

MICRO SWITCH™ Premium Large Basic Switches

Table 1. Specifications

Characteristic	BZ Series	WZ Series	YZ Series	BA Series	WA Series	YA Series	BM Series	BE Series
								
Ampere rating	15 A			20 A			22 A	25 A
Circuitry	SPDT	SPNC	SPNO	SPDT	SPNC	SPNO	SPDT	SPDT
Operating force	1.0 oz to 28 oz							
Termination	quick connect, solder, screw							
Actuator	pin plunger, overtravel plunger, straight, roller, flexible leaf roller, flexible leaf							
Voltage	125 Vac, 250 Vac, 125 Vdc, 250 Vdc							
Agency approvals	UL, CSA, ENEC, CE (varies by specific model)							
Operating temperature	-55 °C to 85 °C [-67 °F to 185 °F]							
Contacts	silver, silver cadmium oxide, gold alloy							
Housing	general purpose phenolic							
Sealing	Environment sealing option available (options for IP64 Sealing)							
Dielectric strength	2000 V between each terminal and ground							
Contact resistance	15 m Ohm max.(initial)							
Insulation resistance	100,000 M Ohm min.							
Vibration	1,5 mm peak-to-peak amplitude, frequency 10 Hz to 55 Hz, for two continuous hours							
Expected mechanical life	up to 20,000,000 cycles at 95% survival							
Expected electrical service life	100K operations at rated load							
Rated frequency	50 Hz/60 Hz							

ELECTRICAL DATA AND UL CODES

Table 2. UL Electrical Ratings

Code	Circuitry	Electrical data and UL codes
A	SPDT	15 A, 125, 250 or 480 Vac; 1/8 HP, 125 Vac; 1/4 HP, 250 Vac; 1/2 A, 125 Vdc; 1/4 amp, 250 Vdc. UL Code L96
B	SPDT	5 A, 125, 250 or 480 Vac; 1/2 A, 125 Vdc; 1/4 amp, 250 Vdc. UL Code L35
C	SPDT	10 A, 125, 250 or 480 Vac; UL Code L8
D	SPDT	15 A, 125, 250 or 480 Vac; 1/8 HP, 125 Vac; 1/4 HP, 250 Vac. UL Code L103
E	SPDT	15 A, 125, 250 or 480 Vac; 1/4 HP, 125 Vac; 1/2 HP, 250 Vac; 1/2 A, 125 Vdc; 1/4 amp, 250 Vdc. UL Code L67
F	SPDT	22 A, 125, 250 or 480 Vac; 1/2 HP, 125 Vac; 1 HP, 250 Vac. UL Code L161
G	SPDT	20 A, 125, 250 or 480 Vac; 10 A, 125 Vac "L" (tungsten lamp load); 1 HP, 125 Vac; 2 HP, 250 Vac; 1/2 A, 125 Vdc; 1/4 A, 250 Vdc. UL Code L23
H	SPDT	Motor control - 25 A, 125, 250 or 480 Vac; 1 HP, 125 Vac; 2 HP, 250 Vac; Pilot duty—750 VA, 125, 250, or 277 Vac
I	SPDT	10 A, 125, 250 or 480 Vac; 1/8 HP, 125 Vac; 1/4 HP, 250 Vac; UL Code L95
P	SPDT	1 A, 125 Vac UL Code L22
T	Two-circuit, double break	Motor Control 15 A, 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.
W	SPST	20 A, 125, 250 or 277 Vac; 3/4 HP, 125 Vac; 1/2 HP, 250 Vac UL Code L178B
X	SPDT	15 A, 125, 250 or 480 Vac; 2 A, 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

GENERAL SWITCH IDENTIFICATION

The first letter in the catalog listing designates:

- B** = Single pole, double throw
- W** = Single pole, normally closed
- Y** = Single pole, normally open

The second letter in the catalog listing designates:

- Z** = Standard, 15 A version
- M** = 22 A version
- A** = Standard, 20 A version
- E** = 25 A version

MOUNTING DIMENSIONS

Mounting dimensions are included in this datasheet. They are shown in English and metric equivalents. These dimensions are for reference only. Engineering drawings may be accessed via the Honeywell web site: sensing.honeywell.com.

Mounting holes for Types BZ, BM, BA, BE, and 6AS switches accept pins or screws of 3,53 mm [0.139 in] diameter.

RECOMMENDED TORQUE

Mounting screws 0,39 Nm [3 in-lb]*
Terminal screws 0,45 Nm [4 in-lb]
Panel mount bushing 0,45 Nm to 0,68 Nm [4 in-lb to 6 in-lb]

*Note: Tightening mounting screws above 0,3 Nm [3 in-lb] changes operating characteristics and increases the possibility of cracking the case.

UL/CSA

Honeywell basic switches are Component Recognized by Underwriters' Laboratories, Inc. and certified by Canadian Standards Association. The BA, BZ, and BM line is covered as Special Use Switches to UL Standard 1054; the BE line is covered as an Industrial Product to UL Standard 508. Agency File References are:

- BA UL File E12252, issued 12-09-88
- BM UL File E12252, issued 12-08-88
- BZ UL File E12252, issued 6-29-89
- BE-1,2,5 UL File E22779, Vol. 4, Sec. 1
- BE-R UL File E22779, Vol. 4, Sec. 2

ROLLER LEVER ORDER GUIDE

	Catalog Listing	Recommended For	Electrical Data and UL Codes	O.F. N [oz]	R.F. min. N [oz]	P.T. max. mm [in]	O.T. min. mm [in]	D.T. mm [in]	O.P.** mm [in]
	BZ-2RW82725551-A2	Applications requiring gold alloy contacts, plus dustproof, and splash resistant seal	1 A P	0,97 [3.5]	0,21 [0.75]	–	3,96 [0.156]	0,10 to 1,0 [0.004 to 0.040]	30,17 ±0,76 [1.188 ±0.030]
	BZ-2RW82-A2	1.90 inch (48,3 mm) (steel roller) lever applications	15 A A	0,97 [3.5]	0,21 [0.75]	–	3,96 [0.156]	0,10 to 1,0 [0.004 to 0.040]	30,17 ±0,76 [1.188 ±0.030]
	BZ-2RW825551-A2	Dustproof and splash resistant seal	15 A A	0,97 [3.5]	0,21 [0.75]	–	3,96 [0.156]	0,10 to 1,0 [0.004 to 0.040]	30,17 ±0,76 [1.188 ±0.030]
	BZ-2RW8224-A2	Operating in temperature to 121 °C [250 °F]	15 A A	0,97 [3.5]	0,21 [0.75]	–	3,96 [0.156]	0,10 to 1,0 [0.004 to 0.040]	30,17 ±0,76 [1.188 ±0.030]
	BA-2RV2-A2	Up to 20 ampere load	20 A G	0,97 [3.5]	0,14 [0.5]	11,89 [0.468]	1,52 [0.060]	2,16 [0.085]	30,17 ±0,76 [1.188 ±0.030]
	BM-1RW82-A2	Up to 22 ampere load	22 A F	0,97 [3.5]	0,21 [0.75]	–	3,96 [0.156]	0,08 to 0,56 [0.003 to 0.022]	30,17 ±0,76 [1.188 ±0.030]
	BE-2RV2-A4	Up to 25 ampere load, #8 screw terminals	25 A H	0,97 [3.5]	0,14 [0.5]	11,89 [0.468]	1,52 [0.060]	2,16 [0.085]	30,17 ±0,76 [1.188 ±0.030]
	BZ-RW922-A2	Best repeatability and O.P. stability	10 A I	3,34 [12]	1,11 [4]	0,35 [0.015]	2,54 [0.100]	0,013 to 0,025 [0.0005 to 0.0010]	31,37 [1.235]
	BZ-2RW826-A2	One-way roller 9,4 mm x 3,8 mm [0.37 in dia. x 0.15 in] wide roller	15 A A	1,67 [6]	0,42 [1.5]	–	2,39 [0.094]	0,08 to 0,51 [0.003 to 0.020]	41,34 [1.625]
	BZ-2RW825-A2	One-way roller 4,83 mm x 4,83 mm [0.19 in dia. x 0.19 in] wide roller	15 A A	2,22 [8]	0,42 [1.5]	–	1,52 [0.060]	0,38 [0.015]	28,96 [1.14]

NOTE: For adjustable operate point and simulated roller lever switches, refer to previous page.

** except where stated ±0,38 mm [±0.015 in]