# COMMERCIAL & MIL MINIATURE TOGGLES

T3 MINIATURE TOGGLES

### FEATURING OTTO'S UNIQUE SNAP-ACTION ACTUATION

These miniature toggles are rugged, highly reliable switches offering positive detent action for safe switching operation. Featuring the unique OTTO snap-action switch actuation in conjunction with a unique toggle actuator design.

High contact pressure and superior wiping action of the OTTO design makes the T3 series an excellent choice for switching loads from logic level up to 5 amps.

Choose sealed one or two pole circuitry, 15/32-32 sealed or 1/4-40 unsealed bushing construction, momentary and/or maintained operation. The 15/32-32 bushing model is also available with lever lockout toggle feature or thumb button actuators.

Molded-in terminals seal the contacts against moisture and solder flux wicking. The front-panel side of 15/32-32 bushing models are sealed against water and other liquids per MIL-DTL-83731.

In addition to the single turret solder terminal specified in MIL-DTL-83731, we also offer two different lengths of pins for printed circuit soldering.

Mounting hardware provided includes two hex nuts, one lockwasher and one keyway washer.

## Features:

- Snap-action actuation
- Shorter behind panel depth
- Superior wiping action keeps contacts clean
- Positive tactile response prevents operating errors
- Weighs up to 25% less than competitive products
- More contact/terminal plating choices
- Highly reliable, simpler design, fewer parts
- Black matte finish available. Contact factory.
- RoHS compliant



#### Standard Characteristics/Ratings:

ELECTRICAL RATINGS:							
Load	Sea Level @ 28VDC or 115VAC, 400Hz	@ 65,000 Feet					
Resistive	5A	5A					
Inductive	2A	2A					
Lamp	1A	N/A					
DWV	1200Vrms	400Vrms					
Contact Resistance	$25 \text{ m}\Omega$ max initial						
Electrical Life:	30,000 cycles						
Mechanical Life:	100,000 cycles						
Seal:	MIL-DTL-83731 (15/32-32 bushing style only)						
Operating Temp Range:	-65°C to +85°C						
MATERIALS:							
Handle:	303 Stainless						
Bushing:	Per MIL-DTL-83731						
Body:	Per MIL-DTL-83731						
Terminal Hardware:	None required						
Mounting Hardware:	Hex nuts, lockwasher and key	/way washer					

### **T3 PART NUMBER CODE**

Т3	- X	X	X		<b>X</b>		X	X -	- or	X
Bushing Style	Terminal Style	Circuitry		Circuit M	ade With	Lever At:	Contact Material	Lockout Featu	re	Button Color For bushing styles 4, 5 and 7
<ol> <li>15/32-32</li> <li>1/4-40</li> <li>15/32-32 With Lockout ①</li> <li>15/32-32 With Convex Button ②</li> <li>15/32-32 With Concave Button ③</li> <li>15/32-32 With Lockout and Smaller Bat Handle ①</li> <li>1/4-40 with Rocker Button ②</li> <li>1/3/32-32 With Small Paddle Bat Handle</li> <li>15/32-32 with Large Paddle Bat</li> </ol>	1. Single Turret 4. PC Pin 0.150" Ig. 5. PC Pin 0.270" Ig.	1. Single Pole 2. Double Pole	1. 2. 3. 4. 5.	Keyway Side ON OFF ON (ON) (ON) (ON) NOTE: ( ) (	Center OFF NONE NONE OFF OFF denotes mo	Opposite Keyway ON ON ON (ON) ON ON	1. Silver/Gold Flash 2. Gold Plate	Lockout feature configuration co letters A–P for bushing styles 3 and A only. Otherwise omit.		1. Red 2. Black 8. Gray Lever Color For bushing styles 1 & 2 - bat handle & bushing A. Black No Selection. Clear For bushing styles 3 & 6 - bat handle &
Handle A. 15/32-32 With Lockout and Knurled Lockout Handle										bushing (available only in clear) No Selection. Clear For bushing styles 8 & 9 - bat handle only 1. Clear

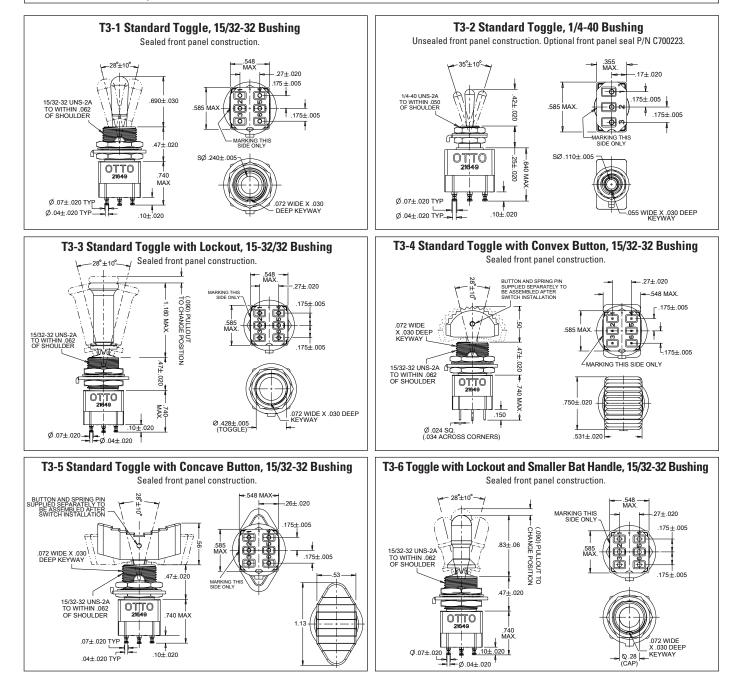
0 Add appropriate lockout feature configuration code letter (A thru P) for bushing styles 3 and 6 only.

<sup>(2)</sup> Button color codes (1, 2 and 8) for bushing styles 4, 5 and 7 at end of Part Number.

For bushing styles 8 & 9 - bat handle only 1. Clear 2. Red No Selection. Black

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Circuit Made With Lever At			15/32" Bushi	ng (Sealed)	1/4-40" Bushin	g (Unsealed)	Lever Lock-15/32" Bushing (Sealed)			
No. Poles	Keyway Side 1-2 4-5	Center Position	Opposite Keyway 2-3 5-6	MIL-SPEC Part Number	OTTO Part Number	MIL-SPEC Part Number	OTTO Part Number	MIL-SPEC Part Number	OTTO Part Number	Suffix for Lockout Feature
1	ON	OFF	ON	MS27718-21-1	T3-11111	MS27716-21-1	T3-21111	MS27720-21-1_	T3-31111_	All
1	OFF	None	ON	MS27718-22-1	T3-11121	MS27716-22-1	T3-21121	MS27720-22-1	T3-31121	D, F, G
1	ON	None	ON	MS27718-23-1	T3-11131	MS27716-23-1	T3-21131	MS27720-23-1	T3-31131	D, F, G
1	(ON)	None	ON	MS27718-26-1	T3-11141	MS27716-26-1	T3-21141	MS27720-26-1	T3-31141	F
1	(ON)	OFF	(ON)	MS27718-27-1	T3-11151	MS27716-27-1	T3-21151	MS27720-27-1	T3-31151	E, L, N
1	(ON)	OFF	ON	MS27718-31-1	T3-11161	MS27716-31-1	T3-21161	MS27720-31-1_	T3-31161	E, F, K, L, M, N
2	ON	0FF	ON	MS27719-21-1	T3-11211	MS27717-21-1	T3-21211	MS27721-21-1	T3-31211	All
2	OFF	None	ON	MS27719-22-1	T3-11221	MS27717-22-1	T3-21221	MS27721-22-1	T3-31221	D, F, G
2	ON	None	ON	MS27719-23-1	T3-11231	MS27717-23-1	T3-21231	MS27721-23-1	T3-31231	D, F, G
2	(ON)	None	ON	MS27719-26-1	T3-11241	MS27717-26-1	T3-21241	MS27721-26-1	T3-31241	F
2	(ON)	OFF	(ON)	MS27719-27-1	T3-11251	MS27717-27-1	T3-21251	MS27721-27-1	T3-31251	E, L, N
2	(ON)	OFF	ON	MS27719-31-1	T3-11261	MS27717-31-1	T3-21261	MS27721-31-1	T3-31261	E, F, K, L, M, N



Specifications Subject To Change Without Notice

