COMMERCIAL & MIL MINIATURE TOGGLES

FEATURING OTTO'S UNIQUE SNAP-IN MECHANISM

These miniature toggles are rugged, highly reliable switches offering positive detent action for safe switching operation. Featuring the unique OTTO snap-action switch mechanism in conjunction with a unique toggle actuator design, the T3 series offers non-teasible contact transfer.

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-PRF-83731.

In addition to the single turret solder terminal specified in MIL-PRF-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.

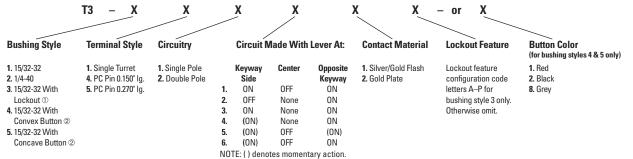
Features:

- Non-teasible snap-action contact 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, less parts



Standard Characteristics/Ratings:									
ELECTRICAL RATINGS:									
Load	Sea Level @ 28VDC & 115VAC, 400Hz	@ 65,000 Feet							
Resistive	5A	N/A							
Inductive	2A	N/A							
Lamp	1A	N/A							
DWV	1050Vrms	400Vrms							
Electrical Life:	30,000 cycles								
Mechanical Life:	100,000 cycles								
Seal:	MIL-PRF-83731 (15/32-32 bushing style only)								
Operating Temp Range:	-65°C to +85°C								
MATERIALS:									
Handle:	303 Stainless								
Bushing:	Per MIL-PRF-83731								
Body:	Per MIL-PRF-83731								
Terminal Hardware:	None required								
Mounting Hardware:	Hex nuts, lockwasher and keyway washer								
	· · ·	eyway washer							





① Add appropriate lockout feature configuration code letter (A thru P) for bushing style 3.

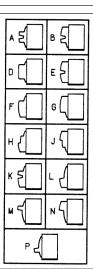
⁽²⁾ Button color codes (1, 2 and 8) for bushing styles 4 and 5 at end of Part Number.

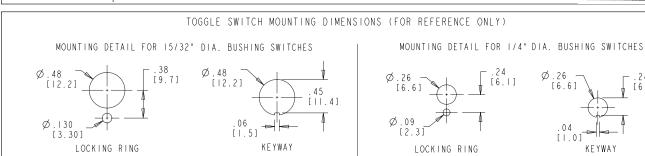
Circuit Made With Lever At				15/32" Bushing (Sealed) 1/4-4		1/4-40" Bushin	1/4-40" Bushing (Unsealed)		Lever Lock-15/32" Bushing (Sealed)		
No. Poles	Keyway Side 1-2 4-5	Center Position	Opposite Keyway 2-3 5-6	MIL-SPEC Part Number	OTTO Part Number	MIL-SPEC Part Number	OTTO Part Number	MIL-SPEC Part 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, Ĺ, M, N	
2	ON	OFF	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	
NOT	E: () denotes	momentary ac	tion.								

MEETS MIL-S-83731, COMMERCIAL & MILITARY GRADES

Standard Toggle, Standard Toggle, Thumb Actuators, 15/32-32 Bushing 15/32-32 Bushing 1/4-40 Bushing Sealed front panel construction. Behind-panel Unsealed front panel construction. Optional dimensions same as 15/32-32 Bushing style. Sealed front panel construction. front panel seal P/N 700223. Style 4 .56 .345 Max -28° ±4' .35° -14°-.575 Max 17.5° ±2.5 75 .072 X .030 KEYWAY KEYWAY-690 KEYWAY 42 1/4-40 BUTTON AND SPRING PIN SUPPLIED SEPARATELY TO BE ASSEMBLED AFTER SWITCH INSTALLATION 15/32-32 535 UNS-2A NS-2A Max THD r .25 56 Style 5 THD T .640 .575 Max. Max. .740 max Φŧ .072 X .030 KEYWAY 535 - 53 Max. Lever Lockout Toggle, 15/32-32 Bushing **Lever Lockout Configuration Codes**

Figures A thru P are schematics to illustrate lockout Sealed front panel construction. configurations and momentary positions. They do not represent details of construction. .090 APPROX. PULLOUT TO CHANGE POSITION. A Locked in all three positions B Locked in Center and Keyway Side position D Locked out of Center position E Locked in Center position F Locked in Opposite Keyway position .160 G Locked in Keyway Side position H Locked out of Center and Keyway Side Position KEYWAY J Locked out of Center and Opposite Keyway position 15/32-32 NS-2A THD K Locked in Center and Opposite Keyway position L Locked out of Keyway Side position M Locked out of and into Opposite Keyway position N Locked out of Opposite Keyway position .740 AX P Locked out of and into Keyway Side position





TOGGLE SWITCHES

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[6.1]

Specifications Subject To Change Without Notice