

## MICRO SWITCH Medium-Duty Light Switches

## **DESCRIPTION**

Honeywell MICRO SWITCH E7/V7 Series medium duty limit switches are designed for a wide variety of indoor and outdoor applications. Typical applications include equipment for commercial, industrial, and transportation industries. The electrostatic applied epoxy coating to the aluminum housings enhances the durability of the product in most applications. The E7/V7 family of switches incorporates the Honeywell MICRO SWITCH BZ switch element which has the reliable snap-spring mechanism with more than 60 years of proven service.

The sealed (plungers with boots) E7/ V7 Series are preferred for applications where there could be exposure to liquid and/or particulate environments. The unsealed E7/V7 Series are ideal for applications where there will not be exposure to liquid or dust environments. The compact size of the limit switch permits installation where there is limited space available on equipment.

The SPDT (Single Pole Double Throw) E7/E7S/V7/E9 Series of catalog listings are certified to CE, UKCA and CSA for worldwide applications. While the DPDT (Double Pole Double Throw) E7/E7S/V7/ E9 Series of catalog listings are certified to CE and UKCA for many applications.

## **FEATURES**

- MICRO SWITCH E7/V7 Series switches feature an electrostatic epoxy coated zinc housing for durability in most indoor and outdoor environments, and a wide variety of actuators to solve most application requirements
- Designed with MICRO SWITCH BZ or DT basic switches to deliver precise switching of electrical and mechanical operating characteristics
- Side and flange mounting options
- Small footprint with easy access to wiring terminals
- Multiple connectivity options: two different conduit offerings with single or double conduits
- BZE7, BZE7S, BZV7, and BZE9 Series with SPDT contacts are certified to CE, UKCA and CSA for worldwide applications. The DTE7 and DTE7S Series with DPDT contacts are certified to CE and UKCA for many uses

## **POTENTIAL APPLICATIONS**

### **Industrial**

- Escalator obstruction detection Roller actuator mounted behind skirt on escalators, if activated, power to the escalator is cut to avoid injury
- Air curtain A component in a circuit for control of air stream
- Door or gate position Can provide a signal when a door or gate is opened or closed
- Commercial food processing For large scale food preparation, to ensure all features are in the desired operating position

### **Transportation**

• Traffic barrier signaling – If traffic barrier lowers, signal lights can be activated



## **VALUE TO CUSTOMERS**

- Designed with MICRO SWITCH BZ or DT basic switches to deliver precise switching of electrical and mechanical operating characteristics
- Rugged, epoxy-coated aluminum housing for indoor and outdoor applications
- Small footprint with easy access to wiring terminals
- Available in a configuration suited to the application with variety of actuators, circuitries, conduits, and mounting options

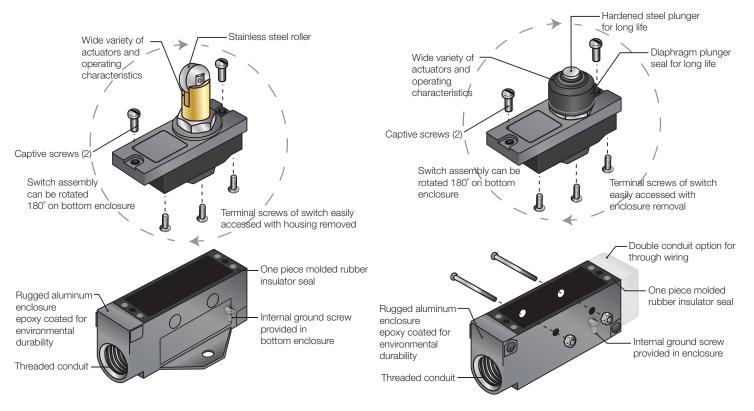
## **PORTFOLIO**



The E7/V7 Series are part of the MICRO SWITCH compact To view the entire Honeywell limit switch offering, click here.



Figure 1. MICRO SWITCH E7/V7 Switch Features and Options



Typical switch assembly, flange mount, without boot sealed actuator

Typical switch assembly, side mount, with boot sealed plunger

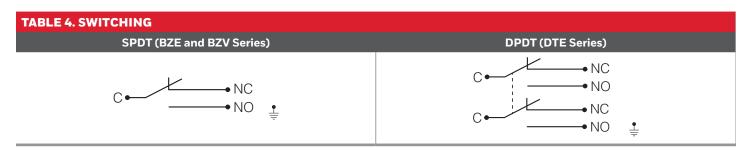
## Four mounting options

- Diagonal side mount (E7 Series)
- · Side mount on 25,4 mm centers (E7S Series)
- · Side mount on 76 mm centers with double conduit (E9 Series)
- Flange mount (V7 Series)

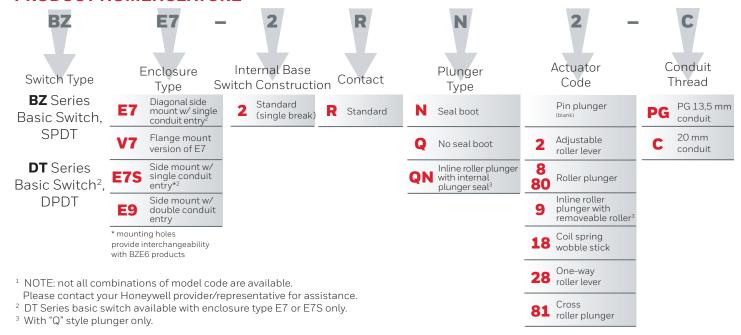
TABLE 1. SPECIFICATIONS	S Commence of the commence of
Characteristic	Parameter
Actuators	top pin plunger (boot sealed or standard type); inline roller plunger (boot sealed or standard type); cross roller plunger (boot sealed or standard type); roller lever adjustable (boot sealed or standard type); one-way roller lever adjustable (boot sealed); coil spring wobble (boot sealed)
Enclosure type	diagonal side mount with single conduit (E7 type); diagonal side mount or side mount with single conduit (E7S type), side mount with double conduit (E9 type) flange mount with single conduit (V7 type)
Housing material	electrostatic epoxy coated zinc die-cast
Termination	threaded conduit, 20 mm or PG 13,5
Sealing	actuator with boot seal: IP65 actuator (QN8 style) with internal plunger seal: IP65 actuator without boot seal or internal plunger seal: IP50
Switching options	SPDT (snap-action contacts) 1NC/1NO, same polarity DPDT (snap-action contacts) 2NC/2NO, each pole same polarity
Operating temperature	-30 °C to 70 °C [-22 °F to 158 °F]
Electrical rating	see tables 2 and 3
Rated impulse voltage Ui	1.5 kV
Pollution degree (with enclosure)	1 (DTE Series); 2 (BZE and BZV Series)
Agency certifications	EN/IEC 60947-5-1 (all Series); CSA file 15775 (BZ prefix only)

TABLE 2. BZE AND BZV SERIES ELECTRICAL RATINGS: EN60947-5-1, IEC 60947-5-1											
Designation & Category	Thermal Current, It (Amps)	Rated Operational Voltage, Ue	Rated Operational Amps, le	VA Rating Make	VA Rating Break						
AC15, A300	10	120	6	7200	720						
AC15, A300	10	240	3	7200	720						
DC13, Q300	10	125	0.55	69	69						
DC13, Q300	10	250	0.27	69	69						

TABLE 3. DTE EI	TABLE 3. DTE ELECTRICAL RATINGS: EN60947-5-1, IEC 60947-5-1												
Designation & Category	Thermal Current, It (Amps)	Rated Operational Voltage, Ue	Rated Operational Amps, Ie	VA Rating Make	VA Rating Break								
AC15, B300	5	120	3	3600	360								
AC15, B300	5	240	1.5	3600	360								
DC13, R300	5	125	0.22	28	28								
DC13, R300	5	250	0.1	28	28								



## **PRODUCT NOMENCLATURE**



<b>TABLE 5. ORDER (</b> For catalog listings n	ot shown, please cont					OR				
	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 5]	Operate Force g [oz]	Operate Point mm [in]	Pretravel max. mm [in]	Over Travel min. mm [in]	Differential Travel max. mm [in]	Conduit Thread	Comments
	BZE7-2RN-C	BZ, SPDT	A300, Q300	255 to 680 [9 to 24]	38,58 ±0,76 [1.519 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	20 mm	
	BZE7-2RN-PG	BZ, SPDT	A300, Q300	255 to 680 [9 to 24]	38,58 ±0,76 [1.519 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	PG 13,5	
Pin Plunger	DTE7-2RN-C	DT, DPDT	B300, R300	454 to 1389 [16 to 49]	40,95 ±1,14 [1.612 ±0.045]	3,18 [0.125]	3,18 [0.125]	1,78 [0.070]	20 mm	
(see Figure 1)	DTE7-2RN-PG	DT, DPDT	B300, R300	454 to 1389 [16 to 49]	40,95 ±1,14 [1.612 ±0.045]	3,18 [0.125]	3,18 [0.125]	1,78 [0.070]	PG 13,5	
A Company	BZE7-2RQN8-C	BZ, SPDT	A300, Q300	3628 [128] max.	59,56 ±1,19 [2.345 ±0.047]	3,81 [0.150]	3,18 [0.125]	0,05	20 mm	can be nents
Inline Roller Plunger	BZE7-2RQN8-PG	BZ, SPDT	A300, Q300	3628 [128] max.	59,56 ±1,19 [2.345 ±0.047]	3,81 [0.150]	3,18 [0.125]	0,05 [0.002]	PG 13,5	Roller plunger assembly can be positioned at 90° increments
	DTE7-2RQN8-C	DT, DPDT	B300, R300	3628 [128] max.	59,31 ±1,19 [2.335 ±0.047]	4,06 [0.160]	3,18 [0.125]	1,65 [0.065]	20 mm	olunger a oned at 9
(see Figure 2)	DTE7-2RQN8-PG	DT, DPDT	B300, R300	3628 [128] max.	59,31 ±1,19 [2.335 ±0.047]	4,06 [0.160]	3,18 [0.125]	1,65 [0.065]	PG 13,5	Rollerp
	BZE7-2RN2-C	BZ, SPDT	A300, Q300	284 to 567 [10 to 20]	66,34 [2.612] Ref	4,78 [0.188]	5,56 [0.219]	0,20 [0.008]	20 mm	
	BZE7-2RN2-PG	BZ, SPDT	A300, Q300	284 to 567 [10 to 20]	66,34 [2.612] Ref	4,78 [0.188]	5,56 [0.219]	0,20 [0.008]	PG 13,5	
Boospard Carlotter of the Carlotter of	DTE7-2RN2-C	DT, DPDT	B300, R300	1134 [40] max.	64,36 [2.534] Ref	6,76 [0.266]	5,56 [0.219]	4,19 [0.165]	20 mm	
Roller Lever (see Figure 3)	DTE7-2RN2-PG	DT, DPDT	B300, R300	1134 [40] max.	64,36 [2.534] Ref	6,76 [0.266]	5,56 [0.219]	4,19 [0.165]	PG 13,5	
	BZE7-2RN28-C	BZ, SPDT	A300, Q300	284 to 567 [10 to 20]	-	5,94 [0.234]	5,56 [0.219]	0,15 [0.006]	20 mm	
- G - G - G - G - G - G - G - G - G - G	BZE7-2RN28-PG	BZ, SPDT	A300, Q300	284 to 567 [10 to 20]	-	5,94 [0.234]	5,56 [0.219]	0,15 [0.006]	PG 13,5	
One-way Roller Lever (see Figure 4)	DTE7-2RN28-C	DT, DPDT	B300, R300	1134 [40] max.	-	6,76 [0.266]	5,56 [0.219]	4,19 [0.165]	20 mm	
Coil-Spring Wobble (see Fig. 5)	BZE7-2RN18-C	BZ, SPDT	A300, Q300	-	-	15°	20° Ref	-	20 mm	
	BZE7-2RN18-PG	BZ, SPDT	A300, Q300	-	-	15°	20° Ref	-	PG 13,5	

## MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES

## **E7/V7 SERIES**

### **DIMENSIONS**

## Figure 1. E7 Series, top pin plunger, diagonal mount with boot seal

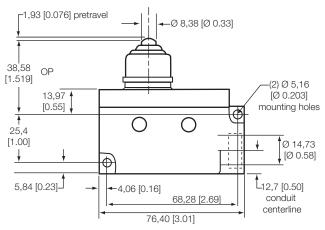


Figure 3. E7 Series, roller lever, diagonal mount with boot seal

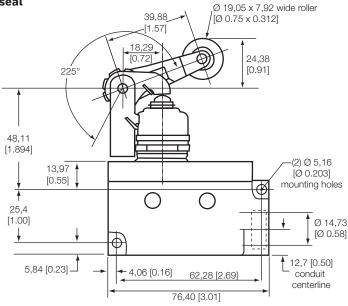


Figure 5. E7 Series, coil wobble, diagonal mount with boot seal

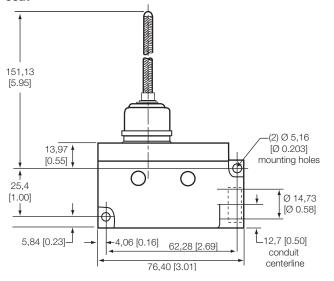


Figure 2. E7 Series, inline roller plunger, diagonal mount, sealed

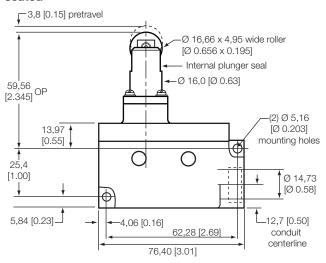
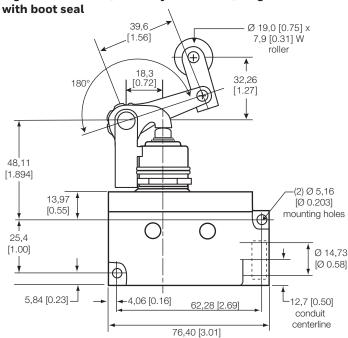


Figure 4. E7 Series, one-way roller lever, diagonal mount



	<b>GUIDE • E7 SERIE</b> not shown, please con						OT SEAL	ED ACT	UATOR	
	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 5]	Operate Force g [oz]	Operate Point mm [in]	Pretravel max. mm [in]	Over Travel min. mm [in]	Differential Travel max. mm [in]	Conduit Thread	Comments
	BZE7-2RQ-C	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	28,70 ±0,76 [1.30 ±0.030]	0,38 [0.015]	5,56 [0.219]	0,05 [0.002]	20 mm	
Pin Plunger (see Figure 6)	BZE7-2RQ-PG	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	28,70 ±0,76 [1.30 ±0.030]	0,38 [0.015]	5,56 [0.219]	0,05 [0.002]	PG 13,5	
	BZE7-2RQ8-C	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	44,53 ±1,19 [1.753 ±0.047]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	20 mm	
	BZE7-2RQ8-PG	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	44,53 ±1,19 [1.753 ±0.047]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	PG 13,5	
Inline Roller Plunger	BZE7-2RQ9-C <sup>1</sup>	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	44,53 ±1,19 [1.753 ±0.047]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	20 mm	Removable roller
(see Figure 7)	BZE7-2RQ9-PG <sup>1</sup>	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	44,53 ±1,19 [1.753 ±0.047]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	PG 13,5	Removable roller
	BZE7-2RQ81-C	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	44,53 ±1,19 [1.753 ±0.047]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	20 mm	
Cross Roller Plunger (see Figure 8)	BZE7-2RQ81-PG	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	44,53 ±1,19 [1.753 ±0.047]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	PG 13,5	
	BZE7-2RQ2-C	BZ, SPDT	A300, Q300	284 to 510 [10 to 18]	56,03 [2.206] Ref.	4,78 [0.188]	5,56 [0.219]	0,15 [0.006]	20 mm	
Roller Lever (see Figure 9)	BZE7-2RQ2-PG	BZ, SPDT	A300, Q300	284 to 510 [10 to 18]	56,03 [2.206] Ref.	4,78 [0.188]	5,56 [0.219]	0,15 [0.006]	PG 13,5	

 $<sup>^{1}</sup>$  With roller removed, plunger can be rotated  $90^{\circ}$  and roller re-assembled for a cross roller plunger.

Figure 6. E7 Series, top pin plunger, diagonal mount

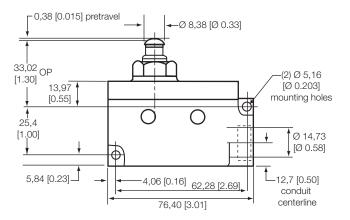


Figure 7. E7 Series, inline roller plunger, diagonal mount

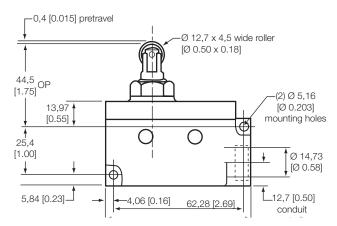


Figure 8. E7 Series, cross roller plunger, diagonal mount

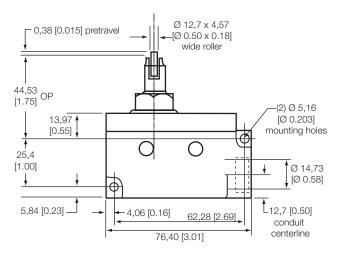
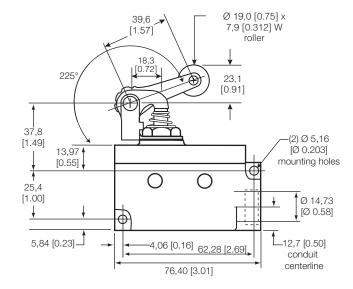


Figure 9. E7 Series, roller lever, diagonal mount



	<b>GUIDE • E7S SERI</b> not shown, please cor						TH SEAL	ED ACT	JATOR	
	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 5]	Operate Force g [oz]	Operate Point mm [in]	Pretravel max. mm [in]	Over Travel min. mm [in]	Differential Travel max. mm [in]	Conduit Thread	Comments
<b>&amp;</b>	BZE7S-2RN	BZ, SPDT	A300, Q300	255 to 680 [9 to 24]	43,66 ±0,89 [1.719 ±0.035]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	0.5-14 NPSM	
	BZE7S-2RN-C	BZ, SPDT	A300, Q300	255 to 680 [9 to 24]	43,66 ±0,89 [1.719 ±0.035]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	20 mm	
Pin Plunger	BZE7S-2RN-PG	BZ, SPDT	A300, Q300	255 to 680 [9 to 24]	43,66 ±0,89 [1.719 ±0.035]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	PG 13,5	
(see Figure 10)	DTE7S-2RN-C	DT, DPDT	B300, R300	454 to 1389 [16 to 49]	46,02 ±1,27 [1.812 ±0.050]	3,18 [0.125]	3,18 [0.125]	1,78 [0.070]	20 mm	
	BZE7S-2RQN8-C	BZ, SPDT	A300, Q300	3628 [128] max.	64,64 ±1,32 [2.545 ±0.052]	3,81 [0.150]	3,18 [0.125]	0,05 [0.002]	20 mm	Roller plunger assembly
Inline Roller Plunger (see Figure 11)	DTE7S-2RQN8-C	DT, DPDT	B300, R300	3628 [128] max.	64,39 ±1,32 [2.535 ±0.052]	4,06 [0.160]	3,18 [0.125]	1,65 [0.065]	20 mm	can be positioned at 90° increments
9	BZE7S-2RN2-C	BZ, SPDT	A300, Q300	284 to 567 [10 to 20]	71,42 [2.812] Ref.	4,76 [0.188]	5,56 [0.219]	0,15 [0.006]	20 mm	
o a	BZE7S-2RN2-PG	BZ, SPDT	A300, Q300	284 to 567 [10 to 20]	71,42 [2.812] Ref.	4,76 [0.188]	5,56 [0.219]	0,15 [0.006]	PG 13,5	
Roller Lever (see Figure 12)	DTE7S-2RN2-C	DT, DPDT	B300, R300	1134 [40] max.	69,44 [2.734] Ref.	6,76 [0.266]	5,56 [0.219]	4,19 [0.165]	20 mm	
One-Way Roller Lever (see Figure 13)	BZE7S-2RN28-C	BZ, SPDT	A300, Q300	227 to 567 [8 to 20]	-	5,94 [0.234]	5,56 [0.219]	0,15 [0.006]	20 mm	

Figure 10. E7S Series, top pin plunger, side mount with boot seal

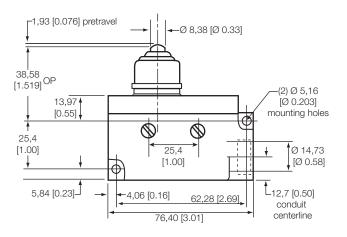


Figure 11. E7S Series, inline roller plunger, side mount, sealed

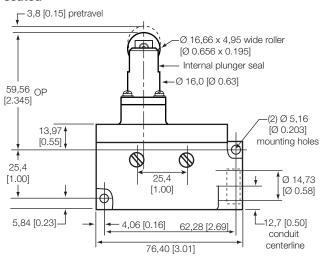


Figure 12. E7S Series, roller lever, side mount with boot seal

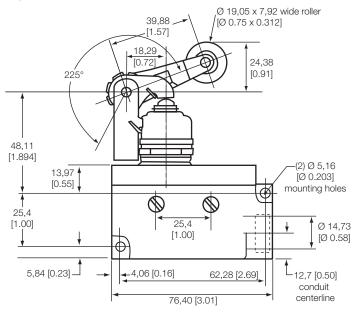
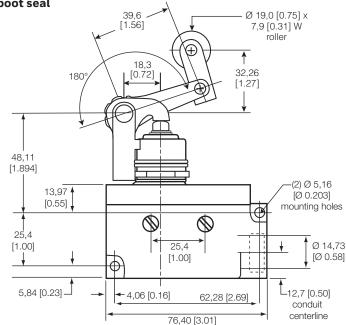


Figure 13. E7S Series, one-way roller lever, side mount with boot seal



#### TABLE 8. ORDER GUIDE • E7S SERIES SWITCHES. SIDE OR DIAGONAL MOUNT WITHOUT BOOT SEALED ACTUATOR For catalog listings not shown, please contact your Honeywell distributor or representative. Differential Travel max. mm [in] Over Travel min Thread 5] Force Pretravel max. **Operate Point** Electrical Rating [page 5 Switch type, Comments Circuitry Operate Conduit [ii] [in] Ē. [oz] mm **Catalog Listing** A300. 255 to 369 38,1 ±0,89 0.38 5,56 BZ, 0.05 BZE7S-2RQ-C 20 mm **SPDT** Q300 [0.002][9 to 13] [1.5 ±0.035] [0.015] [0.219] 0,05 A300, 255 to 369 38.1 ±0.89 0.38 5.56 PG BZ, BZE7S-2RQ-PG **SPDT** Q300 [9 to 13] [1.5 ±0.035] [0.015] [0.219] [0.002] 13,5 Pin Plunger (see Figure 14) 49,61 ±1,32 255 to 369 0,38 3,56 BZ, A300, 0,05 BZE7S-2RQ8-C [1.953 20 mm **SPDT** Q300 [9 to 13] [0.015] [0.14][0.002] ±0.052] 49,61 ±1,32 A300. 255 to 369 0,38 3,56 0.05 PG BZ, BZE7S-2RQ8-PG [1.953 SPDT Q300 13,5 [9 to 13] [0.015][0.14][0.002]±0.052] 49,61 ±1,32 255 to 369 A300. 3,56 Removable BZ, 0,38 0,05 20 mm BZE7S-2RQ9-C1 [1.953 [0.002] **SPDT** Q300 [9 to 13] [0.015] [0.14]roller ±0.052] Roller plunger may be rotated to any position around C/L of plunger 680 to 49,61 ±1,19 **Inline Roller** B300. 3.56 3.18 1,65 DT, DTE7S-2RQ9-C 20 mm 1361 [24 to [1.953 Plunger DPDT R300 [0.125] [0.14][0.065]±0.047] 481 (see Figure 15) 680 to 49,61 ±1,19 3,56 3,18 PG DT, B300, 1,65 DTE7S-2RQ9-PG 1361 [24 to [1.953 DPDT R300 [0.14][0.125] [0.066] 13,5 48] ±0.047] 49,61 ±1,32 0,38 A300, 255 to 369 3,56 0,05 BZ, BZE7S-2RQ81-C [1.953 20 mm SPDT Q300 [9 to 13] [0.015] [0.14] [0.002] ±0.0521 **Cross Roller** Plunger (see Figure 16) BZ, A300, 284 to 510 61,11 [2.406] 4,78 5,56 0,15 BZE7S-2RQ2-C 20 mm SPDT Q300 [0.188] [0.219] [0.006] [10 to 18] Ref Roller Lever (see Figure 17)

<sup>&</sup>lt;sup>1</sup> With roller removed, plunger can be rotated 90° and roller re-assembled for a cross roller plunger.

Figure 14. E7S Series, top pin plunger, side mount

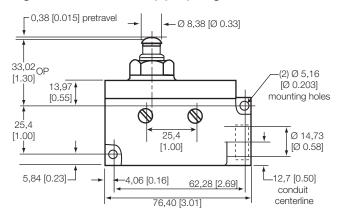


Figure 16. E7S Series, cross roller lever, side mount

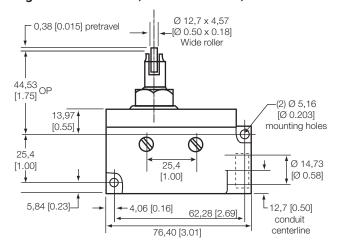


Figure 15. E7S Series, inline roller plunger, side mount

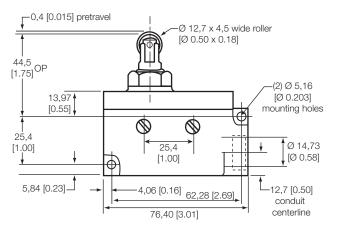
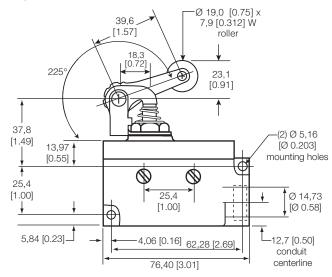


Figure 17. E7S Series, roller lever, side mount



	GUIDE • E9 SERIES ot shown, please conta						TOR AN	D TWO C	ONDUIT	rs
ŭ ŭ	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 5]	Operate Force g [oz]	Operate Point mm [in]	Pretravel max. mm [in]	Over Travel min. mm [in]	Differential Travel max. mm [in]	Conduit Thread	Comments
	BZE9-2RN-C	BZ, SPDT	A300, Q300	255 to 680 [9 to 24]	38,58 ±0,76 [1.519 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	20 mm	
	BZE9-2RN-PG	BZ, SPDT	A300, Q300	255 to 680 [9 to 24]	38,58 ±0,76 [1.519 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	PG 13,5	
Pin Plunger (see Figure 18)	BZE9-2RN-PG11	BZ, SPDT	A300, Q300	255 to 680 [9 to 24]	38,58 ±0,76 [1.519 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	PG 11	
Inline Roller Plunger (see Figure 19)	BZE9-2RQN8-PG	BZ, SPDT	A300, Q300	3628 [128] max.	59,56 ±1,19 [2.345 ±0.047]	3,81 [0.150]	3,18 [0.125]	0,05 [0.002]	PG 13,5	Roller plunger assembly can be positioned at 90° increments
	BZE9-2RN2-C	BZ, SPDT	A300, Q300	284 to 567 [10 to 20]	66,34 [2.612] Ref	4,78 [0.188]	5,56 [0.219]	0,20 [0.008]	20 mm	
Roller Lever (see Figure 20)	BZE9-2RN2-PG	BZ, SPDT	A300, Q300	284 to 567 [10 to 20]	66,34 [2.612] Ref	4,78 [0.188]	5,56 [0.219]	0,20 [0.008]	PG 13,5	
One-Way Roller Lever (see Figure 21)	BZE9-2RN28-PG	BZ, SPDT	A300, Q300	227 to 256 [8 to 20]	-	5,94 [0.234]	5,56 [0.219]	0,15 [0.006]	PG 13,5	

## MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES

## **E7/V7 SERIES**

Figure 18. E9 Series, top pin plunger, side mount with boot seal

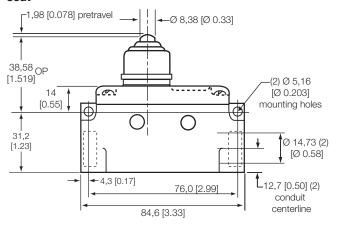


Figure 19. E9 Series, inline roller plunger, side mount with seal

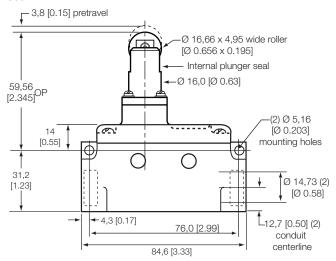


Figure 20. E9 Series, roller lever, side mount with boot seal

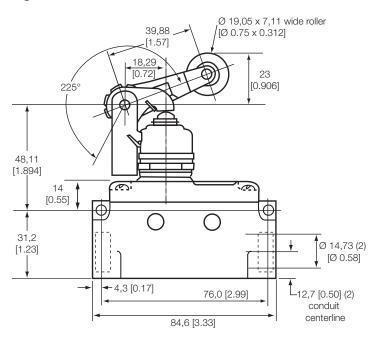
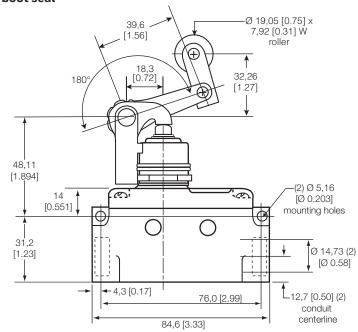


Figure 21. E9 Series, one-way roller lever, side mount with boot seal



## TABLE 10. ORDER GUIDE • E9 SERIES SWITCHES, SIDE MOUNT WITHOUT BOOT SEALED ACTUATOR AND TWO CONDUITS

For catalog listings not shown, please contact your Honeywell distributor or representative.

Tor catalog fishings no	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 5]	Operate Force g [oz]	Operate Point mm [in]	Pretravel max. mm [in]	Over Travel min. mm [in]	Differential Travel max. mm [in]	Conduit Thread	Comments
Pin Plunger (see Figure 22)	BZE9-2RQ-PG	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	28,70 ±0,76 [1.30 ±0.030]	0,38 [0.015]	5,56 [0.219]	0,05 [0.002]	PG 13,5	
	BZE9-2RQ8-C	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	44,53 ±1,19 [1.753 ±0.047]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	20 mm	
Inline Roller Plunger (see Figure 23)	BZE9-2RQ8-PG	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	44,53 ±1,19 [1.753 ±0.047]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	PG 13,5	
Cross Roller Plunger (see Figure 24)	BZE9-2RQ81-PG	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	44,53 ±1,19 [1.753 ±0.047]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	PG 13,5	
Roller Lever (see Figure 25)	BZE9-2RQ2-PG	BZ, SPDT	A300, Q300	284 to 510 [10 to 18]	56,03 [2.206] Ref.	4,78 [0.188]	5,56 [0.219]	0,15 [0.006]	PG 13,5	

Figure 22. E9 Series, top pin plunger, side mount

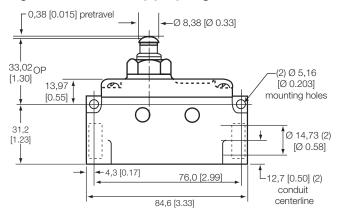


Figure 23. E9 Series, inline roller plunger, side mount

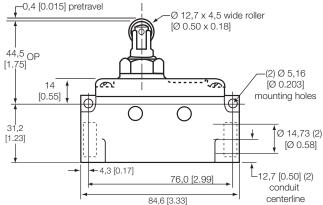


Figure 24. E9 Series, cross roller lever, side mount

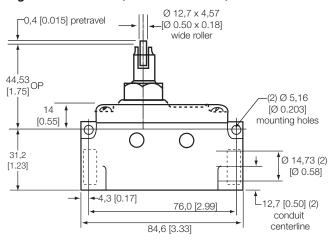


Figure 25. E9 Series, roller lever, side mount

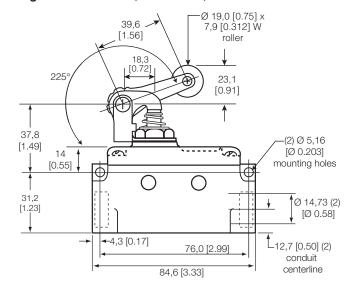


	TABLE 11. ORDER GUIDE • V7 SERIES SWITCHES, FLANGE MOUNT WITH BOOT SEALED ACTUATOR For catalog listings not shown, please contact your Honeywell distributor or representative.											
	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 5]	Operate Force g [oz]	Operate Point mm [in]	Pretravel max. mm [in]	Over Travel min. mm [in]	Differential Travel max. mm [in]	Conduit Thread	Comments		
	BZV7-2RN-C	BZ, SPDT	A300, Q300	255 to 680 [9 to 24]	69,85 ±1,57 [2.75 ±0.062]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	20 mm			
Pin Plunger (see Figure 26)	BZV7-2RN-PG	BZ, SPDT	A300, Q300	255 to 680 [9 to 24]	69,85 ±1,57 [2.75 ±0.062]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	PG 13,5			
Roller Lever (see Figure 27)	BZV7-2RN2-C	BZ, SPDT	A300, Q300	284 to 567 [10 to 20]	97,59 [3.842] Ref.	4,78 [0.188]	5,56 [0.219]	0,20 [0.008]	20 mm			
	BZV7-2RN2-PG	BZ, SPDT	A300, Q300	284 to 567 [10 to 20]	97,59 [3.842] Ref.	4,78 [0.188]	5,56 [0.219]	0,20 [0.008]	PG 13,5			

Figure 26. V7 Series, top pin plunger, flange mount with boot seal

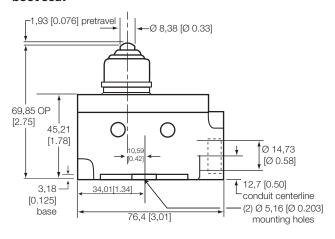
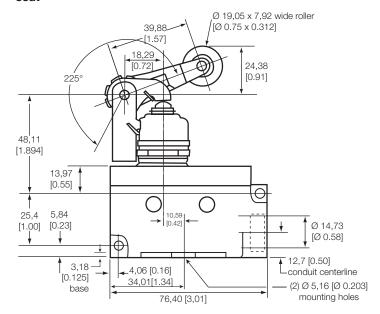


Figure 27. V7 Series, roller lever, flange mount with booth seal



<b>TABLE 12. ORDER</b> For catalog listings no							SEALE	ACTUA	ΓOR	
	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 5]	Operate Force g [oz]	Operate Point mm [in]	Pretravel max. mm [in]	Over Travel min. mm [in]	Differential Travel max. mm [in]	Conduit Thread	Comments
Pin Plunger (see Figure 28)	BZV7-2RQ-PG	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	63,5 ±1,19 [2.50 ±0.047]	0,38 [0.015]	5,56 [0.219]	0,05 [0.002]	PG 13,5	
	BZV7-2RQ8-C	BZ, SDPT	A300, Q300	255 to 369 [9 to 13]	75,01 ±1,52 [2.953 ±0.060]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	20 mm	
Inline Roller Plunger (see Figure 29)	BZV7-2RQ8-PG	BZ, SDPT	A300, Q300	255 to 369 [9 to 13]	75,01 ±1,52 [2.953 ±0.060]	0,38	3,56 [0.140]	0,05 [0.002]	PG 13,5	
	BZV7-2RQ81-C	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	75,01 ±1,52 [2.953 ±0.060]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	20 mm	
Cross Roller Plunger (see Figure 30)	BZV7-2RQ81-PG	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	75,01 ±1,52 [2.953 ±0.060]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	PG 13,5	
	BZV7-2RQ2-C	BZ, SPDT	A300, Q300	284 to 510 [10 to 18]	87,27 [3.436] Ref.	4,78 [0.188]	5,56 [0.219]	0,15 [0.006]	20 mm	
Roller Lever (see Figure 31)	BZV7-2RQ2-PG	BZ, SPDT	A300, Q300	284 to 510 [10 to 18]	87,27 [3.436] Ref.	4,78 [0.188]	5,56 [0.219]	0,15 [0.006]	PG 13,5	

Figure 28. V7 Series, top pin plunger, flange mount

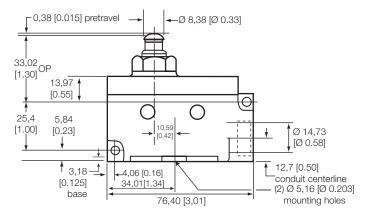


Figure 29. V7 Series, inline roller plunger, flange mount

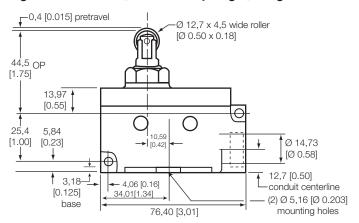


Figure 30. V7 Series, cross roller plunger, flange mount

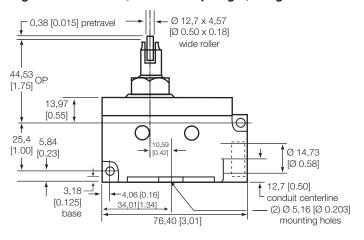
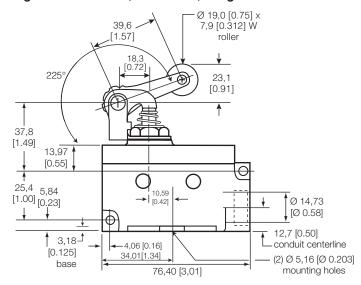


Figure 31. V7 Series, roller lever, flange mount



### WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship during the applicable warranty period. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgment or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items that Honeywell, in its sole discretion, finds defective. The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.

While Honeywell may provide application assistance personally, through our literature and the Honeywell web site, it is buyer's sole responsibility to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this writing. However, Honeywell assumes no responsibility for its use.

## **⚠ 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.

### FOR MORE INFORMATION

Sensing and Safety Technologies services its customers through a worldwide network of sales offices and distributors. For application assistance, current specifications, pricing or the nearest Authorized Distributor,

visit our website or call:

USA/Canada +1 302 613 4491 Latin America +1 305 805 8188 Europe +44 1344 238258 Japan +81 (0) 3-6730-7152 Singapore +65 6355 2828 Greater China +86 4006396841

## Honeywell Sensing and Safety Technologies

830 East Arapaho Road Richardson, TX 75081 www.honeywell.com

