



Product Description

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 line of pushbuttons. See E34 section on **Pages V7-T1-254 to V7-T1-288.**

Features

- Heavy-duty zinc die cast construction
- Enclosed silver contacts with reliability nibs
- Diaphragm seals with drainage holes
- Grounding nibs on the operator casing

Benefits

- Reliability nibs improve contact reliability even under dry circuit and fine dust conditions
- Drainage holes prevent buildup of liquid inside the operator which can prevent operation in freezing environments
- Grounding nibs bit through paint and other coatings to provide secure ground

Contents

Description

Page

30.5 mm Heavy-Duty Watertight/Oiltight—10250T	
Product Overview	V7-T1-183
Product Identification	V7-T1-183
Catalog Number Selection	V7-T1-184
Product Selection	
Point-of-Purchase Packaging	V7-T1-186
Non-Illuminated Momentary Pushbutton Units	V7-T1-187
Pushbuttons	V7-T1-188
Illuminated Momentary Pushbutton Units	V7-T1-192
Indicating Light Units	V7-T1-193
Illuminated Pushbuttons and Indicating Lights	V7-T1-194
Push-Pull Emergency Stop	V7-T1-196
Illuminated Push-Pull Units	V7-T1-199
Potentiometers	V7-T1-202
Push-Pull Operators	V7-T1-203
Selector Switch Units	V7-T1-207
Selector Switch Selection	V7-T1-208
Selector Switch Operators	V7-T1-211
Illuminated Selector Switch Operators	V7-T1-214
Joystick Units	V7-T1-215
Joysticks	V7-T1-216
Roto-Push Units	V7-T1-219
Roto-Push Operators	V7-T1-220
Accessories	V7-T1-225
Options	V7-T1-230
Replacement Parts	V7-T1-239
Technical Data and Specifications	V7-T1-241
Dimensions	V7-T1-244



Drawings
Online

Application Description

Contact Operation

Slow make and break. All normally closed contacts have positive opening operation, i.e., normally closed contacts are forced open in the event of contact weld or spring breakage.

Standards and Certifications

- CE EN 60947-5-1 and 60947-5-5
- UL 508—File No. 131568
- CSA C22.2 No. 14—File No. LR68551



Ingress Protection

When mounted in similarly rated enclosure—

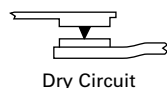
- Standard indicating lights
 - UL (NEMA) Type 1, 2, 3, 3R, 3S, 4, 4X, 12, 13
 - IEC IP65
- Most other operators
 - UL (NEMA) Type 1, 2, 3, 3R, 4, 4X, 12, 13
 - IEC IP65

Product Overview

Reliability Nibs

Eaton's 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.

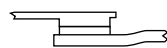
Reliability Nibs



Dry Circuit



Medium Duty



Heavy-Duty

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.

Grounding Nibs

10250T line operators have "grounding nibs"—four 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.

Grounding Nibs

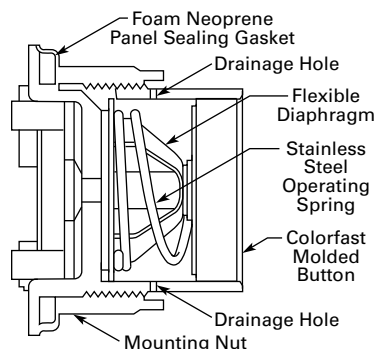


Diaphragm Seal with Drainage Holes

Liquid Drainage

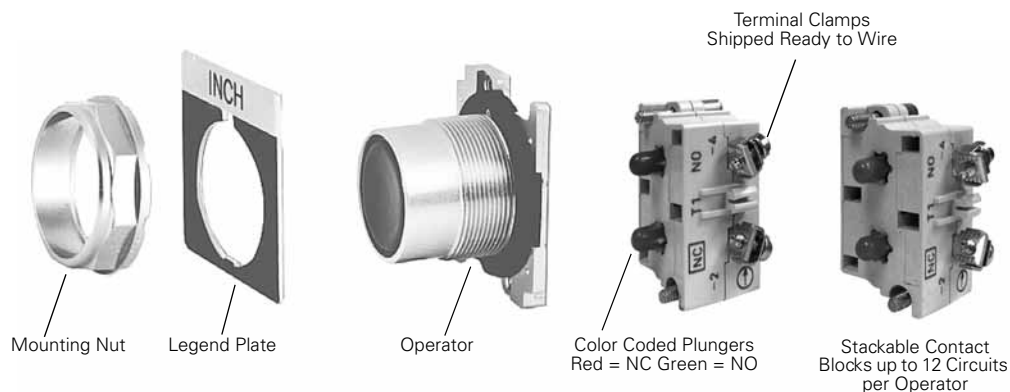
Eaton's pushbutton operators offer front of panel drainage via holes in the operator bushing. Hidden from view by the mounting nut, these holes prevent buildup of liquid inside the operator, which can prevent operation in freezing environments. The holes also provide a route for escaping liquid in high pressure washdowns, effectively relieving pressure from the internal diaphragm seal, ensuring reliable sealing in applications even beyond NEMA 4.

Diaphragm Seal



Product Identification

30.5 mm Heavy-Duty Watertight/Oiltight—10250T Series



Knob**Lever****Illuminated Knobs and Levers**

Color ^①	Knob Code Number and Catalog Number	Lever Code Number and Catalog Number
Red	10250TER	10250TFR
Green	10250TEG	10250TFG
Yellow	10250TEA	10250TFA
Blue	10250TEL	10250TFL
Clear	10250TEC	10250TFC
White	10250TEW	10250TFW
Amber	10250TEM	10250TFM

Joystick Units**Two-Position Joystick****Joystick Units—UL (NEMA) Type 3, 3R, 4, 4X, 12, 13****Operator Position ^②**

Up	Center	Down	Operator Action ^③	Contact Type	Mounting Location A B	Two-Position Assembled Unit Catalog Number ^④
X	0	0		1NC		10250T452-3X
0	0	X		1NC		

Notes

^① Amber, clear and white lenses have a black arrow (pointer), red, green and blue lenses have a white arrow (pointer).

^② X = closed circuit, 0 = open circuit.

^③ M = Maintained. S = Spring return in direction of arrow (R).

^④ Field convertible momentary to maintained or vice versa.

Illuminated Selector Switch Operators

120 Vac Transformer
Selector Switch, Cam 1

Operator without Knob or Lever

Positions	Operator Action	Transformer Type—50/60 Hz 6V #755 Lamp Catalog Number ^{③④}		Full Voltage Type—AC or DC ^① Lamps—#755, #757, #1835, 120MB ^② Catalog Number ^④	
Two-position—60° throw		Cam Code 1 ^⑤		Cam Code 1 ^⑤	
		E34VFB_		E34SFB_	
Three-position—60° throw		Cam Code 2 ^⑤	Cam Code 3 ^⑤	Cam Code 2 ^⑤	Cam Code 3 ^⑤
		E34VGB_	E34VHB_	E34SGB_	E34SHB_
		E34VNB_ ^⑥	E34VPB_ ^⑥	E34SNB_ ^⑦	E34SPB_ ^⑦
		E34VJB_ ^⑥	E34VKB_ ^⑥	E34SJB_ ^⑦	E34SKB_ ^⑦
		E34VLB_	E34VMB_	E34SLB_	E34SMB_
Four-position—40° throw		E34VRB_	—	E34SRB_	—

Knob



Lever



Knobs and Levers

Color ^①	Knob Catalog Number and Code Number	Lever Catalog Number and Code Number
Red	10250TER	10250TFR
Green	10250TEG	10250TFG
Yellow	10250TEA	10250TFA
Blue	10250TEL	10250TFL
Clear	10250TEC	10250TFC
White	10250TEW	10250TFW
Amber	10250TEM	10250TFM

Light Unit Voltage Suffix

Add to operator Catalog Number listed in table above.

Type of Light Unit

Transformer Type 50/60 Hz		Full Voltage Type AC or DC ^①	
Voltage	Suffix Code	Voltage	Suffix Code
24	024	6	06
120	120	12	12
208	208	24	24
240	240	48	48
380	380	120	120
480	480	240 ^⑥	240
600	600		

Notes

Use NEMA 4X 10250T operators where exposed to ultraviolet light, see **Pages V7-T1-182 to V7-T1-253**.^① Full voltage light units can be used at other than listed voltages by changing lamp. Replacement lamps are listed on **Page V7-T1-239**.^② 120MB lamps are used on both 120V and 240V operators.^③ Operator includes lens gasket and lens attachment screws.^④ Add suffix code for light unit voltage to listed catalog number from Light Unit Voltage Suffix table above.

Example: For 24V transformer type light unit, order E34VFB024.

^⑤ For selection of the proper cam and contact block required to obtain a specific circuit sequence, see selection tables on **Pages V7-T1-273 to V7-T1-275**.^⑥ 120 and 240V transformer only.^⑦ 120 full voltage only.^⑧ Resistor type. May generate excess heat if used in high density.^⑨ Amber, clear and white lenses have a black arrow (R). Red, green and blue lenses have a white arrow (R).