>T30FA11 / T30FAH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T30FA④⑤⑥⑦</p> <p><b>Maintained</b> T30FAH④⑤⑥⑦</p>
<p><b>Extended Lens with Full Shroud</b></p> 	<p><b>Size</b></p> <p>T30FAG11 / T30FAGH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T30FAG④⑤⑥⑦</p> <p><b>Maintained</b> T30FAGH④⑤⑥⑦</p>
<p><b>φ 30 Mushroom Lens</b></p> 	<p><b>Size</b></p> <p>T30FGA11 / T30FAGH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T30FAD④⑤⑥⑦</p> <p><b>Maintained</b> T30FADH④⑤⑥⑦</p>
<p><b>φ 30 Push lock turn Reset</b></p> 	<p><b>Size</b></p> <p>T30FAM</p> 	<p><b>Form</b></p> <p>T30FAM④⑤⑥⑦</p>

## φ 30mm Transformer Type (AC 100V – 440V)

<p><b>φ 30 Extended Lens</b></p> 	<p><b>Size</b></p> <p>T30FT11 / T30FTH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T30FT④⑤⑥⑦</p> <p><b>Maintained</b> T30FTH④⑤⑥⑦</p>
<p><b>Extended Lens with Full Shroud</b></p> 	<p><b>Size</b></p> <p>T30FTG11 / T30FTGH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T30FTG④⑤⑥⑦</p> <p><b>Maintained</b> T30FTGH④⑤⑥⑦</p>
<p><b>φ 30 Mushroom Lens</b></p> 	<p><b>Size</b></p> <p>T30FTD11 / T30FTDH11</p> 	<p><b>Form</b></p> <p><b>Momentary</b> T30FTD④⑤⑥⑦</p> <p><b>Maintained</b> T30FTDH④⑤⑥⑦</p>
<p><b>φ 30 Push lock turn Reset</b></p> 	<p><b>Size</b></p> <p>T30FTM</p> 	<p><b>Form</b></p> <p>T30FTM④⑤⑥⑦</p>