

HEAVY-DUTY 30.5 mm METAL PUSHBUTTONS

10250T 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.

Omega’s pushbutton operators offer front of panel drainage via holes in the operator



All models shown smaller than actual size.

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 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 \geq 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: $U_i = 660$ Vac or Vdc

Thermal: $I_{th} = 10$ 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 x 106 operations

5A: 250V pf 0.4 – 1 x 106 operations

2A: 660V pf 0.4 – 1 x 106 operations

Switching Capacity:

AC15 Rated Make/Break (11 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 \geq 0.95 @ 300 mS

0.55 A: 250V L/R \geq 0.95 @ 300 mS

0.1 A: 660V L/R \geq 0.95 @ 300 mS

10 A: 110V pure resistive

Maximum Ratings for Logic Level and Hostile Atmosphere Application:

Max Amperes: 0.5 A

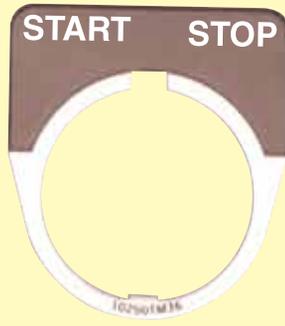
Max Volts: 120 Vac/Vdc

Build Your Own System



10250T101

+



10250TM47

+



10250T2

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

OR

Order Complete Devices and a Legend Plate



10250T29

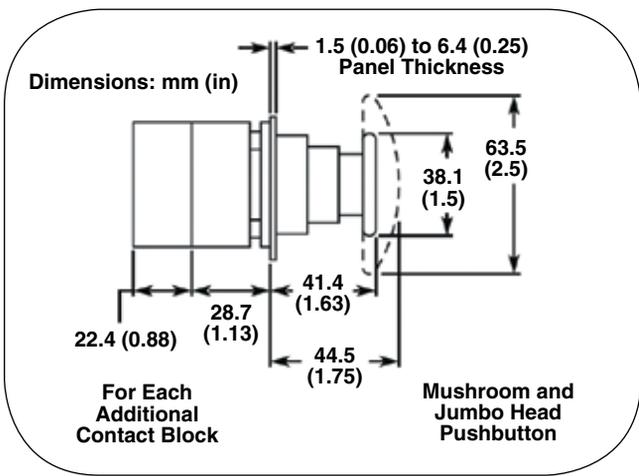
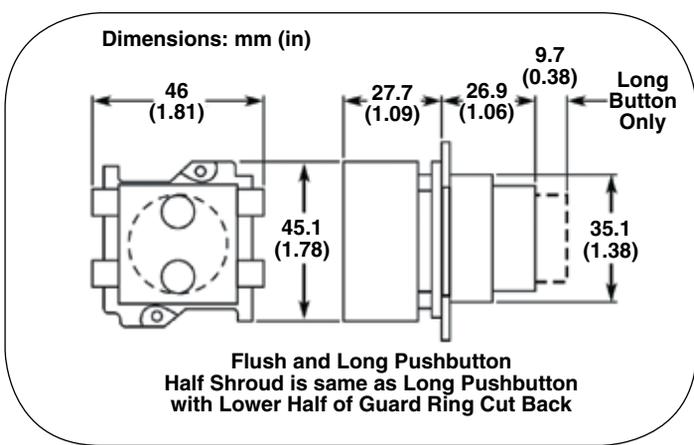
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10250TM47



All models shown smaller than actual size.



To Order	
MODEL NO.	DESCRIPTION
10250T MOMENTARY PUSHBUTTON OPERATORS	
10250T101	Black flush pushbutton operator
10250T103	Green flush pushbutton operator
10250T112	Red extended pushbutton operator
10250T122	Red mushroom head operator
10250T5	Push-pull maintained 2-position operator without lens
10250T17213	E-Stop mushroom operator
10250T411	Illuminated pushbutton operator, no lens, 120 Vac, incandescent
10250T172	Red jumbo mushroom head operator
10250T79	24/48V full votage push-pull light unit
10250T63	120V transformer incandescent push-pull light unit

Comes with retaining nut, operator gasket, and instruction sheet.
Ordering Example: 10250T101, black flush pushbutton operator.

10250T181N



10250T231N



10250T221N



10250T201N



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 with instruction sheet.

Ordering Example: 10250T221N, pres-test 120 V transformer type.



10250T1311

10250T3011



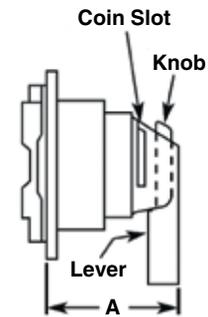
10250T3023



10250T1323



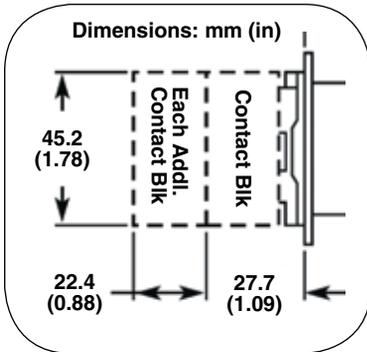
All models shown
smaller than actual size.



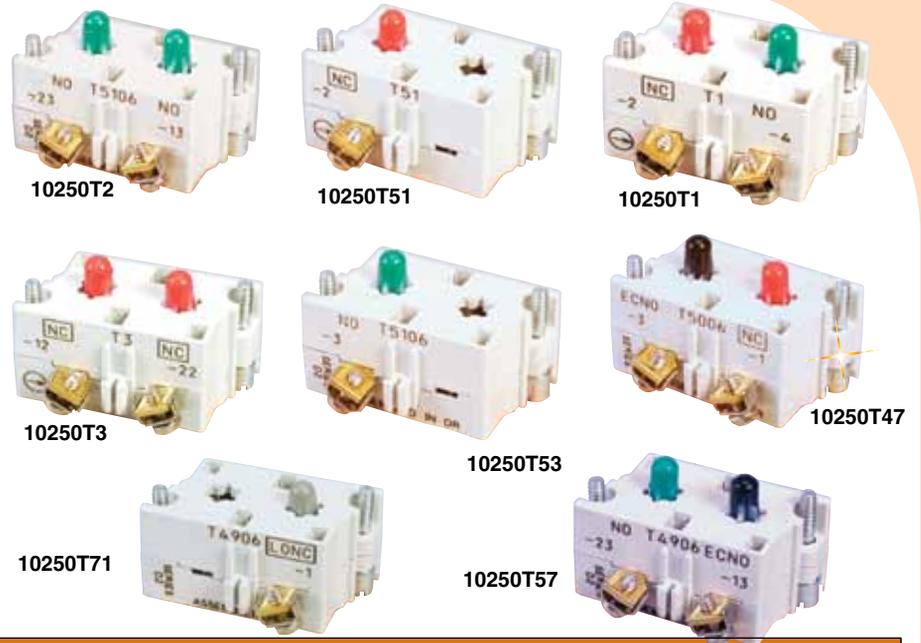
OPERATOR	DIM A mm (in)
Knob	35.1 (1.38)
Lever	38.1 (1.50)
Coin Slot	35.1 (1.38)

To Order

MODEL NO.	DESCRIPTION
10250T SELECTOR SWITCHES – MAINTAINED	
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



All models shown smaller than actual size.



To Order	
MODEL NO.	DESCRIPTION
10250T PUSHBUTTONS CONTACT BLOCK	
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

Comes with instruction sheet.

Ordering Example: 10250T2, contact block, 2 normally open.



To Order	
MODEL NO.	DESCRIPTION
10250T COMMON COMPLETE DEVICES (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)
10250T23B	Start button (black flush button comes with NO contact block)
10250T25R	Stop button (red extended button comes with NC contact block)
10250T29	Emergency stop (red jumbo MRH button comes with NC contact block)

Comes with instruction sheet.

Ordering Example: 10250T29, emergency stop.

All models shown smaller than actual size.



To Order	
MODEL NO.	DESCRIPTION
10250T PUSHBUTTONS – HEAD AND LENS SELECTION TABLE	
10250TB62	Red button for non-illuminated push-pull
10250TB63	Red (emergency stop) for non-illuminated push-pull
10250TJ62	Red jumbo mushroom head for non-illuminated push-pull
10250TJ63	Red jumbo mushroom head (emergency stop) for non-illuminated push-pull
10250TC47	Red lens for illuminated push-pull
10250TC53	Red (emergency stop) lens for illuminated push-pull
10250TC57	Red side-lighted anodized aluminum ring
10250TC63	Red (emergency stop) side-lighted anodized aluminum ring

Comes with instruction sheet.

Ordering Example: 10250TC57, red side-lighted anodized aluminum ring.

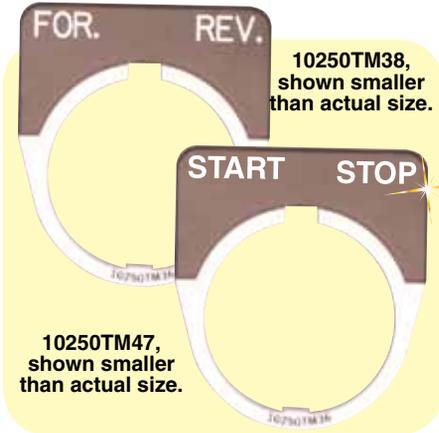


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To Order	
MODEL NO.	DESCRIPTION
10250T LENS FOR INDICATING LIGHTS	
10250TC12N	White, glass (for indicating lights)
10250TC13N	Red, glass (for PresTest or illuminated pushbuttons)
10250TC14N	Green, glass (for PresTest or illuminated pushbuttons)
10250TC15N	Amber, glass (for PresTest or illuminated pushbuttons)
10250TC19N	Amber, plastic (for indicating lights)
10250TC1N	Red, plastic (for indicating lights)
10250TC21	Red, plastic (for PresTest or illuminated pushbuttons)
10250TC22	Green, plastic (for PresTest or illuminated pushbuttons)
10250TC2N	Green, plastic (for indicating lights)
10250TC43	Amber, plastic (for PresTest 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)

Comes with instruction sheet.

Ordering Example: 10250TC12N, white, glass.



To Order	
MODEL NO.	DESCRIPTION
10250T LEGEND PLATES	
10250TM13	E-stop
10250TM24	Off
10250TM25	On
10250TM31	Run
10250TM33	Start
10250TM34	Stop
10250TM36	Blank
10250TM38	For/Rev
10250TM42	Off/On
10250TM47	Start/Stop
10250TM50	F-O-R
10250TM51	H-O-A
10250TM80	Power On

Comes with instruction sheet.
Ordering Example: 10250TM47, start/stop legend plate.

All models shown smaller than actual size.



To Order	
MODEL NO.	DESCRIPTION
10250T ENCLOSURES	
10250TN11	1-hole 2-contact block depth enclosures
10250TN12	2-hole 2-contact block depth enclosures
10250TN13	3-hole 2-contact block depth enclosures
10250TN14	4-hole 2-contact block depth enclosures

Comes with instruction sheet.
Ordering Example: 102TN12, 2-hole, 2 contact block depth enclosure. All models shown smaller than actual size.



To Order	
MODEL NO.	DESCRIPTION
REPLACEMENT LAMPS	
28-3044	120V, 10250T resistor indicating light
10250ED986-4	6.3V, 10250T flasher
28-2202	6.3V, 10250T transformer, PresTest and full voltage
28-5184	12V, 10250T full voltage
28-5185	24V, 10250T full voltage
28-5186	32V, 10250T full voltage
28-5187	55V, 10250T resistor
28-494	120V, 10250T neon
28-3754	120V, 10250T neon, T 3/4 bayonet
28-3755	24V, 10250T neon

Comes with instruction sheet.
Ordering Example: 28-3044, replacement lamp 120V