



# 1H Series

High Current Sealed Toggle Switch

IP 67  
ACCORDING TO  
EN 60529:1991+A1:2001  
IEC 60529:2001

C<sub>UL</sub> US  
E 187490

RoHS  
compliant

Pb  
lead-free

1H  
Toggle Switches



## SPECIFICATIONS

**CONTACT RATING:** 12 Amps @125/250 VAC.

**MECHANICAL LIFE:** 30,000 make-and-break cycles.

**CONTACT RESISTANCE:** 20 mΩ max. (initial value) @ 2-4VDC  
100mA for both silver and gold plated contacts.

**INSULATION RESISTANCE:** 1,000 MΩ min./500VDC

**DIELECTRIC STRENGTH:** 1,500 Vrms min.@sea level.(initial value)

**OPERATING TEMPERATURE:** -30°C to 85°C.

## MATERIALS

**CASE:** Diallyl phthalate (NYLON) (UL94v-0)

**ACTUATOR:** Brass, chrome plated.

**BUSHING:** Zin+Silicon.

**CONTACT:** Copper, Silver plated.

**TERMINAL:** Copper, Nickel plated.







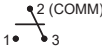
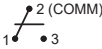
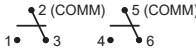
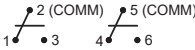
## HOW TO ORDER

MODEL NO.	WATERPROOF	FUNCTION TYPE	ACTUATOR	BUSHING	TERMINAL TYPE	CONTACT PLATING	TERMINAL PLATING	RoHS SOLDERING
1H	A Waterproof	SP S1 ON-NONE-ON S2 ON-NONE-(ON) S3 ON-OFF-ON S4 (ON)-OFF-(ON) S5 ON-OFF-(ON) S9 ON-NONE-OFF DP D1 ON-NONE-ON D2 ON-NONE-(ON) D3 ON-OFF-ON D4 (ON)-OFF-(ON) D5 ON-OFF-(ON)	T1 16.73 high	B1 11.8 high	M1 Screw locking M2 Quick connect	N Silver plated	1 Nickel plated 3um	S RoHS & Lead Free

EXAMPLE: 1HAS1T1B1M1N1S

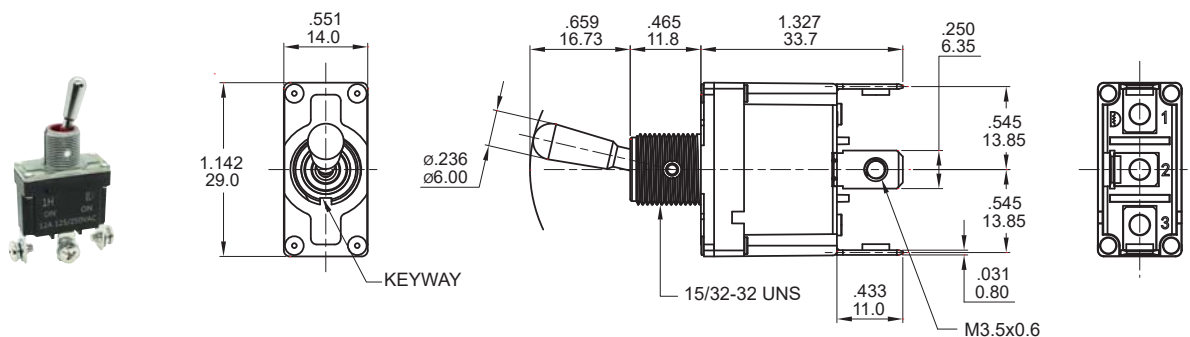


## ▼ SWITCH FUNCTION

NO. POLES	TYPE	SWITCH FUNCTION			CONNECTED TERMINALS / SCHEMATIC		
		POS.1	POS.2	POS.3	POS.1	POS.2	POS.3
							
SP	S1	ON	NONE	ON		N/A	2-1 
	S2	ON	NONE	(ON)		OPEN	
	S3	ON	OFF	ON			
	S4	(ON)	OFF	(ON)			
	S5	ON	OFF	(ON)		N/A	OPEN
	S9	ON	NONE	OFF			
DP	D1	ON	NONE	ON		N/A	2-1, 5-4 
	D2	ON	NONE	(ON)		OPEN	
	D3	ON	OFF	ON			
	D4	(ON)	OFF	(ON)			
	D5	ON	OFF	(ON)			

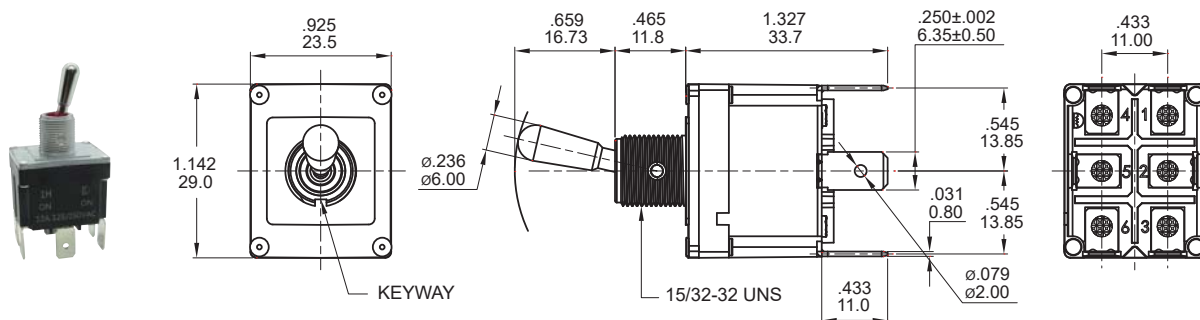
( )=MOMENTARY

## ▼ POLE OPTIONS



SPDT

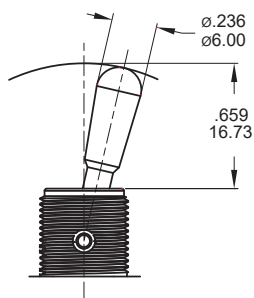
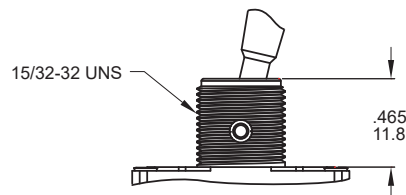
Model name. 1HAS1T1B1M1N1S



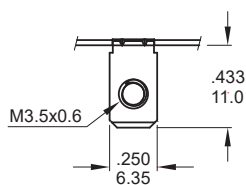
DPDT

Model name. 1HAD1T1B1M2N1S

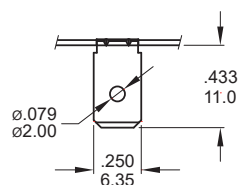
## ▼ ACTUATOR &amp; BUSHING OPTIONS

**T1 STD****B1 STD**

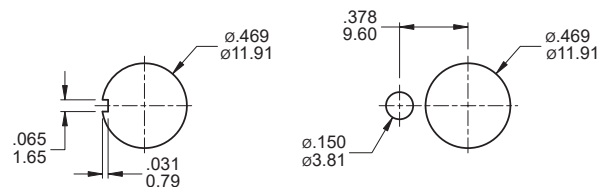
## ▼ TERMINAL OPTIONS &amp; PANEL MOUNTING

**M1 Screw locking**

.031inch(0.80mm) THK.

**M2 Quick connect**

.031inch(0.80mm) THK.

**15/32 IN BUSHING**

Without locking ring (Keyway)

With standard locking ring.

## ▼ HARDWARE

EXAMPLE:

Model name.



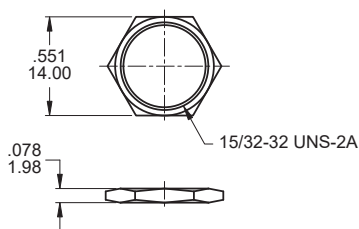
5 Standard hardware

\* Standard : 2 nut, 1 locking ring, 1 lockwasher

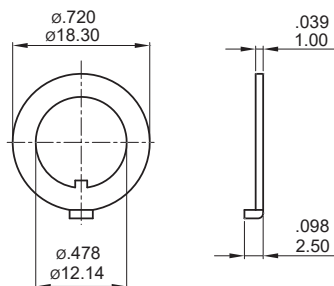
\* For further information please consult sales representative.

**15/32 NUT (Std.)**

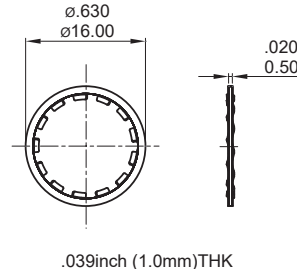
Model name. MNU1M07

**LOCKING RING (Std.)**

Model name. NV-MNU-1M08-ZB

**LOCKWASHER (Std.)**

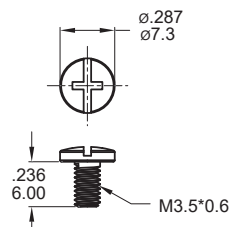
Model name. MNU-1M74



.039inch (1.0mm)THK

**M3.5 SCREW (Std.)**

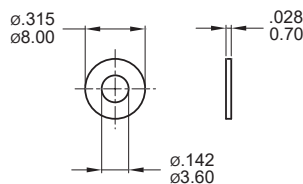
Model name. MNU-1H02



For M1 Terminal

**WASHER (Std.)**

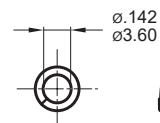
Model name. MNU-1H01



For M1 Terminal

**SPRING WASHER (Std.)**

Model name. MNU-1H05



For M1 Terminal

## ▼ SOLDERING PROCESS

**MANUAL SOLDERING:** Use 30 watts soldering iron and controlled the temperature at 350°.

Duration of solder immersion: Max. 5 sec.

**WAVE SOLDERING:** Recommend soldering temperature: 260 ± 5°C

Duration of solder immersion: Max. 5 sec. (PCB thickness is 1.6mm)