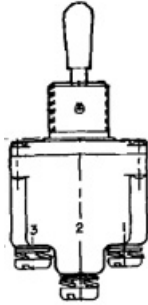




### 1TL1-1



*Actual product appearance may vary.*

**TL Series Toggle Switch, 1 pole, 3 position, Screw terminal, Standard Lever, Military Part Number MS24523-21**

#### Features

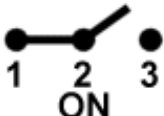

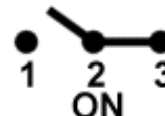
- Qualified to MIL-S-3950
- Environment-proof sealing
- 1,2, and 4 pole circuitry
- Standard and pull-to-unlock levers
- 2 and 3 position, maintained and momentary toggle action
- Temperature range: -85°F to +160°F
- Completely sealed switching chamber
- Step-design case provides added space between terminals to help prevent shorting
- UL recognized, CSA certified
- CE approved

#### Potential Applications

- Industrial machinery and equipment
- Military and commercial aviation
- Construction equipment
- Test instruments
- Agricultural machinery
- Process control
- Medical instrumentation

#### Description

MICRO SWITCH™ TL Series toggle switches have high strength, temperature resistant, non-tracking case material and silver cadmium oxide contacts. Pull-to-Unlock toggle levers prevent accidental operation; the lever must be pulled approx. 2,3 mm (0.09 inches) to change positions.

Product Specifications	
Circuitry/ Operating action	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p><b>Keyway Position</b></p>  </div> <div style="text-align: center;"> <p><b>Center Position</b></p>  </div> <div style="text-align: center;"> <p><b>Opposite Keyway Position</b></p>  </div> </div>
Product Type	MICRO SWITCH™ Toggle Switch
Ampere/ Voltage Range (Resistive Load)	0.5 A to 20 A at 0.5 Vdc to 28 Vdc, 0.5 A to 15 A at 0.5 Vac to 277 Vac, 0.5 A at 250 Vdc, 0.75 A at 115 Vdc
Circuitry	SPDT
Action	3 position
Mounting	Bushing 15/32 in
Termination	Screw
Military Part Number	MS24523-21
Lever Type	Standard
UL/CSA Rating Code	L191: 15 A-125, 250, 277 Vac; 1/2 Hp-125 Vac; 1 Hp-250, 277 Vac; 5 A-120 Vac "L"
Comment	Silver cadmium oxide contacts
Availability	Global
UNSPSC Code	30211908
UNSPSC Commodity	30211908 Toggle switches
Series Name	TL

**SWITCH - TOGGLE**

**1TL1 SERIES CHART 1**

CATALOG LISTING

THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF MICRO SWITCH, A DIVISION OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF MICRO SWITCH

CATALOG LISTING  
**1TL1 SERIES CHART 1**

PAGE 1 OF 1

ISSUE  
**23**

REVISIONS  
A CO-94429  
S A V  
24 NOV 99

CHECK

24 NOV 99

JAF

CHECK

24 NOV 99

CHECK

24 NOV 99

PTC/CAD 2D

DRAWN

S A V 24 NOV 99

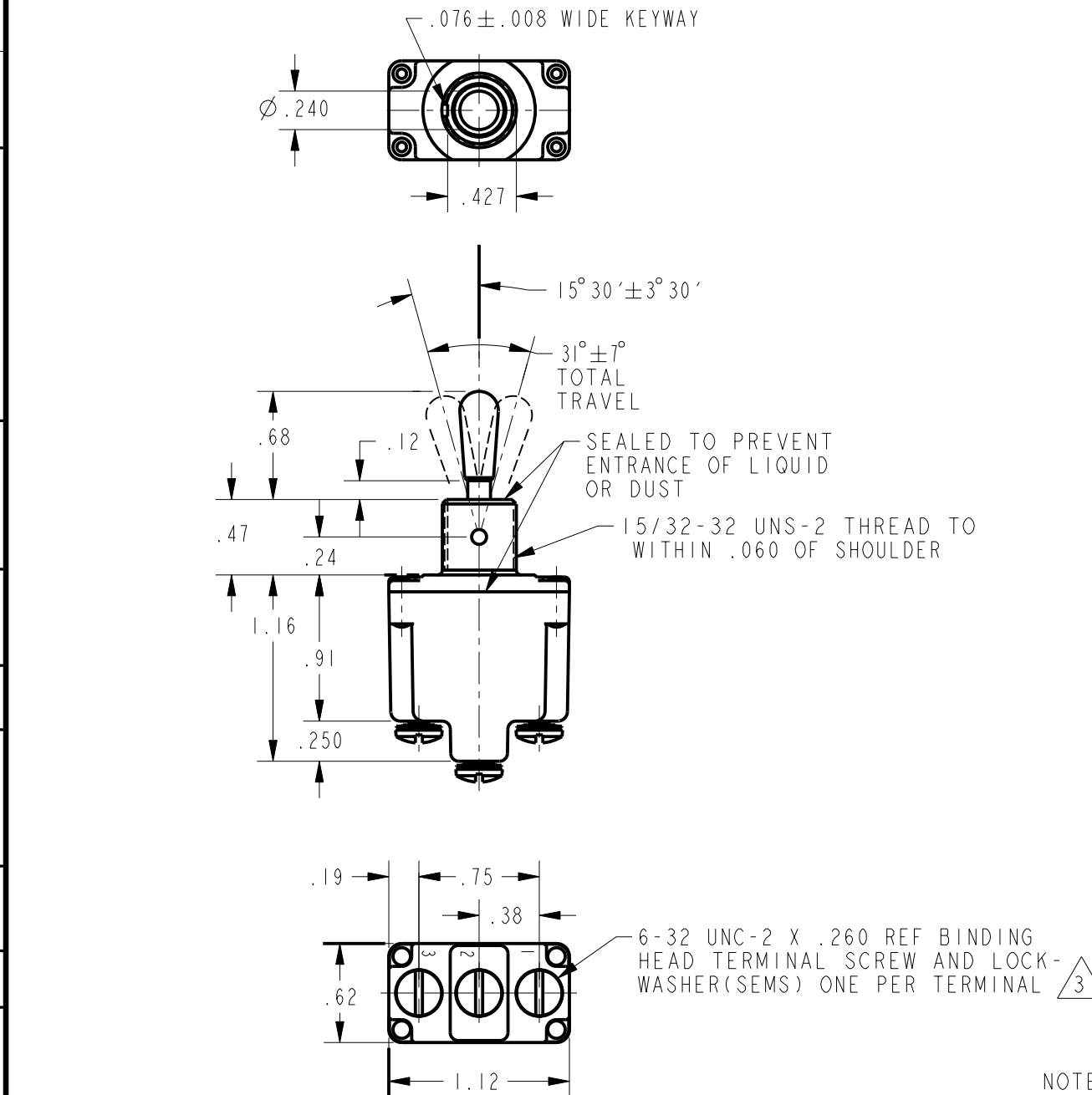
REPLACES

RELEASE NO.

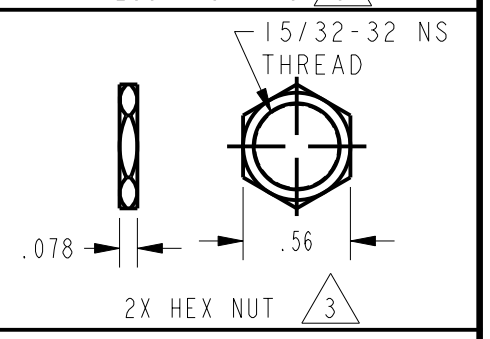
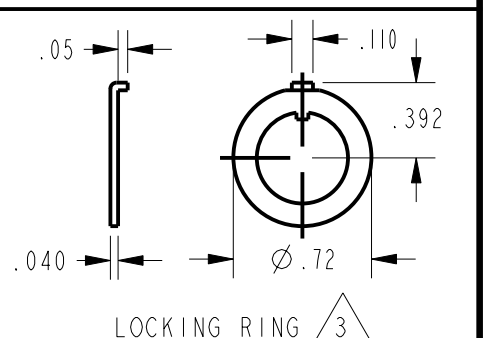
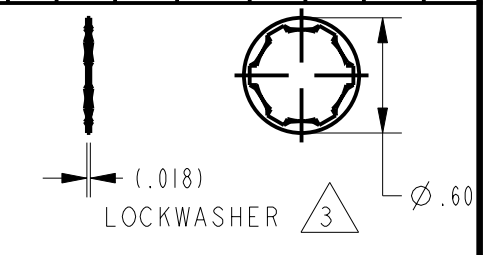
CHECK

CHECK

CHECK



CATALOG LISTING	CIRCUIT MADE WITH TOGGLE LEVER IN			MILITARY STANDARD NUMBER	MILITARY RATING (AMPS)								
	KEYWAY SIDE (1-2)	CENTER (1-2)	OPPOSITE KEYWAY (2-3)		RESISTIVE LOAD				LAMP LOAD		INDUCTIVE LOAD		
					DC VOLTS	AC VOLTS	DC VOLTS	AC VOLTS	VDC	VAC	VDC	VAC	
ITLI-1	ON	OFF	ON	MS24523-21	28	125	250	125	250	28	125	28	125
ITLI-2	OFF	NONE	ON	MS24523-22	20	.75	.5	15	6	5	3	15	10
ITLI-3	ON	NONE	ON	MS24523-23	(REFER TO L191 FOR UL RATING)								
ITLI-21	NONE	OFF	ON	MS24523-24									
ITLI-31	NONE	ON	ON	MS24523-33									
ITLI-4	MOM OFF	NONE	ON	MS24523-29									
ITLI-5	MOM ON	OFF	ON	MS24523-31									
ITLI-6	MOM ON	NONE	OFF	MS24523-30	15	.75	.5	15	6	4	2	10	7
ITLI-7	MOM ON	OFF	MOM ON	MS24523-27	(REFER TO L192 FOR UL RATING)								
ITLI-8	MOM ON	NONE	ON	MS24523-26									
ITLI-51	NONE	ON	MOM ON	MS24523-32									
ITLI-61	MOM ON	OFF	NONE	MS24523-28									



- NOTES
- 1 - SWITCHES ARE CAPABLE OF WITHSTANDING A TEMPERATURE OF 160° F CONTINUOUSLY AT FULL RATED LOAD
  - 2 - CIRCUIT DESIGNATION, MICRO SWITCH CATALOG LISTING AND "MS" NUMBER MARKED ON SIDE OF SWITCH
  - 3 - FURNISHED UNASSEMBLED
  - 4 - FOR TERMINAL COVER, SEE MICRO SWITCH CATALOG LISTING 5PA7
  - 5 - APPLIES ONLY TO "ON" AND "MOMENTARY ON" POSITIONS
  - 6 - THESE SWITCHES ARE QUALIFIED UNDER MIL-S-3950

15A-125, 250 OR 277 VAC   
1/2 HP-125VAC: 1 HP-250, 277 VAC  
5A-125VAC "L" CODE L191

10A-125, 250, 277 VAC   
1/4 HP-125VAC: 1/2 HP-250, 277 VAC  
3A-125VAC "L" CODE L192

THIRD ANGLE PROJECTION

SCALE FULL

DO NOT SCALE PRINT

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE

ONE PLACE (.0) ±.030  
TWO PLACE (.00) ±.015  
THREE PLACE (.000) ±.005  
ANGLES ±

WEIGHT .07 LBS APPROX