

Bulletin 800T/H
30.5 mm Push Buttons
 Selector Switches

2-Position Selector Switch Devices, Non-Illuminated



Standard Knob Operator
 Cat. No. 800T-H2A



Knob Lever Operator
 Cat. No. 800T-H17A



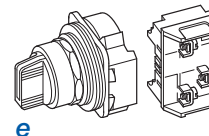
Standard Knob Operator
 Cat. No. 800H-HR2A

Contact Type	Side	Contact	Operator Position		M = Maintained S = Spring Return	Type 4/13		Type 4/4X/13
						Standard Knob	Knob Lever	Standard Knob
						Cat. No.	Cat. No.	Cat. No.
No Contacts	—	—	—	—	M M	800T-H2	800T-H17	800H-HR2
					S→M	800T-H4	800T-H18	800H-HR4
					M←S	800T-H5	800T-H19	800H-HR5
1 N.O.	White	A	O	X	M M	800T-H2D1	800T-H17D1	800H-HR2D1
					S→M*	800T-H4D1	800T-H18D1	800H-HR4D1
					M←S	800T-H5D1	800T-H19D1	800H-HR5D1
1 N.O. - 1 N.C.	White	A B	O X	X O	M M	800T-H2A	800T-H17A	800H-HR2A
					S→M*	800T-H4A	800T-H18A	800H-HR4A
					M←S	800T-H5A	800T-H19A	800H-HR5A

Note: X = Closed/O = Open

* Target tables are reversed from those shown.

800 T — HA 2 A
 a b c d e



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

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

Knob Insert Colors		
800T Type 4/13	Description	800H Type 4/4X/13
Code		Code
H	White	HR
HX	Packet of colored inserts*	HRX
Metal Wing Lever Colors§		
Code	Color	Code
HA	Red	—
HG	Grey	—

Operator Type and Function	
Standard Knob	
Code	Operator Function
2	Maintained
4	Spring return from left‡
5	Spring return from right
Knob Lever§	
Code	Operator Function
17	Maintained
18	Spring return from left‡
19	Spring return from right
Metal Wing Lever§	
Code	Operator Function
11	Maintained
15	Spring return from left‡
16	Spring return from right
Coin Slot§	
Code	Operator Function
6	Maintained
7	Spring return from left
8	Spring return from right

Contact Block(s)			
Code	Contact Configuration	Description	
		2-Position	
Blank	No contacts	—	—
Standard			
D1	1 N.O.	O	X
D2	1 N.C.	X	O
A	1 N.O. - 1 N.C.	O	X
		X	O
B	2 N.O. - 2 N.C.	O	X
		X	O
		O	X
		X	O
Max Duty (Horsepower Rated)*			
D1M	1 N.O.		
D2M	1 N.C.		
PentTUFF (Low Voltage)*			
D1V	1 N.O.		
D2V	1 N.C.		
AV	1 N.O. - 1 N.C.		
BV	2 N.O. - 2 N.C.		
Class1, Div. 2/Zone 2			
Logic Reed*			
D1R	1 N.O.		
D2R	1 N.C.		
AR	1 N.O. - 1 N.C.		
BR	2 N.O. - 2 N.C.		
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.		
AY	1 N.O. - 1 N.C.		
BY	2 N.O. - 2 N.C.		

* One insert of each color (blue, green, orange, red, and yellow).

‡ Target tables are reversed from those shown.

§ Only available on Bul. 800T, Type 4/13 operators.

* Contact target tables same as those listed for standard contact blocks.



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.

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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	

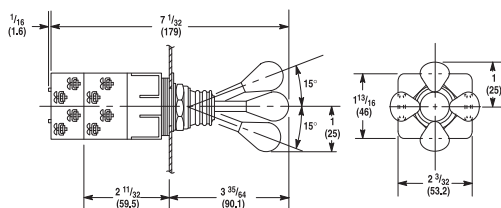
* Performance Data — See Important- 3.

30.5 mm Push Buttons

Approximate Dimensions

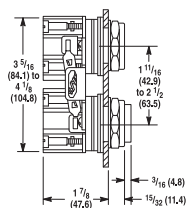
Dimensions in inches (millimeters). Dimensions are not intended to be used for manufacturing purposes.

Push Buttons and Switches (Bul. 800T Only)



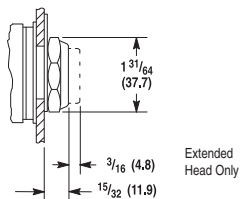
2-3-4 Way Switch

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



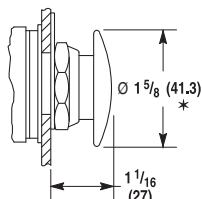
Mechanically Interlocked
Maintained Contact Push Button
Shipping Wt. 1 lb (0.45 kg)

Push Buttons and Pilot Lights



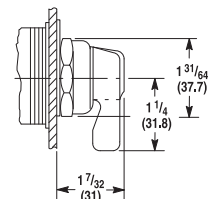
Flush and Extended
Head Push Button

Shipping Wt. 5-1/2 oz (0.15 kg)

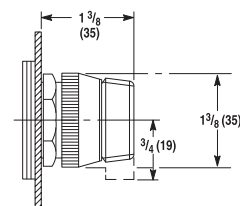


Mushroom Head Push Button

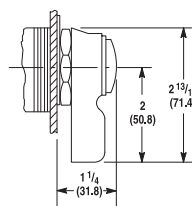
Shipping Wt. 7-1/2 oz (0.21 kg)



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

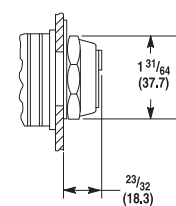


Illuminated Knob Lever and
Standard Knob Selector Switch
Shipping Wt. 6 oz (0.17 kg)



Wing Lever Selector Switch

Shipping Wt. 8 oz (0.22 kg)

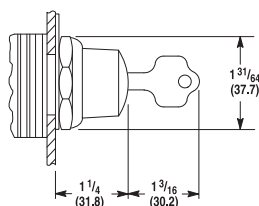


Coin Slot Selector Switch

Shipping Wt. 6 oz (0.17 kg)

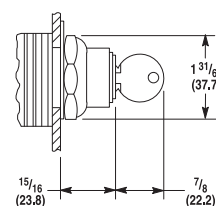
* Except jumbo which is 2-1/4 (57.2).

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



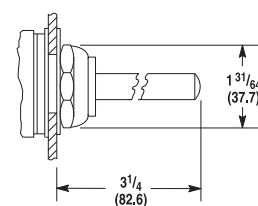
Key Operated Selector Switch

Shipping Wt. 12 oz (0.34 kg)



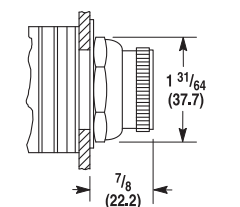
Push Button with Cylinder Lock

Shipping Wt. 12 oz (0.34 kg)



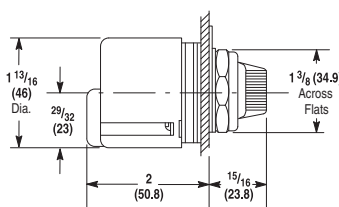
Wobble Stick

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)

