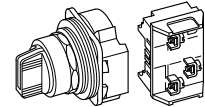


2-Position Selector Switch Devices, Non-Illuminated (Bul. 800T only)



2-Position Cylinder Lock Operator  
Cat. No. 800T-H33A

800 T - H31 A  
a b c d e



a

Protection Rating	
Code	Description
T	Metal, Type 4/13

b

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

c

Key Removal Position	
Maintained	
Code	Operator Function
H31	Key removal — left
H32	Key removal — right
H33	Key removal — both
Spring Return From Left	
Code	Operator Function
H42	Key removal — right ★
Spring Return From Right	
Code	Operator Function
H48	Key removal — left

d

Key Options for Cylinder Locks <sup>Δ</sup>			
Code	T Series Key No.	Code	T Series Key No.
Blank	D018 (Std. Key)	15	T112
03	D020	16	T115
04	D025	17	T324
05	D335	18	T382
06	D429	19	T404
07	D461	20	T171
08	D111	21	T484
09	D587	22	T547
10	D682	23	T569
11	D713	24	T692
12	D900	25	T752
13	D992	26	T178
14	D118	—	—

e

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.		
PenTUFF (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			
Logic Reed <sup>✦</sup>			
D1R	1 N.O.		
D2R	1 N.C.		
AR	1 N.O. - 1 N.C.		
BR	2 N.O. - 2 N.C.		
Sealed Switch <sup>✦</sup>			
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 <sup>✦</sup>			
D1Y	1 N.O.		
D2Y	1 N.C.		
AY	1 N.O. - 1 N.C.		
BY	2 N.O. - 2 N.C.		

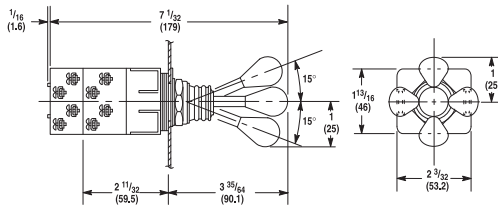
★ Target tables are reversed from those shown.

✦ Contact target tables same as those listed for standard and PenTUFF contact blocks.

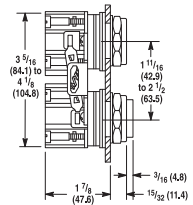
Δ Device supplied with 2 keys. Replacement key part no. for standard D018 key is X-181170. Consult your local Rockwell Automation sales office or Allen-Bradley distributor for additional replacement key numbers.

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

Push Buttons and Switches (Bul. 800T Only)

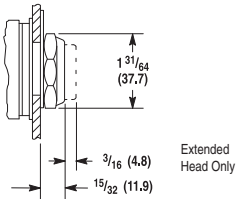


2-3-4 Way Switch  
Shipping Wt. with 2 Contact Blocks 6 oz (0.17 kg)  
Shipping Wt. with 4 Contact Blocks 8-1/2 oz (0.24 kg)

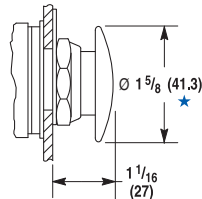


Mechanically Interlocked  
Maintained Contact Push Button  
Shipping Wt. 1 lb (0.45 kg)

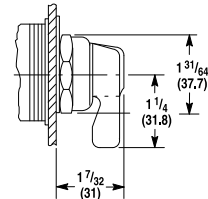
Push Buttons and Pilot Lights



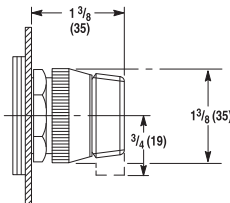
Flush and Extended  
Head Push Button  
Shipping Wt. 5-1/2 oz (0.15 kg)



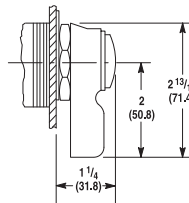
Mushroom Head Push Button  
Shipping Wt. 7-1/2 oz (0.21 kg)



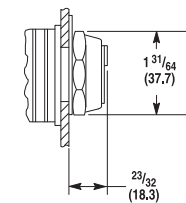
Non-Illuminated Knob Lever and  
Standard Knob Selector Switch  
Shipping Wt. 6 oz (0.17 kg)



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



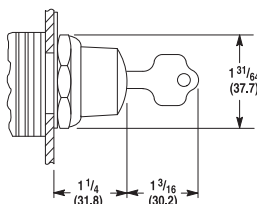
Wing Lever Selector Switch  
Shipping Wt. 8 oz (0.22 kg)



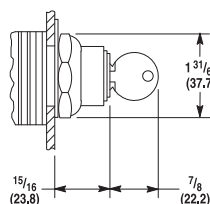
Coin Slot Selector Switch  
Shipping Wt. 6 oz (0.17 kg)

★ Except jumbo which is 2-1/4 (57.2).

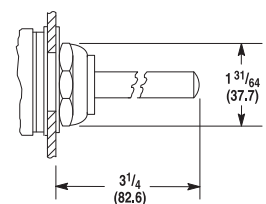
Operator Extension in Front of Panel (Bul. 800T Only)



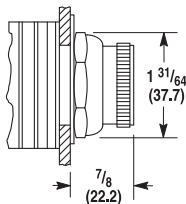
Key Operated Selector Switch  
Shipping Wt. 12 oz (0.34 kg)



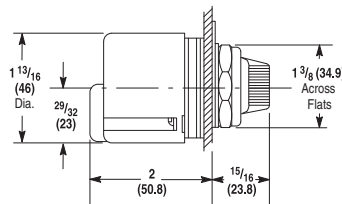
Push Button with Cylinder Lock  
Shipping Wt. 12 oz (0.34 kg)



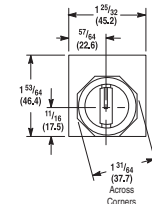
Wobble Stick  
Shipping Wt. 9 oz (0.25 kg)



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)
<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** — 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).