

2-Position Selector Switch Devices, Non-Illuminated



Standard Knob Operator
Cat. No. 800T-H2A

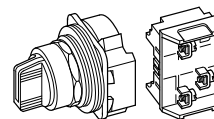


Knob Lever Operator
Cat. No. 800T-H17A



Standard Knob Operator
Cat. No. 800H-HR2A

800 T HA 2 A
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

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	—

d

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

e

Contact Block(s)			
Code	Description Contact Configuration	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) Δ			
D1M	1 N.O.		
D2M	1 N.C.		
PenTUFF (Low Voltage) Δ			
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			
Logic Reed Δ			
D1R	1 N.O.		
D2R	1 N.C.		
AR	1 N.O. - 1 N.C.		
BR	2 N.O. - 2 N.C.		
Sealed Switch Δ			
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 Δ			
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).

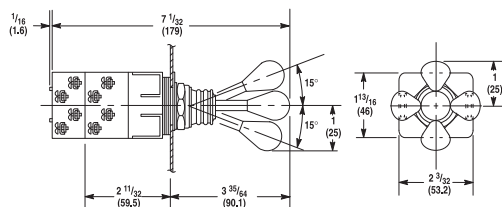
§ Target tables are reversed from those shown.

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

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

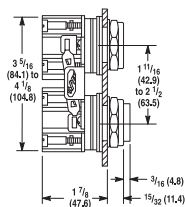
Dimensions in inches (millimeters). Dimensions are not intended to be used for manufacturing purposes.

Push Buttons and Switches (Bul. 800T Only)



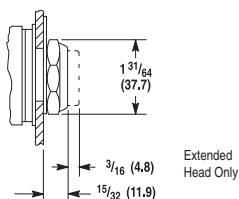
2-3-4 Way Switch

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

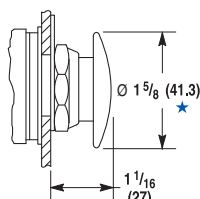


Mechanically Interlocked
Maintained Contact Push Button
Shipping Wt. 1 lb (0.45 kg)

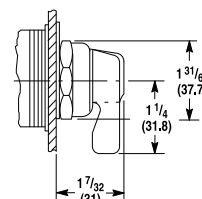
Push Buttons and Pilot Lights



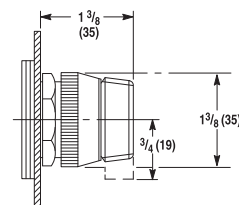
Flush and Extended
Head Push Button
Shipping Wt. 5-1/2 oz (0.15 kg)



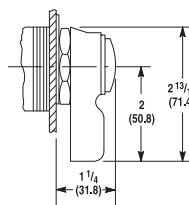
Mushroom Head Push Button
Shipping Wt. 7-1/2 oz (0.21 kg)



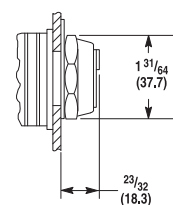
Non-Illuminated Knob Lever and
Standard Knob Selector Switch
Shipping Wt. 6 oz (0.17 kg)



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



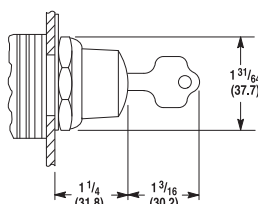
Wing Lever Selector Switch
Shipping Wt. 8 oz (0.22 kg)



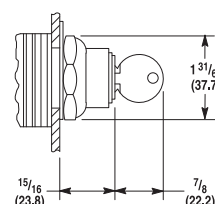
Coin Slot Selector Switch
Shipping Wt. 6 oz (0.17 kg)

★ Except jumbo which is 2-1/4 (57.2).

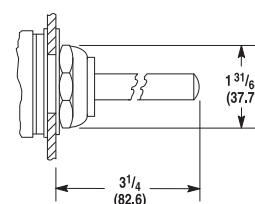
Operator Extension in Front of Panel (Bul. 800T Only)



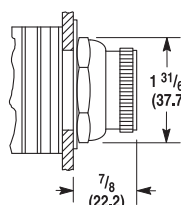
Key Operated Selector Switch
Shipping Wt. 12 oz (0.34 kg)



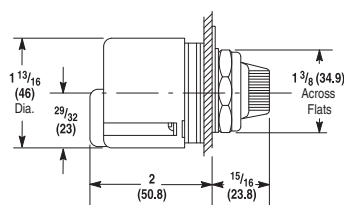
Push Button with Cylinder Lock
Shipping Wt. 12 oz (0.34 kg)



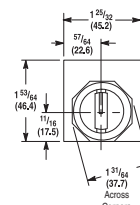
Wobble Stick
Shipping Wt. 9 oz (0.25 kg)



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



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



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, flush and extended head)	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** — Performance data given in this publication is provided only as a guide for the user in determining suitability and do not constitute a performance warranty of any kind. Such data may represent the results of accelerated testing at elevated stress levels, and the user is responsible for correlating the data to actual application requirements. ALL WARRANTIES AS TO ACTUAL PERFORMANCE, WHETHER EXPRESS OR IMPLIED, ARE EXPRESSLY DISCLAIMED.

‡ Illuminated Trigger Action E-stops are rated for 150,000 min. mechanical operations when using Cat. No. 800TC-XD4S Self-Monitoring Contact Blocks (SMCBs).