



# Industrial Control Switches

## Global Specifications:

Utilization Category:	AC-15; A600; 3 A at 240 V; 1,9 A at 380 V DC-13; P600; 0,55 A at 250 V
Rated thermal current:	10 A
Rated insulation voltage:	650 V
Minimum load:	3 V, 5 mA
Contact resistance:	50 mOhm max.
Insulation resistance:	> 100 M at 500 V DC
Dielectric strength:	2500 V, 50 Hz for the duration of 1 minute
Operating temperature:	illuminated components: -25 °C to +55 °C others: -25 °C to +70 °C
Storage temperature:	-40 °C to +85 °C
Operation/storage humidity:	45 to 85 % RH
Ingress Protection:	IP65 from front
Contamination class:	3
Vibration resistance:	10-55 Hz, 0.5 mm
Shock resistance:	10 G (Malfunction), 100 G (Destruction)
Mechanical life:	Emergency switch: 300k cycles Pushbutton (momentary): 5M cycles Pushbutton (latching): 500k cycles Pushbutton (E3 special type): 1M cycles Selector and Keyselector: 500k cycles
Electrical life:	Emergency switch: 100k cycles others: 500k cycles
Operation force (for ref. only):	Emergency switch: 30 N Momentary: 35 N Latching: 25 N E3 special type: 25 N Selector and Keyselector: 0.2 to 0.6 Nm
Contact Design:	positive break for NO contacts
Nominal diameters:	22, 25, 30 mm
Number of contact blocks per unit:	5 max.
Referenced safety standards:	UL508, CSA 22.2 No. 4, EN60947-5-1, EN60947-5-5

## Ordering code for

page 225, first 2 types: ICE   P   -   0 - L

### Mounting hole:

- 22 mm
- 25 mm
- 30 mm

### Knob function:

- 1 flush, momentary
- 2 flush, latching
- 3 raised, momentary
- 4 raised, latching

### Bezel:

- R round
- Q square

### Knob color:

- W white
- K black
- R red
- O orange
- Y yellow
- G green
- B blue

### Function:

- 0 momentary, no illumination
- 1 latching, no illumination
- 2 momentary, illumination
- 3 latching, illumination

### Contacts:

- 10 1 NO
- 01 1 NC
- 11 1 NO, 1 NC
- 20 2 NO
- 21 2 NO, 1 NC etc.
- 41 4 NO, 1 NC
- 14 1 NO, 4 NC

### only for illuminated parts:

#### LED voltage:

- 06 6 V ac/dc
- 12 12 V ac/dc
- 24 24 V ac/dc
- A1 110 V ac
- A2 220 V ac

#### LED color:

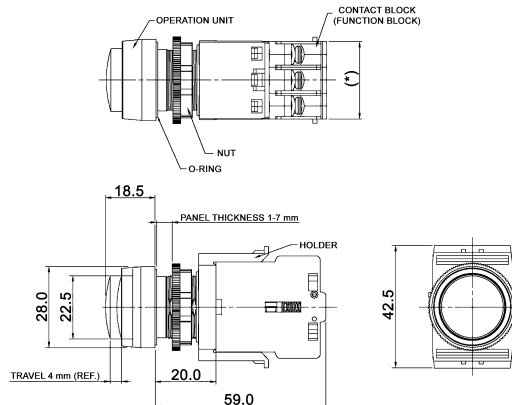
- R red
- B blue
- W white
- Y yellow
- G green



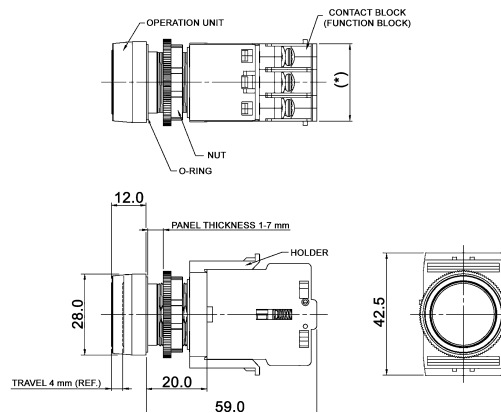
# Pushbuttons for Industrial Controls

Type:

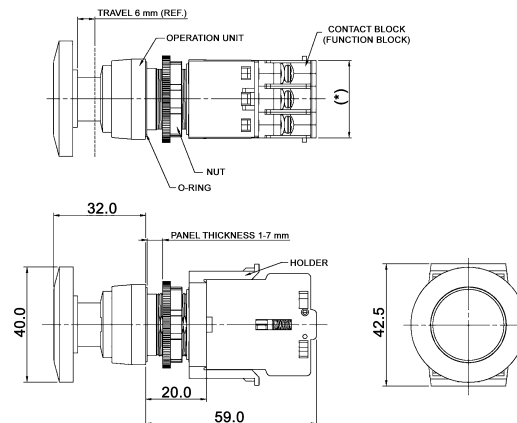
ICE 22RP3K-2100



ICE 22RP2R-0210



ICE 22RE3G-1020-LA2G



Ordering code for last type:

ICE   E  -   0 - L

Mounting hole:

- 22 mm
- 25 mm
- 30 mm

Actuator function:

- 3 momentary

Bezel:

- R round
- Q square

Actuator color and style:

- R red, disc illuminated
- G green, disc illuminated
- R1 red, disc
- RM1 red, flat mushroom
- YM1 yellow, flat mushroom
- BM1 blue, flat mushroom
- GM1 green, flat mushroom
- KM1 black, flat mushroom
- RM2 red, high mushroom
- YM2 yellow, high mushroom
- BM2 blue, high mushroom
- GM2 green, high mushroom
- KM2 black, high mushroom

Function:

- 0 no illumination
- 2 illumination

Contacts:

- 10 1 NO
- 01 1 NC
- 11 1 NO, 1 NC
- 20 2 NO
- 21 2 NO, 1 NC etc.
- 41 4 NO, 1 NC
- 14 1 NO, 4 NC

only for illuminated parts:

LED voltage:

- 06 6 V ac/dc
- 12 12 V ac/dc
- 24 24 V ac/dc
- A1 110 V ac
- A2 220 V ac

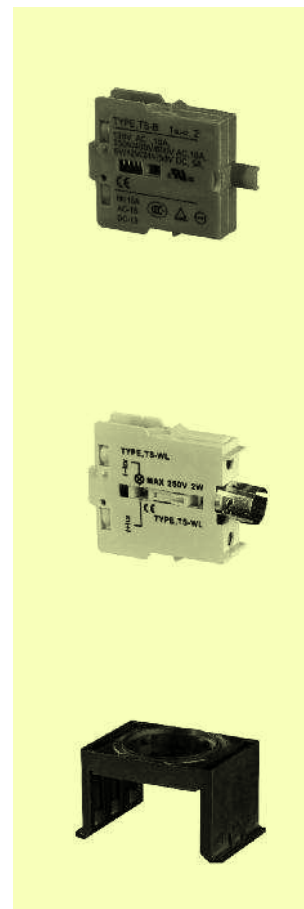
LED color:

- R red
- B blue
- W white
- Y yellow
- G green



# Accessories for Industrial Control Switches

Models:	Switching functions
ICE TS-A	contact block 1a (NO), green
ICE TS-B	contact block 1b (NC), red
ICE TS-W	latch module (needed for latching pusbuttons), grey
ICE TS-L	LED-socket, yellow
ICE TS-WL	latch module w/ LED socket, grey (needed for illuminated latching pushbuttons)
ICE AC-00-M3	holder for 3 contact blocks
ICE AC-00-M5	holder for 5 contact blocks (without picture)



Further available (examples, others on request) are:

ICE AC00-T1	socket wrench
ICE AC00-K1	spare keys (2 pcs.) for key selector
ICE AC00-R22	O-Ring, 22 mm
ICE L24B	LED-lamp, 24 V, blue