

Basic Switches

Standard

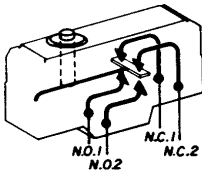
BZ/BA Series

PIN PLUNGER —
SPECIAL CIRCUITRY

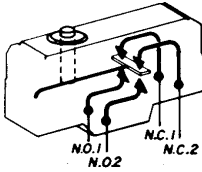
ORDER GUIDE



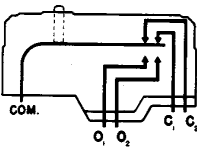
Dim. Dwg. Fig. 8



Dim. Dwg. Fig. 9



Dim. Dwg. Fig. 10



Catalog Listing	Recommended For	Electrical Data and UL Codes Page 46	O.F. newtons ounces	R.F. min. newtons ounces	P.T. max. mm inches	O.T. min. mm inches	D.T. mm inches	O.P.* mm inches
BZ-3AT	Double-break, low voltage DC applications	15 Amps T	4,45-7,23 16-26	1,11 4	0,76 .030	0,13 .005	0,051-0,13 .002-.005	15,9 .625
BZ-2AW80T	As above, with 2.5 inch lever	15 Amps T	0,90 3.25	0,14 .25	- -	5,56 .219	0,51 2.54	19,05±0,76 .750±.030
BZ-2AW82T	As above, with 1.9 inch roller lever	15 Amps T	1,25 4.5	0,21 .75	- -	3,96 .156	0,38-1,91 .015-.075	30,18±0,76 1.188±.030
BZ-2AW822T	As above, with 1.05 inch roller lever	15 Amps T	2,36 8.5	0,42 1.5	- -	2,39 .094	0,20-2,39 .008-.030	30,18±0,76 1.188±.030

BA-3ST	Double-break, low voltage DC applications	25 Amps M	7,23-10,6 26-38	2,78 10	1,65 .065	0,25 .010	0,18-0,38 .007-.015	16,3 .640
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BZ-3YT (MS25383-1)	MIL-S-8805 application requirements. (split contact)	5 Amps U	4,45-7,23 16-26	1,11 4	0,76 .030	0,13 .005	0,025-0,1 .001-.004	15,9 .625
BZ-3YWT80	As above, with 2.50 inch lever	5 Amps U	0,97 3.5	0,14 .5	- -	5,56 .219	0,51-2,54 .020-.100	19,05±0,76 .750±.030
BZ-3YWT82	As above, with 1.9 inch roller lever	5 Amps U	1,25 4.5	0,21 .75	- -	3,96 .156	0,38-1,91 .015-.075	30,18±0,76 1.188±.030
BZ-3YWT822	As above, with 1.05 inch roller lever	5 Amps U	1,95 7	0,42 1.5	- -	2,39 .094	0,20-1,02 .008-.040	30,19 .188

Except where stated * ±0,38 mm
±.015 in.

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ELECTRICAL DATA AND UL CODES STANDARD BASIC SWITCHES

Most of the switches in this section are UL recognized and CSA certified. The current and voltage values shown are based on test conditions specified by these agencies. Electrical life of the switch is influenced by each application condition as well as by voltage and current. For application assistance contact the 800 number.

Circuitry	Electrical Data and UL Codes
Single-pole double-throw unless otherwise noted in order guide	A 15 amps, 125, 250 or 480 vac; 1/8 hp, 125 vac; 1/4 hp, 250 vac; 1/2 amp, 125 vdc; 1/4 amp, 250 vdc. UL Code L96
Single-pole double-throw unless otherwise noted in order guide	B 5 amps, 125, 250 or 480 vac; 1/2 amp, 125 vdc; 1/4 amp, 250 vdc. UL Code L35
Single-pole double-throw unless otherwise noted in order guide	C 10 amps, 125, 250 or 480 vac; UL Code L8
Single-pole double-throw unless otherwise noted in order guide	D 15 amps, 125, 250 or 480 vac; 1/8 hp, 125 vac; 1/4 hp, 250 vac. UL Code L103
Single-pole double-throw unless otherwise noted in order guide	E 15 amps, 125, 250 or 480 vac; 1/4 hp, 125 vac, 1/2 hp, 250 vac; 1/2 amp, 125 vdc; 1/4 amp, 250 vdc. UL Code L67
Single-pole double-throw unless otherwise noted in order guide	F 22 amps, 125, 250 or 480 vac; 1/2 hp, 125 vac, 1 hp, 250 vac. UL Code L161
Single-pole double-throw unless otherwise noted in order guide	G 20 amps, 125, 250 or 480 vac; 10 amps, 125 vac "L" (tungsten lamp load); 1 hp, 125 vac; 2 hp, 250 vac; 1/2 amp, 125 vdc; 1/4 amp, 250 vdc. UL Code L23
Single-pole double-throw unless otherwise noted in order guide	H Motor Control 25 amps, 125, 250 or 480 vac; 1 hp, 125 vac; 2 hp, 250 vac; Pilot Duty—750 VA, 125, 250, or 277 vac.
Single-pole double-throw unless otherwise noted in order guide	I 10 amps, 125, 250 or 480 vac; 1/8 hp, 125 vac; 1/4 hp, 250 vac; UL Code L95

Circuitry	Electrical Data and UL Codes
Double-pole double-throw	J 10 amps, 125 or 250 vac; 0.3 amp, 125 vdc; 0.15 amp, 250 vdc. UL Code L59
Single-pole double-throw unless otherwise noted in order guide	K Rating established with switch non-polarized 10 amps, 125 vac or vdc; 1/4 hp, 125 vac or vdc. UL Code L 168 Non-polarized: 10 amps res. or 1/4 hp, 125 vdc; 3 amps max. res. 250 vdc. Polarized*: 10 amps res. or 1/2 hp, 125 vdc; 3 amps max. res., 250 vdc.
Two-circuit double-break	M 25 amps, 125, 250 or 480 vac; 3/4 hp, 125 vac; 1 1/4 hp, 250 vac. 1 amp, 125 vdc; 1/2 amp, 250 vdc. UL Code L58
Single-pole double-throw	P 1 amp, 125 VAC UL Code L22
Single-pole double-throw	R 10 amps, 125 or 250 vac; 1/3 hp, 125 vac; 3/4 hp, 250 vac; 1/2 amp, 125 vdc; 1/4 amp, 250 vdc. UL Code L115
Single-pole double-throw	S 10 amps, 125 or 250 vac; 1/3 hp, 125 or 250 vac. UL Code L93
Two-circuit double-break	T 15 amps, 125, 250 or 480 vac; 1 amp, 125 vdc; 1/2 amp, 250 vdc; 1/4 hp, 125 vac; 1/2 hp, 250 vac UL Code L73
Single-pole double-throw	U 5 amps, 250 vac. UL Code L4
Two-circuit double-break	V Motor Control 15 amps, 120, 240, 480 or 600 vac; 1/2 hp, 120 vac; 1 hp, 240 vac; 0.8 amp, 115 vdc; 0.4 amp, 230 vdc.
Single-pole single-throw (N.C.)	W 20 amps, 125, 250 or 277 vac; 3/4 hp, 125 vac; 1/2 hp, 250 vac UL Code L178B
Single-pole double-throw	X 15 amps, 125, 250 or 480 vac; 2 amps, 600 vac; 1/8 hp, 125 vac; 1/4 hp, 250 vac; 1/2 amp, 125 vdc; 1/4 amp, 250 vdc. UL Code L74
Single-pole double-throw	Y 20 amps, 125, 250 or 480 vac; 3/4 hp, 125 vac; 1 1/2 hp, 250 vac; UL Code L17

*To polarize, connect negative side of line to common terminal. To achieve the same effect, mount switch with brass screws, using a non-magnetic barrier (at least 1/4" thick) between the switch and mounting surface.

GENERAL INFORMATION SPECIAL CIRCUITRY SWITCHES

"Special sequence" switches provide unusual circuit control. A make-before-break switch provides circuit continuity while switching from N.C. to N.O. In another make-before-make switch, upon actuation, one circuit is made an interval before the second circuit. Another switch

provides a single pulse or momentary closure of the contacts with each cycle of operation.

Double break versions can interrupt greater inductive loads and feature shorting bar construction. A split contact version allows control of the two isolated circuits.



Characteristics: O.F. – Operating Force;
R.F. – Release Force; P.T. – Pretravel;
O.T. – Overtravel; D.T. – Differential Travel;
O.P. – Operating Position.

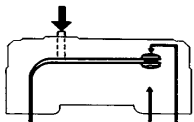
PIN PLUNGER

ORDER GUIDE

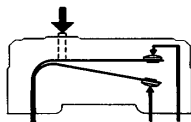


Dim. Dwg. Fig 5

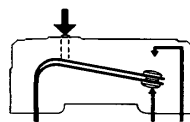
Catalog Listing	Recommended For	Electrical Data and UL Codes Page 46	O.F. newtons ounces	R.F. min. newtons ounces	P.T. max. mm inches	O.T. min. mm inches	D.T. mm inches	O.P.* mm inches
BZ-2G-A2	Make-before-break contact action	10 Amps C	5,56 20 max.	2,22 8	0,76 .030	0,13 .005	0,38 .015	15,9 .625



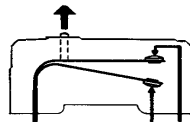
Unoperated



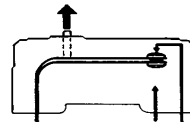
Intermediate



Fully Operated



Intermediate Release



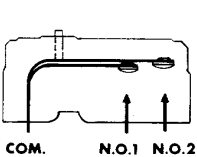
Fully Released



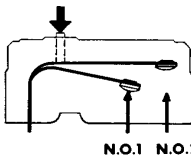
Dim. Dwg. Fig. 6

6BS1-B	Make-before-make contact action	10 Amps R	9,73 35 max.	2,78 10	-	-	-	-
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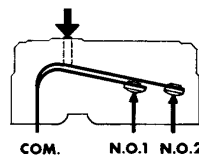
*±0,38 mm
± .015 in.



COM. N.O.1 N.O.2



N.O.1 N.O.2



COM. N.O.1 N.O.2



Dim. Dwg. Fig. 4-A

10BS210	Adjustable differential travel	20 Amps Y	3,10-5,56 11-20	2,78 10	-	0,25 .010 at max. setting	0,04-0,06 .0015-.0025 0,18 .007 at max. setting	16,3 .64
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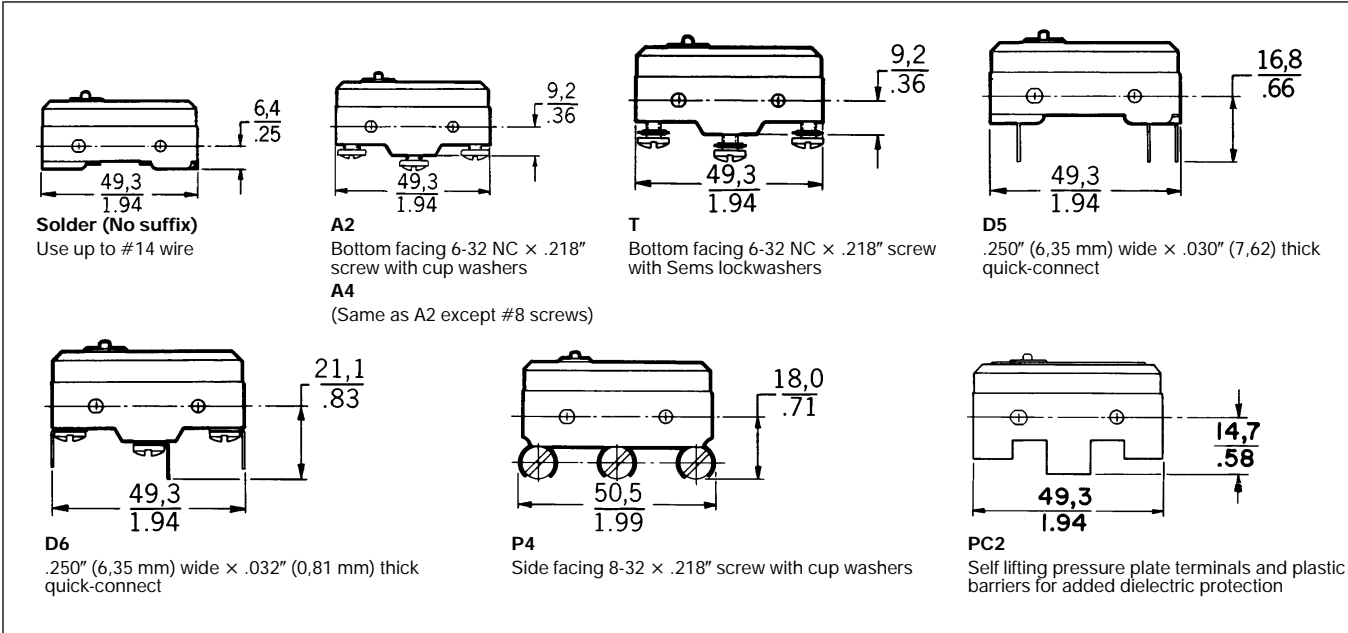
Basic Switches

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BZ/BA Series

AVAILABLE TERMINALS

Most of the BZ/BA catalog listings have A2 type terminals. Several other terminal styles are shown and others are available. Specific information should be requested from the 800 number or local Authorized Distributor.



ACTUATORS

BA, BE, BM and BZ standard basic switches use the actuators described.

