

Bulletin 800T/H  
**30.5 mm Push Buttons**  
 Push Button Operators

Momentary Contact Push Button Devices, Illuminated



Extended Head Without Guard  
**Cat. No. 800T-PB16R**



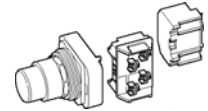
Extended Head with Guard  
**Cat. No. 800H-PRB16R**

Type	Lamp Type	Volts	Color	Type 4/13		Type 4/4X/13	
				Extended Head Without Guard*	Extended Head With Guard*	Extended Head without Guard*	Extended Head with Guard*
				Cat. No.	Cat. No.	Cat. No.	Cat. No.
Operator Only*				<b>800T-SB00XX</b>	800T-SA00XX	800H-SRB00XX	800H-SRA00XX
Full Voltage	Incandescent	24V AC/DC	Red	<b>800T-QB24R</b>	<b>800T-QA24R</b>	<b>800H-QRB24R</b>	<b>800H-QRA24R</b>
			Green	<b>800T-QB24G</b>	<b>800T-QA24G</b>	<b>800H-QRB24G</b>	<b>800H-QRA24G</b>
			Amber	<b>800T-QB24A</b>	<b>800T-QA24A</b>	<b>800H-QRB24A</b>	<b>800H-QRA24A</b>
	No Lamp	0...250V AC/DC	No Lens	800T-QBN25	800T-QAN25	800H-QRBN25	800H-QRAN25
Universal	LED	12...130V AC/DC	Red	<b>800T-QBH2R</b>	<b>800T-QAH2R</b>	<b>800H-QRBH2R</b>	<b>800H-QRAH2R</b>
			Green	<b>800T-QBH2G</b>	<b>800T-QAH2G</b>	<b>800H-QRBH2G</b>	<b>800H-QRAH2G</b>
			Amber	<b>800T-QBH2A</b>	<b>800T-QAH2A</b>	<b>800H-QRBH2A</b>	<b>800H-QRAH2A</b>
Transformer	Incandescent	120V AC, 50/60 Hz	Red	<b>800T-PB16R</b>	<b>800T-PA16R</b>	<b>800H-PRB16R</b>	<b>800H-PRA16R</b>
			Green	<b>800T-PB16G</b>	<b>800T-PA16G</b>	<b>800H-PRB16G</b>	<b>800H-PRA16G</b>
			Amber	<b>800T-PB16A</b>	<b>800T-PA16A</b>	<b>800H-PRB16A</b>	<b>800H-PRA16A</b>
	LED		Red	<b>800T-PBH16R</b>	<b>800T-PAH16R</b>	<b>800H-PRBH16R</b>	<b>800H-PRAH16R</b>
	Green		<b>800T-PBH16G</b>	<b>800T-PAH16G</b>	<b>800H-PRBH16G</b>	<b>800H-PRAH16G</b>	
	Amber		<b>800T-PBH16A</b>	<b>800T-PAH16A</b>	<b>800H-PRBH16A</b>	<b>800H-PRAH16A</b>	
	No Lamp		No Lens	800T-PBN16	800T-PAN16	800H-PRBN16	800H-PRAN16

\* Includes as standard one Cat. No. 800T-XA (1 N.O. - 1 N.C.) contact block.

\* Operator only supplied without power module, lamp, lens cap, or contact blocks.

800 T - P B H 16 R  
 a b c d e f g h



**a**

Protection Rating	
Code	Description
T	Metal, Type 4/13
H	Plastic, Type 4/4X/13

**b**

Finger-Safe Guards	
Code	Description
Blank	No guards
C	Guards on terminals

**c**

Power Module Type		
800T Type 4/13	Description	800H Type 4/4X/13
Code		Code
P	Transformer (or dual input)	PR
Q	Full voltage/ Universal	QR

**d**

Head Type	
Code	Description
A	Extended head with guard
B	Extended head without guard
M	Mushroom
MJ	Jumbo mushroom

**e**

Illumination Options	
Code	Description
Blank	Incandescent
H	LED
Dual Input	
D	Diode type ‡
T	Transformer — relay type
TH	Transformer — relay type LED

**f**

Voltage	
Transformer	
Code	Description
16	120V AC, 50/60 Hz
26	240V AC, 50/60 Hz
46	480V AC, 50/60 Hz
56	600V AC, 50/60 Hz
Full Voltage — Incandescent	
12	12V AC/DC
24	24V AC/DC
48	48V AC/DC
10	120V AC/DC
20	240V AC/DC
Universal — LED	
2	12...130V AC/DC
Dual Input	
16	120V AC
24	24V AC/DC ➤

**g**

Lens Color	
Code	Description
Blank	No lens with standard contacts 1 N.O. - 1 N.C.
X	No lens if ordering any contacts other than standard 1 N.O. - 1 N.C.
A	Amber
B	Blue
C	Clear
G	Green
R	Red
W	White

**h**

Contact Block(s)	
Code	Description
X	No contacts
Standard	
Blank	1 N.O. - 1 N.C.
D1	1 N.O.
PenTUFF (Low Voltage)	
AV	1 N.O. - 1 N.C.
Class 1, Div. 2/Zone 2	
Logic Reed	
AR	1 N.O. - 1 N.C.
Sealed Switch	
AP	1 N.O. - 1 N.C.
Stackable Sealed Switch	
AY	1 N.O. - 1 N.C.

‡ Diode type dual input provides circuit isolation via opposing diodes. Not recommended for use with solid-state outputs.  
 ➤ Dual input diode only.



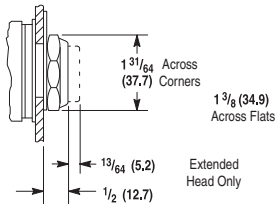
**Specifications\***

Electrical Ratings		
Contact ratings	Refer to the contact ratings tables on page 10-4.	
Dielectric strength	2200V for one minute, 1300V for one minute (Logic Reed)	
Electrical design life cycles	1 000 000 at max. rated load, 200 000 at max. rated load (Logic Reed)	
Mechanical Ratings		
Vibration	10...2000 Hz, 1.52 mm displacement (peak-to-peak) max./ 10 G max. (except Logic Reed)	
Shock	1/2 cycle sine wave for 11 ms $\geq$ 25 G (contact fragility) and no damage at 100 G	
Degree of protection	Type 1/4/12/13 (800T); Type 1/4/4X/12/13 (800H); EN/IEC 60529 IP66/65	
Mechanical design life cycles		
Push buttons	(Momentary, non-illuminated)	10 000 000 min.
	(Momentary, illuminated)	250 000 min.
	(Push-pull/twist-to-release)	250 000 min.
Selector switches	(Non-illuminated)	1 000 000 min.
	(Illuminated, key-operated)	200 000 min.
Potentiometers	25 000 min.	
All other devices	200 000 min.	
Contact operation	Shallow, mini, and low-voltage contact blocks: Slow, double make and break Logic Reed and sealed switch contact blocks: Single break magnetic	
Wire gauge/Terminal screw torque	#18...14 AWG (#18...10 Max Duty) / 6...8 lb•in	
Typical operating forces		
Operators without contact blocks	Flush, extended button, standard mushroom, jumbo plastic mushroom: 2 lbs max. Jumbo and extended aluminum mushroom head: 3.95 lbs max. Maintained selector switch: 3.6 in•lb max.	
Spring return selector switches	3.6 in•lb to stop, 0.2 in•lb to return	
Illuminated push buttons and push-to-test pilot lights	5 lb max.	
2-position push-pull	8.0 lb max. push or pull	
3-position push-pull	8 lb max. push to in position or pull to center position (15 lb max. pull to out position)	
Twist-to-release or push-pull	9 lbs max. push or pull 30 in•oz max. twist, 6 in•oz minimum return	
Potentiometer	Rotational torque 3...12 in•oz; stopping torque 12 in•lb (minimum)	
Contact blocks	Standard	1 lb
	Logic Reed	1 lb max.
	Sealed switch	3 lb max. at 0.205 in. plunger travel
	Stackable sealed switch	1 lb max.
	MaxDuty	1.4 lb max.
	PenTUFF	1.4 lb max.
Self Monitoring	1.6 lb	
Environment		
Temperature range	Operating	-40...+131 °F (-40...+55 °C)
	Storage	-40...+185 °F (-40...+85 °C)
<b>Note:</b> Operating temperatures below freezing are based on the absence of moisture and liquids. Consult your local Rockwell Automation sales office or Allen-Bradley distributor for use in lower temperature applications.		
Humidity	50...95% RH from 77...140 °F (25...60 °C) per Procedure IV of MIL-STD-810C, Method 507.1 cycling test	

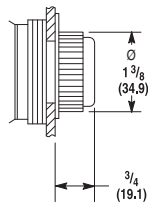
\* Performance Data — See Important- 3.

Dimensions in inches (millimeters). Dimensions are not intended to be used for manufacturing purposes.

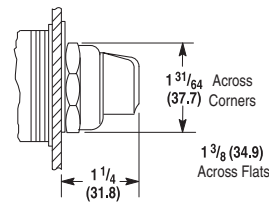
**Push Buttons and Switches (Bul. 800H Only)**



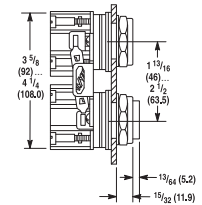
*Bootless Flush and Extended Head Momentary Contact Push Button*  
**Shipping Weight. 5-1/2 oz (0.16 kg)**



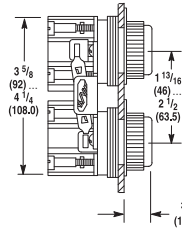
*Booted Flush and Extended Head Momentary Contact Push Button*  
**Shipping Weight. 5-1/2 oz (0.16 kg)**



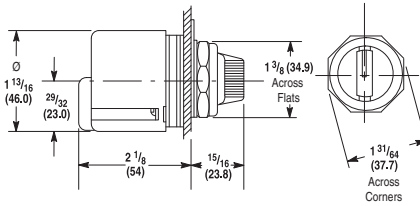
*Standard Knob Selector Switch Non-Illuminated*  
**Shipping Weight. 6 oz (0.17 kg)**



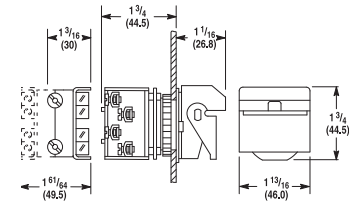
*Bootless Maintained Contact Push Buttons*



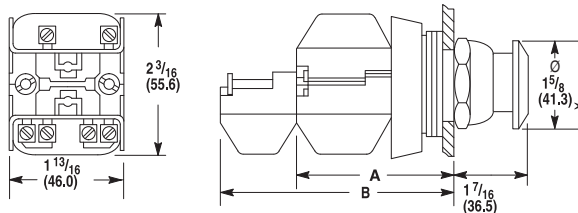
*Booted Maintained Contact Push Buttons*  
**Shipping Weight. 1 lb (0.45 kg)**



*Type J Potentiometer Unit*  
**Shipping Weight. 7 oz (0.20 kg)**



*Type 4 Flip Lever*  
**Shipping Weight. 8 oz (0.14 kg)**



**Mushroom Head — Maintained and Momentary**

**Non-Illuminated Mushroom and Push-Pull Push Buttons**

Cat. No. Suffix	Description	Dimensions		Shipping Weights
D4	One Shallow Block	A	2-1/32 (51.6)	5 oz (0.14 kg)
A1, A5 and A7	Two Shallow blocks	A	2-1/32 (51.6)	6 oz (0.17 kg)
B6	Two Shallow Blocks and Two Mini Blocks	B	2-7/8 (73.0)	8 oz (0.22 kg)

\* Jumbo versions are 2-1/4 (57.2).