



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

- 30.5 mm mounting hole
- Type 4/13 watertight/oiltight (Bul. 800T)
- Type 4/4X/13 corrosion-resistant/watertight/oiltight (Bul. 800H)
- Heavy industrial stations and operators

**Description**

The Allen-Bradley Bulletin 800T and 800H 30.5 mm push button product lines are in a class by themselves. They are designed and constructed to perform in the most demanding industrial environments. In terms of sealing and switching performance, you will not find a more dependable push button offering. Allen-Bradley delivers more styles and options of operator types and contact blocks, offering flexibility to meet the most demanding specifications in the world's toughest industrial environments.

Design innovation is key to the performance advantage provided in the Bulletin 800T and 800H offerings. New in this catalog are the **Trigger Action E-Stop** operators, the new standard bearer in a tamper-resistant design. Also new is the **Universal LED Illumination** option that accepts a wide 12...130V AC/DC voltage input. This is compatible with all illuminated operator types, allows retrofitting in existing installations, and incorporates super bright LED technology.

**Table of Contents**

See below.

**Standards Compliance**

UL 508

CCC

**Certifications**

UL Listed  
 (File No. E14840, E10314  
 Guide No. NKCR, NOIV)

CSA Certified  
 (File No. LR1234, LR11924)

CSA C22.2, No. 14

EN/IEC: 60947-5-1

**TABLE OF CONTENTS**

Description	Page	Description	Page
<b>Specifications</b> .....	10-3	<b>Specialty Operators</b>	
<b>Assembled Stations</b> .....	10-5	Potentiometer .....	10-25
<b>DeviceNet Stations</b> .....	10-6	Mechanically Interlocked Push Button .....	10-25
<b>Trigger Action E-Stops</b> .....	10-7	Cluster Pilot Light.....	10-26
<b>Push Buttons, Momentary</b>		18 mm Small Pilot Light .....	10-27
Non-Illuminated.....	10-9	1-, 2-, 3-, 4-Way Toggle Switch .....	10-28
Illuminated.....	10-10	Selector Push Button.....	10-29
Non-Illuminated — with Two-Color Molded Legend Cap .....	10-11	Cylinder Lock Push Button .....	10-30
<b>Selector Switches, Non-Illuminated</b>		Padlocking Mushroom Head .....	10-30
2-Position .....	10-12	Wobble Stick.....	10-30
3-Position .....	10-14	Flip Lever Operator.....	10-31
4-Position .....	10-16	Break-Glass Push Button Station.....	10-32
<b>Selector Switches, Illuminated</b>		<b>Custom-Built Stations</b> .....	10-33
2-Position .....	10-18	<b>Enclosures</b> .....	10-33
3-Position .....	10-19	<b>Accessories</b>	
<b>Pilot Light Devices</b> .....	10-20	Contact Blocks.....	10-35
<b>Emergency Stop Operators</b>		Power Modules and Universal LED Module.....	10-36
Push-Pull, Non-Illuminated		Replacement Color Caps.....	10-37
2-Position.....	10-21	Selector Switch Knobs.....	10-38
3-Position.....	10-22	Protective Boots .....	10-39
Push-Pull, Illuminated		Push Buttons & Miscellaneous .....	10-40
2-Position.....	10-23	Locking Attachments.....	10-42
3-Position.....	10-24	Guards .....	10-44
		Replacement Lamps .....	10-45
		Replacement Keys.....	10-46
		Legend Plates.....	10-47
		<b>Approximate Dimensions &amp; Shipping Weights</b> .....	10-53
		<b>Typical Pilot Light Wiring Diagram</b> .....	10-65



**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.

# 30.5 mm Push Buttons

## Specifications

### Standard Contact Ratings

Minimum: 24V, 24 mA

Maximum thermal continuous current  $I_{th}$  10 A AC/2.5 A DC. Bulletin 800T units with 800T-XA contacts have ratings as follows:

Max. Operntl. Volts $U_e$	Utilization Category		Rated Operational Currents		
	IEC	NEMA	Volts $U_e$	Make	Break
AC 600	AC-15	A600	120...600	7200VA	720VA
			72...120	60 A	720VA
			24...72	60 A	10 A
DC 600	DC-13	Q600	28...600	69VA	
			24...28*	2.5 A	

\* For applications below 24V/24 mA, PenTUFF or Logic Reed contacts are recommended.

### Sealed Switch Contact Ratings

Minimum: 5V, 1 mA

Maximum continuous current  $I_{th}$  5 A. Bulletin 800T units have control circuit ratings with sealed switch contact blocks as follows:

Max. Operntl. Volts $U_e$	Utilization Category		Rated Operational Currents		
	IEC	NEMA	Volts $U_e$	Make	Break
AC 600	AC-15	B600	120...600	3600VA	360VA
			0...120	30 A	3 A
DC 300	DC-13	P300	24...300	138VA	
			0...24	5.0 A	

### Stackable Sealed Switch Contact Ratings

Minimum: 5V, 10 mA (digital); 24V, 1 mA (analog)

Maximum continuous current  $I_{th}$  2.5 A. Bulletin 800T units have control circuit ratings with sealed switch contact blocks as follows:

Max. Operntl. Volts $U_e$	Utilization Category		Rated Operational Currents		
	IEC	NEMA	Volts $U_e$	Make	Break
AC 300	AC-15	C300	120...300	1800VA	180VA
			0...120	15 A	1.5 A
DC 150	DC-13	Q150	24...150	69VA	
			0...24	2.5 A	

### Logic Reed Contact Ratings

Minimum — DC: 5V, 1 mA

Maximum — DC: 30V, 0.06 A, AC: 150V, 0.15 A

Should only be used with resistive loads.

### Materials Used in 800H Type 4X Operators Thermoplastic Polyester (Fiberglass Reinforced)

- Bushings
- Mounting Rings
- Sockets

### Thermoplastic Polyester

- Non-illuminated button caps

### Transparent Amorphous Nylon

- Pilot light lens cap
- Illuminated button caps

### Glass Filled Crystalline Nylon

- Thrust washer

### Mineral Filled Nylon

- Trim washer

### Nitrile (Synthetic Rubber)

- Gaskets and internal seals

### PenTUFF™ (Low Voltage) Contact Ratings

Minimum DC: 5V, 1 mA

Maximum thermal continuous current  $I_{th}$  2.5 A AC/1.0 A DC. Bulletin 800T units with 800T-XAV contacts have ratings as follows:

Max. Operntl. Volts $U_e$	Utilization Category		Rated Operational Currents		
	IEC	NEMA	Volts $U_e$	Make	Break
AC 300	AC-15	C300	120...300	1800VA	180VA
			0...120	15 A	1.5 A
DC 150	DC-13	R150	24...150	28VA	
			0...24	1.0 A	

### Snap Action Contact Ratings

Max. Operntl. Volts $U_e$	Contact Rating Designation	Rated Operational Currents		
		Volts $U_e$	Make	Break
AC 300	A300	120...300	7200VA	720VA
		24...72	60 A	10 A
DC 250	—	230...250	0.2 A	
		115...125	0.4 A	

### MaxDuty Contact Rating

Maximum thermal continuous current  $I_{th}$  24 A.

Pilot Duty — 120V AC, 12 A; 24V DC, 10 A

Motor Ratings — 120V AC, 1.5 Hp; 240V AC, 3 Hp; 24V DC, 10 A FLA/60 A LRA

### Time Delay Contacts

Max. Operntl. Volts $U_e$	Contact Rating Designation	Rated Operational Currents		
		Volts $U_e$	Make	Break
AC 120	B150	120	3600VA	360VA

**Note:** This device is not rated for DC applications.

Adjustment range: 0.5...15 s  $\pm$  25%  $I_{th}$  = 5 A

**2-Position Red Push-Pull and Push-Pull/Twist Release Devices, Non-Illuminated**

**Note:** A jumbo or large legend plate is recommended, if space allows.



2-Position Push-Pull  
 Cat. No. 800T-FX6D4



2-Position Metal Push-Pull  
 Cat. No. 800T-FXLE6D4S



2-Position Push-Pull / Twist  
 Cat. No. 800T-FXT6D4



2-Position Push-Pull / Twist  
 Cat. No. 800H-FRXT6D4

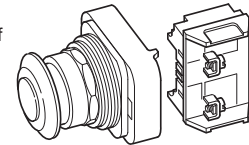
Contact Type	Operator Position		Type 4/13			Type 4/4X/13
			Push-Pull — 40 mm	Push-Pull — 63 mm Metal	Push-Pull/Twist Release	Push-Pull/Twist Release
	Out	In	Cat. No.	Cat. No.	Cat. No.	Cat. No.
N.C.L.B.*	X	O	<b>800T-FX6D4</b>	<b>800T-FXLE6D4</b>	<b>800T-FXT6D4</b>	<b>800H-FRXT6D4</b>
N.O. - N.C.L.B.*	O	X	<b>800T-FX6A1</b>	<b>800T-FXLE6A1</b>	<b>800T-FXT6A1</b>	<b>800H-FRXT6A1</b>
N.C.L.B. - N.C.L.B.*	X	O	<b>800T-FX6A5</b>	<b>800T-FXLE6A5</b>	<b>800T-FXT6A5</b>	<b>800H-FRXT6A5</b>
S.M.C.B.*†	X	O	<b>800TC-FX6D4S</b>	<b>800TC-FXLE6D4S</b>	<b>800TC-FXT6D4S</b>	<b>800HC-FRXT6D4S</b>
N.O. - S.M.C.B.*†	O	X	<b>800TC-FX6A1S</b>	<b>800TC-FXLE6A1S</b>	<b>800TC-FXT6A1S</b>	<b>800HC-FRXT6A1S</b>
S.M.C.B. - S.M.C.B.*†	X	O	<b>800TC-FX6A5S</b>	<b>800TC-FXLE6A5S</b>	<b>800TC-FXT6A5S</b>	<b>800HC-FRXT6A5S</b>

**Note:** X = Closed/O = Open

**Note:** These caps are only available in plastic.

**Note:** Emergency stop push buttons are compliant with EN ISO 13850 and EN/IEC 60947-5-5 Standards when using N.C.L.B. contact blocks.

\* The Self Monitoring Contact Block (S.M.C.B.) is composed of a N.C.L.B. contact wired in series with a N.O. monitoring contact. The N.O. monitoring contact automatically closes when the S.M.C.B. is properly installed onto the E-stop operator. If the S.M.C.B. is separated from the E-stop operator, the N.O. monitoring contact will automatically open.



**800 T - FX 1 A1**

a                      b                      c                      d                      e

**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**

Head Type†		
800T Type 4/13	Description	800H Type 4/4X/13
Code		Code
FX	Mushroom head (push-pull)	—
FXC	90 mm anodized aluminum head (push-pull)	—
FXJ	Jumbo mushroom head (push-pull)	—
FXJE	Jumbo mushroom head (push-pull) with "E-Stop"	—
FXL	63 mm anodized aluminum head (push-pull)	—
FXLE	63 mm anodized aluminum head (push-pull) with "E-Stop"	—
FXT	Push-pull/twist-to-release	FRXT
FXJT	Jumbo head push-pull with twist-to-release	FRXJT

**d**

Color Cap	
Code	Color
Blank	No cap§
1	Green
2	Black
3	Orange
4	Grey
5	White
6	Red
7	Blue
9	Yellow

**e**

Contact Block(s)				
Code	Operator Position		Description	
Blank	—	—	No contacts on operator	
Standard				
D1	O	X	1 N.O.	
D2	X	O	1 N.C.	
D4	X	O	1 N.C.L.B.	
A	O	X	1 N.O. - 1 N.C.	
A1	O	X	1 N.O. - 1 N.C.L.B.	
A5	X	O	2 N.C.L.B.	

**e (cont'd)**

Contact Block(s)			
Code	Operator Position		Description
Blank	—	—	No contacts
PenTUFF (Low Voltage)			
D1V	O	X	1 N.O.
D2V	X	O	1 N.C.
D4V	X	O	1 N.C.L.B.
AV	O	X	1 N.O. - 1 N.C.
X	X	O	
Class 1, Div. 2/Zone 2			
Logic Reed			
D1R	O	X	1 N.O.
D2R	X	O	1 N.C.
AR	O	X	1 N.O. - 1 N.C.
X	X	O	
Sealed Switch			
D1P	O	X	1 N.O.
D2P	X	O	1 N.C.
AP	O	X	1 N.O.
X	X	O	1 N.C.
Stackable Sealed Switch			
D1Y	O	X	1 N.O.
D2Y	X	O	1 N.C.
AY	O	X	1 N.O. - 1 N.C.
X	X	O	

**Note:** X = Closed/O = Open

\* Normally closed late break contact. When button is pushed from the OUT to IN position, the mechanical detent action of the operator occurs before electrical contacts change state. When the button is pulled from the IN in the OUT position, the electrical contacts change state before the mechanical detent occurs.

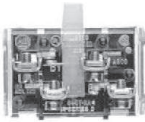
† Devices with N.C.L.B. contacts meet EN ISO 13850 and IEC 60947-5-5 standards for emergency stop applications.

§ Not valid with head Type J or JT.

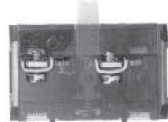
**Contact Blocks**

Packaged in kit form for field installation. All necessary mounting hardware is provided with each contact block kit. **Contact ratings are listed on page 10-4.**

**Note:** It is not recommended to mount more than four contact blocks on any one non-illuminated operator (maximum two blocks deep). Contact blocks cannot be stacked onto power modules, so illuminated operators are limited to two contact blocks. Sealed switch contact blocks are not stackable and are limited to two blocks per operator. Time delay contacts are only available as one circuit per operator.



**Shallow Block**



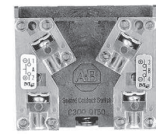
**PenTUFF™ (Low Voltage) Contact Block**



**Logic Reed Block**



**Sealed Switch Block**



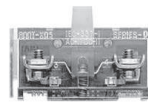
**Stackable Sealed Switch Block**

Contact Type	Shallow Block**		PenTUFF (Low Voltage) Block**		Logic Reed Block‡		Sealed Switch Block‡		Stackable Sealed Switch Block‡	
	Cat. No.	Code	Cat. No.	Code	Cat. No.	Code	Cat. No.	Code	Cat. No.	Code
1 N.O.	800T-XD1	D	800T-XD1V	H	800T-XD1R	V	800T-XD1P	R	800T-XD1Y	5
1 N.C.	800T-XD2	E	800T-XD2V	U	800T-XD2R	W	800T-XD2P	S	800T-XD2Y	6
1 N.O.E.M.	800T-XD3	G	800T-XD3V	I	—	—	—	—	—	—
1 N.C.L.B.	800T-XD4	J	800T-XD4V	Q	—	—	—	—	—	—
1 N.O. - N.C.	800T-XA	A	800T-XAV	F	800T-XAR	T	800T-XAP	P	800T-XAY	7
2 N.O.	800T-XA2§	M	—	—	800T-XA2R§	Y	—	—	800T-XA2Y	8
2 N.C.	800T-XA4	N	—	—	800T-XA4R	Z	—	—	800T-XA4Y	9
1 N.C.L.B. - 1 N.O.	800T-XA1	B	—	—	—	—	—	—	—	—
1 N.C.L.B. - 1 N.C.	800T-XA7	C	—	—	—	—	—	—	—	—

**Note:** Modular suffix codes can be used when specifying selector switches with multiple contact blocks.



**Self Monitoring Contact Block**



**Mini Block**



**Time Delay Block**



**MaxDuty Block**

Contact Type	S.M.C.B.*>	
	Cat. No.	Code
1 N.C.L.B. (wired in series with 1 N.O. monitoring contact)	800TC-XD4S	3

Contact Type	Mini Block*		Time Delay Block*	MaxDuty Block	
	Cat. No.	Code	Cat. No.	Cat. No.	Code
1 N.O.	800T-XD5	K	800T-XT	800T-XD1M	1
1 N.C.	800T-XD6	L	800T-XS	800T-XD2M	2
1 N.C.L.B.	—	—	—	800T-XD4M	4

**Note:** Modular suffix codes can be used when specifying selector switches with multiple contact blocks.

\* Contact blocks with normally closed contacts meet direct drive positive opening standard requirements when properly fused to IEC 269-1 and 269-2. Shallow/mini contacts: 10 A gl or N type cartridge fuse. PenTUFF contacts: 6 A gl or N type cartridge fuse.

\*\* Specify Bulletin 800TC for finger-safe contact blocks. Example: **Cat. No. 800T-XA** becomes **Cat. No. 800TC-XA**.

‡ 800T operator using sealed switch and logic reed contact blocks and installed in a suitable enclosure are UL Listed as suitable for use in Class I, Division 2/Zone 2 hazardous locations.

§ Additional contacts cannot be stacked on XA2 and XA2R contact blocks.

♣ For contact ratings, see page 10-4.

> For use with 2-position push-pull or push-pull/twist operators only. Must be mounted on the first level of the operator. The N.O. monitoring contact automatically closes when the S.M.C.B. is properly installed onto the operator. If the S.M.C.B. is separated from the operator, the N.O. monitoring contact automatically opens.





**Shallow Contact Block Hardware**

Description	Cat. No.
Contact Block Mounting Screw	800T-N335
Screw Retainer	800T-N336
Actuator Extender	800T-N337





Potentiometer Replacement Knobs

Description	Cat. No.
Type 4/13 (800T)	40274-073-55
Type 4/4X/13 (800H)	40274-073-54

Push Buttons

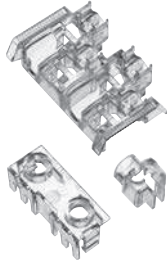




	Description	Cat. No.
 <b>Cat. No. 800T-N179</b> <i>(Operators not included)</i>	<b>Bul. 800T/H Mechanical Interlock</b> Used on momentary contact push button units. Guards against closing the N.O. contacts of one button while the other button's N.O. contacts are closed. Buttons remain momentary. For maintained units, see page 10-25.	800T-N179
 <b>Cat. No. 800T-N12</b>	<b>Bul. 800T Rocker Arm Operating Lever</b> The rocker arm lever operates two flush head or one flush with one extended head momentary contact push button units spaced 1-27/32 in. (46.8 mm) center-to-center. Legend plates must be ordered separately and should be inverted 180° prior to engraving and installation.	800T-N12

Miscellaneous

	Description	Cat. No.
 <b>Cat. No. 800T-N245</b>	<b>Bul. 800T/H Mounting Ring Wrench</b> This wrench will simplify tightening or loosening the octagonal mounting ring used on Bul. 800T units. This wrench is double-ended and can be used for 18 mm and 30 mm pilot light mounting rings.	800T-N245
 <b>Cat. No. 800T-N209RE1</b>	<b>Bul. 800T/H Jumbo Push-Pull Cap</b> For use on Bul. 800T or 800H push-pull operators. Fits on illuminated and non-illuminated devices.	800T-N209RE1
	<b>Bul. 800T 63 mm Red Anodized Aluminum Cap</b> For use on Bul. 800T non-illuminated push-pull devices.	800T-N210R
	<b>Bul. 800T 63 mm Red Anodized Aluminum Cap with "E-Stop"</b> For use on Bul. 800T non-illuminated push-pull devices.	800T-N210RE
	<b>Bul. 800T 90 mm Gold Anodized Aluminum Cap</b> For use on Bul. 800T non-illuminated push-pull devices.	800T-N211GL
 <b>Cat. No. 800T-N300</b>	<b>Bul. 800T Bonding Bracket</b> The bonding bracket establishes an electrical circuit between the mounting surface and metal operator bushing for grounding purposes; recommended for installations which require CSA approval. Necessary mounting hardware is included. Order Cat. No. 800T-N300 for back-of-panel bracket. Order Cat. No. 800T-N300F for front-of-panel bracket.	800T-N300
		800T-N300F
 <b>Cat. No. 800E-ALR1</b>	<b>Bul. 800T/H Lens/Bulb Removal Tool</b> The small end of this tool provides quick and easy removal of any incandescent or LED lamp.	800F-ALR1








Miscellaneous, Continued

		Description	Cat. No.	
 <b>Cat. No. 800T-N324</b>  <b>Cat. No. 800T-N323</b>  <b>IEC Finger-Safe Accessories</b>	<b>Cat. No. 800T-N323</b>  <b>Bul. 800T/H IEC Finger-Safe Terminal Guards</b> Snap-on accessories which provide IEC, IP2X and VGB finger-safe protection. Single terminal guards for single circuit contact blocks, full voltage modules, LED modules, etc. (800T-XD1, -XD2, -XD3, -XD4, -XD5, -XD6, -XAP, -XD1P, -XD2P, -PC..., and -QC...)* <b>Note:</b> Must be ordered in multiples of 100 pieces.	<b>800T-N322</b>		
	<b>Cat. No. 800T-N322</b>  Transformer covers for transformer only. <b>Note:</b> Must be ordered in multiples of 25 pieces.	<b>800T-N324</b>		
	Multi-terminal side cover for use on single or double circuit contact blocks. (800T-XA, -XA1, -XA2, -XA4, -XA7, -XAR, -XA2R, -XA4R, -XD1R, and -XD2R) <b>Note:</b> Must be ordered in multiples of 25 pieces.	<b>800T-N323</b>		
 <b>Cat. No. 800T-N292</b>	<b>Grey Bul. 800T Trim Washer</b> Used to mount the operator properly when a legend plate is not being used. <b>Note:</b> Must be ordered in multiples of 10 pieces.	<b>800T-N292</b>		
	<b>Plastic Bul. 800H Trim Washer</b> Used to mount the operator properly when a legend plate is not being used. <b>Note:</b> Must be ordered in multiples of 10 pieces.	800H-N148		
 <b>Cat. No. 800T-N293</b>	<b>Metal Bul. 800T Thrust Washer</b> Used to prevent rotation of operators in a keyed or notched hole. <b>Note:</b> Must be ordered in multiples of 10 pieces.	<b>800T-N293</b>		
	<b>Plastic Bul. 800H Thrust Washer</b> Used to prevent rotation of operators in a keyed or notched hole. <b>Note:</b> Must be ordered in multiples of 10 pieces.	800H-N146		
 <b>Cat. No. 800T-N188</b>	<b>Bul. 800T Etching Fluid</b> Used to blacken freshly engraved aluminum legend plates.	<b>800T-N188</b>		
		Description	Color	Cat. No.
 <b>Cat. No. 800T-N1</b>	<b>Bul. 800T/H Closing Button</b> Where an enclosure or flush plate with more than the required number of openings is used, this neat-appearing button can be supplied to close the unused openings.	Grey	<b>800T-N1</b>	
		Black	<b>800T-N1B</b>	









\* Power modules excluding transformers and dual inputs

**Locking Attachments**

	Description	Cat. No.
 <p><b>Cat. No. 800T-N2</b> (Padlock not included)</p>	<p><b>Bul. 800T</b>  <b>Extended Head Push Button Padlocking Attachments</b>                      Permits locking in the depressed position. Locks the normally closed contact in the open position. For extended head non-illuminated momentary push buttons.</p>	<p>800T-N2</p>
 <p><b>Cat. No. 800T-N10</b> (Padlock not included)</p>	<p><b>Bul. 800T</b>  <b>Flush Head Push Button Padlocking Attachments</b>                      Permits locking in the depressed position. Locks the normally closed contact in the open position. For flush head push button.</p>	<p>800T-N10</p>
 <p><b>Cat. No. 800T-N315</b> (Padlock not included)</p>	<p><b>Bul. 800T</b>  <b>Momentary Mushroom Padlocking Attachments</b>                      For Bul. 800T non-illuminated momentary mushroom push button. Requires use of Cat. No. 800T-N311 mushroom cap. This device is used to lock the mushroom button in a depressed position.</p>	<p>800T-N315</p>
 <p><b>Cat. No. 800T-N314</b> (Padlock not included)</p>	<p><b>Bul. 800T/H</b>  <b>Push-Pull Padlocking Attachment</b>                      For 2-position push-pull and push-pull/twist release illuminated and non-illuminated operators. Use on standard head only (40 mm dia.). Locks the normally closed contacts open only. Conversion of normally closed late break contacts to standard normally closed contacts are recommended when using this accessory. Made of stainless steel.</p>	<p>800T-N314</p>
 <p><b>Cat. No. 800T-N163</b> (Padlock not included)</p>	<p><b>Bul. 800T/H</b>  <b>Padlocking Cover</b>                      Guards against unauthorized operation for non-illuminated, standard knob selector switches and potentiometers. Stainless steel and clear plastic construction.</p>	<p>800T-N163</p>
	<p><b>Bul. 800T/H</b>  <b>Trigger Action Padlocking Attachment</b>                      For 2-position trigger action E-stops with 45 mm heads.</p>	<p>800T-N378</p>



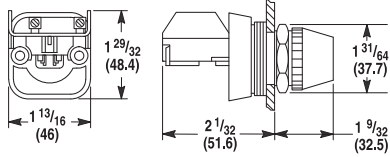
**Guards**

	Description	Type	Cat. No.
 Cat. No. 800T-N13	<b>Bul. 800T Push Button Guards</b> Momentary push button guards to reduce the risk of accidental operation.	1 in. guard for non-illuminated	<b>800T-N13</b>
		1/2 in. guard for non-illuminated	<b>800T-N143</b>
		1-1/2 in. guard for illuminated	<b>800T-N93</b>
		1-1/2 in. guard for non-illuminated with locking attachment	800T-N39
 Cat. No. 800H-N152	<b>Bul. 800H Illuminated Push Button Guard</b> This guard provides additional protection against accidental operation of the push button unit. 1-1/2 in. (38.1 mm) guard for illumination units.		<b>800H-N152</b>
 Cat. No. 800T-N226	<b>Bul. 800T 18 mm Guard</b> Provides side protection for 18 mm pilot lights.		<b>800T-N226</b>
 Cat. No. 800H-N153	<b>Bul. 800H Stainless Steel Guard</b> Used on non-illuminated push buttons that have protective boots as shown on page 10-39.		<b>800H-N153</b>
 Cat. No. 800T-N129	<b>Bul. 800T Mushroom Push Button Guards</b> Momentary mushroom guards for standard and jumbo mushroom push buttons. Reduces the risk of accidental operation.	Standard guard	<b>800T-N129</b>
		Standard guard with set screw	<b>800T-N165</b>
		Jumbo guard	<b>800T-N151</b>
		Jumbo guard with set screw	<b>800T-N154</b>
 Cat. Nos. 800T-N310 and 800T-NX1320	<b>Bul. 800T/H Protective Guard</b> Protective ring for Bul. 800T 2-position push-pull operators. Illuminated or non-illuminated. Often used to avoid unintentional tripping of E-stop operators. This guard is used with standard size button (40 mm dia.).	Stainless steel	<b>800T-N310</b>
		Black	<b>800T-NX1320</b>
 Cat. No. 800T-N310J	<b>Bul. 800T/H Jumbo Protective Guard</b> Protective ring for Bul. 800T 2-position push-pull operators. Illuminated or non-illuminated. Often used to avoid unintentional tripping of E-stop operators.	60 mm (Jumbo)	<b>800T-N310J</b>
		63 mm	800T-N310L
Cat. No. 800T-N381	<b>Bul. 800T/H Protective Guard</b> Protective ring for Bul. 800T trigger action E-stop operators.	45 mm	800T-N381
 Cat. No. 800T-N339		<b>Bul. 800T/H Ramp Guard</b> For Bul. 800T/800H 2- and 3-position illuminated and non-illuminated push-pull units. Standard size button only (40 mm dia.).	60/63 mm

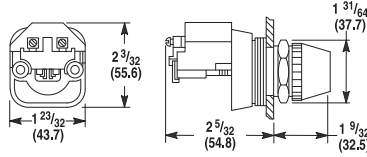
**Bulletin 800T/H**  
**30.5 mm Push Buttons**  
 Approximate Dimensions

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

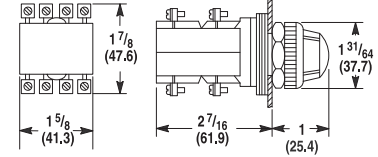
**Pilot Light and Illuminated Devices (Bul. 800T Only)**



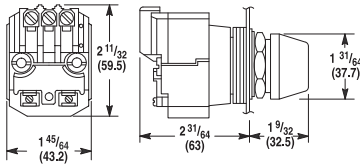
Full Voltage, Neon and Dual Input Pilot Light  
 Shipping Wt. 5 oz (0.14 kg)



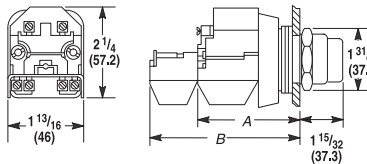
Transformer Type Pilot Light  
 Shipping Wt. 8 oz (0.22 kg)



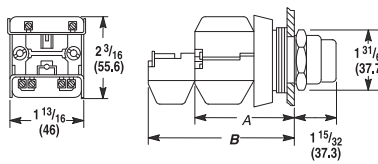
Cluster Pilot Light  
 Shipping Wt. 12 oz (0.34 kg)



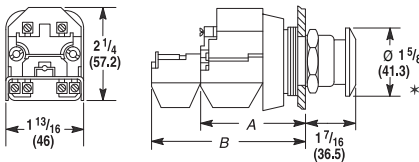
Dual Input Transformer Type Pilot Light



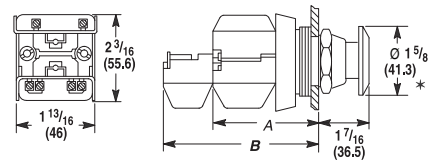
Transformer Type (Push-to-Test Pilot Light and Illuminated Push Button)



Full Voltage, Neon and Dual Input Type (Push-to-Test Pilot Light and Illuminated Push Button)



Push-Pull and Twist or Pull Release Units (Transformer Type Illuminated)



Push-Pull and Twist or Pull Release Units (Full Voltage, Neon and Dual Input Illuminated and All Non-Illuminated)

\* Jumbo mushroom versions are 2-1/4 in. (57.2 mm) diameter.

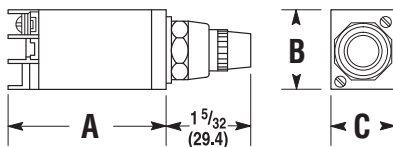
Push-to-Test Pilot Lights Illuminated Push Buttons and Illuminated Push-Pull Buttons							Non-Illuminated Push-Pull Buttons					
Cat. No. Suffix*	Description	Transformer Type		Full Voltage or Neon Type		Cat. No. Suffix	Description	Transformer Type				
		Dim.	Ship. Wt.	Dim.	Ship. Wt.			Dim.	Ship. Wt.			
D4	Transformer or Terminal Module and One Shallow Contact Block	A	2-5/32 (54.8)†	9 oz. (0.25 kg)	A	2-1/32 (51.6)	7 oz. (0.25 kg)	D4	One Shallow Contact Block	A	2-1/32 (51.6)	5 oz. (0.14 kg)
A1 and A7	Transformer or Terminal Module and One Shallow Block and One Mini Contact Block	B	2-7/8 (73)	10 oz. (0.28 kg)	B	2-7/8 (73)	8 oz. (0.22 kg)	A4 A5 A7	Two Shallow Contact Blocks	A	2-1/32 (51.6)	6 oz. (0.17 kg)
AP D1P D2P	Transformer or Terminal Module and One Sealed Switch Contact Block	A	3-1/32 (77)	10 oz. (0.28 kg)	A	2-29/32 (73.8)	8 oz. (0.22 kg)	B6	Two Shallow Blocks and Two Mini Contact Blocks	B	2-7/8 (73)	8 oz. (0.22 kg)

\* Applies to illuminated push-pull push buttons only.

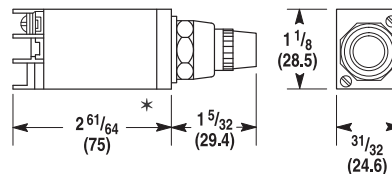
† Dual input type pilot light dimension is 2-13/32 in. (61.1 mm).

10

**18 mm Small Pilot Lights**



Small Pilot Light Including Push-To-Test  
 Shipping Weight 3 oz (0.08 kg)



Small Pilot Light Dual Input (Diode)  
 Shipping Weight 3 oz (0.08 kg)

Device	A	B	C
800T-PS, -PSD, -PST, -QS, -QST, and -RST	2-1/4 (57.2)	1-1/16 (27)	27/32 (21.4)
800T-PSDT	2-61/64 (75)	1-15/64 (31.4)	31/32 (24.6)

\* Transfer dual input pilot light dimension is 2-31/32 in. (75.4 mm).

