

600H-600NH series

Toggle switches • high amperage



DISTINCTIVE FEATURES

- Robust mechanism
- High current/voltage rating
- Insulated or metal lever
- UL, CSA and NF-VDE (EN 61058-1) approved



ELECTRICAL SPECIFICATIONS

- Max. current/voltage ratings : see tables below
- Peak current : 30 A max. during 1/2 sine, 250 VAC
- Initial contact resistance : 10 mΩ max.
- Insulation resistance : 1,000 MΩ min. at 500 VDC
- Dielectric strength :
2,000 Vrms 50 Hz min. between terminals
2,500 Vrms 50 Hz min. between terminals and frame
- Electrical life : 10,000 cycles at full load

APPROVED RATINGS				
Models	Functions	600H - 600NH		
		UL	CSA	NF-VDE
		UL 1054	CSA 22-2	EN 61058-1
Single and double pole	ON - OFF (1)	15 A 1/2 HP 125-250 VAC		10(4) A 400 VAC
	ON - ON (6)			
	Other (4-5-7-8-9)	10 A 1/2 HP 125-250 VAC		T 85/55 (600H)
Three pole	ON - OFF (1) & ON - ON (6)	15 A 1/2 HP 125-250 VAC		T 125/55 (600NH)
	Other (4-5-7-8-9)	10 A 1/2 HP 125-250 VAC		

FOR INFORMATION Max. current/voltage rating w. resistive load		
Functions	Ratings	Electrical life
ON - OFF ON - ON	15 A 250 VAC 10 A 24 VDC 15 A 12 VDC	10,000 cycles
ON OFF ON	15 A 250 VAC 5 A 24 VDC	6,000 cycles 10,000 cycles
Other	15 A 125 VAC 12 A 250 VAC 5 A 24 VDC	10,000 cycles

The company reserves the right to change specifications without notice.



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GENERAL SPECIFICATIONS

- Torque : 1.50 Nm (1.10 Ft.lb) max. applied to nut
- Panel thickness : 4.5 mm (.177) max. between 2 nuts
- Operating temperature : -20 °C to +55 °C (-4 °F to +131 °F)

MATERIALS

- Case : polyester UL94-V0
- Actuator :
 - 600H : brass, nickel plated
 - 600NH : black polyamide
- Bushing : brass, nickel plated or zinc die-cast (zamak)
- Contacts : silver/nickel alloy

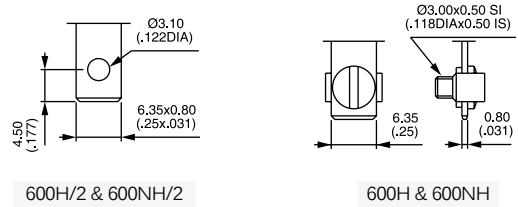
APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.

AGENCY APPROVALS



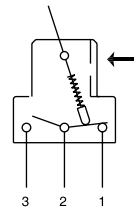
Availability : see chart on previous page.
Marking : approved models are standard marked.

TERMINALS

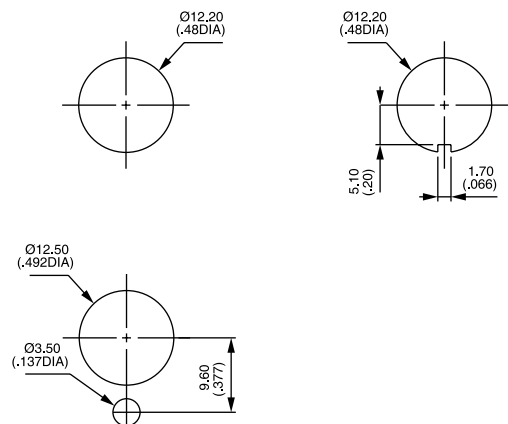


ELECTRICAL FUNCTIONS

→ KEYWAY



PANEL CUT-OUT



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BUILD YOUR PART NUMBER

BASIC PART NUMBER

6				
SERIES	NUMBER OF POLES	ELECTRICAL FUNCTIONS	ACTUATOR AND TERMINALS	MOMENTARY
3	Single pole	1 ON - OFF	H Metal lever, screw terminals	-1R ON ON MOM
4	Double pole	5 MOM - ON	H/2 Metal lever, solder lug/quick-connect terminals *	-2R MOM ON MOM
5	Three pole	6 ON - ON	H/3 Metal lever, normalized quick-connect terminals	
For 4 pole, see 660 series.		7 MOM OFF MOM	NH Insulated lever, screw terminals	
		8 ON OFF MOM	NH/2 Insulated lever, solder lug/quick-connect terminals	
		9 ON OFF ON	NH/3 Insulated lever, normalized quick-connect terminals *	
		4 ON ON ON MOM Δ		
		MOM ON MOM Δ		

Δ Must not have blank in "momentary" box. * On request.

OPTIONS FOR 600H SERIES ONLY

OPTIONS	LOCKING LEVERS	ACTUATOR OPTIONS
For models with metal lever only		
T Tropicalized case	-1V 1 locked position	-4 30 mm (1.181) long actuator
K Front panel sealing	-2V 2 locked positions	-5 40 mm (1.574) long actuator
L Bushing 16 mm (.629)	-3V 3 locked positions	-6 Retro style actuator
LUXE Chrome finish		X2595 Ergonomic flat plastic actuator
TKLUXE Front panel sealing + T and LUXE		
G Black finish		
GK Black finish + front panel sealing		
G-038 Black finish + luminous tip on lever		



ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

- ⚠ **Notice** : please note that not all combinations of above numbers are available. Refer to following pages for further information.
- 🛡 **Switch guards** are available to prevent inadvertent lever operation. See "Switch Guards" section on website.
- 🌧 **Sealing boots** are available on 600H series to protect the switches against dust and water. See "Sealing Boots" section of website.
- 🔧 **Mounting accessories** : standard hardware supplied with all models :
 - 600H series : 1 hex nut U166 and 1 knurled nut U411
 - 600NH series : 1 hex nut U166 and 1 knurled nut U522

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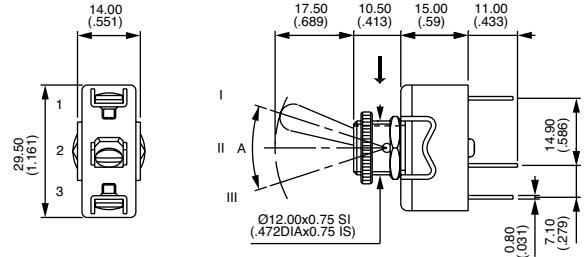
METAL LEVER - SINGLE POLE



Solder lug	Screw	A	III 2-1	II	I 2-3
631H/2	631H	30° ON	-	OFF	
635H/2	635H	26° MOM	-	ON	
636H/2	636H	30° ON	-	ON	
637H/2	637H	30° MOM	OFF	MOM	
638H/2	638H	36° ON	OFF	MOM	
639H/2	639H	36° ON	OFF	ON	

→ KEYWAY

A = Angle of throw



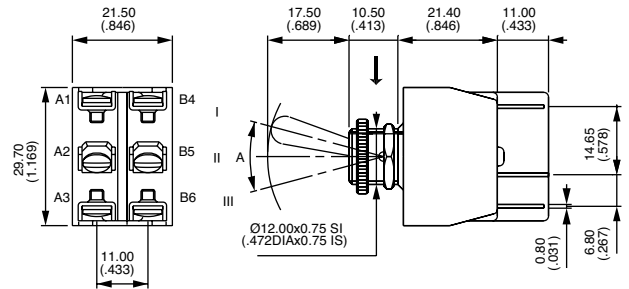
Angle of throw with K sealing option :
functions 1, 5, 6, 7 : 26° - functions 8, 9 : 32°

→ KEYWAY

METAL LEVER - DOUBLE POLE



Solder lug	Screw	A	III 2-1 5-4	II	I 2-3 5-6
641H/2	641H	26° ON	-	OFF	
644H/2	644H*	33° ON	ON	ON	
644H/2-1R	644H-1R*	33° ON	ON	MOM	
644H/2-2R	644H-2R*	33° MOM	ON	MOM	
645H/2	645H	26° MOM	-	ON	
646H/2	646H	26° ON	-	ON	
647H/2	647H	26° MOM	OFF	MOM	
648H/2	648H	26° ON	OFF	MOM	
649H/2	649H	32° ON	OFF	ON	



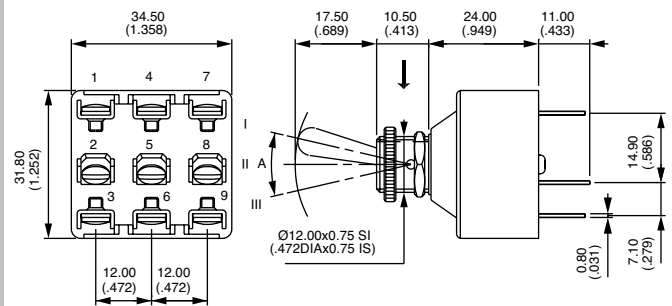
* Function 4 : SP in DP case - see "Technical information" on website

→ KEYWAY

METAL LEVER - THREE POLE



Solder lug	Screw	A	III 2-1 5-4 8-7	II	I 2-3 5-6 8-9
651H/2	651H	24° ON	-	OFF	
655H/2	655H	15° MOM	-	ON	
656H/2	656H	24° ON	-	ON	
657H/2	657H	24° MOM	OFF	MOM	
658H/2	658H	24° ON	OFF	MOM	
659H/2	659H	28° ON	OFF	ON	

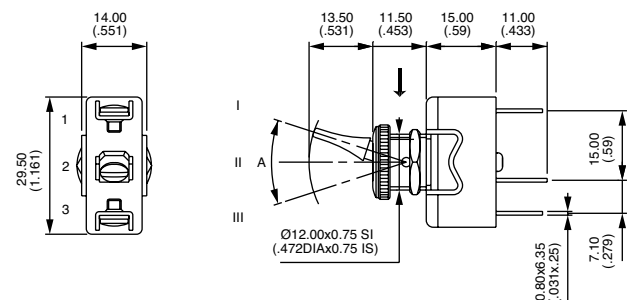


→ KEYWAY

INSULATED LEVER - SINGLE POLE



Solder lug	Screw	A	III 2-1	II	I 2-3
631NH/2	631NH	28° ON	-	OFF	
635NH/2	635NH	24° MOM	-	ON	
636NH/2	636NH	28° ON	-	ON	
637NH/2	637NH	33° MOM	OFF	MOM	
638NH/2	638NH	33° ON	OFF	MOM	
639NH/2	639NH	33° ON	OFF	ON	



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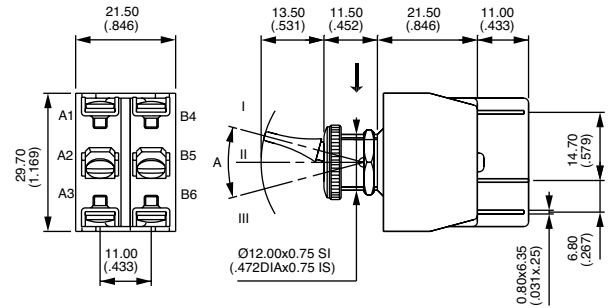
INSULATED LEVER - DOUBLE POLE



Solder lug	Screw	A		
641NH/2	641NH	26° ON	-	OFF
644NH/2	644NH*	30° ON	ON	ON
644NH/2-1R	644NH-1R*	26° ON	ON	MOM
644NH/2-2R	644NH-2R*	26° MOM	ON	MOM
645NH/2	645NH	26° MOM	-	ON
646NH/2	646NH	26° ON	-	ON
647NH/2	647NH	26° MOM	OFF	MOM
648NH/2	648NH	30° ON	OFF	MOM
649NH/2	649NH	30° ON	OFF	ON

III 2-1
5-4
II
I 2-3
5-6

KEYWAY



* Function 4 : SP in DP case - see "Technical information" on website

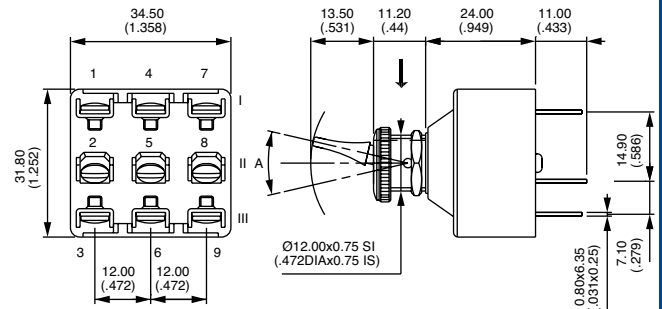
INSULATED LEVER - THREE POLE



Solder lug	Screw	A		
651NH/2	651NH	24° ON	-	OFF
655NH/2	655NH	15° MOM	-	ON
656NH/2	656NH	24° ON	-	ON
657NH/2	657NH	24° MOM	OFF	MOM
658NH/2	658NH	24° ON	OFF	MOM
659NH/2	659NH	28° ON	OFF	ON

III 2-1
5-4
8-7
II
I 2-3
5-6
8-9

KEYWAY



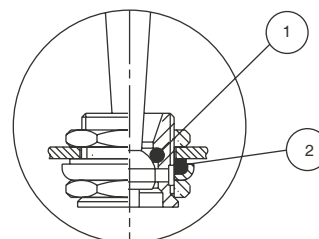
All models also available with normalized quick-connect terminals H/3 or NH/3.

OPTIONS

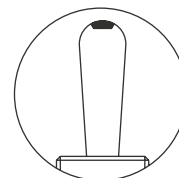


For 600H series only

- T** Tropicalized diallylphthalate case (-40 °C to +85 °C) (-40 °F to +185 °F)
- K** Front panel sealing by 1 O-ring and sealing washer. Protects the switch against water and dust. Panel seal withstands 1 bar pressure and remains sealed even when switch is operated
- L** Special threaded bushing, length 16 mm (.629)
- LUXE** Chrome plated lever and cap nut U117
- TK LUXE** Options T, K and LUXE.
- G** Black finish on bushing, lever and nuts. Includes tropicalization (option T) and locking ring U12.
- GK** Option G + front panel sealing by O-ring and sealing washer (as described in option K)
- G-038** Option G + fluorescent tip on lever. White fluorescent tip becomes luminous when submitted to ultra violet rays.



- ① O-ring
- ② Sealing washer

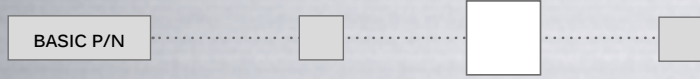


G-038

600H-600NH series

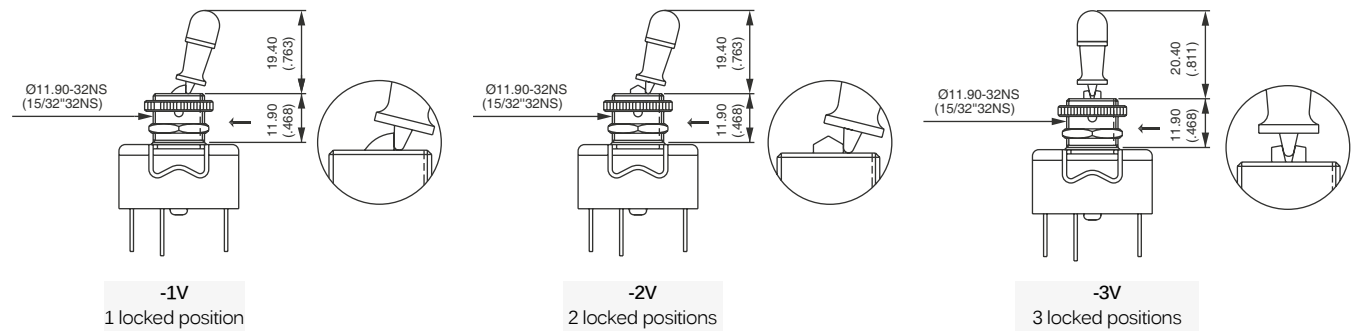
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LOCKING LEVERS

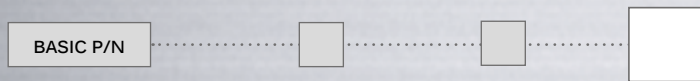


For 600H series only
 For 1 and 2 pole models.
 For 3-pole models, refer to 6000 series.

→ KEYWAY

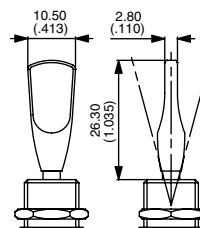
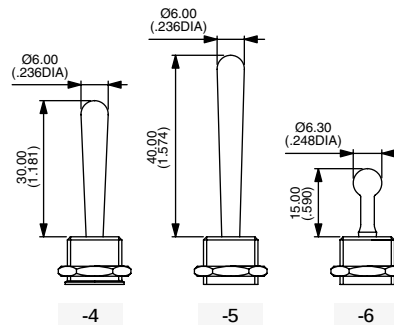


ACTUATOR OPTIONS



For 600H series only
 For 1 and 2 pole models.

- 4 30 mm (1.181) long actuator
- 5 40 mm (1.574) long actuator
- 6 Retro style actuator (gold plated or chrome plated : on request)
- X2595 Ergonomic flat plastic actuator



X2595

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Apem:

[657H/2](#) [636NH/2](#) [648H/2](#) [644H/2](#) [635H](#) [638NH/2](#) [631H/2](#) [651H/2](#) [639H/2](#) [639NH/2](#) [647H/2](#) [659H/2](#) [656H/2](#)
[637H/2](#) [658H/2](#) [637NH/2](#) [641H/2](#) [649H/2](#) [638H/2](#) [636H/2](#) [646H/2](#) [644H](#) [631NH/2](#) [647H/2K4](#) [631H/25](#) [631H](#)
[631H/22V](#) [631NH](#) [635H/2](#) [635NH](#) [635NH/2](#) [636H](#) [637H](#) [638H](#) [639H](#) [641H](#) [641H/22V](#) [641NH/2](#) [644H/21R](#)
[644H/22R](#) [644H1R](#) [644NH/2](#) [645H](#) [645H/2](#) [645NH](#) [645NH/2](#) [646H](#) [646NH/2](#) [647H](#) [647NH/2](#) [648H](#) [648NH/2](#)
[649H](#) [649NH/2](#) [651H](#) [651NH](#) [651NH/2](#) [655H](#) [656H](#) [656NH](#) [656NH/2](#) [657H](#) [657NH/2](#) [658H](#) [659H](#) [659NH](#)
[659NH/2](#) [631H/21V](#) [631H/2K](#) [635H/2K](#) [635H/2T](#) [636H/21V](#) [636H/22V](#) [636H/2T](#) [636H2V](#) [637H/2K](#) [639H/2K](#)
[641H/21V](#) [641H/2TKLUXE](#) [641HK](#) [644H3V](#) [645H/2TKLUXE](#) [646H/22V](#) [646H/2G](#) [646H/2TKLUXE](#) [646H2V](#)
[647H/2KX2126](#) [648HK](#) [649H/23V](#) [649H/2G](#) [649H/2GK3V](#) [649H3V](#) [649HK](#) [651H/22V](#) [641H/2K](#) [631HLUXE](#)
[639H/23V](#) [637H/25V](#) [655HK](#) [647HK](#)