

Heavy-Duty 30.5 mm Metal Selector Switches

All models shown smaller than actual size.

10250T-SS Series



- ✓ Heavy-Duty Zinc Die Cast Construction
- ✓ Enclosed Silver Contacts with Reliability Nibs
- ✓ Diaphragm Seals with Drainage Holes
- ✓ Grounding Nibs on Operator Casing

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.



10250T20LB



10250T3023



10250T21LB



10250T3011



10250T1323



10250T15237

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 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: 10×10^6 operations

Contact Blocks: 10×10^6 operations

PresTest Units: 10×10^6 operations

Lever and Key Selector Switches:

0.25×10^6 operations

Twist-to-Release Pushbuttons:

0.3×10^6 operation

Shock Resistance Duration:

$20 \text{ mS} \geq 5\text{g}$

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

Build Your Own System

10250T3011



+



10250TM47

+



10250T2

Note: To order complete system add a contact block and legend plate to operator.

OR

Order Complete Devices and a Legend Plate

10250T20LB

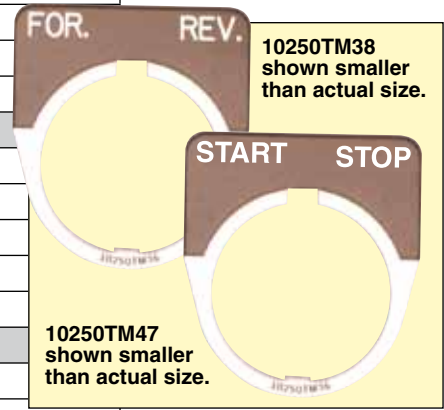


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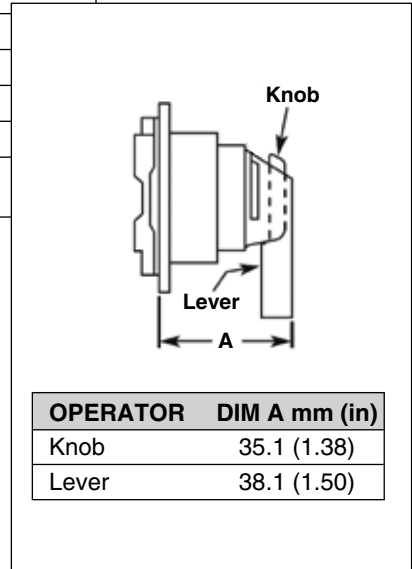


10250TM47

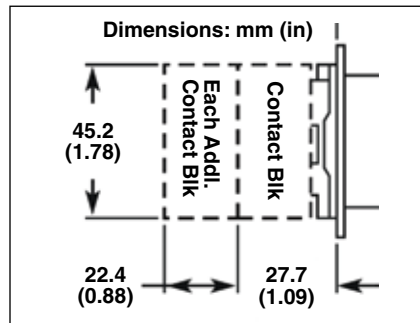
To Order	
Model No.	Description
10250T Complete Selector Switches (Includes Contact Blocks)	
10250T20LB	On/Off switch (black knob switch comes with NO/NC contact block)
10250T21LB	H-O-A switch (black lever switch comes with 2 NO/2 NC contact blocks)
10250T Selector Switches – Operators*	
10250T1311	2-position maintained selector switch, knob
10250T1323	3-position maintained selector switch, knob
10250T3011	2-position maintained selector switch, lever
10250T3023	3-position maintained selector switch, lever
10250T15112	2-position maintained selector switch, keyed
10250T15237	3-position maintained selector switch, keyed
10250T Legend Plates	
10250TM38	For/Rev
10250TM42	Off/On
10250TM47	Start/Stop
10250TM50	F-O-R
10250TM51	H-O-A
10250T Pushbutton Contact Blocks	
10250T2	Contact block—2 NO, 6 blocks can be stacked
10250T3	Contact block—2 NC, 6 blocks can be stacked
10250T51	Contact block—1 NC, 6 blocks can be stacked
10250T53	Contact block—1 NO, 6 blocks can be stacked
10250T1	Contact block—NO-NC, 6 blocks can be stacked
10250T71	Contact block—late opening NC
10250T47	Contact block—early closing NO and standard NC
10250T57	Contact block—early closing NO and standard NO, 4 blocks can be stacked



*Operators require contact blocks, sold separately.
Ordering Examples: 10250T2, contact block, 2 normally open.
 10250T1311, 2 position maintained selector switch, knob.



Pushbutton Contact Blocks



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