



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

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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 ≥ 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)
Note: 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

Momentary Contact Push Button Devices, Non-Illuminated



Flush Head Unit
 Cat. No. 800T-A1A



Extended Head Unit
 Cat. No. 800T-B6A



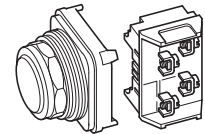
Booted Unit
 Cat. No. 800H-R2A



Bootless Flush Head Unit
 Cat. No. 800H-AR1A

Contact Type	Button Color	Type 4/13		Type 4/4X/13	
		Flush Head	Extended Head	Booted*	Bootless Flush Head
		Cat. No.	Cat. No.	Cat. No.	Cat. No.
No Contact	Green	800T-A1	800T-B1	800H-R1	800H-AR1
	Black	800T-A2	800T-B2	800H-R2	800H-AR2
	Red	800T-A6	800T-B6	800H-R6	800H-AR6
1 N.O.	Green	800T-A1D1	800T-B1D1	800H-R1D1	800H-AR1D1
	Black	800T-A2D1	800T-B2D1	800H-R2D1	800H-AR2D1
	Red	800T-A6D1	800T-B6D1	800H-R6D1	800H-AR6D1
1 N.C.	Green	800T-A1D2	800T-B1D2	800H-R1D2	800H-AR1D2
	Black	800T-A2D2	800T-B2D2	800H-R2D2	800H-AR2D2
	Red	800T-A6D2	800T-B6D2	800H-R6D2	800H-AR6D2
1 N.O. - 1 N.C.	Green	800T-A1A	800T-B1A	800H-R1A	800H-AR1A
	Black	800T-A2A	800T-B2A	800H-R2A	800H-AR2A
	Red	800T-A6A	800T-B6A	800H-R6A	800H-AR6A

800 T - A 1 A
 a b c d e f



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

Operator Type		
800T Type 4/13	Description	800H Type 4/4X/13
Code		Code
A	Flush head	AR
B	Extended head	BR
D	Mushroom head	DR
DX	Mushroom head less color cap	DRX
—	Bootless guarded head	GR
—	Booted head	R*

d

Color Cap	
Code	Description
Blank	Used only when ordering Operator Type DX/DRX
1	Green
2	Black
3	Orange*

d (cont'd)

Color Cap	
Code	Description
4	Grey*
5	White*
6	Red
7	Blue
9	Yellow

e

Special Mushroom Head	
Code	Description
J§	Jumbo mushroom head — plastic
L§	Jumbo mushroom head — metal

Note: Special mushroom head options only apply to mushroom head operator type code D/DR (Table c).

f

Contact Block(s)	
Code	Description
Blank	No contacts
Standard	
D1	1 N.O.
D2	1 N.C.
D3	1 N.O.E.M.
D4	1 N.C.L.B.
D5	1 N.O. (Mini)
D6	1 N.C. (Mini)
A1	1 N.C.L.B. - 1 N.O.
A2	2 N.O.‡
A4	2 N.C.
A7	1 N.C.L.B. - 1 N.C.
A	1 N.O. - 1 N.C.
B	2 N.O. - 2 N.C.

f (cont'd)

Contact Block(s)	
Code	Description
PenTUFF (Low Voltage)	
D1V	1 N.O.
D2V	1 N.C.
D3V	1 N.O.E.M.
D4V	1 N.C.L.B.
AV	1 N.O. - 1 N.C.
BV	2 N.O. - 2 N.C.
Time Delay	
T	1 N.O. Depress close, delayed opening
S	1 N.C. Depress open, delayed closure
Snap Action	
M	1 N.O. - 1 N.C.
N	2 N.O. - 2 N.C.
Class 1, Div. 2/Zone 2 Logic Reed	
D1R	1 N.O.
D2R	1 N.C.
A2R	2 N.O.‡
A4R	2 N.C.
AR	1 N.O. - 1 N.C.
BR	2 N.O. - 2 N.C.

f (cont'd)

Contact Block(s)	
Code	Description
Class 1, Div. 2/Zone 2 Sealed Switch	
D1P	1 N.O.
D2P	1 N.C.
AP	1 N.O. - 1 N.C.
BP	2 N.O. - 2 N.C.
Stackable Sealed Switch	
D1Y	1 N.O.
D2Y	1 N.C.
A2Y	2 N.O.
A4Y	2 N.C.
AY	1 N.O. - 1 N.C.
BY	2 N.O. - 2 N.C.
Time Delay Contacts	
Series C field installable kits can only be used with Series T or later operators. Adjustable range of 0.5 to 15 s + 25%. Maximum continuous current I _{th} 5 A.	
Snap Action Contacts	
Snap-action contacts feature a quick make, quick break snap-action mechanism that is only available on factory assembled units. Maximum continuous current I _{th} 10 A.	

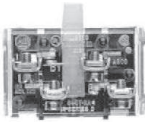
* Underlying operators are "flush head" type, except red which are "extended head". Boot material is chlorosulfonated polyethylene.
 † Not available for booted operators.
 ‡ A2 and A2R contact blocks cannot be stacked upon, but can stack on other contact blocks.
 § Jumbo mushroom heads not available in white color.



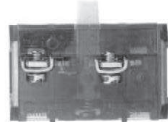
Contact Blocks

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



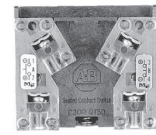
PenTUFF™ (Low Voltage) Contact Block



Logic Reed Block



Sealed Switch Block



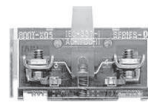
Stackable Sealed Switch Block

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

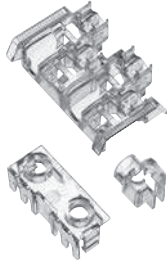




Push Buttons

	Description	Cat. No.
 Cat. No. 800T-N179 <i>(Operators not included)</i>	Bul. 800T/H Mechanical Interlock 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
 Cat. No. 800T-N12	Bul. 800T Rocker Arm Operating Lever 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.
 Cat. No. 800T-N245	Bul. 800T/H Mounting Ring Wrench 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
 Cat. No. 800T-N209RE1	Bul. 800T/H Jumbo Push-Pull Cap For use on Bul. 800T or 800H push-pull operators. Fits on illuminated and non-illuminated devices.	800T-N209RE1
	Bul. 800T 63 mm Red Anodized Aluminum Cap For use on Bul. 800T non-illuminated push-pull devices.	800T-N210R
	Bul. 800T 63 mm Red Anodized Aluminum Cap with "E-Stop" For use on Bul. 800T non-illuminated push-pull devices.	800T-N210RE
	Bul. 800T 90 mm Gold Anodized Aluminum Cap For use on Bul. 800T non-illuminated push-pull devices.	800T-N211GL
 Cat. No. 800T-N300	Bul. 800T Bonding Bracket 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
 Cat. No. 800E-ALR1	Bul. 800T/H Lens/Bulb Removal Tool The small end of this tool provides quick and easy removal of any incandescent or LED lamp.	800F-ALR1

Miscellaneous, Continued










		Description	Cat. No.	
 Cat. No. 800T-N324 Cat. No. 800T-N323 IEC Finger-Safe Accessories	Cat. No. 800T-N323 Bul. 800T/H IEC Finger-Safe Terminal Guards 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...)* Note: Must be ordered in multiples of 100 pieces.	800T-N322		
	Cat. No. 800T-N322 Transformer covers for transformer only. Note: Must be ordered in multiples of 25 pieces.	800T-N324		
	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) Note: Must be ordered in multiples of 25 pieces.	800T-N323		
 Cat. No. 800T-N292	Grey Bul. 800T Trim Washer Used to mount the operator properly when a legend plate is not being used. Note: Must be ordered in multiples of 10 pieces.	800T-N292		
	Plastic Bul. 800H Trim Washer Used to mount the operator properly when a legend plate is not being used. Note: Must be ordered in multiples of 10 pieces.	800H-N148		
 Cat. No. 800T-N293	Metal Bul. 800T Thrust Washer Used to prevent rotation of operators in a keyed or notched hole. Note: Must be ordered in multiples of 10 pieces.	800T-N293		
	Plastic Bul. 800H Thrust Washer Used to prevent rotation of operators in a keyed or notched hole. Note: Must be ordered in multiples of 10 pieces.	800H-N146		
 Cat. No. 800T-N188	Bul. 800T Etching Fluid Used to blacken freshly engraved aluminum legend plates.	800T-N188		
	Description	Color	Cat. No.	
 Cat. No. 800T-N1	Bul. 800T/H Closing Button 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	800T-N1	
		Black	800T-N1B	

* Power modules excluding transformers and dual inputs

Locking Attachments

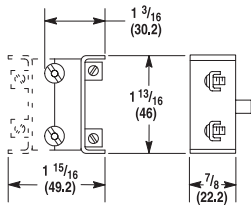
	Description	Cat. No.
 <p>Cat. No. 800T-N2 (Padlock not included)</p>	<p>Bul. 800T Extended Head Push Button Padlocking Attachments Permits locking in the depressed position. Locks the normally closed contact in the open position. For extended head non-illuminated momentary push buttons.</p>	<p>800T-N2</p>
 <p>Cat. No. 800T-N10 (Padlock not included)</p>	<p>Bul. 800T Flush Head Push Button Padlocking Attachments 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>Cat. No. 800T-N315 (Padlock not included)</p>	<p>Bul. 800T Momentary Mushroom Padlocking Attachments 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>Cat. No. 800T-N314 (Padlock not included)</p>	<p>Bul. 800T/H Push-Pull Padlocking Attachment 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>Cat. No. 800T-N163 (Padlock not included)</p>	<p>Bul. 800T/H Padlocking Cover 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>Bul. 800T/H Trigger Action Padlocking Attachment For 2-position trigger action E-stops with 45 mm heads.</p>	<p>800T-N378</p>

Guards

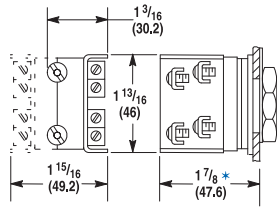
	Description	Type	Cat. No.
 Cat. No. 800T-N13	Bul. 800T Push Button Guards Momentary push button guards to reduce the risk of accidental operation.	1 in. guard for non-illuminated	800T-N13
		1/2 in. guard for non-illuminated	800T-N143
		1-1/2 in. guard for illuminated	800T-N93
		1-1/2 in. guard for non-illuminated with locking attachment	800T-N39
 Cat. No. 800H-N152	Bul. 800H Illuminated Push Button Guard This guard provides additional protection against accidental operation of the push button unit. 1-1/2 in. (38.1 mm) guard for illumination units.		800H-N152
 Cat. No. 800T-N226	Bul. 800T 18 mm Guard Provides side protection for 18 mm pilot lights.		800T-N226
 Cat. No. 800H-N153	Bul. 800H Stainless Steel Guard Used on non-illuminated push buttons that have protective boots as shown on page 10-39.		800H-N153
 Cat. No. 800T-N129	Bul. 800T Mushroom Push Button Guards Momentary mushroom guards for standard and jumbo mushroom push buttons. Reduces the risk of accidental operation.	Standard guard	800T-N129
		Standard guard with set screw	800T-N165
		Jumbo guard	800T-N151
		Jumbo guard with set screw	800T-N154
 Cat. Nos. 800T-N310 and 800T-NX1320	Bul. 800T/H Protective Guard 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	800T-N310
		Black	800T-NX1320
 Cat. No. 800T-N310J	Bul. 800T/H Jumbo Protective Guard 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)	800T-N310J
		63 mm	800T-N310L
 Cat. No. 800T-N381	Bul. 800T/H Protective Guard Protective ring for Bul. 800T trigger action E-stop operators.	45 mm	800T-N381
		60/63 mm	800T-N381L
 Cat. No. 800T-N339	Bul. 800T/H Ramp Guard For Bul. 800T/800H 2- and 3-position illuminated and non-illuminated push-pull units. Standard size button only (40 mm dia.).		800T-N339

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

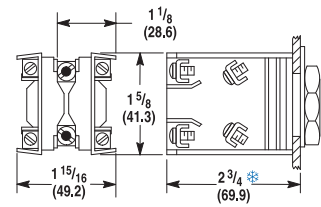
Blocks (Bul. 800T Only)



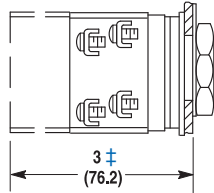
Mini Contact Block
 7/8 (22.2) Deep



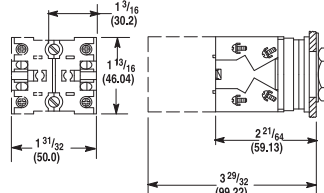
**Shallow, PenTUFF,
 and Logic Reed Contact Blocks**
 1-1/8 (28.6) Deep



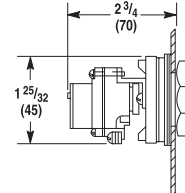
Sealed Switch Block
 2 (50.8) Deep



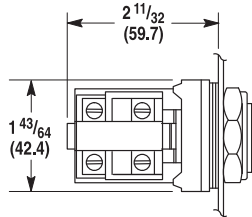
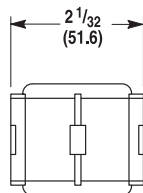
Tandem Mounting
 (2 shallow contact blocks stacked)



Stackable Sealed Switch Block
 1.58 (40.1) Deep



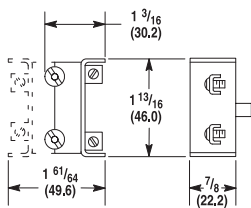
Time Delay Contact Block
 (For Push Buttons Only)



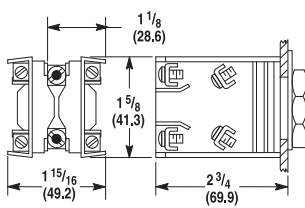
Snap Action Contact Block (For Push Button Only)

- * Dimension shown is for push buttons. Selector switch dimension is 2-1/32 in. (51.6 mm).
- ⊛ Dimension shown is for push buttons. Selector switch dimension is 2-27/32 in. (72.2 mm).
- ‡ Dimension shown is for push buttons. Selector switch dimension is 3-5/32 in. (80.2 mm).

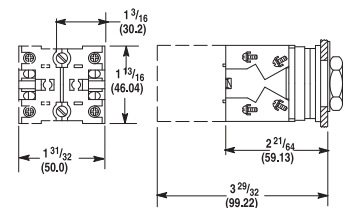
Blocks (Bul. 800H Only)



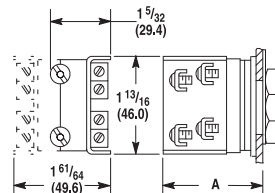
Mini Contact Block



Sealed Switch Block
 2 (50.8) Deep



Stackable Sealed Switch Block
 1.58 (40.1) Deep



**Shallow, PenTUFF and Logic
 Reed Contact Blocks**

Dim.	Momentary Push Button	Maintained Push Button	Selector Switch
A	2 (50.8)	2 (50.8)	1-29/32 (48.4)

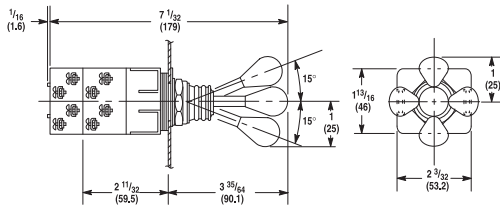
Operator Extension Behind Panel — When mounted with thrust washer, trim washer, or notched legend plate and correct number of rubber washers.

30.5 mm Push Buttons

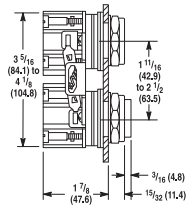
Approximate Dimensions

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

Push Buttons and Switches (Bul. 800T Only)

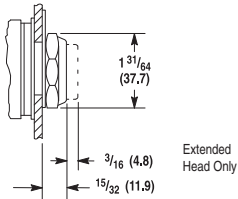


2-3-4 Way Switch
Shipping Wt. with 2 Contact Blocks 6 oz (0.17 kg)
Shipping Wt. with 4 Contact Blocks 8-1/2 oz (0.24 kg)

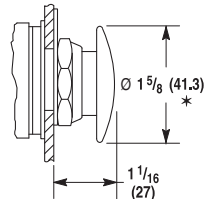


Mechanically Interlocked Maintained Contact Push Button
Shipping Wt. 1 lb (0.45 kg)

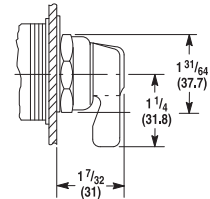
Push Buttons and Pilot Lights



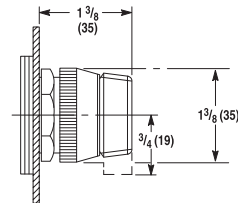
Flush and Extended Head Push Button
Shipping Wt. 5-1/2 oz (0.15 kg)



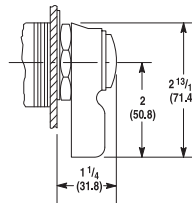
Mushroom Head Push Button
Shipping Wt. 7-1/2 oz (0.21 kg)



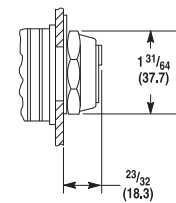
Non-Illuminated Knob Lever and Standard Knob Selector Switch
Shipping Wt. 6 oz (0.17 kg)



Illuminated Knob Lever and Standard Knob Selector Switch
Shipping Wt. 6 oz (0.17 kg)



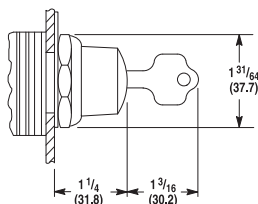
Wing Lever Selector Switch
Shipping Wt. 8 oz (0.22 kg)



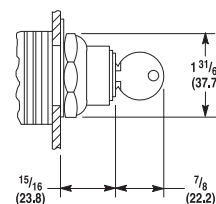
Coin Slot Selector Switch
Shipping Wt. 6 oz (0.17 kg)

* Except jumbo which is 2-1/4 (57.2).

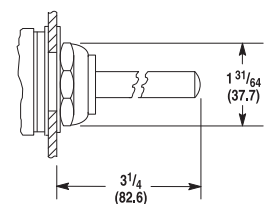
Operator Extension in Front of Panel (Bul. 800T Only)



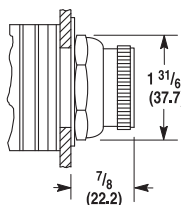
Key Operated Selector Switch
Shipping Wt. 12 oz (0.34 kg)



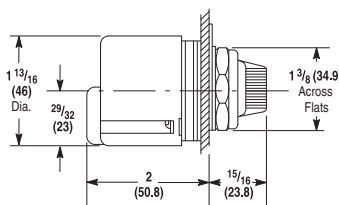
Push Button with Cylinder Lock
Shipping Wt. 12 oz (0.34 kg)



Wobble Stick
Shipping Wt. 9 oz (0.25 kg)



Selector Push Button
Shipping Wt. 6 oz (0.17 kg)



Type J Potentiometer Unit
Shipping Wt. 4 oz (0.11 kg)

