

Heavy-Duty 30.5 mm Metal Indicating Lights

10250T-IL
Series



- ✓ Heavy-Duty Zinc Die Cast Construction
- ✓ Diaphragm Seals with Drainage Holes
- ✓ Push-to-Test

The 30.5 mm pushbutton line features a zinc die cast construction with chrome-plated housing and mounting nut. The same durable construction is also available with the corrosive resistant E34 Series of pushbuttons.

The contact blocks feature enclosed silver contacts with pointed “reliability nibs” for reliable performance from logic level up to 600V. To ensure reliable switching, nibs bite through oxide which can form on silver contacts, eliminating the need for expensive logic level blocks for most applications.

Reliability nibs improve performance in dry circuit, corrosive, fine dust and other contaminated atmospheres.

Under normal environmental conditions, the minimum operational voltage is 5V and the minimum operational current is 1 mA, AC/DC. For operation under a wider range of environmental conditions, logic level contact blocks with inert palladium tipped contacts are recommended.

10250T Series operators have “grounding nibs”—4 metal points on the operator casting designed to bite through most paints and other coatings on metal panels to enhance the ground connection when the operator is securely tightened.

Omega’s pushbutton operators offer front of panel drainage via holes in the operator bushing. Hidden from view by the mounting nut, these holes prevent buildup of liquid inside the operator, which can prevent operation in freezing environments. The holes also provide a route for escaping

10250T181N



10250T231N



10250T221N



10250T201N



All models shown smaller than actual size.

liquid in high pressure washdowns, effectively relieving pressure from the internal diaphragm seal. This ensures reliable sealing in applications even beyond NEMA 4.

Specifications

Standards and Certifications:

CE EN60947-5-1
UL 508: File No. 131568
CSA C22.2 No. 14: File No. LR68551

Ingress Protection (When Mounted in Similarly Rated Enclosure):

Standard Indicating Lights:

UL (NEMA) Type 1, 2, 3, 3R, 3S, 4, 4X, 12, 13; IEC IP65

All Other Operators: UL (NEMA)

Type 1, 2, 3, 3R, 4, 4X, 12, 13; IEC IP65

MECHANICAL RATINGS

Frequency of Operation:

All Pushbuttons: 6000 operations per hr

Key and Lever Selector Switches: 3000 operations per hr

Auto-Latch Devices: 1200 operations per hr

Life:

Pushbuttons: 10 x 10⁶ operations

Contact Blocks: 10 x 10⁶ operations

PresTest Units: 10 x 10⁶ operations

Lever and Key Selector

Switches:

0.25 x 10⁶ operations

Twist-to-Release Pushbuttons:

0.3 x 10⁶ operation

Shock Resistance Duration:

20 mS ≥ 5g

Climate Conditions:

Operating Temperature:

-17 to 66°C (1 to 150°F)

Storage Temperature:

-40 to 80°C (-40 to 176°F)

Altitude: 2000 m (6562')

Max Humidity: 95% RH

@ 60°C (140°F)

Terminals: Marking; NC-NO on the

contact block to meet the NEMA

requirements; dual marking system

1 to 2 for normally closed, 3 to 4 for

normally open to meet BS5472

(Cenelec EN50 005)

Clamps: Terminals are saddle

clamp type for 1 x 22 AWG (0.34

mm²) to 2 x 14 AWG (2.5 mm²)

conductors; torque = 7 lb-in (0.8 Nm)

Degree of Protection Against Direct Electrical Contact: IP2X with fingerproof shroud

Light Units: Transformers will withstand short circuit for 1 hr per IEC 60997-5-1

Average Bulb Life:

Transformer Type: 20,000 hrs

Resistor/Direct Voltage Type: 2500 hr min @ rated V

LED: 60,000 to 100,000 hrs

Electrical Ratings

Insulation: $U_i = 660 \text{ Vac or Vdc}$

Thermal: $I_{th} = 10 \text{ A}$

Short Circuit Coordination to IEC/EN 60947-5-1:

Rated Conditional Short Circuit

Current: 1 kA

Fuse Type: GE Power Controls TIA 10, Red Spot Type gG, 10 A, 660 Vac, 460 Vdc, BS88-2, IEC 60269-2-1

UL Rating: A600, P600

AC Load Life Duty Cycle: 1200 operations per hr

10A: 110V pf 0.4 – 1×10^6 operations

5A: 250V pf 0.4 – 1×10^6 operations

2A: 660V pf 0.4 – 1×10^6 operations

Switching Capacity:

AC15 Rated

Make/Break

(1.1 x I_e at 1.1 x U_e):

6 A: 120V pf 0.3

4 A: 240V pf 0.3

2 A: 660V pf 0.3

DC13 Rated Make/Break

(1.1 x I_e at 1.1 x U_e):

1.0 A: 125V L/R ≥ 0.95 @ 300 mS

0.55 A: 250V L/R ≥ 0.95 @ 300 mS

0.1 A: 660V L/R ≥ 0.95 @ 300 mS

10 A: 110V pure resistive

Maximum Ratings for Logic Level and Hostile Atmosphere

Application:

Max Amperes: 0.5 A

Max Volts: 120 Vac/Vdc

Lenses for indicating lights



10250TC12N



10250TC15N



10250TC9N



10250TC14N



10250TC8N



10250TC13N



10250TC2N



10250TC21



10250TC43



10250TC1N



10250TC6N



10250TC22

All models shown smaller than actual size.

To Order

Model No.	Description
10250T Indicating Lights*	
10250T221N	Pres-test 120V transformer type, no lens
10250T231N	Pres-test 120V full voltage/resistor type, no lens
10250T181N	120V transformer type, no lens
10250T201N	120V full voltage/resistor type, no lens

Comes complete with retaining nut, operator gasket and operator's manual.

* Operators require lens, sold separately, see table below for selection.

Accessories

Model No.	Description
10250T Lens for Indicating Lights	
10250TC12N	White, glass (for indicating lights)
10250TC13N	Red, glass (for pres-test or illuminated pushbuttons)
10250TC14N	Green, glass (for pres-test or illuminated pushbuttons)
10250TC15N	Amber, glass (for pres-test or illuminated pushbuttons)
10250TC19N	Amber, plastic (for indicating lights)
10250TC1N	Red, plastic (for indicating lights)
10250TC21	Red, plastic (for pres-test or illuminated pushbuttons)
10250TC22	Green, plastic (for pres-test or illuminated pushbuttons)
10250TC2N	Green, plastic (for indicating lights)
10250TC43	Amber, plastic (for pres-test or illuminated pushbuttons)
10250TC6N	White, plastic (for indicating lights)
10250TC7N	Red, glass (for indicating lights)
10250TC8N	Green, glass (for indicating lights)
10250TC9N	Amber, glass (for indicating lights)

Ordering Examples: 10250T221N, pres-test 120V transformer type, and 10250TC1N, red plastic lens.

10250T201N, 120V full voltage/resistor type indicating light operator, and 10250TC8N, green glass lens.