











Pushbutton Switches and Hardware



A

B

C

D

E

F

G

H

J

K

**Butt Contact Switches (A, B, C, K)**

- ▶ Miniature and Economical SPST Switches
- ▶ Positive Feel (30-17), Overtravel (30-15), and SPDT PC Mount (M) Versions


**Wiping Contact Types (D, E, F, G, I, J)**

- ▶ Self-Cleaning, Reliable At Low Voltage
- ▶ SPDT and DPDT Circuitry
- ▶ Capped (46-102), and Decorative (I, J) Styles

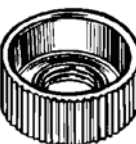
**Snap Action Contact Types (H)**

- ▶ Rapid Make and Break For High Current

**Accessories (for D, H)**



7C1040



10C1015

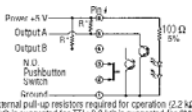
▶ Decorative Bezel (7C) Replaces Mounting Nut  
Guard (10C) Prevents Accidental Actuation

Type 7C1040-1. Overall Diameter: 0.77".  
948-0001.....EACH 1.02

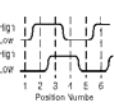
Type 10C1015-1. Overall Diameter: 0.89".  
948-0002.....EACH 1.27

Stock No.	Mfr.'s Type	Fig.	Amps 115 VAC Res.	Circuitry	Button	Dimensions			EACH		
						Mtg. Hole	Behind Panel	O.A. Ht.	1-99	100-499	500-999
948-7190	39-1	A	1/2	SPST-NO	Red	11/64	0.315	0.615	3.38	3.11	2.88
948-7192	39-3	A	1/2	SPST-NO	Black	11/64	0.315	0.615	3.39	3.13	2.89
948-7193	30-1	B	1	SPST-NO	Red	17/64	0.592	0.992	2.21	2.01	1.84
948-7194	30-2	B	1	SPST-NC	Black	17/64	0.605	1.005	2.48	2.29	2.13
948-7195	30-3	B	1	SPST-NO	Black	17/64	0.592	0.992	2.21	2.01	1.84
948-7196	30-15	B	1	SPST-NO	Red	17/64	0.667	1.077	2.75	2.54	2.36
948-7197	30-17 Red	C	1	SPST-NO	Red	31/64	0.958	1.350	5.43	5.02	4.67
948-7198	10-9	D	1	SPST-NO	Black	31/64	0.965	1.500	4.30	3.75	3.49
948-7199	4001	D	1	SPST-NO	Red	31/64	0.965	1.500	4.30	3.75	3.49
948-7200	4002	D	1	SPST-NC	Black	31/64	0.965	1.500	4.30	3.75	3.49
948-7201	23-1	E	1/4	SPST-NO	Red	21/64	0.663	1.059	5.60	5.18	4.81
948-7202	46-101 Red	F	1/4	SPDT-BBM	Red	17/64	0.890	1.327	4.48	4.15	3.86
948-7204	46-102 Red	F	1/4	SPDT-BBM	Red	17/64	0.890	1.327	4.50	4.15	3.85
948-7205	46-102 Black	F	1/4	SPDT-BBM	Black	17/64	0.890	1.327	4.50	4.15	3.85
948-7207	46-200 Red	G	1/4	DPDT-BBM	Red	17/64	0.921	1.560	8.63	7.98	7.42
948-7208	46-200 Black	G	1/4	DPDT-BBM	Black	17/64	0.921	1.560	8.63	7.98	7.42
948-7210	2201	H	10	SPST-NO	Red	31/64	1.176	1.903	13.12	12.13	11.28
948-7211	2202	H	10	SPST-NC	Black	31/64	1.176	1.903	13.99	12.79	11.14
948-7213	46-05-05-502-0707	J	1/4	SPDT-BBM	Black	0.440 × 0.516	1.179	1.527	13.15	12.98	11.33
948-7214	46-05-05-502-0303	J	1/4	SPDT-BBM	Red	0.440 × 0.516	1.179	1.527	13.15	12.98	11.33
948-7215	46-05-07-502-0707	J	1/4	SPDT-BBM	Black	0.440 × 0.516	1.465	1.813	18.72	17.31	16.09
948-7217	46-05-08-502-0707	J	1/4	DPDT-BBM	Black	0.565 × 0.641	1.188	1.536	17.48	16.34	14.46
948-7218	46-05-08-502-0303	J	1/4	DPDT-BBM	Red	0.565 × 0.641	1.188	1.536	15.70	14.52	13.50
948-7221	30-05-04-502-0303	J	1	SPST-NO	Red	0.440 × 0.516	1.132	1.480	26.13	24.08	22.33
948-7222	39-251 Red	K	1/4	SPDT-BBM	Red	PC	—	0.328	2.13	1.97	1.83

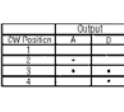
Series 62 Optical Encoder



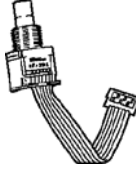
Circuitry



Waveform



Output



Series 62A is a compact, 1/2" package with proven reliability. Available with or without integrated pushbutton in 16, 24 and 32 detent positions, with maximum 24" cable with connector available in 1/2" increments (contact Allied or Grayhill for special lengths). Produces a standard quadrature two bit code illustrated above.

Stock No.	Mfr.'s Type	Positions	Terminations	EACH	
				1-24	25-99
948-8000	62A11-02-060C	32	6" Cable/Connector	37.23	34.42
948-8001	62A11-02-060S	32	6" Stripped Cable	37.23	34.42
948-8002	62A15-02-060C	24	6" Cable/Connector	37.23	34.42
948-8003	62A15-02-060S	24	6" Stripped Cable	37.23	34.42
948-8005	62A22-02-060C	16	6" Cable/Connector	37.23	34.42
948-8006	62A22-02-060S	16	6" Stripped Cable	37.23	34.42

Series 61 High Resolution Optical Encoders

Light passage is allowed or interrupted as switch is operated. Provides million-cycle life. Encoders produce a 2-bit, 4-state code. The code repeats every 4 positions. Number of changes and direction of rotation can be sensed. Switches include Schmitt Trigger outputs and are available in 25, 32, 50, 64, 100 and 256 cycles per revolution. All units require a 5 VDC external source. Panel mount versions require user-supplied pull-up resistors dependent on the type of logic that is used. **Switching Current:** 30 mA max. **Temperature Range:** -40°C to +65°C.

Stock No.	Mfr.'s Type	Position	Termination	EACH	
				1-9	10-24
948-2027	61R64	64	Switch pins	64.13	51.31
948-2028	61R64-050	64	5" Cable/Connector	69.72	55.81
948-2029	61R100	100	Switch pins	64.13	51.31
948-2031	61R128	128	Switch pins	64.13	51.31
948-2032	61R128-050	128	5" Cable/Connector	69.72	55.81

Hardware

29 Series Binding Posts

- ▶ Straight Skirt Binding Posts Rated Up To 15 A For 3/16" Panels (29-1)
- ▶ 20 A Push-Post™ Has Spring Pressure To Assure Positive Contact; In Standard
- ▶ (29-100), Capless (29-110), and Insulated (29-104) Versions

Stock No.	Mfr.'s Type	Cap Color	Mounting Hole Dia. (In.)	EACH		
				1-99	100-499	500-999
948-7392	29-100B	Black	11/64	3.17	2.93	2.72
948-7393	29-100R	Red	11/64	3.17	2.93	2.72
948-7395	29-104B	Black	25/64	4.35	3.79	3.53
948-7396	29-104R	Red	25/64	4.50	3.79	3.53

2 Series Test Clips

- ▶ Standard Size Test Clips With (2-0) and Without (2-60) Stud
- ▶ Threaded Miniature Test Clip (2-20) Mounts On Thick Panels Up To 0.25"
- ▶ Ultra Miniature Clips Save Space and Handle Single Or Double Leads

Stock No.	Mfr.'s Type	Mounting	Height (In.)	EACH		
				1-99	100-499	500-999
948-7397	2-0	Std. Thread Stud	1.59	1.90	1.76	1.64
948-7398	2-60	Studless	1.14	1.94	1.80	1.67
948-7399	2-20	Mini Thread Stud	1.16	2.15	1.99	1.85
948-7400	2-41	Ultra. Single	0.79	2.15	1.99	1.85

For Fast, Dependable Service, Make Just One Call — 1-800-433-5700

ALLIED ► 225