

SERIES 100 SWITCHES

TOGGLE SWITCHES - MINIATURE

US



SPECIFICATIONS

Contact Rating:	See contact material options
Life Expectancy:	40,000 make-and-break cycles
Contact Resistance:	10 mΩ max. typical initial @ 2-4 VDC 100 mA for both silver and gold plated contacts
Insulation Resistance:	1,000 MΩ min.
Dielectric Strength:	1,000 V RMS @ sea level
Operating Temperature:	-30° C to 85° C

MATERIALS

Case:	Diallyl Phthalate (DAP)
Toggle Handle:	Brass, chrome plated
Switch Support:	Brass or steel, tin plated
Bushing:	Brass, nickel plated
Housing:	Stainless steel
Contacts / Terminals:	Silver or gold plated copper alloy

FEATURES & BENEFITS

- ▶ Up to 4 poles available
- ▶ Variety of switching functions
- ▶ Miniature
- ▶ Multiple actuator & bushing options

APPLICATIONS/MARKETS

- ▶ Telecommunications
- ▶ Instrumentation
- ▶ Networking
- ▶ Medical equipment

HOW TO ORDER

SERIES 100	MODEL NO.	ACTUATOR	BUSHING	TERMINATION	CONTACT MATERIAL	SEAL E	HARDWARE
	SP1	T1†	B1	M1	Q = Silver R = Gold	E = Epoxy Sealed at Base of Terminal	H = Hardware
	SP2*	T2	B2	M2			
	SP3	T3	B3	M3			
	SP4*	T4	B4	M5			
	SP5*	T5	B5	M6			
	DP1	T6	B6	M61			
	DP2*	T7	B8	M7			
	DP3	T8	B9	M71			
	DP4*	T9	B11	VS2			
	DP5*	K1	B12	VS3			
	DP6	K2	B13	VS5*			
	DP7*		B15	M64*			
	DP8*	† Optional Toggle Cap (T1 Only): T100-1 = White T100-2 = Black	B16	VS21*			
	3P1		B25**	VS31*			
	3P2*		B26**				
	3P3						
	3P4*						
	3P5*						
	4P1						
	4P2*						
	4P3						
	4P4*						
	4P5*						
	4P6						
	4P7*						
	4P8*						

▶ ▶ ▶ Example Ordering Number
100-SP1-T4-B2-M1-R-E

Notes: * Not available with the K1 and K2 actuator options.

** Available only with the K1 and K2 actuator options.

Specifications subject to change without notice.

SPDT



SCHEMATIC



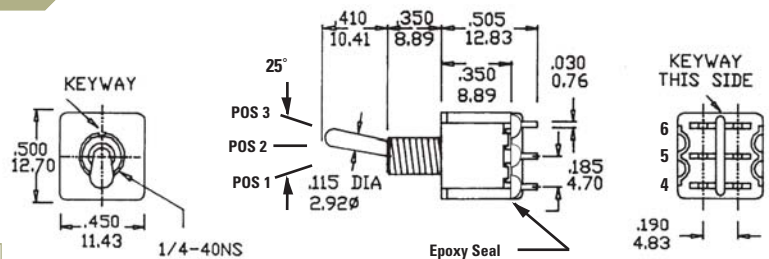
Model No.	POS 1	POS 2	POS 3
SP-1	ON	NONE	ON
SP-2	ON	NONE	(ON)
SP-3	ON	OFF	ON
SP-4	(ON)	OFF	(ON)
SP-5	ON	OFF	(ON)
Term. Comm.	2-3	OPEN	2-1

() = Momentary

DPDT



SCHEMATIC



Model No.	POS 1	POS 2	POS 3
DP-1	ON	NONE	ON
DP-2	ON	NONE	(ON)
DP-3	ON	OFF	ON
DP-4	(ON)	OFF	(ON)
DP-5	ON	OFF	(ON)
DP-7	ON	ON	(ON)
DP-8	(ON)	ON	(ON)
Term. Comm.	2-3, 5-6	OPEN	2-1, 5-4

DP-6	ON	ON	ON
Term. Comm.	2-3, 5-6	2-3, 5-4	2-1, 5-4

() = Momentary

3PDT



SCHEMATIC



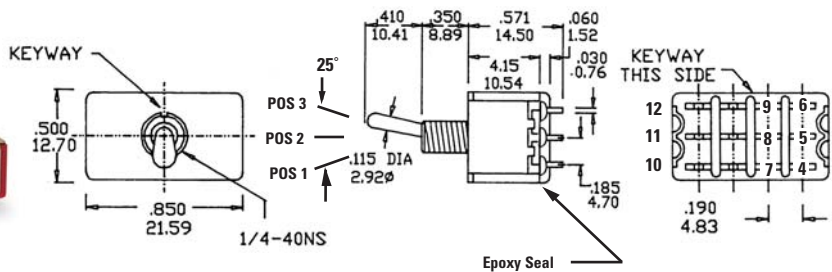
Model No.	POS 1	POS 2	POS 3
3P-1	ON	NONE	ON
3P-2	ON	NONE	(ON)
3P-3	ON	OFF	ON
3P-4	(ON)	OFF	(ON)
3P-5	ON	OFF	(ON)
Term. Comm.	2-3, 5-6 8-9	OPEN	2-1, 5-4 8-7

() = Momentary

4PDT



SCHEMATIC



Model No.	POS 1	POS 2	POS 3
4P-1	ON	NONE	ON
4P-2	ON	NONE	(ON)
4P-3	ON	OFF	ON
4P-4	(ON)	OFF	(ON)
4P-5	ON	OFF	(ON)
4P-7	ON	ON	(ON)
4P-8	(ON)	ON	(ON)
Term. Comm.	2-3, 5-6 8-9 11-12	OPEN	2-1, 5-4 8-7 11-10

4P-6	ON	ON	ON
Term. Comm.	2-3, 5-6 8-9 11-12	2-3, 5-4 8-9 11-10	2-1, 5-4 8-7 11-10

() = Momentary

SERIES 100 SWITCHES

TOGGLE SWITCHES - MINIATURE

3 - WAY WIRING DIAGRAM SCHEMATICS



Bottom View
or DP-6, DP-7, DP-8



Bottom View
for 4P-6, 4P-7, 4P-8



ACTUATOR OPTIONS

T1* STANDARD



T2*



T3*



T4*



T5*



T6 FLATTED WITH BUILT IN ANTIROTATION



Use with B11, B12, B15, B16 only

T7



T8



T9* PLASTIC BLACK



K1



K2



*Add .070 (1.78) for B3, B4 bushings, subtract .020 (0.51) for B6 bushing.



BUSHING OPTIONS

B1 THD STD

B2 NON-THD



B3 THD STD

B4 NON-THD



B4 is standard for M6, M7 and VS termination options.

B5 HIGH TORQUE



B6 HIGH TORQUE



B8 METRIC THD



B9 SPLASH PROOF



B13



Use with T7 and T8 actuators only

B11 THD STD

B12 NON-THD



Use with T6 actuator only

B15 THD STD

B16 NON-THD



Use with T6 actuator only

B25



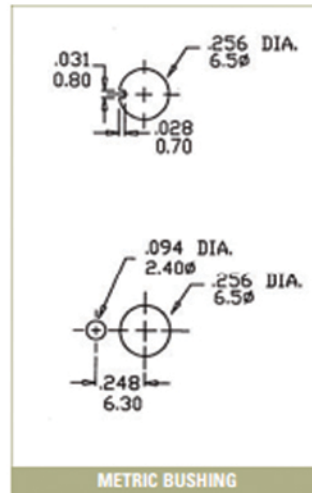
B26



SERIES 100 SWITCHES

TOGGLE SWITCHES - MINIATURE

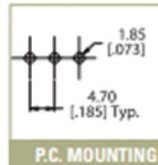
BUSHING OPTIONS - PANEL MOUNTING



TERMINATION OPTIONS

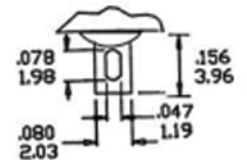
M2

SPDT



M1

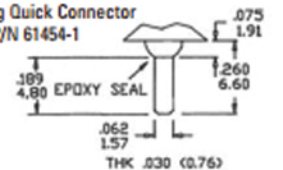
SOLDER LUG



M3

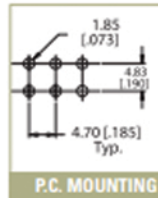
QUICK CONNECT

Mating Quick Connector
Amp P/N 61454-1



M2

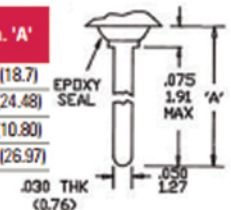
DPDT



M5

WIRE WRAP

Option Code	Dim. 'A'
M51	.750 (18.7)
M52	.964 (24.48)
M53	.425 (10.80)
M54	1.062 (26.97)



M6

SPDT





M6

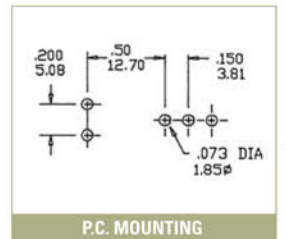
DPDT



P.C. MOUNTING

M7

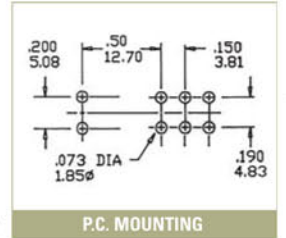
SPDT



P.C. MOUNTING

M7

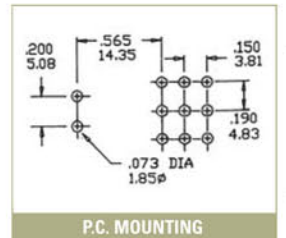
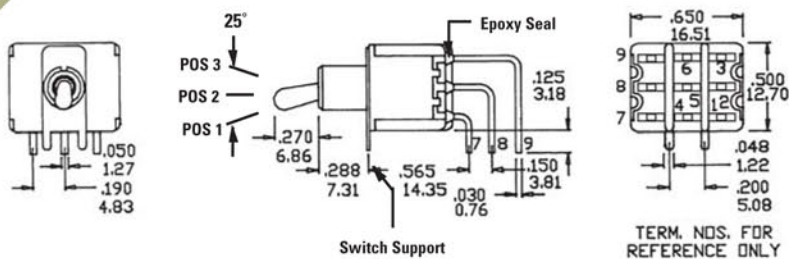
DPDT



P.C. MOUNTING

M7

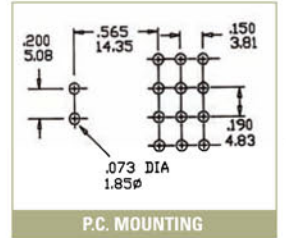
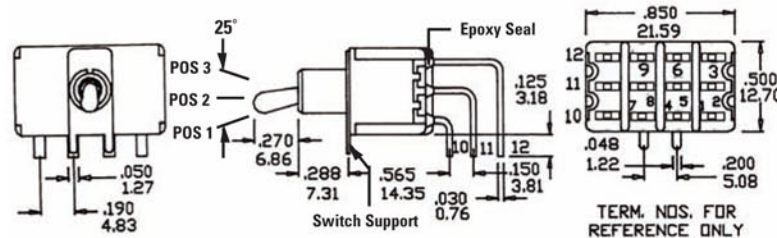
3PDT



P.C. MOUNTING

M7

4PDT



P.C. MOUNTING

SERIES 100 SWITCHES

TOGGLE SWITCHES - MINIATURE

TACT
SWITCHES

NAVIGATION
SWITCHES

PUSHBUTTON
SWITCHES

TOGGLE
SWITCHES

ROCKER
SWITCHES

SLIDE
SWITCHES

SNAP-ACTION
SWITCHES

DIP
SWITCHES

KEYLOCK
SWITCHES

ROTARY
SWITCHES

DETECTOR
SWITCHES

CAP
OPTIONS

VS2-VS3

SPDT



Option Code	Dim. 'A'
VS2	.460 (11.68)
VS3	.630 (16.00)



VS2-VS3

DPDT



Option Code	Dim. 'A'
VS2	.460 (11.68)
VS3	.630 (16.00)



VS5

DPDT



Option Code	Dim. 'A'
VS5	.630 (16.00)



M61

SPDT





M61

DPDT



M71

SPDT



M64

SPDT



TACT SWITCHES

NAVIGATION SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

ROCKER SWITCHES

SLIDE SWITCHES

SNAP-ACTION SWITCHES

DIP SWITCHES

KEYLOCK SWITCHES

ROTARY SWITCHES

DETECTOR SWITCHES

CAP OPTIONS

SERIES 100 SWITCHES

TOGGLE SWITCHES - MINIATURE

VS21-VS31

SPDT



Option Code	Dim. 'A'
VS2	.460 (11.68)
VS3	.630 (16.00)



P.C. MOUNTING

VS21-VS31

DPDT



Option Code	Dim. 'A'
VS2	.460 (11.68)
VS3	.630 (16.00)



P.C. MOUNTING

OPTIONAL TOGGLE CAP



Use with T1
T100-1 WHITE
T100-2 BLACK



CONTACT MATERIAL OPTIONS

Q

Fixed Terminal:	Silver plated over copper alloy
Moving Contact:	Silver plated over copper alloy
Rating:	5 Amps with resistive load @ 120VAC or 28VDC; 2 Amps with resistive load @ 250VAC

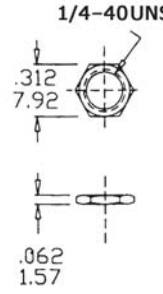
R

Fixed Terminal:	Copper alloy with gold plate over nickel plate
Moving Contact:	Copper alloy with gold plate over nickel plate
Rating:	0.4 Volt-Amps (VA) max. @ 20V max. (AC or DC)

HARDWARE

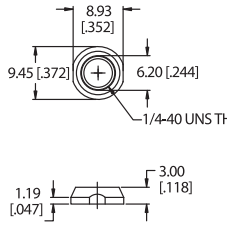
HDW2 1/4 IN. NUTS

1/4-40UNS



Supplied standard with B1, B3, B5, B6 and B9 options

HDW3 BLIND DRESSNUT

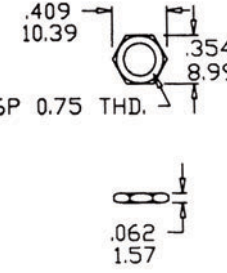


1.19 [.047]

3.00 [.118]

1/4-40 UNS THD

HDW6 METRIC NUT



.409 10.39

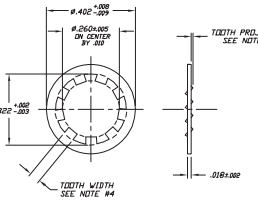
.354 8.99

M6P 0.75 THD.

.062 1.57

Supplied standard with B8 metric bushing

HDW11 LOCK WASHER



.400 (10.16)

.260 (6.60)

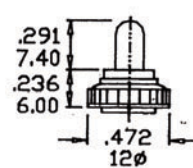
.302 (7.67)

TOOTH PROJECTION SEE NOTE #5

TOOTH WIDTH SEE NOTE #4

Supplied standard with B1/B3 bushing

Optional Rubber Hood Sealing E1



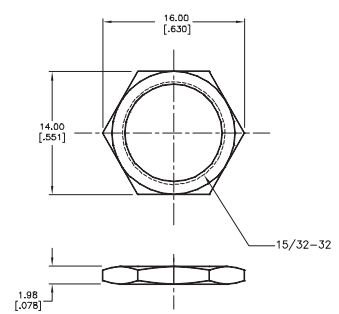
.291 7.40

.236 6.00

.472 12

E1= Inch (Std.) for actuator T1, T2 and bushings B1, B3, B5, B6 Optional rubber boot sealing

HDW4 15/32 IN. NUTS



16.00 [.630]

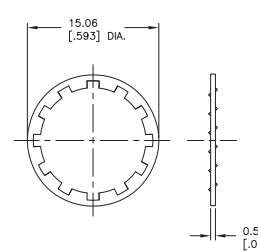
14.00 [.551]

15/32-32 NS

1.98 [.078]

Supplied standard with B13 bushing

HDW12 LOCK WASHER

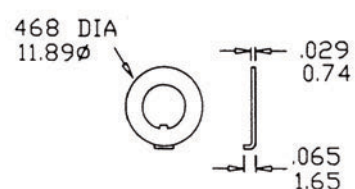


15.06 [.593] DIA.

0.55 [.022]

Supplied standard with B13 bushing

HDW15 LOCKING RING



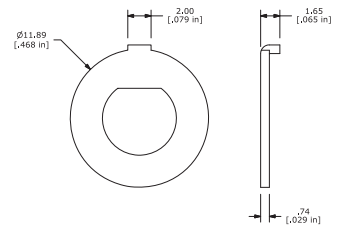
468 DIA 11.89

.029 0.74

.065 1.65

Supplied standard

HDW16 LOCKING RING



11.89 [.468]

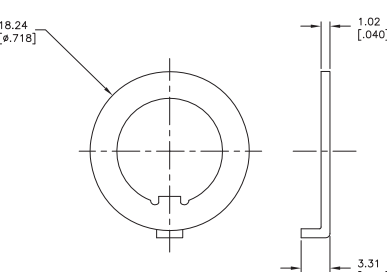
2.00 [.079 in]

1.65 [.065 in]

.74 [.029 in]

Supplied with B5 bushing

HDW17 LOCKING RING



18.24 [718]

1.02 [.040]

3.31 [.130]

Supplied with B13 bushing

TACT SWITCHES

NAVIGATION SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

ROCKER SWITCHES

SLIDE SWITCHES

SNAP-ACTION SWITCHES

DIP SWITCHES

KEYLOCK SWITCHES

ROTARY SWITCHES

DETECTOR SWITCHES

CAP OPTIONS