



## NP8 Series Pushbuttons

### 1. General

Electric ratings: AC50/60Hz, AC415V/DC250V;  
Degree of protection: IP65  
Standard: IEC/EN60947-5-1

### 2. Operating conditions

- 2.1 Ambient temperature is  $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$ , the average temperature during 24 hours couldn't exceed  $+35^{\circ}\text{C}$ .
- 2.2 Altitude:  $\leq 2000\text{m}$ .
- 2.3 Atmosphere condition: Relative humidity of the atmosphere couldn't exceed 50% when the highest temperature is  $+40^{\circ}\text{C}$ ; much higher relative humidity is allowable under the condition of lower temperature, for example, when the temperature reaches  $+20^{\circ}\text{C}$ , the relative humidity is up to 90%. As for dews, which contingently appear due to change of temperature, special steps should be taken.
- 2.4 Pollution grade: 3
- 2.5 Installation category: II
- 2.6 Tightening torque is  $0.8 \sim 1.2\text{N}\cdot\text{m}$  for the cable terminals.  
Cross section of the cable connection is  $0.5 \sim 2.5\text{mm}^2$ , and 8mm conductor length is needed.

### 3. Technical data

3.1 Refer to table below for rated values related to utilization category.

AC-15	Rated operational voltage,V	415	240	120
	Rated operational current,A	1.9	3	6
DC-13	Rated operational voltage,V	250	125	-
	Rated operational current,A	0.27	0.55	-

3.2 Refer to table 3 for basic parameters of illuminated pushbutton.

Basic parameters	LED lamp
Rated operational current	$\leq 20\text{mA}$
Rated operational voltage	AC/DC 6V,12V,24V,36V,AC110V~230V

### 3.3 Durability

Mechanical life:

Flush, mushroom-headed and illuminated version:

$3 \times 10^6$  operation circles.

Rotary, double-headed, self-locking and keyed version:

$1 \times 10^5$  operation circles.

Electric life:

Flush, mushroom-headed and illuminated version:

AC  $1 \times 10^6$  / DC  $2.5 \times 10^5$  operation circles.

Rotary, double-headed, self-locking and key type button:

$1 \times 10^5$  operation circles.



3.4 Short-circuit protective device: gG16

### 4. Features


- 4.1 Operating mechanism features  
bright colors and streamline surface.
- 4.2 Modular design.  
Operating system, adapter, contact system and illuminating system can be freely combined to realize different functions.
- 4.3 Convenient for mounting  
and dismounting thanks to snap-on structure.
- 4.4 Automatic locking function of the central adaptor makes it convenient and reliable for mounting and connection.
- 4.5 The terminal screw is available  
with anti-loosening mechanism to protect it against loosening from the body during transportation.
- 4.6 LED lamp with high brightness and long service life ensures reliable indication.

## 5. NP8 pushbutton

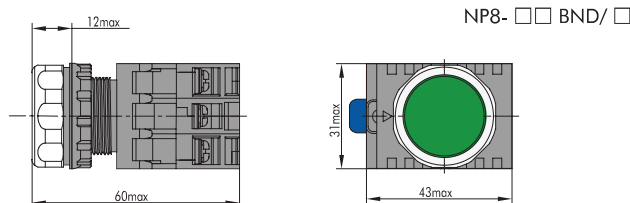
### ★ Momentary Flush Pushbutton-(Non illuminated)


NP8- □□ BN/ □□	Model	Color	1	2
	NP8-10BN/1	○	1	-
	NP8-10BN/2	●	1	-
	NP8-10BN/3	●	1	-
	NP8-10BN/4	●	1	-
	NP8-10BN/5	●	1	-
	NP8-10BN/6	●	1	-
	NP8-01BN/1	○	-	1
	NP8-01BN/2	●	-	1
	NP8-01BN/3	●	-	1
	NP8-01BN/4	●	-	1
	NP8-01BN/5	●	-	1
	NP8-01BN/6	●	-	1
	NP8-20BN/1	○	2	-
	NP8-20BN/2	●	2	-
	NP8-20BN/3	●	2	-
	NP8-20BN/4	●	2	-
	NP8-20BN/5	●	2	-
	NP8-20BN/6	●	2	-
	NP8-02BN/1	○	-	2
	NP8-02BN/2	●	-	2
	NP8-02BN/3	●	-	2
	NP8-02BN/4	●	-	2
	NP8-02BN/5	●	-	2
	NP8-02BN/6	●	-	2
	NP8-11BN/1	○	1	1
	NP8-11BN/2	●	1	1
	NP8-11BN/3	●	1	1
	NP8-11BN/4	●	1	1
	NP8-11BN/5	●	1	1
	NP8-11BN/6	●	1	1

### ★ Momentary Flush Pushbutton-illuminated AC/DC6V, 12V, 24V, 36V, AC110V~230V

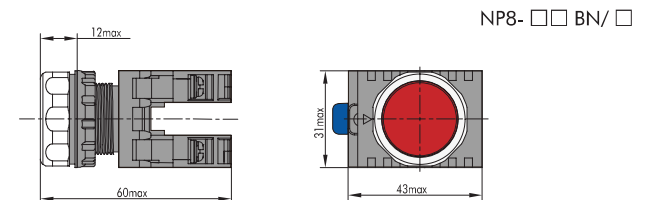
NP8- □□ BND/ □□	Model	Color	1	2
	NP8-10BND/1	○	1	-
	NP8-10BND/3	●	1	-
	NP8-10BND/4	●	1	-
	NP8-10BND/5	●	1	-
	NP8-10BND/6	●	1	-
	NP8-01BND/1	○	-	1
	NP8-01BND/3	●	-	1
	NP8-01BND/4	●	-	1
	NP8-01BND/5	●	-	1
	NP8-01BND/6	●	-	1
	NP8-11BND/1	○	1	1
	NP8-11BND/3	●	1	1
	NP8-11BND/4	●	1	1
	NP8-11BND/5	●	1	1
	NP8-11BND/6	●	1	1


Dimension(mm)



NP8- □□ BN/ □□	Model	Color	1	2
	NP8-30BN/1	○	3	-
	NP8-30BN/2	●	3	-
	NP8-30BN/3	●	3	-
	NP8-30BN/4	●	3	-
	NP8-30BN/5	●	3	-
	NP8-30BN/6	●	3	-
	NP8-03BN/1	○	-	3
	NP8-03BN/2	●	-	3
	NP8-03BN/3	●	-	3
	NP8-03BN/4	●	-	3
	NP8-03BN/5	●	-	3
	NP8-03BN/6	●	-	3
	NP8-12BN/1	○	1	2
	NP8-12BN/2	●	1	2
	NP8-12BN/3	●	1	2
	NP8-12BN/4	●	1	2
	NP8-12BN/5	●	1	2
	NP8-12BN/6	●	1	2
	NP8-21BN/1	○	2	1
	NP8-21BN/2	●	2	1
	NP8-21BN/3	●	2	1
	NP8-21BN/4	●	2	1
	NP8-21BN/5	●	2	1
	NP8-21BN/6	●	2	1

Dimension(mm)



NP8- □□ BND/ □□	Model	Color	1	2
	NP8-20BND/1	○	2	-
	NP8-20BND/3	●	2	-
	NP8-20BND/4	●	2	-
	NP8-20BND/5	●	2	-
	NP8-20BND/6	●	2	-
	NP8-02BND/1	○	-	2
	NP8-02BND/3	●	-	2
	NP8-02BND/4	●	-	2
	NP8-02BND/5	●	-	2
	NP8-02BND/6	●	-	2
	NP8-11BND/1	○	1	1
	NP8-11BND/3	●	1	1
	NP8-11BND/4	●	1	1
	NP8-11BND/5	●	1	1
	NP8-11BND/6	●	1	1

NP8	-	0	1	BN	1	/	RED	AC/DC 24V
Product Series		NO Contact Quantity	NC Contact Quantity	Function	Additional Function		Color	Control Voltage
		1 2 3	1 2 3	BN: flush button BND: illuminated flush button GN: projecting button GND: illuminated projecting button M: mushroom button MD: illuminated mushroom button ZS: latching mushroom button X: selector XD: illuminated selector Y: key selector S: double head button SD: illuminated double head button D: indicator light	for mushroom button: 1: Φ40mm 2: Φ60mm 3: Φ30mm for selector: 21: 2-position, latching 22: 2-position, self-return 31: 3-position, latching 33: 3-position, self-return 37: 3-position, latching on the left, self-return on the right 38: 3-position, latching on the right, self-return on the left		WHT: white RED: red GRN: green BLU: blue YEL: yellow BLK: black ORG: orange	AC/DC 12V AC/DC 24V AC/DC 36V AC 110~220V AC 110~230V

Type	Color or Function	Contact	Model Description	Code
Illuminated selector	Blue, 3-position, latching on the left, self-return on the right, AC/DC 24V LED	2 NC	NP8-02XD/37 BLU AC/DC 24V	578891
Illuminated selector	Blue, 3-position, latching on the left, self-return on the right, AC 110V-220V LED	2 NC	NP8-02XD/37 BLU AC 110V-220V	578903
Illuminated selector	Blue, 3-position, latching on the left, self-return on the right, AC 110V-230V LED	2 NC	NP8-02XD/37 BLU AC110V-230V	667705
Illuminated selector	Yellow, 3-position, latching on the left, self-return on the right, AC/DC 24V LED	2 NC	NP8-02XD/37 YEL AC/DC 24V	578888
Illuminated selector	Yellow, 3-position, latching on the left, self-return on the right, AC 110V-220V LED	2 NC	NP8-02XD/37 YEL AC 110V-220V	578900
Illuminated selector	Yellow, 3-position, latching on the left, self-return on the right, AC 110V-230V LED	2 NC	NP8-02XD/37 YEL AC110V-230V	667702
Illuminated selector	Orange, 3-position, latching on the right, self-return on the left, AC/DC 24V LED	2 NC	NP8-02XD/38 ORG AC/DC 24V	578895
Illuminated selector	Orange, 3-position, latching on the right, self-return on the left, AC 110V-220V LED	2 NC	NP8-02XD/38 ORG AC 110V-220V	578907
Illuminated selector	White, 3-position, latching on the right, self-return on the left, AC/DC 24V LED	2 NC	NP8-02XD/38 WHT AC/DC 24V	578886
Illuminated selector	White, 3-position, latching on the right, self-return on the left, AC 110V-220V LED	2 NC	NP8-02XD/38 WHT AC 110V-220V	578898
Illuminated selector	White, 3-position, latching on the right, self-return on the left, AC 110V-230V LED	2 NC	NP8-02XD/38 WHT AC110V-230V	667700
Illuminated selector	Red, 3-position, latching on the right, self-return on the left, AC/DC 24V LED	2 NC	NP8-02XD/38 RED AC/DC 24V	578703
Illuminated selector	Red, 3-position, latching on the right, self-return on the left, AC 110V-220V LED	2 NC	NP8-02XD/38 RED AC 110V-220V	578731
Illuminated selector	Red, 3-position, latching on the right, self-return on the left, AC 110V-230V LED	2 NC	NP8-02XD/38 RED AC110V-230V	667667
Illuminated selector	Green, 3-position, latching on the right, self-return on the left, AC/DC 24V LED	2 NC	NP8-02XD/38 GRN AC/DC 24V	578700
Illuminated selector	Green, 3-position, latching on the right, self-return on the left, AC 110V-220V LED	2 NC	NP8-02XD/38 GRN AC 110V-220V	578728
Illuminated selector	Green, 3-position, latching on the right, self-return on the left, AC 110V-230V LED	2 NC	NP8-02XD/38 GRN AC110V-230V	667664
Illuminated selector	Blue, 3-position, latching on the right, self-return on the left, AC/DC 24V LED	2 NC	NP8-02XD/38 BLU AC/DC 24V	578892
Illuminated selector	Blue, 3-position, latching on the right, self-return on the left, AC 110V-220V LED	2 NC	NP8-02XD/38 BLU AC 110V-220V	578904
Illuminated selector	Blue, 3-position, latching on the right, self-return on the left, AC 110V-230V LED	2 NC	NP8-02XD/38 BLU AC110V-230V	667706
Illuminated selector	Yellow, 3-position, latching on the right, self-return on the left, AC/DC 24V LED	2 NC	NP8-02XD/38 YEL AC/DC 24V	578889
Illuminated selector	Yellow, 3-position, latching on the right, self-return on the left, AC 110V-220V LED	2 NC	NP8-02XD/38 YEL AC 110V-220V	578901
Illuminated selector	Yellow, 3-position, latching on the right, self-return on the left, AC 110V-230V LED	2 NC	NP8-02XD/38 YEL AC110V-230V	667703
Key selector	2-position, latching	2 NC	NP8-02Y/21	667181
Key selector	2-position, self-return	2 NC	NP8-02Y/22	578671
Key selector	3-position, latching	2 NC	NP8-02Y/31	667184
Key selector	3-position, self-return	2 NC	NP8-02Y/33	578676
Key selector	3-position, latching on the left, self-return on the right	2 NC	NP8-02Y/37	578677
Key selector	3-position, latching on the right, self-return on the left	2 NC	NP8-02Y/38	578678
Mushroom button	Red, Φ40mm, latching, turn release	2 NC	NP8-02ZS/1 RED	667214
Mushroom button	Red, Φ60mm, latching, turn release	2 NC	NP8-02ZS/2 RED	667215
Mushroom button	Red, Φ30mm, latching, turn release	2 NC	NP8-02ZS/3 RED	667853
Flush button	White	3 NC	NP8-03BN WHT	368576
Flush button	Red	3 NC	NP8-03BN RED	368579
Flush button	Green	3 NC	NP8-03BN GRN	368578
Flush button	Blue	3 NC	NP8-03BN BLU	578635
Flush button	Yellow	3 NC	NP8-03BN YEL	368580
Flush button	Black	3 NC	NP8-03BN BLK	368577
Projecting button	Blue	3 NC	NP8-03GN BLU	578636
Mushroom button	Green, Φ40mm	3 NC	NP8-03M/1 GRN	578637
Mushroom button	Red, Φ60mm	3 NC	NP8-03M/2 RED	578638
Flush button	White	1 NO	NP8-10BN WHT	578646
Flush button	Red	1 NO	NP8-10BN RED	667233
Flush button	Green	1 NO	NP8-10BN GRN	667232