

TRD Series

TYPICAL PERFORMANCE CHARACTERISTICS:

Contact Rating	0.4 VA Max. @ 20 VDC or peak AC 3 A @ 125 VAC or 28 VDC (2 pos.) 2A
Initial Contact Resistance	20 Milliohms max.
Contact Timing	Break-before-make
Insulation Resistance	1,000 Megohms min.
Dielectric Strength	500 Volts RMS @ sea level
Actuator Travel	23°
Life Expectancy	2 Pos. - 100,000 actuations 3 Pos. - 50,000 actuations
UL recognized under the Component Program of Underwriters Laboratories Inc. File #E46765	

NOTE: When hand soldering, solder with switch in closed position. Solder temperature 550-600°F less than 5 seconds.

NOTE: Part numbering sequence page E4



TRD21N10WL

Standard Body Color - (Black)

Model	Type	Function			Act. Code Pg. M8	Contact	Terminal	Model	Type	Function			Act. Code Pg. M8	Contact	Terminal
TRD11D1(*)WL	SPDT	On	None	On	1	Gold	Wire Lug	TRD13D1(*)WL	SPDT	On	None	On	1	Silver	Wire Lug
TRD11E1(*)WL	SPDT	On	Off	On	5	Gold	Wire Lug	TRD13E1(*)WL	SPDT	On	Off	On	5	Silver	Wire Lug
TRD11F1(*)WL	SPDT	On	None	(On)	1	Gold	Wire Lug	TRD13F1(*)WL	SPDT	On	None	(On)	1	Silver	Wire Lug
TRD21N1(*)WL	DPDT	On	None	On	2	Gold	Wire Lug	TRD23N1(*)WL	DPDT	On	None	On	2	Silver	Wire Lug
TRD21P1(*)WL	DP3T	On	Off	On	6	Gold	Wire Lug	TRD23P1(*)WL	DP3T	On	Off	On	6	Silver	Wire Lug
TRD21R1(*)WL	DPDT	On	None	(On)	2	Gold	Wire Lug	TRD23R1(*)WL	DPDT	On	None	(On)	2	Silver	Wire Lug

(*) Specify rocker color by adding suffix number: (0) Black (2) Red, (6) Blue (9) Yellow,
(On) indicates momentary position.



TRD11D10WLLR

Standard Body and Rocker Color - (Black)

Model	Type	Function			Act. Code Pg. M8	Contact	Terminal	Model	Type	Function			Act. Code Pg. M8	Contact	Terminal
TRD11D10WLLR(*)	SPDT	On	None	On	1	Gold	Wire Lug	TRD13D10WLLR(*)	SPDT	On	None	On	1	Gold	Wire Lug
TRD11E10WLLR(*)	SP3T	On	Off	On	5	Gold	Wire Lug	TRD13E10WLLR(*)	SP3T	On	Off	On	5	Gold	Wire Lug
TRD11F10WLLR(*)	SPDT	On	None	(On)	1	Gold	Wire Lug	TRD13F10WLLR(*)	SPDT	On	None	(On)	1	Gold	Wire Lug

(*) Specify LED color by adding suffix number: (2) Red, (4) Yellow, (5) Green, (25) Red/Green - Bi-color (On) indicates momentary position.

E3

AUGAT Inc.
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Attleboro Falls, MA 02763 USA
(508) 699-9800 FAX (800) 533-2526

TRD Series *Rocker/Paddle • How To Order*

MATERIAL SPECIFICATIONS:

Movable Contacts Copper alloy w/silver inlay contact or gold plate
 Terminals/Fixed Contacts Copper alloy w/silver inlay contact or gold plate
 Terminal Seal Epoxy
 Housing/Beveled Frame Polyamide, black matte finish

ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature -4°F to +176°F (-20°C to +80°C)
 Storage Temperature -49°F to +199°F (-45°C to +93°C)
 Solder Heat Resistance Meets MIL-STD-202, method 210

TYPICAL PERFORMANCE CHARACTERISTICS:

Contact Rating Silver: 3A max. @ 125 VAC, option 3
 Gold: 0.4VA max. @ 20 VDC, option 1
 Initial Contact Resistance 20 Milliohms max.
 Static Withstanding 15KV, per IEC 801-2
 Insulation Resistance 1,000 Megohms min. @ 500 VDC
 Dielectric Strength 500 Volts RMS @ sea level
 Electrical Life 2 Pos. 20K cycles @ full rated 3A load, 80K @ 0.4VA, 3 pos. 10K cycles @ full rated 3A load, 60K @ 0.4VA

***NOTICE:** Caution should be used when hand-soldering. Solder heat Resistance -550°-600°F for less than 5 seconds. Solder with the switch in the closed position.

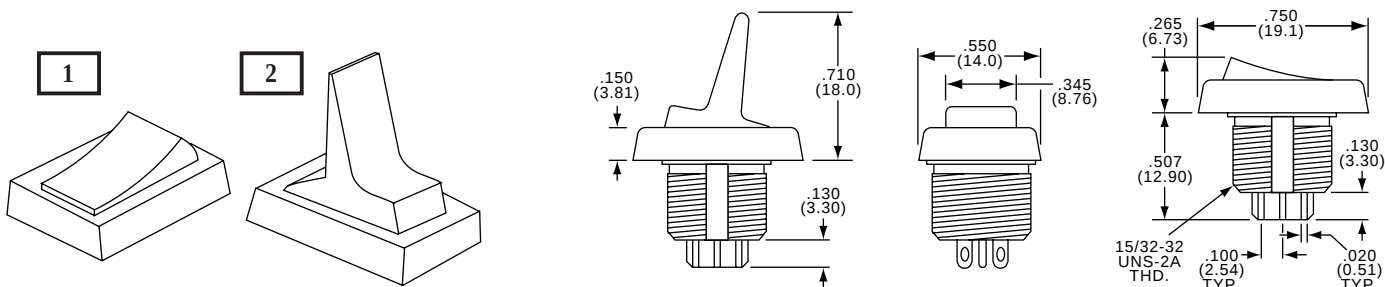
UL recognized under the Component Program of Underwriters Laboratories Inc. File #E46765

HOW TO ORDER

See pages M2-M4 for application specific indexing.

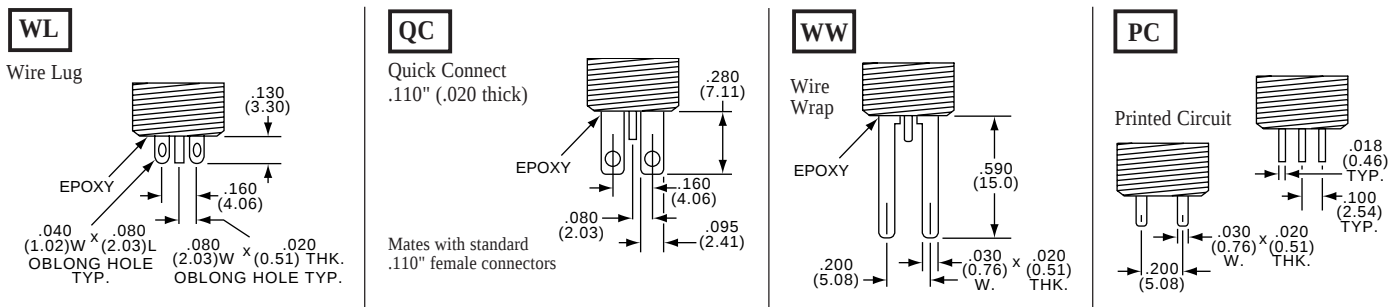
Model	Contact Rating	Function	Actuator	Actuator Color	Terminal	Mount	L.E.D. Illumin.	L.E.D. Color	*UL
TRD1 Single Pole	Single Pole D on-on E on-off-on F on-(on) G (on)-off-(on) H on-off-(on)		1 Rocker	WL Wire Lug	W Wire Wrap QC Quick Connect PC Printed Circuit	L Beveled frame adaptor	L None 2 red 4 yellow 5 green 25 bi-color red/green	L	
TRD2 Double Pole			2 Paddle	WW Wire Wrap		LR Integral w/rocker (TRD 1 only)			
1 Gold 0.4VA			0 black	QC Quick Connect					
3 Silver 3A			2 red	PC Printed Circuit					
			6 blue						
			9 yellow						
	Double Pole N on-on P on-off-on R on-(on) S (on)-off-(on) T on-off-(on)					15/32" round hole 5 1/2" square hole			
									Functions: Silver only D, F, N, & R Terminations Functions only WL, WW or QC only

ACTUATORS



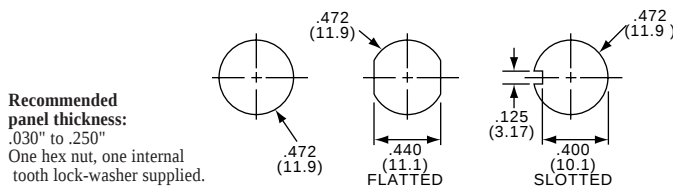
TERMINATIONS

(Epoxy seal standard)

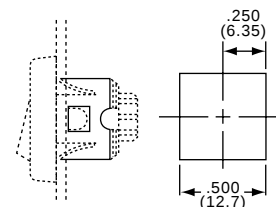


15/32" HOLE STANDARD

Standard TRD bushing will mount in any hole shown below.



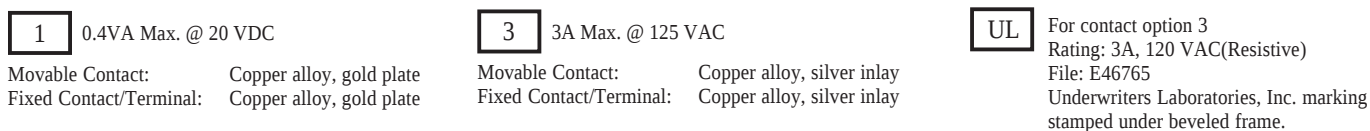
5 1/2" SQUARE CUTOUT SNAP-IN ADAPTOR



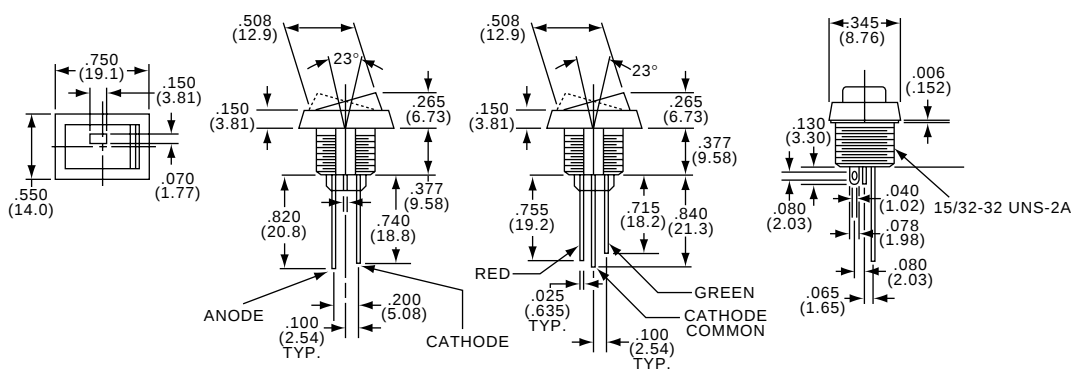
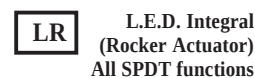
Recommended panel thickness:
.030" to .125"

Material: bright stainless steel
To specify adaptor separately,
use P/N **TRD10793**

CONTACTS/RATING/UL RECOGNITION



L.E.D. ILLUMINATION - SINGLE AND BI-COLOR



Standard mounting dimensions apply, L.E.D. supplied in 2 red, 4 yellow, 5 green, or 25 red/green.

L.E.D. Specifications: Max Voltage: 2.8 VDC

Max. Forward Current: red-20mA, Yellow-25 mA, green-25 mA, red/green-40 mA.

Need more technical information?

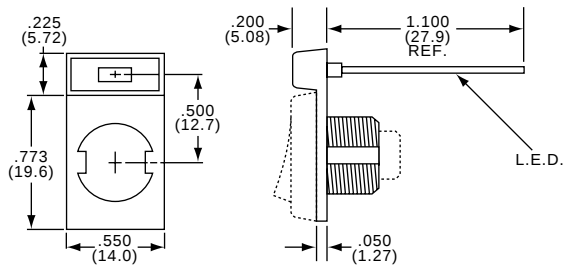
*Consult your local Augat sales office
listed on the back cover*

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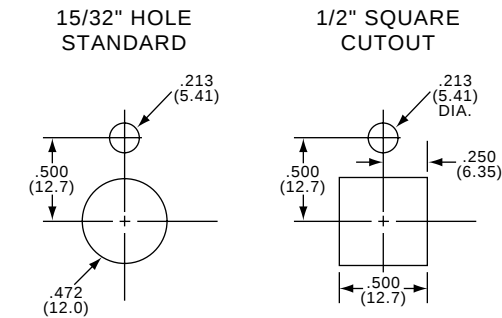
L

L.E.D. BEVELE FRAME ADAPTOR
(Accepts rectangular L.E.D.)



Material: Nylon 6/6
Color/Finish: Black, matte

MOUNTING



Recommended Panel Thickness: .030 to .220:

Recommended Panel Thickness: .030 to .095"

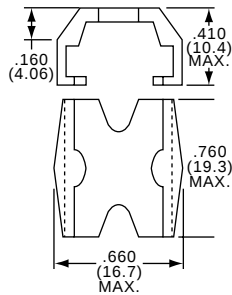
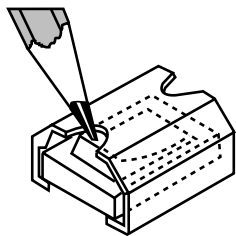
E

FUNCTIONS

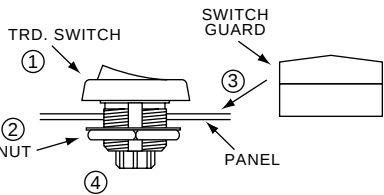
Single Pole	Double Pole			
		123 456	123 456	123 456
☐ D	☐ N	On	None	On
☐ E	☐ P	On	Off	On
☐ F	☐ R	On	None	(On)
☐ G	☐ S	(On)	Off	(On)
☐ H	☐ T	On	Off	(On)
SPDT Terminals Connected		2-3	---	1-2
DPDT Terminals Connected		2-3 5-6	---	1-2 4-5

- None** No mechanical position
- Off** Mechanical position, no electrical connection
- (On)** Momentary mechanical position, electrical connection

SWITCH GUARD



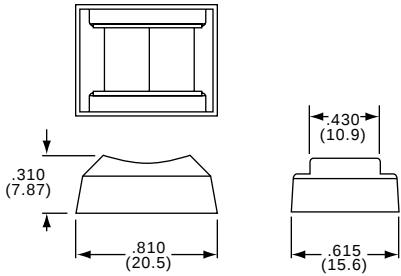
1. Insert switch in panel.
2. Attach lockwasher and hexnut.
3. Snap switch guard onto switch.
4. Tighten hex nut.



Recommended Panel Thickness:
15/32" hole standard - .030 to .220
15/32" square cutout - .030 to .095

Material: Nylon 6/6 **Color/Finish:** Black matte, Specify separately, P/N TRD10979

ROCKER BOOT SEAL



To specify boot seal use P/N TRD11494