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Honeywell





MICRO SWITCH[™] Premium Large Basic Switches BZ | BA | BM | BE | 6AS Series

Datasheet

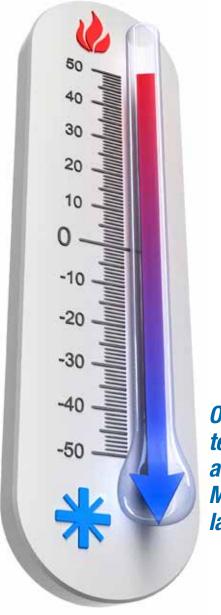
MICRO SWITCH™ Large Premium Basic Switches

Accurate, reliable, and repeatable, MICRO SWITCH[™] BZ/BA/BM/BE Series features precise operating characteristics and enhanced life. These premium, large snap-action switches offer precision operation and sensitive differential travel.

Utilizing state-of-the-art manufacturing processes and quality controls, Honeywell has engineered premium, large snap-action switches that meet various international agency requirements. Some models have military qualifications. MICRO SWITCH[™] BZ/BA/BM/BE Series are often used for precision on/off applications, as well as end of limit, presence/absence, and manual operator interface functions.

Their engineered design is suitable for various application needs. Configured options with BZ, BA, BM, and BE switches provide a wide variety of operating and interface characteristics.

The MICRO SWITCH[™] 6AS Series consists of two large premium BZ/BA/BM/BE snap-action switches ganged together and actuated by a single actuator. Field adjustable operating point is an option for one or both switches.



What makes our switches better?

- Industry-leading temperature range for options up to 204 °C [400 °F] and temperatures as low as -55 °C [-67 °F]
- Exclusive current carrying capability of up to 25 A
- International approvals: UL, CSA, ENEC, CE listings
- Options for circuitry, styles, connection types and a wide selection of actuator styles
- Dependable performance tested up to 20 million mechanical cycles
- MICRO SWITCH[™] legacy and expertise over 75 years of engineering excellence and experience

Operating in extreme temperatures is all in a day's work for MICRO SWITCH[™] large basics!



QUALITY • RELIABLE • RUGGED • GLOBAL

Features and Benefits

GLOBAL USE AND APPROVALS

Switches certified to UL, CSA, ENEC, and CE for global use

FLEXIBILITY OF PRODUCT CHARACTERISTICS

Honeywell's large basic switches offer various operating force and differential travel options to meet the actuator type. Designed with **momentary or maintained contact action**, these switches may perform a variety of functions as well as offering a choice of actuation, termination and operating characteristics for **design flexibility**

Listings certified for global use and mulitple applications

VARIENTS FOR EXTREME CONDITIONS

With an IP64 sealing option to maintain switch enclosure sealing, many listings can be used in dirty, harsh environments with their **dustproof and splash resistant seals**. Many versions operate in extreme temperatures, up to 121 °C [250 °F], and several with high temperature options for up to 204 °C [400 °F], as well as temperatures as low as -55 °C [-67 °F]

EASY INSTALLATION REDUCES OVERALL COSTS

The switch's enlongated mounting hole allows for easier, more accurate mounting

TIGHT HYSTERESIS/DIFFERENTIAL TRAVEL

Designed with a hysteresis **as small as 0,008 mm [0.0003 in]**, the BZ/BA/BM/ BE switches may be used in applications where very tight and sensitive control is required between the operate and release points

Standardize switching packages

CURRENT CAPACITY FROM LESS THAN 1 A TO 25 A

With a broad current capacity, **one switch package can control a wide range of electrical loads**. As requirements vary for applications, a standardized switch package may help reduce costs and increase application flexibility. **Gold contacts** available for controlling low energy/low power circuits

ENHANCED PERFORMANCE

Internal flat spring design delivers optimum performance and switch reliability

MILITARY APPROVALS

MIL-PRF-8805 switches available for military-specified applications

Potential Applications







BUILDING CONTROLS AND EQUIPMENT

Often used in a building's boiler/heater controls, in HVAC systems to sense exhaust pressure on high efficiency furnances, and in fire suppression systems to sound alarm when sprinkler activation/waterflow is detected. May also be used in machine tools to limit the maxiumum movement for pieces of equipment

DOORS AND LIFTS

May be used in elevators and lifts to sense if the car is in position before the door opens and on door-latching mechanisms to indicate door closed and/or door locked

SEMI-TRUCKS AND TRAILERS

Can be used to disengage the cruise control when the clutch pedal is depressed and for diesel engine brake assist. For surface transportation equipment, can be used as a seat switch

VALVES

Detects whether a valve is "open" or "closed"

TIMING DEVICES

Often used in commercial/industrial-grade timers to turn outputs "on" and/or "off" at preset times

COMMUNICATION SYSTEMS

May be used as a door interlock on communication consoles or enclosures

FOOT SWITCHES

In commerical and industrial foot switch enclosures, may be used as the switching element

COMMERCIAL AND INDUSTRIAL KITCHEN EQUIPMENT

May be used to indicate door closed and/or door locked for the self-cleaning feature

IRRIGATION EQUIPMENT

Often used for limiting maximum offset of irrigation towers

MEDICAL INSTRUMENTATION

In medical and dental equipment, often used in foot switches to control the dental drill and the positioning of the chair

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, EN	IEC, CE (v	aries by specific model)			
Operating temperature					-55 °C	to 85 °C	[-67 °F to 185 °F]			
Contacts					silver, silv	ver cadmiu	ım oxide, gold alloy			
Housing					ge	eneral purp	ose phenolic			
Sealing			E	nvironme	nt sealing	option ava	ilable (options for IP64 Sealing	g)		
Dielectric strength				2	000 V bet	ween eacl	n terminal and ground			
Contact resistance					1	15 m Ohm	max.(initial)			
Insulation resistance		100 M Ohm min.								
Vibration		1,5	i mm peak	k-to-peak	amplitude	, frequenc	y 10 Hz to 55 Hz, for two con	tinuous hours		
Expected mechanical life					up to 20,0	000,000 cy	cles 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
В	SPDT	5 A, 125, 250 or 480 Vac; 1⁄2 A, 125 Vdc; 1⁄4 amp, 250 Vdc. UL Code L35
С	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
Н	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
Ι	SPDT	10 A, 125, 250 or 480 Vac; 1/8 HP, 125 Vac; 1/4 HP, 250 Vac; UL Code L95
Ρ	SPDT	1 A, 125 Vac UL Code L22
Т	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 S&C 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	
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 Standard1054; 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

ORDER GUIDE BY ASCENDING ELECTRICAL CAPABILITY

P.T. • Pretravel

O.T. • Overtravel

D.T. • Differential travel O.P. • Operating position

			<u>ه م ق</u>		R.F.	P.T.	О.Т.		
	Catalog Listing	Recommended For	Electrical Data and UL Codes	O.F. N [oz]	min. N [oz]	max. mm [in]	min. mm [in]	D.T. mm [in]	O.P.*** mm [in]
	BZ-2R72-A2**	Applications requiring gold alloy contacts	1 A P	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	0,13 [0.005]	0,01 to 0,05 [0.0004 to 0.0020]	15,88 [0.625]
	BZ-2R725551-A2	Gold alloy contacts Dustproof and splash resistant seal	1 A P	2,22 to 4,17 [8 to 15]	1,11 [4]	_	0,13 [0.005]	0,01 to 0,06 [0.0004 to 0.0025]	15,88 [0.625]
BZ/BA type	BZ-2R244-A2	Operating in temp. to 204 °C [400 °F] for 100 hours	5 A B	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	0,13 [0.005]	0,01 to 0,05 [0.0004 to 0.0020]	15,88 [0.625]
	BZ-R21-A2	Lower force	10 A C	1,11 [4]	0,7 [2.5]	0,30 [0.012]	0,13 [0.005]	0,005 to 0,013 [0.0002 to 0.0005]	15,88 [0.625]
	BZ-2R-A2	Most applications SPDT	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	0,13 [0.005]	0,01 to 0,05 [0.0004 to 0.0020]	15,88 [0.625]
	WZ-2R-A2	SPST (normally closed)	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	0,13 [0.005]	0,01 to 0,05 [0.0004 to 0.0020]	15,88 [0.625]
	YZ-2R-A2	SPST (normally open)	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	0,13 [0.005]	0,01 to 0,05 [0.0004 to 0.0020]	15,88 [0.625]
	BZ-R-A2	Less differential travel	15 A D	1,95 to 2.5 [7 to 9]	1,11 [4]	0,30 [0.012]	0,13 [0.005]	0,005 to 0,008 [0.0002 to 0.0003]	15,88 [0.625]
Sealed type	BZ-R19-A2	Best repeatability	15 A D	1,95 to 3,34 [7 to 12]	1,11 [4]	0,30 [0.012]	0,13 to 0,2 [0.005 to 0.008]	0,005 to 0,02 [0.0002 to 0.0008]	16,26 [0.640]
	BZ-2R24-A2	Operating in temp. to 121 °C [250 °F]	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	0,13 [0.005]	0,01 to 0,05 [0.0004 to 0.0020]	15,88 [0.625]
	BZ-2RT04 (M8805/1-004)	MIL-PRF-8805 appli- cation requirements	15 A A	2,5 to 3,61 [9 to 13]	1,67 [6]	0,38 [0.015]	0,13 [0.005]	0,01 to 0,05 [0.0004 to 0.0020]	15,88 [0.625]
	BZ-2R05-A2	Stability under varying humidity	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	0,13 [0.005]	0,01 to 0,05 [0.0004 to 0.0020]	15,88 [0.625]
	BZ-2R5551-A2	Dustproof and splash resistant seal	15 A A	2,5 to 4,17 [9 to 15]	1,11 [4]	_	0,13 [0.005]	0,01 to 0,06 [0.0004 to 0.0025]	15,88 [0.625]
	BZ-2R55-A2-S	Sealed construction. Stainless steel internal snapspring	15 A A	2,5 to 4,17 [9 to 15]	1,11 [4]	_	0,13 [0.005]	0,01 to 0,06 [0.0004 to 0.0025]	15,88 [0.625]
	BA-2R-A2	Up to 20 ampere load	20 A G	3,89 to 6,12 [14 to 22]	2,78 [10]	1,27 [0.050]	0,25 [0.10]	0,05 to 0,19 [0.0020 to 0.0075]	16,26 [0.640]
BA/BE type	BA-2R24-A2	Operating in temp. to 121 °C [250 °F]	20 A G	3,89 to 6,12 [14 to 22]	2,78 [10]	1,27 [0.050]	0,25 [0.10]	0,05 to 0,19 [0.0020 to 0.0075]	16,26 [0.640]
	BM-1R-A2	Up to 22 ampere load	22 A F	1,95 to 2,78 [7 to 10]	1,11 [4]	0,38 [0.015]	0,13 [0.005]	0,013 to 0,025 [0.0005 to 0.0010]	15,88 [0.625]
	BE-2R-A4	Up to 25 ampere load, #8 screw terminals	25 A H	3,89 to 6,12 [14 to 22]	2,78 [10]	1,27 [0.050]	0,25 [0.10]	0,05 to 0,19 [0.0020 to 0.0075]	16,26 [0.640]
Manual Reset	BZ-RX	Manual reset, solder terminals	15 A E	1,95 to 2,5 [7 to 9] 0,56 to 2,78* [2 to 10]	_	0,30 [0.012] -	0,13 [0.005] 0,38* 0.015]	_	15,88 [0.625]
	WA-1RX-A4	Manual reset SPST-NC, #8 screw terminals	20 A W	5,56 [20] 6,95 [25]*	-	-	0,25 [0.010] -	0,20 [0.008] -	16,26 [0.64] 27,9*[1.10]

* Reset characteristics

** -A2 is supplied with #6 terminal screws

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

OVERTRAVEL PLUNGER ORDER GUIDE

O.F. •	Operating force
R.F. •	Release force
P.T. •	Pretravel
0.T. •	Overtravel
D.T. •	Differential travel
OP.	Operating position

	ET EURGER UN	UNGER URDER GUIDE					0.P. • Operating position						
	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-2RD72-A2	Applications requiring gold alloy contacts	1 A P	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	1,52 [0.060]	0,01 to 0,05 [0.0004 to 0.0020]	21,21 [0.835]				
()	BZ-2RD-A2	Added overtravel. For manual operation and slow 20° (max) cam rise	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	1,52 [0.060]	0,01 to 0,05 [0.0004 to 0.0020]	21,21 [0.835]				
	BZ-2RD24-A2	Operating in temperature to 121 °C [250 °F]	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	1,52 [0.060]	0,01 to 0,05 [0.0004 to 0.0020]	21,21 [0.835]				
	BM-1RD-A2	Up to 22 ampere load	22 A F	1,95 to 2,78 [7 to 10]	1,11 [4]	0,38 [0.015]	1,52 [0.060]	0,013 to 0,025 [0.0005 to 0.0010]	21,21 [0.835]				
	BZ-2RDS725551-A2	Applications requiring gold alloy contacts plus dustproof and splash resistant seal	1 A P	3,61 to 5,28 [13 to 19]	1,11 [4]	_	1,52 [0.060]	0,01 to 0,063 [0.0004 to 0.0025]	28,20 [1.110]				
	BZ-2RDS5551-A2	Dustproof and splash resistant seal	15 A A	3,61 to 5,28 [13 to 19]	1,11 [4]	-	1,52 [0.060]	0,01 to 0,063 [0.0004 to 0.0025]	28,20 [1.110]				
	BA-2RB-A2	Up to 20 ampere load	20 A G	3,89 to 6,12 [14 to 22]	2,78 [10]	1,27 [0.050]	2,39 [0.094]	0,05 to 0,019 [0.0020 to 0.0075]	26,20 [1.03]				
	BE-2RB-A4	Up to 25 ampere load, #8 screw terminals	25 A H	3,89 to 6,12 [14 to 22]	2,78 [10]	1,27 [0.050]	2,39 [0.094]	0,05 to 0,019 [0.0020 to 0.0075]	26,20 [1.03]				
	BZ-2RS72-A2	Applications requiring gold alloy contacts	1 A P	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	1,52 [0.060]	0,01 to 0,05 [0.0004 to 0.0020]	28,20 [1.110]				
	BZ-2RS-A2	Added overtravel. For in-line operation and with JR aux. actuators	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	1,52 [0.060]	0,01 to 0,063 [0.0004 to 0.0025]	28,20 [1.110]				
	BZ-2RS24-A2	Operating in temperature to 121 °C [250 °F]	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	1,52 [0.060]	0,01 to 0,05 [0.0004 to 0.0020]	28,20 [1.110]				
	BZ-2RST04 (M8805/1-012)	MIL-PRF-8805 applica- tion requirements	15 A A	2,5 to 3,61 [9 to 13]	1,67 [6]	0,38 [0.015]	1,52 [0.060]	0,01 to 0,05 [0.0004 to 0.0020]	28,20 [1.110]				
	BZ-RSX	Manual reset solder terminals	15 A E	1,95 to 2,64 [7 to 9]	-	0,30 [0.012]	0,65 [0.025]	_	2,79 [1.11]				
	BM-1RS-A2	Up to 22 ampere load	22 A F	1,95 to 2,78 [7 to 10]	1,11 [4]	0,38 [0.015]	1,52 [0.060]	0,013 to 0,025 [0.0005 to 0.0010]	28,20 [1.110]				
	BZ-2RS7225551-A2	Applications requiring gold alloy contacts plus dustproof and splash resistant seal	1 A P	2,5 to 4,17 [9 to 15]	1,11 [4]	_	1,52 [0.060]	0,01 to 0,063 [0.0004 to 0.0025]	28,20 [1.110]				
	BZ-2RS5551-A2	Dustproof and splash resistant seal	15 A A	2,5 to 4,17 [9 to 15]	1,11 [4]	-	1,52 [0.060]	0,01 to 0,063 [0.0004 to 0.0025]	28,20 [1.110]				

* ±51 mm [±0.020 in]

MICRO SWITCH[™] Premium Large Basic Switches

O.F. • Operating force

R.F. • Release force

P.T. • Pretravel

O.T. • Overtravel

D.T. • Differential travel O.P. • Operating position

OVERTRAVEL PLUNGER ORDER GUIDE

		ONDER GOIDE							
	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-2RQ-A2	Added overtravel. For manual in-line operation and for slow 30° (max) rise cams	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	5,56 [0.219]	0,01 to 0,05 [0.0004 to 0.0020]	38,10 ±0,51 [1.50 ±0.02]
	BZ-2RQ24-A2	Operating in temperature to 121 °C [250 °F]	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	5,56 [0.219]	0,01 to 0,05 [0.0004 to 0.0020]	38,10 ±0,51 [1.50 ±0.02]
	BZ-2RQ172-A2	Applications requiring gold alloy contacts	1 A P	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	5,56 [0.219]	0,01 to 0,05 [0.0004 to 0.0020]	21,82 [0.859]
	BZ-2RQ1-A2	BZ-2RQ-A2 type applica- tions with panel mount	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	5,56 [0.219]	0,01 to 0,05 [0.0004 to 0.0020]	21,82 [0.859]
	BZ-2RQ1T04 (M8805/1-020)	MIL-PRF-8805 application requirements	15 A A	2,5 to 3,61 [9 to 13]	1,67 [6]	0,38 [0.015]	5,56 [0.219]	0,01 to 0,05 [0.0004 to 0.0020]	21,82 [0.859]
П	BZ-2RQ124-A2	Operating in temperature to 121 °C [250 °F]	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	5,56 [0.219]	0,01 to 0,05 [0.0004 to 0.0020]	21,82 [0.859]
	BZ-2RN702	Furnished with unassembled seal boot.	15 A X	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	3,18 [0.125]	0,01 to 0,05 [0.0004 to 0.0020]	48,4 ±0,50 1.906 [±0.02]
	BZ-RQ1X	Manual reset. Solder terminals	15 A E	1,67 to 2,64 [6 to 9.5]	-	0,30 [0.012]	5,56 [0.219]	-	23,42 ±1,14 [0.922 ±0.045] 7,14* [0.281*]
	BA-2RQ1-A2	Up to 20 ampere load	20 A G	3,89 to 6,12 [14 to 22]	2,78 [10]	1,27 [0.050]	5,56 [0.219]	0,05 to 0,19 [0.0020 to 0.0075]	21,82 [0.859]
	BM-1RQ1-A2	Up to 22 ampere load	22 A F	1,95 to 2,78 [7 to 10]	1,11 [4]	0,38 [0.015]	5,56 [0.219]	0,013 to 0,025 [0.0005 to 0.0010]	21,82 [0.859]
	BZ-2RQ1872-A2	Applications requiring gold alloy contacts	1 A P	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	3,56 [0.140]	0,01 to 0,05 [0.0004 to 0.0020]	33,32 ±1,14 [1.31 ±0.045]
1	BZ-2RQ18-A2	Added overtravel. Roller plunger for rapid cam (30° max) rise and slide operation. Panel mount	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	3,56 [0.140]	0,01 to 0,05 [0.0004 to 0.0020]	33,32 ±1,14 [1.31 ±0.045]
	BZ-2RQ1824-A2	Operating in temperature to 121 °C [250 °F]	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	3,56 [0.140]	0,01 to 0,05 [0.0004 to 0.0020]	33,32 ±1,14 [1.31 ±0.045]
	BZ-2AQ18T1	Double-break circuitry	15 A T	3,89 to 6,68 [14 to 24]	1,11 [4]	0,69 [0.025]	3,58 [0.141]	0,03 to 0,10 [0.001 to 0.004]	33,35 ±1,19 [1.31 ±0.047]
	BM-1RQ18-A2	Up to 22 ampere load	22 A F	1,95 to 2,78 [7 to 10]	1,11 [4]	0,38 [0.015]	3,56 [0.140]	0,013 to 0,025 [0.0005 to 0.0010]	33,32 ±1,14 [1.31 ±0.045]
	BZ-2RQ181-A2	Applications requiring roller plunger 90° to major axis of switch	15 A A	2,5 to 3,61 [9 to 13]	1,11 [4]	0,38 [0.015]	3,56 [0.140]	0,01 to 0,05 [0.0004 to 0.0020]	33,32 ±1,14 [1.31 ±0.045]

* Reset characteristics

** Except where stated, ± 0.76 mm [± 0.030 in]

STRAIGHT LEVER ORDER GUIDE

STRAIGHT L	GHT LEVER ORDER GUIDE O.P. • Operating po								
	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-2RW8072-A2	Applications requiring gold alloy contacts	1 A P	0,7 [2.5]	0,14 [0.5]	-	5,56 [0.219]	0,18 to 1,27 [0.007 to 0.050]	19,1 [0.750]
	BZ- 2RW80722555105- A2	Stability under varying hu- midity. Gold alloy contacts with seal	1 A P	0,7 [2.5]	0,14 [0.5]	_	5,56 [0.219]	0,18 to 1,27 [0.007 to 0.050]	19,1 [0.750]
	BZ-2RW8244-A2	Operating in temp. to 204 °C [400 °F] for 100 hours	5 A B	0,7 [2.5]	0,14 [0.5]	_	5,56 [0.219]	0,18 to 1,27 [0.007 to 0.050]	19,1 [0.750]
	BZ-RW8435-A2	Lowest operating force (without external return spring)	10 A I	0,07 [0.25[-	6,76 [0.266]	5,56 [0.219]	0,08 to 0,38 [0.003 to 0.015]	19,1 [0.750]
	BZ-2RW876T	1.25-inch lever	15 A A	1,67 [6]	0,42 [1.5]	-	0,42 [0.141]	0,10 to 0,63 [0.004 to 0.025]	19,1 [0.750]
	BZ-2RW80-A2	2.5-inch lever	15 A A	0,7 [2.5]	0,14 [0.5]	-	5,56 [0.219]	0,18 to 1,27 [0.007 to 0.050]	19,1 [0.750]
	BZ-2RW84-A2	Lower force (without external return spring)	15 A A	0,28 [1]	0,03 [0.125]	8,33 [0.328]	5,56 [0.219]	0,18 to 1,27 [0.007 to 0.050]	19,1 [0.750]
	BZ-2RW805551- A2	Dustproof and splash resistant seal	15 A A	0,7 [2.5]	0,14 [0.5]	-	5,56 [0.219]	0,18 to 1,27 [0.007 to 0.050]	19,1 [0.750]
	BZ-2RWT04 (M8805/1-044)	MIL-PRF-8805 application requirements	15 A A	0,28 to 0,90 [1 to 3.25]	0,21 [0.75]	7,52 [0.296]	4,37 [0.172]	2,36 [0.093]	19,1 [0.750]
	BZ-2RW824-A2	Operating in temperature to 121 °C [250 °F]	15 A A	0,7 [2.5]	0,14 [0.5]	-	5,56 [0.219]	0,18 to 1,27 [0.007 to 0.050]	19,1 [0.750]
	BZ-RW80X	Manual reset, solder terminals	15 A E	0,63 [2.25]	_	-	5,56 [0.219] 0,38* [0.015]	-	19,05 [0.750] 7,14* [0.281]
	BZ-2RW863-A2	6-inch lever	15 A A	0,28 [1]	-	-	12,7 [0.50]	0,46 to 3,68 [0.018 to 0.145]	19,1 ±1,52 [0.75 ±0.06]
	BA-2RV-A2	Up to 20 ampere load	20 A G	0,7 [2.5]	0,14 [0.5]	15,88 [0.625]	1,98 [0.078]	2,77 max. [0.109] max.	19,1 [0.750]
	BM-1RW84-A2	Up to 22 ampere load	22 A F	0,28 [1]	0,03 [0.125]	7,54 [0.297]	5,56 [0.219]	0,13 to 0,84 [0.005 to 0.033]	19,1 [0.750]
	BE-2RV-A4	Up to 25 ampere load #8 screw terminals	25 A H	0,7 [2.5]	0,14 [0.5]	15,88 [0.625]	1,98 [0.078]	2,77 max. [0.109] max.	19,1 [0.750]
	BZ-2RW899-A2	Adjustable operating point 17 mm to 22 mm [0.67 in to 0.88 in]	15 A A	0,7 [2.5]	0,14 [0.5]	-	3,54*** [0.125]	0,18 to 1,27 [0.007 to 0.050]	17,02 to 22,35 [0.670 to 0.880]
	BZ-2RM-A2	Reverse acting actuator (switch plunger depressed in free position)	15 A A	1,67 [6]	0,28 [1]	5,56 [0.219]	5,56 [0.219]	0,10 to 0,89 [0.004 to 0.035]	19,1 [0.750]

O.F. • Operating force R.F. • Release force P.T. • Pretravel O.T. • Overtravel D.T. • Differential travel

* Reset characteristics

** except where stated $\pm 0.76 \text{ mm} [\pm 0.030 \text{ in}]$

*** from 17 mm [0.670 in] O.P.

MICRO SWITCH[™] Premium Large Basic Switches

O.F. • Operating force

R.F. • Release force P.T. • Pretravel

O.T. • Overtravel

D.T. • Differential travel O.P. • Operating position

SIMULATED ROLLER AND 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-2RW80147- A2	1.05 inch (26,7 mm) (simulated roller) lever applications	15 A A	1,67 [6]	0,42 [1.5]	_	2,39 [0.094]	0,08 to 0,51 [0.003 to 0.020]	30,17 [1.188]
	BZ-2RW80196-A2	1.90 inch (48,3 mm) (simulated 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 ±0.03]
	BZ-2RW82272- A2	Applications requiring gold alloy contacts	1 A P	1,67 [6]	0,42 [1.5]	-	2,39 [0.094]	0,08 to 0,51 [0.003 to 0.020]	30,17 [1.188]
	BZ- 2RW822725551- A2	Apps requiring gold alloy contacts plus dustproof and splash resistant seal	1 A P	1,67 [6]	0,42 [1.5]	_	2,39 [0.094]	0,08 to 0,51 [0.003 to 0.020]	30,17 [1.188]
	BZ-2RW822-A2	26,7 mm [1.05 in] mm) roller lever	15 A A	1,67 [6]	0,42 [1.5]	-	2,39 [0.094]	0,08 to 0,51 [0.003 to 0.020]	30,17 [1.188]
	BZ-2RW8222-A2	Roller turned 90°	15 A A	0,7 to 1,81 [2.5 to 6.5]	0,35 [1.25]	_	3,58 [0.141] max.	0,08 to 0,51 [0.003 to 0.020]	30,75 [1.25]
	BZ-2RW82224- A2	Operating in temperature to 121 °C [250 °F]	15 A A	1,67 [6]	0,42 [1.5]	_	2,39 [0.094]	0,08 to 0,51 [0.003 to 0.020]	30,17 [1.188]
	BZ- 2RW8225551-A2	Dustproof and splash resistant seal	15 A A	1,67 [6]	0,42 [1.5]	-	2,39 [0.094]	0,08 to 0,51 [0.003 to 0.020]	30,17 [1.188]
	BZ- 2RW82255-A2-S	Best service for sealed construction. Stainless steel internal snap spring.	15 A A	1,67 [6]	0,42 [1.5]	_	2,39 [0.094]	0,08 to 0,51 [0.003 to 0.020]	30,17 [1.188]
	BA-2RV22-A2	Up to 20 ampere load	20 G	1,67 [6]	0,42 [1.5]	6,35 [0.250]	0,76 [0.030]	1,14 [0.045] max.	29,77 [1.172]
	BM-1RW822-A2	Up to 22 ampere load	22 F	1,67 [6]	0,42 [1.5]	_	2,39 [0.094]	0,025 to 0,33 [0.001 to 0.013]	30,17 [1.188]
	BE-2RV22-A4	Up to 25 ampere load, #8 screw terminals	25 H	1,67 [6]	0,42 [1.5]	6,35 [0.250]	0,76 [0.030]	1,14 [0.045] max.	29,77 [1.172]
	BZ-2RW82299- A2	Adjustable operating point. Roller lever 1.05 inch (26,7 mm)	15 A A	1,67 [6]	0,42 [1.5]	_	1,02 [0.040]	0,08 to 0,51 [0.003 to 0.020]	29,77 to 30,56 [1.172 to 1.203]
	BZ-2RW8299-A2	Adjustable operating point. Roller lever 1.90 inch (48,3 mm)	15 A A	0,97 [3.5]	0,21 [0.75]	_	2,16 [0.085]	0,10 to 1,0 [0.004 to 0.040]	29,2 to 31,5 [1.150 to 1.24]

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

ROLLER LEVER ORDER GUIDE

0.F. •	Operating force
R.F. •	Release force
P.T. •	Pretravel
0.T. •	Overtravel
DT.	Differential trav

D.T. • Differential travel O.P. • Operating position

	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]
ß	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]
4	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]

MICRO SWITCH[™] Premium Large Basic Switches

0.F. •	Operating force
R.F. •	Release force
P.T. •	Pretravel
0.T. •	Overtravel
D.T. •	Differential travel
0.P. •	Operating position

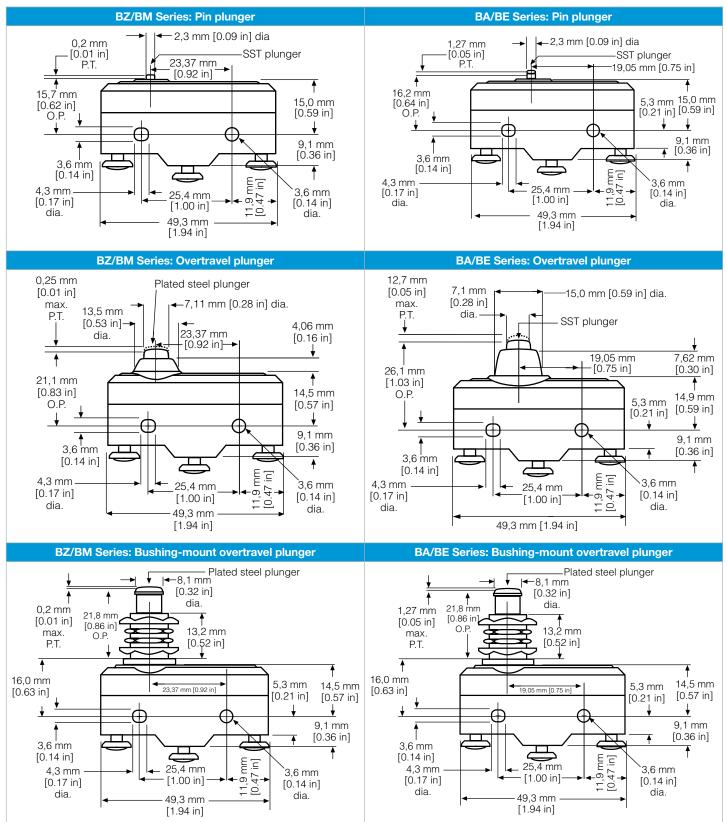
FLEXIBLE LEAF AND FLEXIBLE ROLLER LEAF ORDER GUIDE

	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] max.	O.P.** mm [in]		
	BZ-2RL-A2	Force and stability of the flexible leaf actuator	15 A A	1,39 [5]	0,14 [0.5]	_	1,52 [0.060]	1,27 [0.050]	17,48 [0.688]		
	BZ-2RL5551-A2	Dustproof and splash resistant seal	15 A A	1,95 [7]	0,14 [0.5]	_	1,52 [0.060]	1,27 [0.050]	17,48 [0.688]		
	BZ-2RLT04 (M8805/1-001)	MIL-PRF-8805 application requirements	15 A A	1,39 [5]	0,14 [0.5]	_	1,52 [0.060]	1,27 [0.050]	17,48 [0.688]		
	BZ-2RL24-A2	Operating in temperature to 121 °C [250 °F]	15 A A	1,39 [5]	0,14 [0.5]	_	1,52 [0.060]	1,27 [0.050]	17,48 [0.688]		
1000	BZ-RLX	Manual reset. Solder terminals	15 A E	0,83 [3]	_	_	1,57 [0.062] 0,38* [0.015]	-	17,48 [0.688] 7,14* [0.281]		
	BA-2RL-A2	Up to 20 ampere load	20 A G	2,5 [9]	0,28 [1]	_	1,57 [0.062]	1,57 [0.062]	17,48 [0.688]		
	BE-2RL-A4	Up to 25 ampere load, #8 screw terminals	25 A H	2,5 [9]	0,28 [1]	_	1,57 [0.062]	1,57 [0.062]	17,48 [0.688]		
	BZ-RL24-A2	Operating in temp. to 121 °C [250 °F] for 100 hours	5 A B	1,39 [5]	0,14 [0.5]	_	1,52 [0.060]	1,27 [0.050]	28,6 [1.125]		
	BZ-2RL2-A2	Force and stability of the flexible leaf with roller	15 A A	1,39 [5]	0,14 [0.5]	_	1,52 [0.060]	1,27 [0.050]	28,6 [1.125]		
	BZ-2RL25551- A2	Dustproof and splash resistant seal	15 A A	1,95 [7]	0,14 [0.5]	_	1,52 [0.060]	1,27 [0.050]	28,6 [1.125]		
	BZ-2RL2T04 (M8805/1-036)	MIL-PRF-8805 application requirements	15 A A	1,04 to 1,39 [3.75 to 5]	0,14 [0.5]	_	1,52 [0.060]	1,27 [0.050]	28,6 [1.125]		
	BA-2RL2-A2	Up to 20 ampere load	20 A G	2,5 [9]	0,28 [1]	_	1,52 [0.060]	1,65 [0.065]	28,6 [1.125]		
	BE-2RL2-A4	Up to 25 ampere load, #8 screw terminals	25 A H	2,5 [9]	0,28 [1]	_	1,52 [0.060]	1,65 [0.065]	28,6 [1.125]		

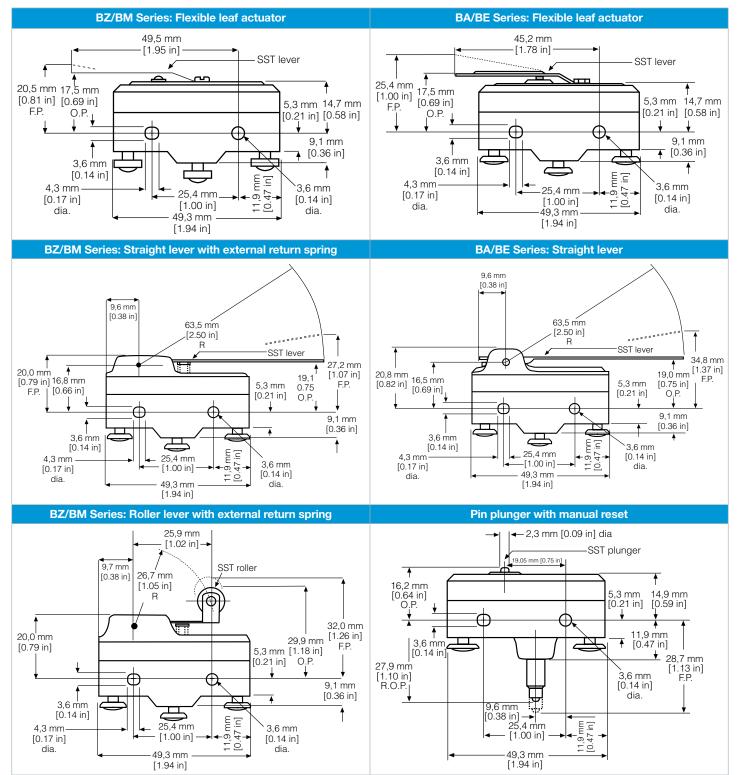
NOTE: For adjustable operate point and simulated roller lever switches, refer to previous page.

** except where stated ±0,76 mm [±0.030 in]

STANDARD ACTUATOR OPTIONS, TERMINALS, & DIMENSIONS



STANDARD ACTUATOR OPTIONS, TERMINALS, & DIMENSIONS



6AS SERIES - PREMIUM LARGE SNAP-ACTION TANDEM SWITCH ASSEMBLY



The MICRO SWITCH[™] 6AS Series consists of two large premium BZ/BA/BM/BE snap-action switches ganged together and actuated by a single actuator. Operating characteristics are dependent upon the type of individual switches and actuators chosen. Field adjustable operating point on one or both basic switches. Solder, A2, and T-type terminations available, along with straight, roller, and leaf levers. Mounting holes accept pins or screws of 3,53 mm [0.139 in] diameter. Often used for boiler controls or anywhere two circuits need to be controlled by one actuator. O.F. • Operating force

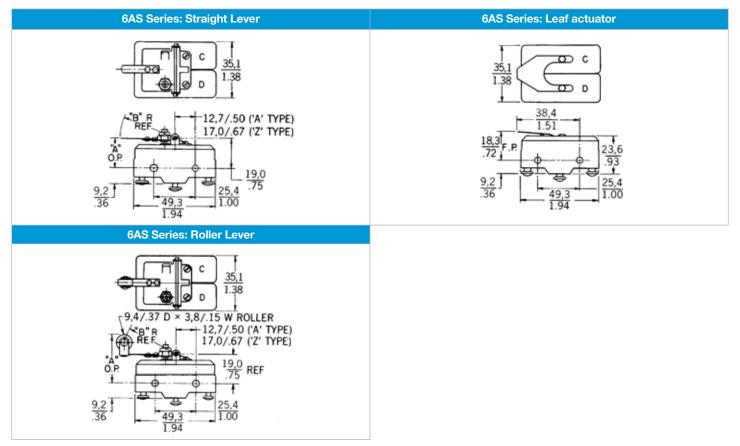
R.F. • Release force O.T. • Overtravel D.T. • Differential travel

6AS SERIES ORDER GUIDE

6AS SERIES ORDER GUIDE									rating position	
	Catalog Listing Lot Lot		Electrical Data and UL Codes	Lever length	Terminal type	O.F. N [oz]	R.F. min. N [oz]	O.T. min. mm [in]	D.T. mm [in]	O.P.* mm [in]
	6AS34	Centered lever. Adjustment over switch D	15 A A	30,56 mm [1.203 in]	A2	2,22 [8]	0,14 [0.5]	0,51 [0.020]	2,77 [0.109]	29,77 [1.172]
	6AS36	Lever over switch C. Adjustment over switch D	15 A A	30,56 mm [1.203 in]	A2	2,22 [8]	0,14 [0.5]	0,51 [0.020]	2,77 [0.109]	29,77 [1.172]
****	6AS16	Centered lever. Adjustment over switch D	20 A G	30,56 mm [1.203 in]	A2	3,89 [14]	1,11 [4]	1,02 [0.040]	3,96 [0.156]	30,96 ±1,14 [1.219 ±0.045]
	6AS201	Lever over switch C. No adjustment. Sealed construction	15 A A	26,67 mm [1.05 in]	A2 and D6 6,35 mm x 0,81 mm [0.25 in x 0.32 in]	4,2 [15]	0,42 [1.5]	2,4 [0.094]	1,3 [0.050]	30,2 [1.188]
No.	6AS5	Centered leaf. No adjust- ment. Switches operate within 0.030 in of each other	15 A A	38,38 [1.51]	A2	_	_	0,76 to 1,52 [0.030 to 0.060]	_	-
	6AS28	Centered lever. Adjustment over switch C	20 A G	32,26 [1.27]	A2	3,89 [14]	1,11 [4]	1,02 [0.040]	-	18,67 [0.735]

* except where stated ±0,76 mm [±0.030 in]

STANDARD ACTUATOR OPTIONS, TERMINALS, & DIMENSIONS



OPERATING CHARACTERISTICS

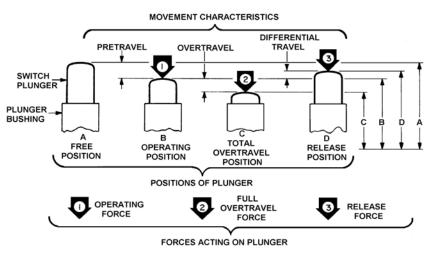
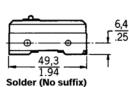


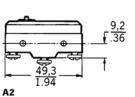
Table 3. Operating Characteristics Definitions

Characteristic	Description				
Differential Travel-DT	Plunger or actuator travel from point where contacts "snap-over" to point where they "snap-back."				
Free Position-FP	Position of switch plunger or actuator when no external force is applied.				
Full Overtravel Force	Force required to attain full overtravel of actuator.				
Operating Position-OP	Position of switch plunger or actuator at which point contacts snap from normal to operated position. With flex- ible or adjustable actuators, the operating position is measured from the end of the lever or its maximum length. Location of operating position measurement shown on mounting dimension drawings.				
Operating Force-OF	Amount of force applied to switch plunger or actuator to cause the contact "snap-over." Note in the case of adjustable actuators, the force is measured from the maximum length position of the lever.				
Overtravel-OT	Plunger or actuator travel safely available beyond operating position.				
Pretravel-PT	Distance or angle traveled in moving plunger or actuator from free position to operating position.				
Release Force-RF	Amount of force still applied to switch plunger or actuator at the moment contacts snap from operated position to non-operated position.				
Total Travel	Distance from actuator free position to overtravel limit position.				

AVAILABLE TERMINALS



Use up to #14 wire



Bottom facing 6-32 NC \times .218" screw with cup washers

(Same as A2 except #8 screws)

A4

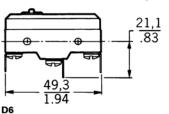
9,2 .36

1 94 т

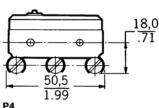
Bottom facing 6-32 NC \times .218" screw with Sems lockwashers

16,8 .66 49,3 1.94

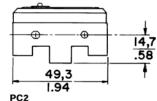
D5 .250" (6,35 mm) wide \times .030" (7,62) thick quick-connect



.250" (6,35 mm) wide × .032" (0,81 mm) thick quick-connect



Side facing $8-32 \times .218''$ screw with cup washers



Self lifting pressure plate terminals and plastic barriers for added dielectric protection

ACTUATORS

BA, BE, BM, and BZ standard snap-action switches use the actuators described:



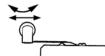
Pin plunger; in-line motion



Overtravel plunger; in-line applications requiring additional overtravel



Roller lever; very low-force, fast moving cams



Roller leaf; low-force, large movement actuation

Added overtravel in a

panel-mount roller plunger; actuation by cam

Lever; very low-force, slow cams and slides

Leaf; low-force moving cams or slides



Added overtravel in a panel-mount plunger; heavy-duty, in-line applications or slow cams. Cam rise should not exceed 30°

p spring mat'l (variation) Stainless steel snap spring 5 Snap (S I Bottom facing #6 screws & cupwashers Bottom facing #8 screws & cupwashers A2 type without screws & cupwashers A4 type without screws & cupwashers Same as P1, except facing right Same as P4, except Bottom facing #6 screws/lockwashers screw w/ cupwashei solder lug base (left) side facing #8 screw w/ cupwashei integral construction (left) side facing #8 A4 type #8 screws and lock washers Solder lug or no terminal hardware 89° QC used with flat base w/o slots 90° QC used with A2 (step) base 45° QC used with flat base Terminal type facing right 42 **A22 A46** A41 **A**2 **A4** 50 00 5 Ξ 5 4 **P**5 H ÷. l Heavy-duty seal cons. Stain steel snap spring, Special inserts Threaded bushing, panel mount Q-plunger On Q-plunger, detach. roller, turned 90° Variation of design, other than Q plungers Before other number= military construction On Q plunger, replac. for die-cast switches On W-lever, light force var. (no spring) With Q-plunger, rolle Used with other 5s, denotes sealed cons plunger inline to axis With L-leaf actuators flat leaf Heat resistant construction 121 °C With W-levers, rigid type lever (ex. W80) On Q-plunger, roller 90° to major axis High temp. constr. Diff snap spring Lower elect. rating Maintained manual reset sealed construction Numbers or Letters) Variation of design Misc. Variations On W-lever, adj O.P. (usually w/ 8) Short roller lever, V- or W-lever Long W-lever, with roller Short W-lever with roller 82255 Gold contacts 5551 General use 882 **1**9 244 24 72 22 55 <mark>6</mark> 82 66 0 ດ -N 4 ŋ ດ × 00 00 Sealed low overtravel Standard pin plunger Low overtravel plunger, Type A & E High overtravel plunger/sealed boot High overtravel plunger, Type A & Z Medium overtravel plunger, Type Z only plunger, Type Z only Reverse actuating Low overtravel plunger, Type Z Omnidirectional "wobble" lever Leaf actuator Type A & Z only lever, Type Z only ntegral actuator Rigid lever Type A & E only Rigid or resilient 3 ever MØ SO ≥ Σ m Z Ø ທ > -. Split contact switches Type Z switches only Shorting bar circuitry Type A switches only Shorting bar circuitry Type Z switches only Make-before-break switches Construction Moving contact rivet construction œ œ 4 S G ≻ 1,27 mm [0.050 in] Type A switches only 1,78 mm [0.07 in] Type Z switches only 0,91 mm [0.036 in] 1,14 mm [0.045 in] (MT-4R only) 0,15 mm [0.006 in] Break distance 0,50 mm [0.02 in] 0,25 mm [0.01 in] Notes (nominal) N 4 2 ო S ÷ 25 A capacity; pin plunger 19,0 [0.750] from 20 A capacity**; pin plunger 19,0 [0.750] from mounting hole 22 A capacity; pin plunger 23,3 [0.917] from mounting hole 15 A capacity**; pin plunger 23, 3 [0.917] from mounting hole plunger 25,4 [1 00] from front mounting hole 15 A standard; Switch type mounting hole Ν Σ Ν ◀ ш ÷ B Series Premium Basics Type & Contact substitute W Series for SPNC circuitry substitute Y Series for SPNO circuitry

LARGE PREMIUM SWITCH SERIES NOMENCLATURE TREE (NOT ALL CONFIGURATIONS AVAILABLE)

SPDT

LARGE SNAP-ACTION SWITCH ACCESSORIES

Brackets

Description	8MA1	8MA2	17MA1-B		
Description	Adjustable mounting bracket with adjustment slot on left	Adjustable mounting bracket with adjustment slot on right	Conversion mounting bracket		
Housing material	Steel	Steel	Corrosion-resistant metal		
Measurements	60,2 mm W x 21,3 mm H x 7,4 mm	D [2.37 in W x 0.84 in H x 0.29 in D]	66,8 mm W x 19,0 mm D [2.63 in W x 0.75 in D]		
Features		sy screwdriver adjustment; can be used rd basic switches	converts standard basic switches from side to top mount; corrosion resist- ant; snaps into switch mounting holes without tools		

Die-cast Zinc Enclosures

Description	3PA1	3PA28	3PA2			
Description	mounted from either side through 3,55 mm [0.140 in] dia. holes on 25,4 mm [1.0 in] centers; conduit/hub 0.5 – 14 NPT internal thread	mounted from either side through 3,55 mm [0.140 in] dia. holes on 25,4 mm [1.0 in] centers. 1/2-14 NPSM internal thread conduit hub	switch secured in enclosure; two 4,37 mm [0.172 in] dia. holes in flange ac- cept #8 screws for mounting on 41,3 mm [1.625 in] centers; conduit/hub 0.5 – 14 NPT internal thread			
Housing material	die-cast zinc enclosure (side mount)	die-cast zinc enclosure (side mount)	die-cast zinc enclosure (flange mount)			
Measurements	74,8 mm W x 42,9 mm H x 25,4 mm D [2.95 in W x 1.69 in H x 1.00 in D]	74,8 mm W x 42,9 mm H x 25,4 mm D [2.95 in W x 1.69 in H x 1.00 in D]	74,8 mm W x 42,9 mm H x 25,4 mm D [2.95 in W x 1.69 in H x 1.00 in D]			
Sealing/Features	ures NEMA 1; IP 40; protects the switch from physical abuse and personnel from contact with exposed terminals					

Plastic Thermal Enclosures

Description	5PA1	5PA2	5PA3		
	and a second				
Description	Plastic terminal enclosure used with solder terminal switches	Plastic terminal enclosure use with screw terminal switches	Plastic terminal enclosure used with either solder or screw terminal switches with auxiliary actuators assembled		
Housing material	plastic	plastic	plastic		
Measurements	52,8 mm W x 16,1 mm H [2.08 in W x 0.64 in H]	52,8 mm W x 20,2 mm H x 21,0 mm D [2.08 in W x 0.80 in H x 0.83 in D]	52,8 mm W x 20,2 mm H x 21,0 mm D [2.08 in W x 0.80 in H x 0.83 in D]		
Sealing/Features NEMA 1, IP 40; easy to use; screw and solder terminal versions; protect personnel from contact with exposed t					

AUXILIARY ACTUATOR ORDER GUIDE

	Catalog Listing	Description	Use only with	Overtravel min. mm [in]	Operating Position* mm [in]	Free Position mm [in]
	JR	Roller lever for "S" plunger type BZ switches only. Permits cam operation	BZ	11,1 mm [0.437 in]	44,45 mm ±3,18 mm [1.75 in ±0.125 in]	_
0	AD5721R (M8805/59) AN3169-1	Adjustable roller lever. Tang on top of actuator can be bent to	BZ, BM	11,1 mm [0.437 in] approx.	31,75 mm to 41,15 mm [1.25 in to 1.62 in]	39,6 mm to 43,7 mm [1.56 in to 1.72 in]
	ADA3721R	adjust O.P. and F.P.	BA, BE	9,53 mm [0.375 in] approx.	40,48 mm [1.594 in] approx.	46,03 mm [1.812 in]
4	MC2711 (M8805/59) AN3168-2	Straight plunger. Panel mount	BZ, BM	4,78 mm [0.188 in]	27,79 mm [1.094 in]	29,4 mm [1.156 in]
	MCA2711	oragin planger. Failer mount	BA, BE	3,96 mm [0.156 in]	28,17 mm [1.109 in]	30,18 mm [1.188 in]
	MC2711H	Sealed straight plunger. Panel mount. Elastomer boot seal resists liquid splash and dirt. Furnished unassembled.	BZ, BM	4,78 mm [0.188 in]	28,98 mm [1.141 in]	29,4 mm [1.156 in]
A REAL	MCA2711H		BA, BE	4,37 mm [0.172 in]	27,38 mm ±0,76 mm [1.078 in ±0.030 in]	29,56 mm [1.156]
1	MD3211Q	Roller plunger. Panel mount. Roller parallel to long axis of the switch	BZ, BM	3,18 mm [0.125 in] approx.	35,7 mm [1.406 in]	37,69 mm [1.484 in]
	MDA3711Q		BA, BE	3,18 mm [0.125 in]	36,12 mm [1.422 in]	37,69 mm [1.484 in]
	MD3211Q1	Cross roller plunger. Panel	BZ, BM	3,18 mm [0.125 in] approx.	35,7 mm [1.406 in]	37,69 mm [1.484 in]
	MDA3711Q1	mount. Roller perpendicular to long axis of the switch	BA, BE	3,18 mm [0.125 in]	36,12 mm [1.422 in]	37,69 mm [1.484 in]
S.	MC7711 (M8805/58) AN3167-1	High overtravel plunger. Panel	BZ, BM	20,62 mm [0.812 in]	69,1 mm [2.719 in]	70,64 mm [2.781 in]
e	MCA7711	mount	BA, BE	19,84 mm [0.781 in]	69,44 mm [2.734 in]	71,42 mm [2.812 in]

* except where stated ±1,14 mm [±0.045 in]

NOTE: All actuators are for use with pin plunger types only, except catalog listing JR.

MICRO SWITCH[™] Premium Large Basic Switches

This Honeywell datasheet supports the following MICRO SWITCH™ Premium Large Basic Switch Listings

6AS16 6AS201 6AS25 6AS34 6AS36 6AS5 6ASN13 6ASN39 8AS244-MT 8AS252-BZ 8AS254-BZ 8AS264-MT BA-1R2416-A42 BA-1R3511 BA-1B357 BA-1R7223524-A2 BA-1RV111-A2 BA-1RV133-A4 BA-1RV543510-A2 BA-1RV543512-A2 BA-1RV54352411-A21 BA-1RV5435241-A2 BA-1RV5435246-A2 BA-1RV5435247-A2 BA-2CB708-A2 BA-2R BA-2R164-A4 BA-2R24-A2 BA-2R280-A2 BA-2R281-A2 BA-2R708-P7 BA-2R-A2 BA-2R-A4 BA-2RB BA-2RB35-A2 BA-2RB7-P4 BA-2RB-A2 BA-2RB-A4 BA-2RB-P4 BA-2RL BA-2RL2-A2 BA-2BI -A2 BA-2R-P1 BA-2R-P4 BA-2R-P7 BA-2RQ1 BA-2RQ1250-A2 BA-2RQ1-A2 BA-2RQ1-D5 BA-2RQ1T BA-2RT BA-2RV BA-2RV136-A2 BA-2RV191-A2 BA-2RV219-D68 BA-2RV22 BA-2RV2223-A2 BA-2RV2233T BA-2RV22-A2 BA-2RV22-D6 BA-2RV22-D81 BA-2RV22T BA-2RV241-A2 BA-2RV2-A2 BA-2RV301-PC2 BA-2RV303

BA-2RV312T BA-2RV314-A22 BA-2RV32-P405 BA-2RV336-A2 BA-2BV338 BA-2RV339-A2 BA-2RV45-A2 BA-2RV6-A2 BA-2RV-A2 BA-2RV-A4 BA-2RV-D5 BA-2RV-P4 BA-2RVT BA-2SBT BA-2SV22T BA-3RBX BA-3RX717 BA-3SQ1T BA-3ST BA-5RV310-A2 BA-R138-A2 BA-R358-A2 BA-B82-D685 BE-1R242-A46 BE-1RV320-A4 BE-1RV52-A4 BE-2R BE-2R057-A41 BE-2R059-A41 BE-2B2425 BE-2R25-A4 BF-2R-A4 BE-2RB BE-2RB19-A2 BE-2RB232-A4 BE-2RB-A2 BE-2RB-A4 BE-2BI -A4 BE-2R-P4 BE-2RQ1-A2 BE-2RQ1-A4 BE-2RV193-A4 BE-2RV22-A2 BE-2RV22-A4 BE-2RV24-A2 BE-2RV2-A4 BE-2BV5-A2 BE-2RV-A2 BE-2RV-A4 BE-R0512-A2 BE-R0512-D69 BE-R0512-D691 BE-R205 BE-R2420-A2 BE-R24-A4 BF-10032 BM-1R BM-1R231-A4 BM-1R2420 BM-1R2450 BM-1R369-A41 BM-1R373 BM-1R378-P4 BM-1R392-A2 BM-1R-A2 BM-1R-A4

BM-1RD33-A2 BM-1RD373 BM-1R-P5 BM-1RQ18124-A2 BM-1RQ18-A2 BM-1RQ1-A2 BM-1RS-A2 BM-1RW822-A2 BM-1RW82-A2 BM-1RW84225551051-A2 BM-1RW842255511-A2 BM-1RW84464-A4 BM-2B559729 BM-2R559729-A4 BM-2BM50-A2 BM-2RQ1-A2 BM-2RW82255512429-Α4 BM-2RW8424-A2 BM-2RW855-D6 BZ-1R2448-A2 B7-1B2452-A2 BZ-1R374-P4 BZ-1R5421-A2 BZ-1R95-A21 BZ-1RDN930 B7-1RD-N930 BZ-1RW80-A2N163 BZ-1RW8255051T-S BZ-1RW82991T B7-1RW82991-T BZ-1RW8472A2N166 BZ-2ADT1 BZ-2AQ1842-PC2 BZ-2AQ18T1 BZ-2AQ1T B7-2A0784T BZ-2AT BZ-2AW822551-D6 BZ-2AW822556T BZ-2AW822T B7-2AW825551T BZ-2AW82T BZ-2AW84223T BZ-2AW842444T BZ-2AW8557-D6 BZ-2AW8558-D6 B7-2AW855-D6 BZ-2AW855T1 BZ-2G-A2 B7-2GW822 B7-2R BZ-2R15-A6 BZ-2R168-A2 BZ-2R21-A2 BZ-2R244-A2 BZ-2R244-P1 BZ-2R244T BZ-2R24-A2 BZ-2R24-A2N84 BZ-2R258 BZ-2R268-A2 BZ-2R276-P5 BZ-2R291-A4 BZ-2R291-P4

BZ-2R296 BZ-2R3000-T4-J BZ-2R331 BZ-2R352420-A2 RZ-2R383-A2 BZ-2R389-A2 BZ-2R391-A2 BZ-2R53-A2 BZ-2R55 BZ-2B55156T-S BZ-2R5528-S BZ-2R55513-A2 BZ-2R5551-A2 BZ-2R5551-P4 BZ-2R5551T BZ-2R559729 BZ-2R559729-A4 BZ-2R55-A2-S B7-2B55-P4-S BZ-2R708-P7 B7-2B710-PC2 BZ-2R722331 BZ-2R725551 BZ-2B725551-A2 BZ-2R72-A2 BZ-2R73-A21 BZ-2R-A2 BZ-2R-A22 BZ-2R-A22F1 BZ-2R-A2F1 BZ-2R-A2N100 BZ-2R-A2N101 B7-2R-A2N113 BZ-2R-A2N74 BZ-2R-A2N80 BZ-2RD BZ-2RD23-A2 B7-2BD244T1 BZ-2RD24-A2 BZ-2RD331 BZ-2RD39-A2 BZ-2RD42-P4 B7-2BD44-PC2 BZ-2RD45 BZ-2R-D5 BZ-2RD72-A2 BZ-2RD-A2 B7-2BD-A2N11 B7-2RD-D5 BZ-2RD-D6 BZ-2RD-D82 B7-2RD-N930 BZ-2RD-P1 B7-2BD-P4 BZ-2RD-PC2 BZ-2RDS B7-2BDS24-S BZ-2RDS5551-A2 BZ-2BDS725551-A2 BZ-2RDS-A2-S BZ-2RDST-S BZ-2RDT BZ-2RD-T4-J BZ-2RD-WCBA-240 BZ-2RD-WCBA-720 B7-2RD-WEDE-240

BZ-2RL BZ-2RL131T BZ-2RL2 BZ-2RL204 B7-2RI 224 BZ-2RL2-A2 BZ-2RI 2T04 BZ-2RL5551-A2 BZ-2RL5551T BZ-2RL55T-S BZ-2RL711 BZ-2RL712 BZ-2RL99 BZ-2RL-A2 B7-2BI -P4 BZ-2RLT BZ-2RLT04 BZ-2RM BZ-2RM2 BZ-2RM22 B7-2BM22-A2 BZ-2RM2-A2 BZ-2RM31 B7-2RM-A2 BZ-2R-N108 BZ-2R-N114 BZ-2R-N124 BZ-2RN317-P4 BZ-2RN702 BZ-2RN702-N2 BZ-2RN730 BZ-2RN770 B7-2RN784 BZ-2RN7T BZ-2RN87 BZ-2R-N87 BZ-2R-N88 B7-2BN918 BZ-2RN-A2 BZ-2R-P1 BZ-2R-P4 BZ-2R-P5 BZ-2R-P7 BZ-2RQ BZ-2RQ1 BZ-2RQ1004-A2 BZ-2RQ1008-A2 BZ-2BQ1015-W109 BZ-2RQ1016-W119 BZ-2RQ1017-A2 BZ-2RQ104 BZ-2RQ115-A2 B7-2BQ124-A2 BZ-2RQ124-D6 BZ-2RQ128T BZ-2RQ1331 B7-2RQ13-A2 BZ-2RQ172-A2 BZ-2RQ172-D6 BZ-2RQ172-D625 BZ-2RQ174-A2 B7-2BQ18 BZ-2RQ181 BZ-2RQ181-A2 BZ-2RQ181-D5 B7-2BQ181M

BZ-2RQ181M-A2RS BZ-2RQ181T BZ-2RQ1824-A2 BZ-2RQ1872-A2 B7-2BQ18-A2 BZ-2RQ18-D5 BZ-2RQ18M BZ-2RQ18MA2 BZ-2RQ18M-A2 BZ-2RQ18M-A2RS BZ-2RQ18MD611 BZ-2RQ18-P4 BZ-2RQ18T BZ-2RQ18-T4-J BZ-2RQ18UL BZ-2RQ1-A2 BZ-2RQ1-D6 BZ-2RQ1-D682 BZ-2RQ1MA2 BZ-2RQ1M-A2RS BZ-2RQ1-P4 BZ-2RQ1T BZ-2RQ1T04 BZ-2RQ233-A2 BZ-2RQ239-A2 BZ-2RQ241-D5 BZ-2RQ24-A2 BZ-2RQ24-D5 BZ-2RQ25272T BZ-2RQ3001-T4-JK BZ-2RQ3002-T4-JK BZ-2RQ66 BZ-2RQ66-N26 BZ-2RQ68 BZ-2RQ69 BZ-2RQ722233-A2 BZ-2RQ72266. BZ-2RQ722-A2 BZ-2RQ77 BZ-2RQ7722 BZ-2RQ77N23 BZ-2RQ77-N24 BZ-2RQ784 B7-2B0785 BZ-2RQ81A2 BZ-2RQ81-A2 BZ-2RQ8-A2 BZ-2RQ9-A2 BZ-2RQ-A2 BZ-2RQ-A2N11 BZ-2RQ-A2N19 BZ-2RQ-A2N9 B7-2BOW10-A2 BZ-2RQW15-A2 BZ-2RQW1-A2 BZ-2RQW558-W103 BZ-2RQW55-W103 **B7-2RS** BZ-2RS331 BZ-2RS5551-A2 BZ-2RS55A2 B7-2BS55-A2-S BZ-2RS7224-A2 BZ-2RS72-A2 BZ-2RS-A2 BZ-2RS-P1

BZ-2RS-P4 BZ-2RST04 BZ-2RS-T4-J BZ-2RT B7-2BT04 BZ-2R-T4-J BZ-2RW0172-J BZ-2RW53-A2 BZ-2RW53-A2RS BZ-2RW80 BZ-2RW80136-A2 BZ-2RW80147-A2 BZ-2RW80147-P4 BZ-2BW80161-A2 BZ-2RW80172-A2 BZ-2RW80196-A2 BZ-2RW80198T BZ-2RW80225-A2 BZ-2RW80231-A2 B7-2BW80233-A2 BZ-2RW8024 BZ-2RW80259-A2 BZ-2RW80282-A2 BZ-2RW80283-PC2 BZ-2RW80288-A2 BZ-2RW80331 BZ-2RW8055285T-S BZ-2RW80555110T BZ-2BW80555113-A2 BZ-2RW8055513-A2 BZ-2RW8055513T BZ-2RW8055513-W118 BZ-2RW8055516T BZ-2RW8055517-A2 BZ-2RW80555196T BZ-2RW805551-A2 BZ-2RW8055520T BZ-2RW8072224286-A2 BZ-2BW80722555105-A2 BZ-2RW8072-A2 BZ-2RW80-A2 BZ-2RW80-A2N130 BZ-2RW80A2UL BZ-2RW80-A2UL BZ-2RW80-D5 BZ-2RW8155551-A2 B7-2RW82 BZ-2RW82113T BZ-2RW82120-A21 BZ-2RW82128-T BZ-2RW82155551-A2 BZ-2RW8219-A2 B7-2RW822 BZ-2RW822102-A2 BZ-2RW82212-A2 BZ-2RW82212T BZ-2BW82215-P12 BZ-2RW82215T BZ-2RW822244-A2 BZ-2RW82224-A2 BZ-2RW8222-A2 BZ-2RW8223312 BZ-2RW82244-A2 B7-2BW82255 BZ-2RW822551529T-S BZ-2RW8225534-W123 BZ-2RW8225551 BZ-2RW822555114-A46

BZ-2BW822555114-W117 BZ-2BW8225551-A2 BZ-2RW8225551-A46 BZ-2RW8225551-D6 BZ-2RW8225551T BZ-2RW8225551-W103 BZ-2RW82255721W122 BZ-2RW82255A2 B7-2RW82255-A2-S BZ-2RW82255-S BZ-2RW82255T-S BZ-2RW8225-A2-S B7-2BW82262T BZ-2RW82271 BZ-2RW82272100-A2 BZ-2RW822725551 BZ-2RW82272555124-A2 BZ-2RW822725551-A2 BZ-2BW822725551-A46 BZ-2RW82272-A2 BZ-2RW82272D5 BZ-2RW82272-D5 BZ-2RW82276T B7-2RW82279-A21 BZ-2RW82291-A2 BZ-2RW822995-A2 BZ-2RW82299-A2 B7-2RW822-A2 BZ-2RW822-A2N138 B7-2BW822-D5 BZ-2RW822-D612 BZ-2RW822-P4 B7-2RW822T BZ-2RW822-T4-J BZ-2RW8238-A2 BZ-2RW82443-A2 BZ-2RW82444-A2 BZ-2RW8244-A2 BZ-2RW8244-P4 BZ-2RW824-A2 BZ-2RW825 BZ-2RW8253312 BZ-2RW8255 BZ-2RW825518-A2-S BZ-2RW82555110-A2 BZ-2RW82555110T BZ-2BW82555111-A2 BZ-2RW82555111-A46 BZ-2RW8255516-A2 BZ-2RW8255517-T BZ-2RW825551-A2 BZ-2RW825551-D6 BZ-2RW82555T-S BZ-2RW8255A2 BZ-2RW8255-A2 BZ-2RW8255-A2-S B7-2RW8255T-S BZ-2RW825-A2 BZ-2RW826 BZ-2RW826-A2 BZ-2RW826-A2RS BZ-2RW826T BZ-2RW82725551-A2 BZ-2RW82725551-D6 BZ-2RW828-A2 B7-2RW8292 BZ-2RW8299-A2

B7-2RW82-A2 BZ-2RW82-A2N131 BZ-2RW82-D5 BZ-2RW82T BZ-2RW82-T4-J BZ-2RW84 BZ-2RW8405-A2 BZ-2RW84118-A41 BZ-2RW842216-D6 BZ-2RW8422-A2 BZ-2RW8424501-A2 BZ-2RW8424511-A2 BZ-2RW8435145T BZ-2RW843589-P4 BZ-2RW8435-A2 BZ-2RW84375T BZ-2RW84429-P52 BZ-2RW84441-A2 BZ-2RW84449-A2 B7-2RW/8446072-PC2 BZ-2RW84462-A2 BZ-2RW84467-A2 BZ-2RW84512T BZ-2RW84514-A2 B7-2RW84514-A22 BZ-2RW8478-D5 BZ-2RW8497-A2 BZ-2RW84-A2 BZ-2RW84T B7-2RW855 BZ-2RW855051-A2-S BZ-2RW855511T BZ-2RW855A2 BZ-2RW855-A2-S BZ-2RW855-P4-S B7-2BW855-S BZ-2RW855T-S BZ-2RW863 B7-2RW86324-A2 BZ-2RW8635551-A2 BZ-2RW863-A2 BZ-2RW863T BZ-2RW8761-A2 BZ-2RW876-PC2 BZ-2RW876T BZ-2RW881T BZ-2RW896-A2 B7-2RW897-A2 BZ-2RW89999-A2 BZ-2RW899-A2 BZ-2RWT04 BZ-2RWT80 BZ-3A55T BZ-3AD-PC2 BZ-3ALT1 **BZ-3AST** BZ-3AT BZ-3AW8055511T BZ-3AW805551T BZ-3AW82254T BZ-3R BZ-3R2446 B7-3B-A2 BZ-3RD-A2 BZ-3RDS152T-S BZ-3RDS15T-S BZ-3RQ115T BZ-3RQ1-A2

B7-3BS BZ-3RW80155551-A2-S BZ-3RW80551-A2-S BZ-3RW80552-A2-S BZ-3RW8055-A2-S BZ-3RW82134-A2 BZ-3BW822155112D6S BZ-3RW82215555111T-S B7-3RW82215555112D6S BZ-3RW8221555513T BZ-3RW8221555513T-S BZ-3RW822158-A46 BZ-3RW822-A2 B7-3RW822T BZ-3RW825515-A2-S BZ-3RW8995516-PC2-S BZ-3RW899555110PC2-S BZ-3YDT BZ-3YN702 BZ-3YN703 BZ-3YQ18T BZ-3YQ1T BZ-3YQ66T BZ-3YQ67T BZ-3YQ68T BZ-3YQ69T BZ-3YQ8T BZ-3YST BZ-3YT BZ-3YT552 BZ-3YWT82 BZ-3YWT822 B7-5RW822A2F2 BZ-5RW822-A2F2 BZ-5RW84A2N161 BZ-5RW84-A2N161 BZ-7R24-A2 BZ-7R277 BZ-7R331 BZ-7R336T BZ-7R35-A4 B7-7B55T-S BZ-7R-A2 BZ-7R-A2N128 BZ-7R-A2N130 BZ-7R-A2N131 BZ-7RD-A2 BZ-7RL127 BZ-7RL13072T BZ-7RL367T BZ-7RL36872T BZ-7RLT04 BZ-7RLT711 BZ-7R-N89 BZ7-RN89 BZ-7R-P5 B7-7BQ1 BZ-7RQ144T BZ-7RQ181T BZ-7RQ18T B7-7BQ1T **BZ-7RST** B7-7BT04 BZ-7RW204 BZ-7RW2T04 BZ-7RW80189-A2

BZ-7RW8055151-A2-S B7-7RW80A2F1 BZ-7RW80-A2N164 BZ-7RW82127T-S BZ-7RW82132T-S BZ-7RW82135-A2 BZ-7RW8221555516T-S BZ-7RW82255518T BZ-7RW8225551-D6 BZ-7RW822-A2 BZ-7RW82550511PC2S BZ-7RW82550519-A2-S BZ-7RW825520-A2-S BZ-7RW84449-A2 BZ-7RW84-A2 BZ-7RW855T-S BZ-7RWT04 BZ-7RWT80 BZ-7RWT822 BZ-7RWT822101 BZ-7RX-N2 BZ-7RX-N3 BZ-7YQ1T1 BZ-R BZ-R1691 B7-B1692 BZ-R169-N78 BZ-R169-WCBA-060-T BZ-R173-A4 BZ-R173-P4 BZ-R178 BZ-R178-WCBA-030-T BZ-R178-WCBA-060-T BZ-R178-WCBA-240 BZ-R178-WFDE-050-T BZ-R178-WFDE-240 BZ-R179 BZ-R179-WCBA-060-T BZ-R179-WCBA-240 BZ-R179-WEDE-060-T BZ-R179-WFDE-240 BZ-R19-A2 BZ-R20 BZ-R21 BZ-R2136-P1 BZ-R2137-A2 BZ-R214 BZ-R21-A2 B7-B2411 BZ-R2411-A4 BZ-R2430 BZ-R2430-P1 BZ-R2439-P4 BZ-R30372-PC2 BZ-R31 BZ-R330-P4 BZ-R370-P5 BZ-B546-D6 B7-B55511-A4 BZ-R55514-P4 BZ-R55-A2-S BZ-R55-P4-S BZ-R55-S B7-B7216 BZ-R7216-P5 BZ-R812 **BZ-R88** B7-B88-A2

BZ-R-A2 B7-R-A2N104 BZ-R-A2N110 B7-R-A2N112 BZ-R-A2N117 BZ-RD BZ-BD178 BZ-RD242 BZ-RD24-A4 BZ-RD722-A2 B7-RD-A2 BZ-RD-A2N10 BZ-RF3 BZ-R-F3 BZ-R-J BZ-RL BZ-BL 95 BZ-RLX **BZ-RMX** BZ-RMX23-A29 BZ-RMX4 BZ-RMX4-A29 BZ-RMX6-B7 BZ-R-N111 BZ-R-N115 BZ-R-N86 **BZ-RN917** BZ-R-N917 BZ-RN953 BZ-R-N953 B7-R-P4 BZ-RQ1-A2 BZ-RQ1T04 BZ-RQ1X BZ-RQ66 BZ-RQ69 BZ-RQ-A2 BZ-RQX BZ-RQX167 B7-B0X66 BZ-RS BZ-RS66 BZ-RS72-N9 BZ-RS801-A2 BZ-RS-A2 BZ-RS-A2N8 BZ-RSN10 BZ-RS-N10 **B7-BSX** BZ-RT04 BZ-RW53-A2 BZ-RW80331 BZ-RW80722-A2 BZ-RW80-A2 BZ-RW80-A2N144 BZ-RW80-A2N155 BZ-RW80-A2N156 BZ-RW80X BZ-RW80X37-A29 BZ-RW82051-A2 **BZ-RW822** B7-RW822-A2 BZ-RW822-P4 BZ-RW84 BZ-RW8405-A2 **BZ-RW842** BZ-RW842214-P4 BZ-RW842214-P5

MICRO SWITCH[™] Premium Large Basic Switches

BZ-RW8422-A2 BZ-RW8422-P4 BZ-RW8435 BZ-RW8435113-A2-1 BZ-RW8435149-A2 BZ-RW8435149-D6 BZ-RW843515 BZ-RW8435161-A2 BZ-RW8435164-A2 BZ-RW843517372-A21 BZ-RW8435-A2 BZ-RW84411-A2 BZ-RW84414-A2 B7-RW84431-A2 BZ-RW84461-A2 BZ-RW847225-A2 BZ-RW84-A2 BZ-RW84-A2N145 BZ-RW84-A2N157 BZ-RW84-N108 BZ-RW84-N20 BZ-RW84-N94 BZ-RW84X33 BZ-RW85X2 BZ-RW889 BZ-RW9221 BZ-RW9223312 BZ-RW922-A2 B7-RW922-P4 BZ-RW925

BZ-RW-F1 BZ-RW-F3 BZ-RX BZ-RX122 BZ-RX122-A29 BZ-RX20 BZ-RX243 BZ-RX43 BZ-RX47 BZ-RX48 BZ-RX53-B7 BZ-RX9 BZ-RX-D584 BZ-RX-F1 WA-1R249-A42 WA-1RVX051-A4 WA-1RVX132-A4 WA-1RX123-A4 WA-1RX12-A4 WA-1RX12-A41 WA-1RX33-A4 WA-1RX38-A41 WA-1RX-A4 WA-1RX-A41 WA-2R-A2 WA-2R-A21 WA-2RV178-A2 WA-2RV313-A22 WM-1R369-AR2 WM-1R369-AR4

WM-1RW88294T WZ-2RD19-D1 WZ-2RQ15-A2 WZ-2RQ1846 WZ-2RQ1T WZ-2RQW55-W104 WZ-2RW822-A2 WZ-2RW84429-P52 WZ-3RW8221555514T-S W7-R WZ-R141 WZ-R296 YA-1R5435242-A2 YA-2CB16-A2 YA-2CB713-A2 YA-2R-A2 YA-2RB18-A21 YA-2RB19-A64 YA-2RB-A2 YA-2BB-A64 YA-2RB-D504 YA-2RBT YA-2RL-A6 YA-2RL-P4 YA-2RQ1243-D6 YA-2RQ1-A2 YA-2RQ81245-D6 YA-2RV54321-D6 YA-3R64-A2 YE-2RB-A2

YE-2RB-A4 YE-2RQ27-A4 YE-2RV198-A41 YE-28V22-D5 YE-2RV248-D6 YM-1R2450 YM-1R-A2 YZ-2R296-A2 YZ-2R5556T YZ-2R-A2 YZ-2R-A21 YZ-2RDS4 YZ-2RDS5551-D6 YZ-2RL YZ-2RQ1T YZ-2RQW-A2 YZ-2RS-A2 YZ-2RW805551T YZ-2RW812-A2 YZ-2RW822-A2 YZ-2RW82725551-D6 Y7-28W8435114-D5-S YZ-2RW84-A2 YZ-2RW863-A2 YZ-3RW845547-A2-S YZ-7RW8221555516T-S YZ-R YZ-RSX351 YZ-RX58-D5 YZ-RX-D584

ADDITIONAL INFORMATION

The following associated literature is available at sensing.honeywell.com:

- Product installation instructions
- Product application-specific information
 - Sensors and switches for potential HVAC/R applications
 - Sensors and switches for valve monitors and valve indicators
 - Sensors and switches in oil rig applications
 - Sensors and switches in sanitary valves
- Case study
 - A good range of mobility BZ Series
- BZ/BA performance information
- Applying basic switches
- Low energy switching guide
- Product range guide

WARNING PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

WARNING MISUSE OF DOCUMENTATION

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

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