

4-Position Selector Switch Devices, Non-Illuminated



Standard Knob Operator
Cat. No. 800T-N2KN4B



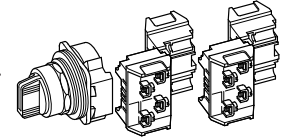
Knob Lever Operator
Cat. No. 800T-N17KN4B



Standard Knob Operator
Cat. No. 800H-NR2KF4AAXX

800 T - N 2 KF4 B

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

Knob Insert Colors		
800T Type 4/13	Description	800H Type 4/4X/13
Code		Code
N	White	NR
NX	Packet of colored inserts★	NRX

Metal Wing Lever Colors		
Code	Color	Code
NA	Red	—
NG	Grey	—

d

Operator Function and Knob Type	
Standard Knob	
Code	Operator Function
2	Maintained
3	Spring return from position 1 to position 2
9	Spring return from position 4 to position 3

Knob Lever★	
Code	Operator Function
17	Maintained
29	Spring return from position 1 to position 2
30	Spring return from position 4 to position 3

Metal Wing Lever★	
Code	Operator Function
11	Maintained
13	Spring return from position 1 to position 2
14	Spring return from position 4 to position 3

e

Cam Option△	
Code	Description
KF4	F cam
KG4	G cam
KK4♦	K cam
KM4♦	M cam
KP4	P cam
KN4	Overlapping cam‡

f

Contact Blocks△		
800T Type 4/13	Description	800H Type 4/4X/13
Code		Code
Blank	No contacts	Blank

Standard		
Code	Description	Code
B	2 N.O. - 2 N.C. 2-800T-XAs — 1 on white side/ 1 on black side	AAXX
H	3 N.O. - 3 N.C. 3-800T-XAs — 2 on white side/ 1 on black side	AAAX
C	4 N.O. - 4 N.C. 4-800T-XAs — 2 on white side/ 2 on black side	AAAA

f (cont)

Contact Blocks		
800T Type 4/13	Description	800H Type 4/4X/13
Code		Code
PenTUFF (Low Voltage)		
BV	2 N.O. - 2 N.C.	FFXX
HV	3 N.O. - 3 N.C.	FFFX
CV	4 N.O. - 4 N.C.	FFFF
Class 1, Div. 2		
Logic Reed§		
BR	2 N.O. - 2 N.C.	TTXX
HR	3 N.O. - 3 N.C.	TTTX
CR	4 N.O. - 4 N.C.	TTTT
Sealed Switch§		
BP	2 N.O. - 2 N.C.	PPXX
Stackable Sealed Switch★		
BY△	2 N.O. - 2 N.C.	TTXX
HY△	3 N.O. - 3 N.C.	TTTX
CY△	4 N.O. - 4 N.C.	TTTT

- ★ One insert of each color (blue, green, orange, red, and yellow).
- ‡ Overlapping cam. See Publication 800T-2.8 for overlap specifications.
- § Contact block mounting same as listed for standard and PenTUFF contact blocks.
- ★ Only available on Bul. 800T, Type 4/13 operators.
- △ See Table 1 for proper cam/contact selection.
- ♦ Not available with wing levers.

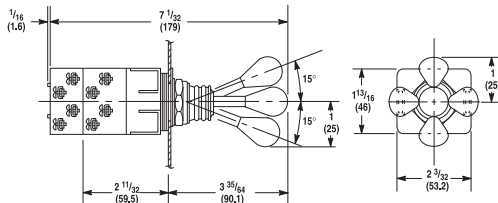
Table 1. Cam and Contact Block Functionality Table

Contact Block Suffix Code	Contact Block Side	Circuits	Cam Codes																								
			KF4				KG4				KK4				KM4				KP4				KN4‡				
			↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	
C H B	White	A	X	O	O	O	X	X	O	O	O	O	X	X	X	O	O	O	O	O	O	X	O	X	O	O	
		B	O	X	O	O	O	O	X	O	X	X	O	O	O	X	X	O	O	X	O	O	O	O	O	O	X
	Black	A	O	O	O	X	X	O	O	O	X	O	O	X	O	O	O	X	O	O	X	X	O	O	X	O	O
		B	O	O	X	O	O	O	O	X	O	X	X	O	O	X	O	O	X	O	O	O	X	O	O	O	O
	White	A	X	O	O	O	X	X	O	O	O	O	X	X	X	O	O	O	O	O	O	X	O	X	O	O	O
		B	O	X	O	O	O	O	X	O	X	X	O	O	O	X	X	O	O	X	O	O	O	O	O	O	X
	Black	A	O	O	O	X	X	O	O	O	X	O	O	X	O	O	O	X	O	O	X	X	O	O	X	O	O
		B	O	O	X	O	O	O	O	O	X	O	X	X	O	O	X	O	O	X	O	O	O	X	O	O	O

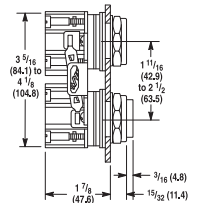
Note: X = Closed/O = Open

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

Push Buttons and Switches (Bul. 800T Only)

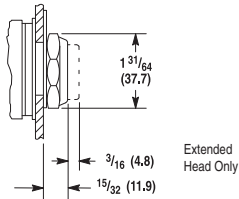


2-3-4 Way Switch
 Shipping Wt. with 2 Contact Blocks 6 oz (0.17 kg)
 Shipping Wt. with 4 Contact Blocks 8-1/2 oz (0.24 kg)

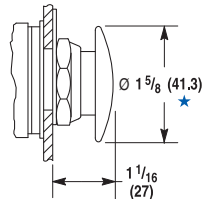


Mechanically Interlocked
 Maintained Contact Push Button
 Shipping Wt. 1 lb (0.45 kg)

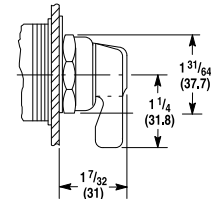
Push Buttons and Pilot Lights



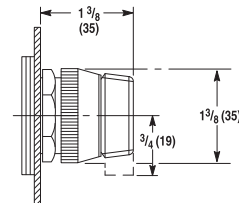
Flush and Extended
 Head Push Button
 Shipping Wt. 5-1/2 oz (0.15 kg)



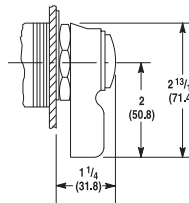
Mushroom Head Push Button
 Shipping Wt. 7-1/2 oz (0.21 kg)



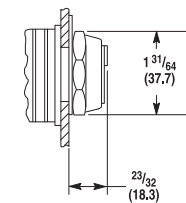
Non-Illuminated Knob Lever and
 Standard Knob Selector Switch
 Shipping Wt. 6 oz (0.17 kg)



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



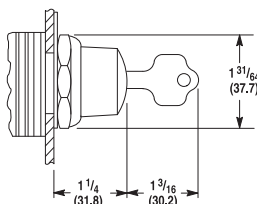
Wing Lever Selector Switch
 Shipping Wt. 8 oz (0.22 kg)



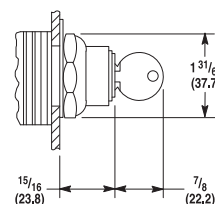
Coin Slot Selector Switch
 Shipping Wt. 6 oz (0.17 kg)

★ Except jumbo which is 2-1/4 (57.2).

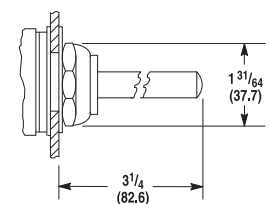
Operator Extension in Front of Panel (Bul. 800T Only)



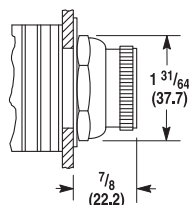
Key Operated Selector Switch
 Shipping Wt. 12 oz (0.34 kg)



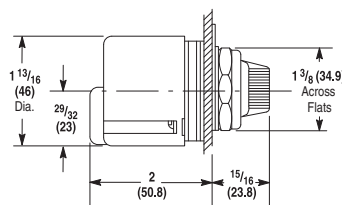
Push Button with Cylinder Lock
 Shipping Wt. 12 oz (0.34 kg)



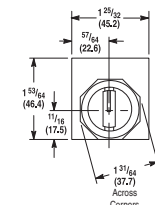
Wobble Stick
 Shipping Wt. 9 oz (0.25 kg)



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).