

# E7/V7 SERIES

002393

Issue 2

## 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

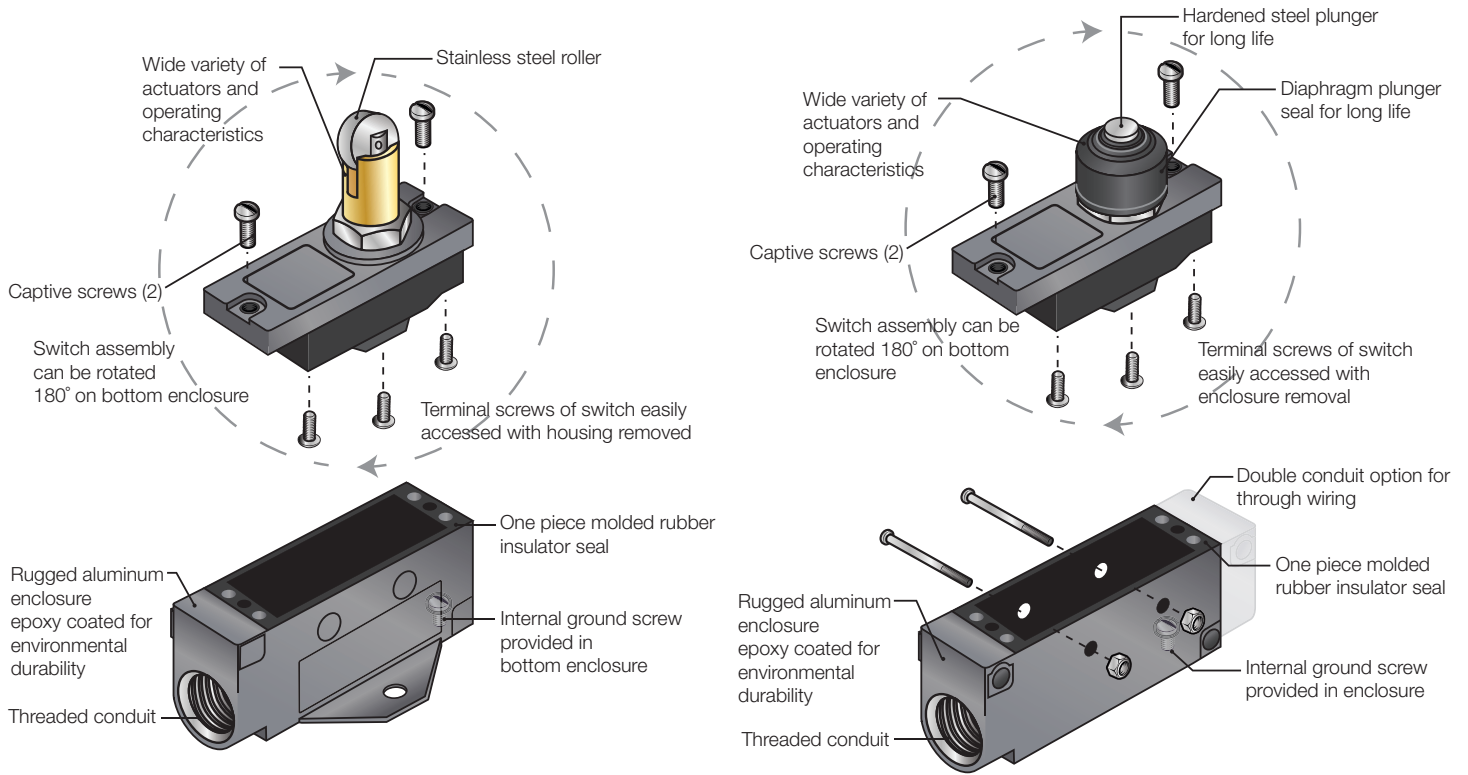


The E7/V7 Series are part of the MICRO SWITCH compact precision limit switch family. To view the entire Honeywell limit switch offering, [click here](#).

**Honeywell**

# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

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**)

# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

**TABLE 1. SPECIFICATIONS**

Characteristic	Parameter
<b>Actuators</b>	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)
<b>Enclosure type</b>	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)
<b>Housing material</b>	electrostatic epoxy coated zinc die-cast
<b>Termination</b>	threaded conduit, 20 mm or PG 13,5
<b>Sealing</b>	actuator with boot seal: IP65 actuator (QN8 style) with internal plunger seal: IP65 actuator without boot seal or internal plunger seal: IP50
<b>Switching options</b>	SPDT (snap-action contacts) 1NC/1NO, same polarity DPDT (snap-action contacts) 2NC/2NO, each pole same polarity
<b>Operating temperature</b>	-30 °C to 70 °C [-22 °F to 158 °F]
<b>Electrical rating</b>	see tables 2 and 3
<b>Rated impulse voltage Ui</b>	1.5 kV
<b>Pollution degree (with enclosure)</b>	1 (DTE Series); 2 (BZE and BZV Series)
<b>Agency certifications</b>	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, Ie	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 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

**TABLE 4. SWITCHING**

SPDT (BZE and BZV Series)	DPDT (DTE Series)

# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

## PRODUCT NOMENCLATURE

<b>BZ</b>	<b>E7</b>	-	<b>2</b>	<b>R</b>	<b>N</b>	<b>2</b>	-	<b>C</b>
Switch Type	Enclosure Type		Internal Base Switch Construction	Contact	Plunger Type	Actuator Code		Conduit Thread
<b>BZ</b> Series Basic Switch, SPDT	<b>E7</b> Diagonal side mount w/ single conduit entry <sup>2</sup>		<b>2</b> Standard (single break)	<b>R</b> Standard	<b>N</b> Seal boot	Pin plunger (blank)		<b>PG</b> PG 13,5 mm conduit
	<b>V7</b> Flange mount version of E7				<b>Q</b> No seal boot	<b>2</b> Adjustable roller lever		<b>C</b> 20 mm conduit
<b>DT</b> Series Basic Switch <sup>2</sup> , DPDT	<b>E7S</b> Side mount w/ single conduit entry <sup>2</sup>				<b>QN</b> Inline roller plunger with internal plunger seal <sup>3</sup>	<b>8</b> Roller plunger		
	<b>E9</b> Side mount w/ double conduit entry					<b>80</b> Roller plunger		
						<b>9</b> Inline roller plunger with removeable roller <sup>3</sup>		
						<b>18</b> Coil spring wobble stick		
						<b>28</b> One-way roller lever		
						<b>81</b> Cross roller plunger		






\* mounting holes provide interchangeability with BZE6 products

<sup>1</sup> NOTE: not all combinations of model code are available. Please contact your Honeywell provider/representative for assistance.  
<sup>2</sup> DT Series basic switch available with enclosure type E7 or E7S only.  
<sup>3</sup> With "Q" style plunger only.

# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

**TABLE 5. ORDER GUIDE • E7 DIAGONAL SIDE MOUNT WITH SEALED ACTUATOR**

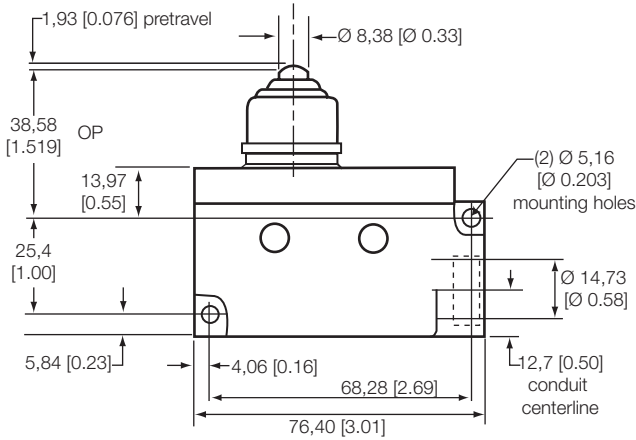
For catalog listings not shown, please contact your Honeywell distributor or representative.

	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
 <p><b>Pin Plunger</b> (see Figure 1)</p>	<b>BZE7-2RN-C</b>	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	
	<b>BZE7-2RN-PG</b>	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	
	<b>DTE7-2RN-C</b>	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	
	<b>DTE7-2RN-PG</b>	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	
 <p><b>Inline Roller Plunger</b> (see Figure 2)</p>	<b>BZE7-2RQN8-C</b>	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]	20 mm	Roller plunger assembly can be positioned at 90° increments
	<b>BZE7-2RQN8-PG</b>	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	
	<b>DTE7-2RQN8-C</b>	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	
	<b>DTE7-2RQN8-PG</b>	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	
 <p><b>Roller Lever</b> (see Figure 3)</p>	<b>BZE7-2RN2-C</b>	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	
	<b>BZE7-2RN2-PG</b>	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	
	<b>DTE7-2RN2-C</b>	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	
	<b>DTE7-2RN2-PG</b>	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	
 <p><b>One-way Roller Lever</b> (see Figure 4)</p>	<b>BZE7-2RN28-C</b>	BZ, SPDT	A300, Q300	284 to 567 [10 to 20]	-	5,94 [0.234]	5,56 [0.219]	0,15 [0.006]	20 mm	
	<b>BZE7-2RN28-PG</b>	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	
	<b>DTE7-2RN28-C</b>	DT, DPDT	B300, R300	1134 [40] max.	-	6,76 [0.266]	5,56 [0.219]	4,19 [0.165]	20 mm	
 <p><b>Coil-Spring Wobble</b> (see Fig. 5)</p>	<b>BZE7-2RN18-C</b>	BZ, SPDT	A300, Q300	-	-	15°	20° Ref	-	20 mm	
	<b>BZE7-2RN18-PG</b>	BZ, SPDT	A300, Q300	-	-	15°	20° Ref	-	PG 13,5	

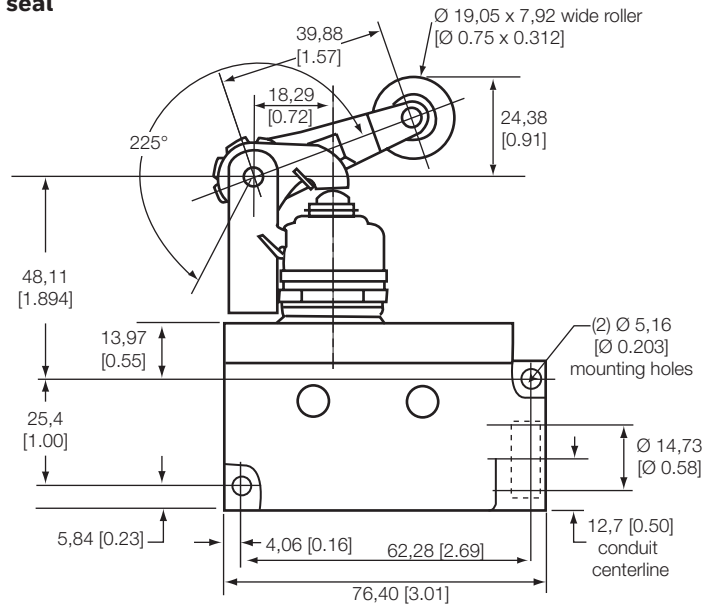
# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

## DIMENSIONS

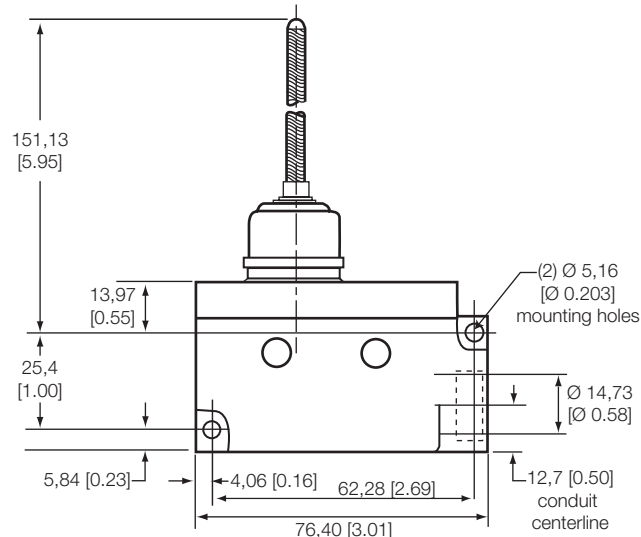
**Figure 1. E7 Series, top pin plunger, diagonal mount with boot seal**



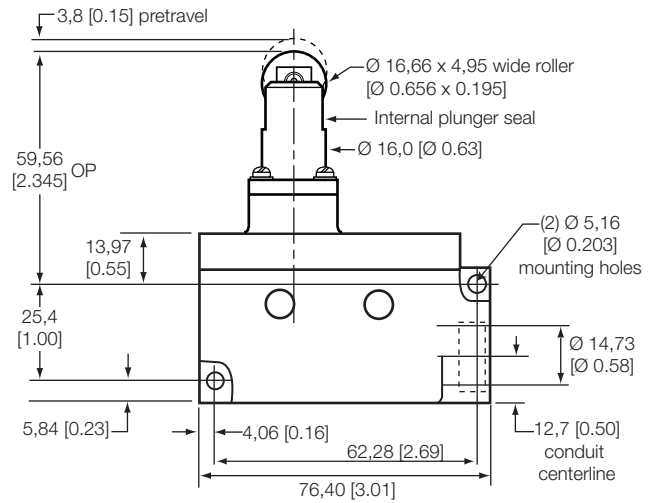
**Figure 3. E7 Series, roller lever, diagonal mount with boot seal**



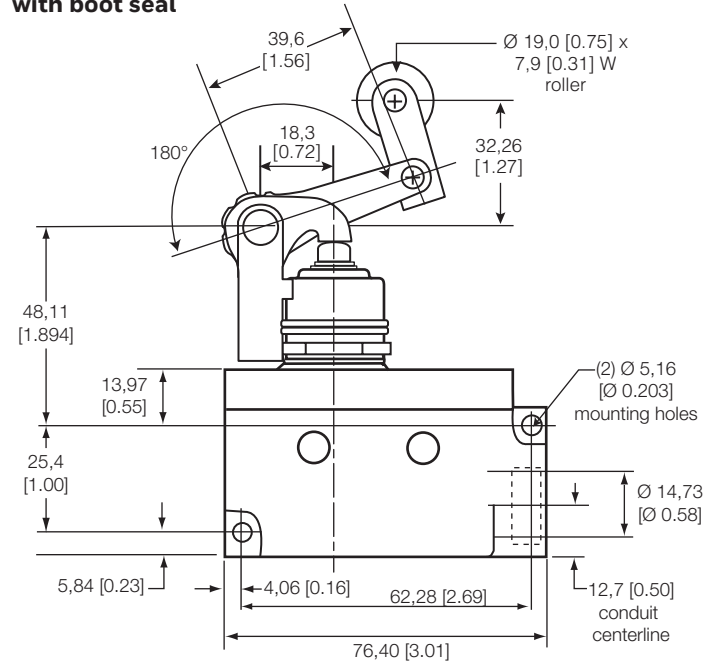
**Figure 5. E7 Series, coil wobble, diagonal mount with boot seal**



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



**Figure 4. E7 Series, one-way roller lever, diagonal mount with boot seal**



# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

**TABLE 6. ORDER GUIDE • E7 SERIES SWITCHES, DIAGONAL MOUNT WITHOUT BOOT SEALED ACTUATOR**

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

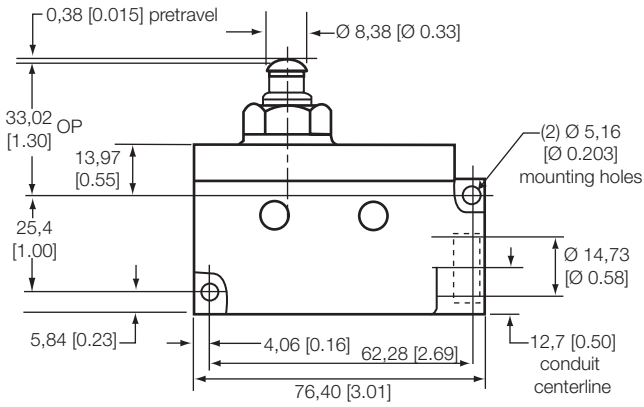
	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 5]	Operate Force g [oz]	Operate Point mm [in]	Pretravel max. mm [in]	Over Travel min. mm [in]	Differential Travel max. mm [in]	Conduit Thread	Comments
 <b>Pin Plunger</b> (see Figure 6)	<b>BZE7-2RQ-C</b>	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	28,70 ±0,76 [1.30 ±0.030]	0,38 [0.015]	5,56 [0.219]	0,05 [0.002]	20 mm	
	<b>BZE7-2RQ-PG</b>	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	
 <b>Inline Roller Plunger</b> (see Figure 7)	<b>BZE7-2RQ8-C</b>	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	
	<b>BZE7-2RQ8-PG</b>	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	
	<b>BZE7-2RQ9-C<sup>1</sup></b>	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
	<b>BZE7-2RQ9-PG<sup>1</sup></b>	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
 <b>Cross Roller Plunger</b> (see Figure 8)	<b>BZE7-2RQ81-C</b>	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	
	<b>BZE7-2RQ81-PG</b>	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	
 <b>Roller Lever</b> (see Figure 9)	<b>BZE7-2RQ2-C</b>	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	
	<b>BZE7-2RQ2-PG</b>	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° and roller re-assembled for a cross roller plunger.

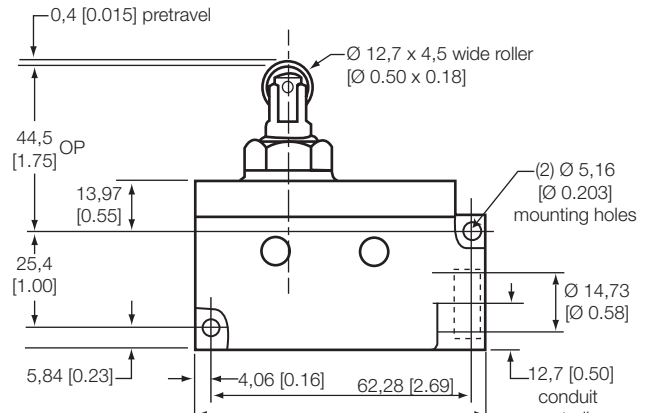
# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

## DIMENSIONS

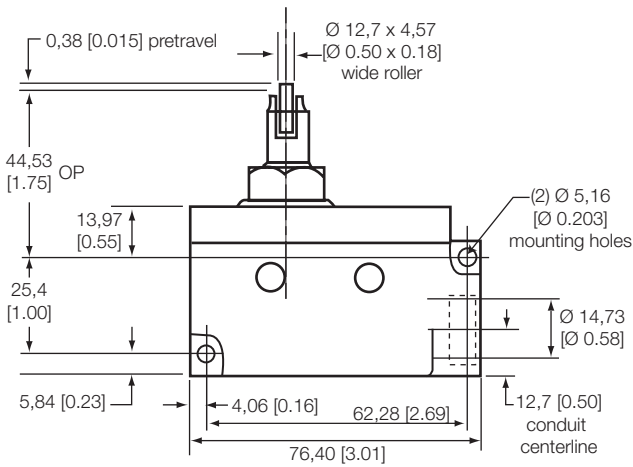
**Figure 6. E7 Series, top pin plunger, diagonal mount**



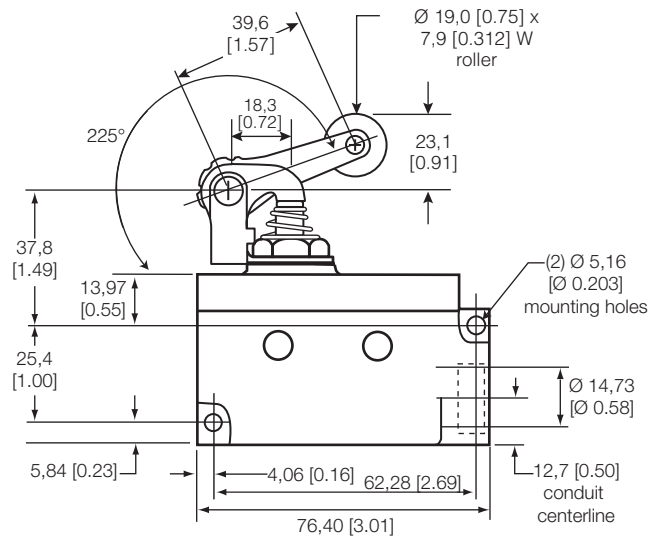
**Figure 7. E7 Series, inline roller plunger, diagonal mount**



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



**Figure 9. E7 Series, roller lever, diagonal mount**









# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

**TABLE 7. ORDER GUIDE • E7S SERIES SWITCHES, SIDE OR DIAGONAL MOUNT WITH SEALED ACTUATOR**

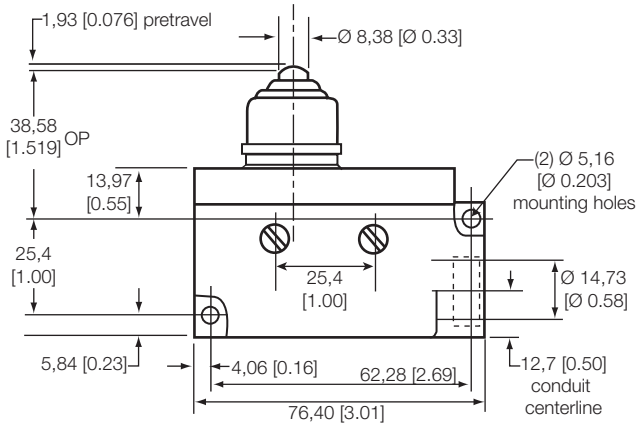
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	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 5]	Operate Force g [oz]	Operate Point mm [in]	Pretravel max. mm [in]	Over Travel min. mm [in]	Differential Travel max. mm [in]	Conduit Thread	Comments
 <p><b>Pin Plunger</b> (see Figure 10)</p>	<b>BZE7S-2RN</b>	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	
	<b>BZE7S-2RN-C</b>	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	
	<b>BZE7S-2RN-PG</b>	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	
	<b>DTE7S-2RN-C</b>	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	
 <p><b>Inline Roller Plunger</b> (see Figure 11)</p>	<b>BZE7S-2RQN8-C</b>	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 can be positioned at 90° increments
	<b>DTE7S-2RQN8-C</b>	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	
 <p><b>Roller Lever</b> (see Figure 12)</p>	<b>BZE7S-2RN2-C</b>	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	
	<b>BZE7S-2RN2-PG</b>	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	
	<b>DTE7S-2RN2-C</b>	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	
 <p><b>One-Way Roller Lever</b> (see Figure 13)</p>	<b>BZE7S-2RN28-C</b>	BZ, SPDT	A300, Q300	227 to 567 [8 to 20]	-	5,94 [0.234]	5,56 [0.219]	0,15 [0.006]	20 mm	

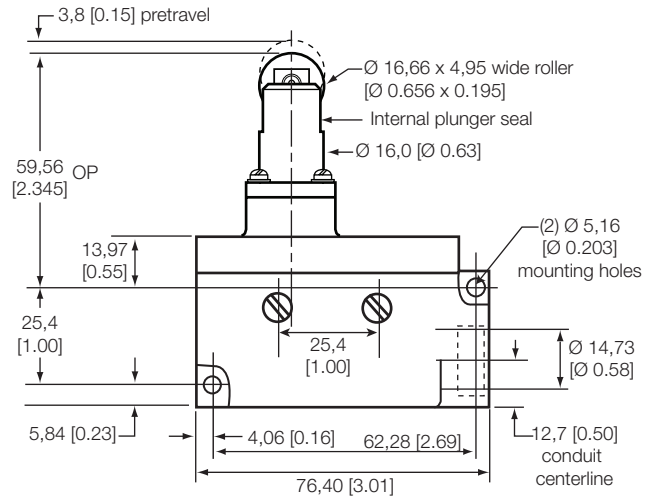
# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

## DIMENSIONS

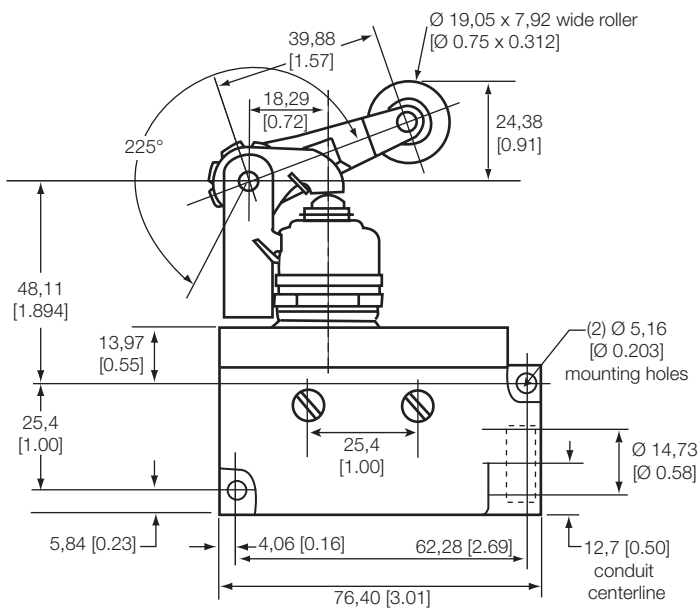
**Figure 10. E7S Series, top pin plunger, side mount with boot seal**



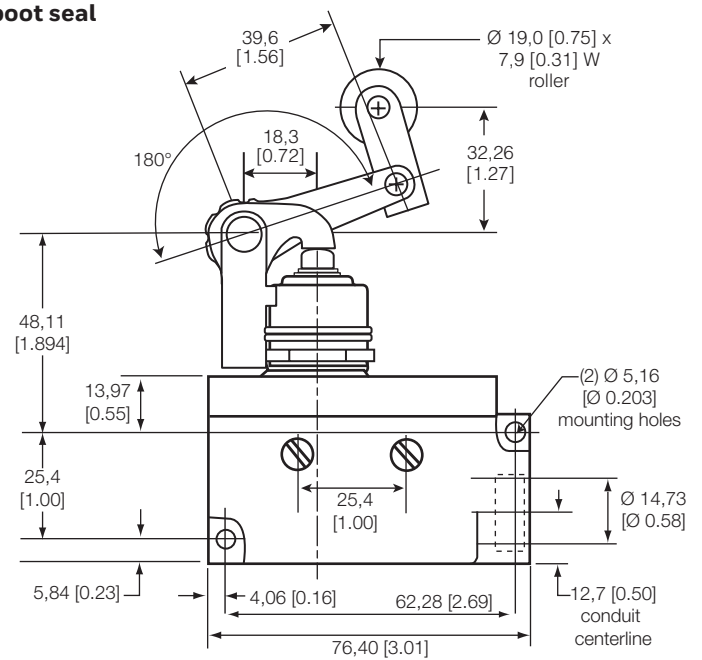
**Figure 11. E7S Series, inline roller plunger, side mount, sealed**



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







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



# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

**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.

	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>Pin Plunger</b> (see Figure 14)	<b>BZE7S-2RQ-C</b>	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	38,1 ±0,89 [1.5 ±0.035]	0,38 [0.015]	5,56 [0.219]	0,05 [0.002]	20 mm	
	<b>BZE7S-2RQ-PG</b>	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	38,1 ±0,89 [1.5 ±0.035]	0,38 [0.015]	5,56 [0.219]	0,05 [0.002]	PG 13,5	
 <b>Inline Roller Plunger</b> (see Figure 15)	<b>BZE7S-2RQ8-C</b>	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	49,61 ±1,32 [1.953 ±0.052]	0,38 [0.015]	3,56 [0.14]	0,05 [0.002]	20 mm	
	<b>BZE7S-2RQ8-PG</b>	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	49,61 ±1,32 [1.953 ±0.052]	0,38 [0.015]	3,56 [0.14]	0,05 [0.002]	PG 13,5	
	<b>BZE7S-2RQ9-C<sup>1</sup></b>	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	49,61 ±1,32 [1.953 ±0.052]	0,38 [0.015]	3,56 [0.14]	0,05 [0.002]	20 mm	Removable roller
	<b>DTE7S-2RQ9-C</b>	DT, DPDT	B300, R300	680 to 1361 [24 to 48]	49,61 ±1,19 [1.953 ±0.047]	3,56 [0.14]	3,18 [0.125]	1,65 [0.065]	20 mm	Roller plunger may be rotated to any position around C/L of plunger
	<b>DTE7S-2RQ9-PG</b>	DT, DPDT	B300, R300	680 to 1361 [24 to 48]	49,61 ±1,19 [1.953 ±0.047]	3,56 [0.14]	3,18 [0.125]	1,65 [0.066]	PG 13,5	
 <b>Cross Roller Plunger</b> (see Figure 16)	<b>BZE7S-2RQ81-C</b>	BZ, SPDT	A300, Q300	255 to 369 [9 to 13]	49,61 ±1,32 [1.953 ±0.052]	0,38 [0.015]	3,56 [0.14]	0,05 [0.002]	20 mm	
 <b>Roller Lever</b> (see Figure 17)	<b>BZE7S-2RQ2-C</b>	BZ, SPDT	A300, Q300	284 to 510 [10 to 18]	61,11 [2.406] Ref	4,78 [0.188]	5,56 [0.219]	0,15 [0.006]	20 mm	

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

# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

## DIMENSIONS

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

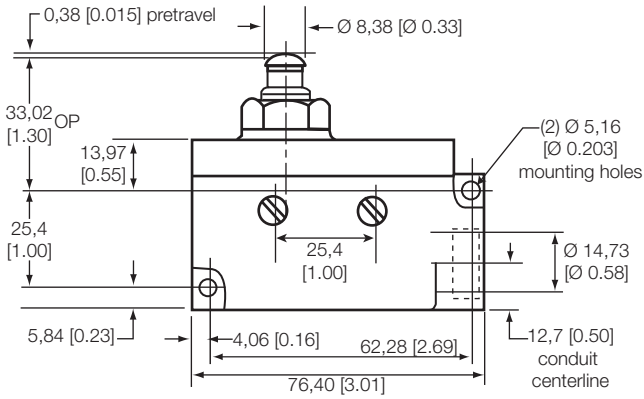


Figure 15. E7S Series, inline roller plunger, side mount

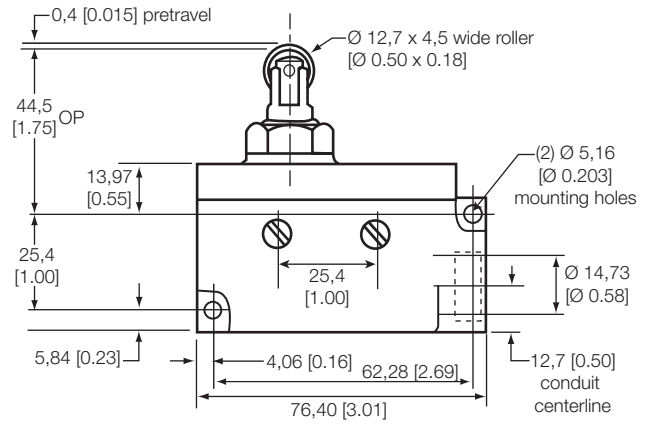


Figure 16. E7S Series, cross roller lever, side mount

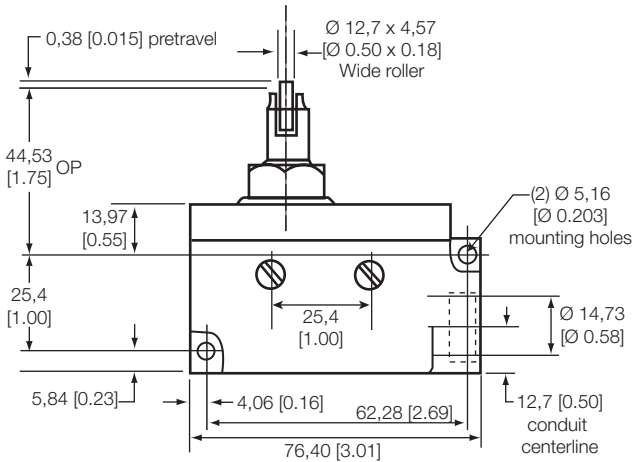
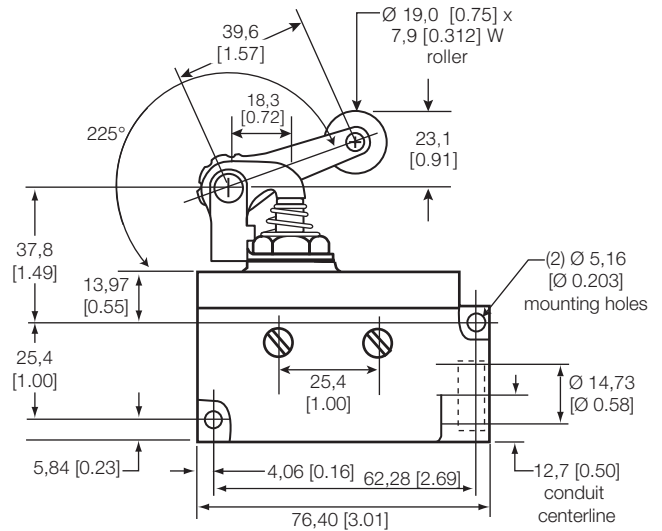






Figure 17. E7S Series, roller lever, side mount



# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

**TABLE 9. ORDER GUIDE • E9 SERIES SWITCHES, SIDE MOUNT WITH SEALED ACTUATOR AND TWO CONDUITS**

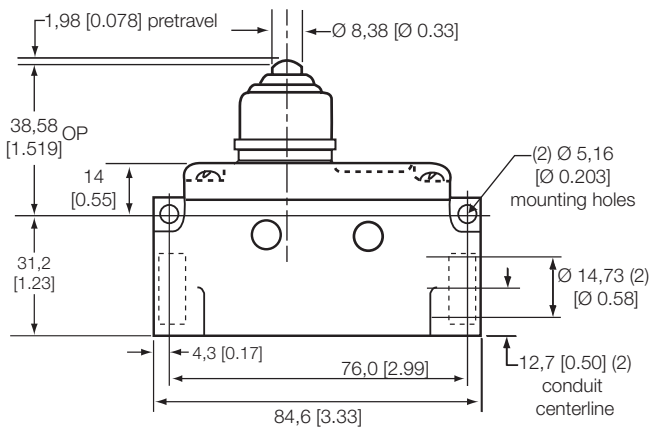
For catalog listings not shown, please contact your Honeywell distributor or representative.

	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
 <p><b>Pin Plunger</b> (see Figure 18)</p>	<b>BZE9-2RN-C</b>	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	
	<b>BZE9-2RN-PG</b>	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	
	<b>BZE9-2RN-PG11</b>	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	
 <p><b>Inline Roller Plunger</b> (see Figure 19)</p>	<b>BZE9-2RQN8-PG</b>	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
 <p><b>Roller Lever</b> (see Figure 20)</p>	<b>BZE9-2RN2-C</b>	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	
	<b>BZE9-2RN2-PG</b>	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	
 <p><b>One-Way Roller Lever</b> (see Figure 21)</p>	<b>BZE9-2RN28-PG</b>	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	

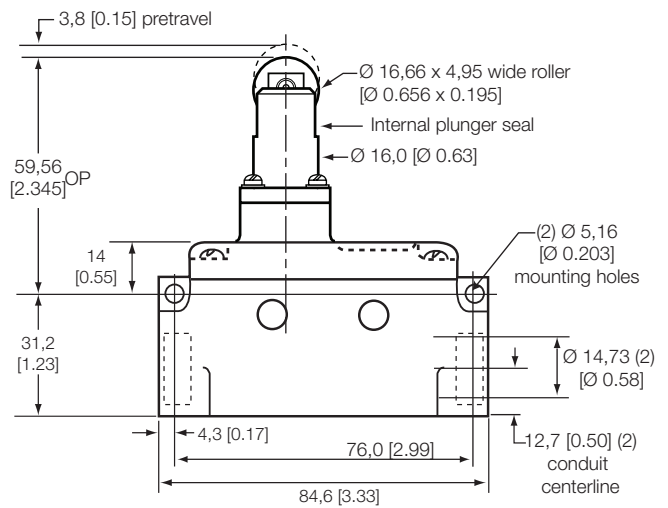
# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

## DIMENSIONS

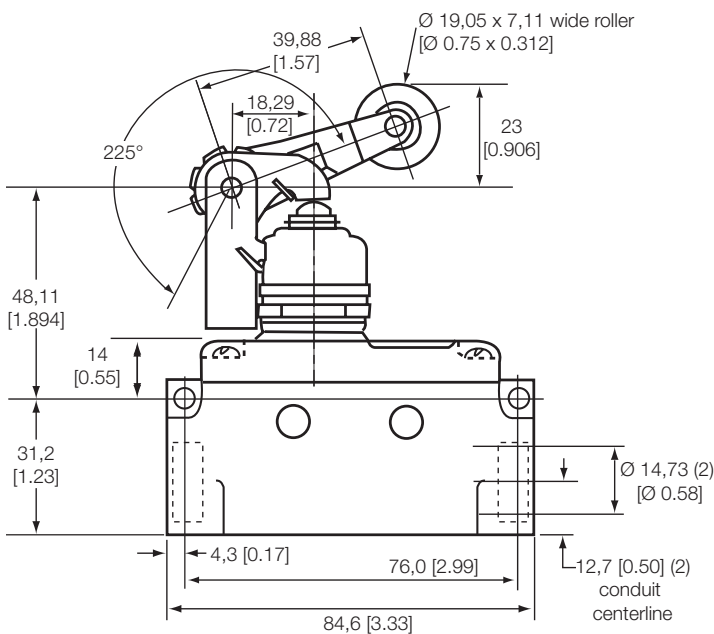
**Figure 18. E9 Series, top pin plunger, side mount with boot seal**



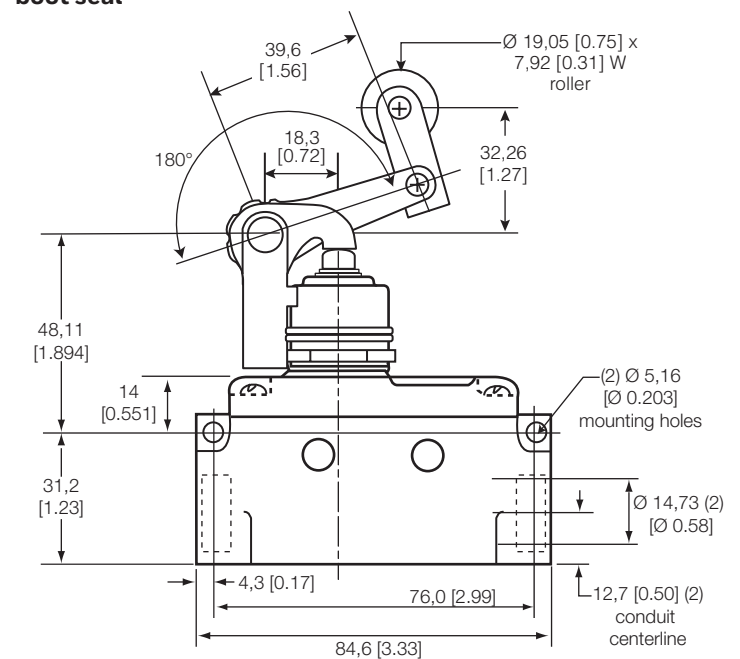
**Figure 19. E9 Series, inline roller plunger, side mount with seal**



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



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



# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

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

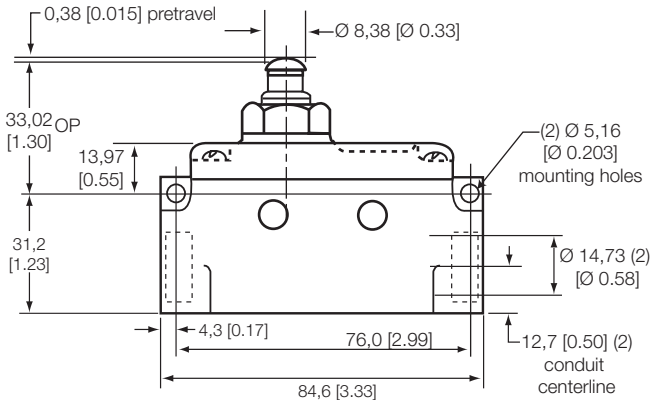
For catalog listings not shown, please contact your Honeywell distributor or representative.

	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>Pin Plunger</b> (see Figure 22)	<b>BZE9-2RQ-PG</b>	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	
 <b>Inline Roller Plunger</b> (see Figure 23)	<b>BZE9-2RQ8-C</b>	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	
	<b>BZE9-2RQ8-PG</b>	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	
 <b>Cross Roller Plunger</b> (see Figure 24)	<b>BZE9-2RQ81-PG</b>	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	
 <b>Roller Lever</b> (see Figure 25)	<b>BZE9-2RQ2-PG</b>	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	

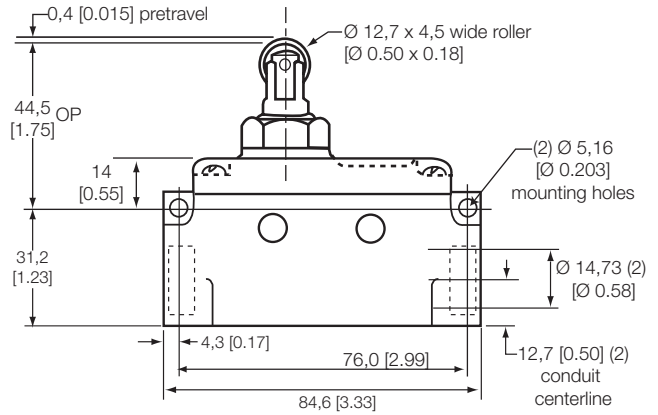
# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

## DIMENSIONS

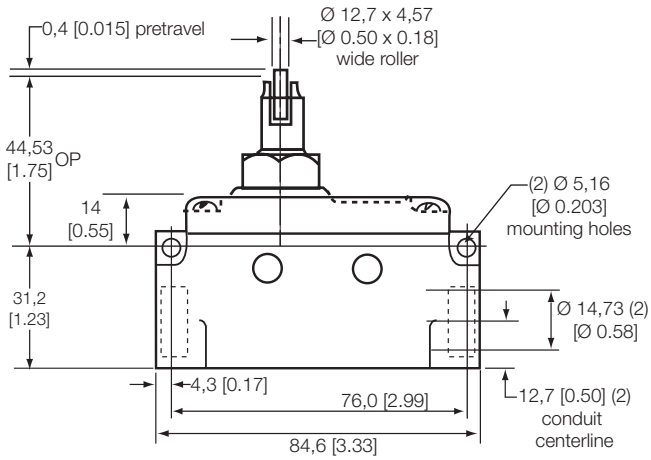
**Figure 22. E9 Series, top pin plunger, side mount**



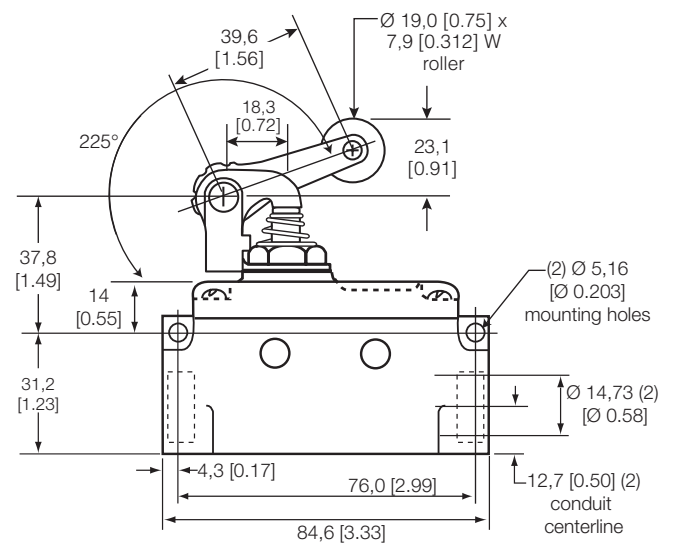
**Figure 23. E9 Series, inline roller plunger, side mount**



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



**Figure 25. E9 Series, roller lever, side mount**







# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

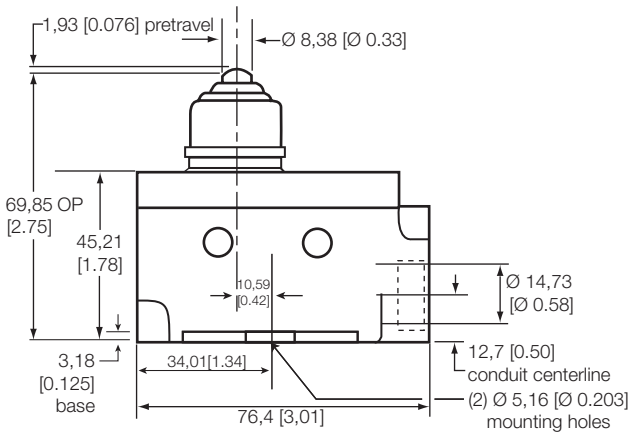
**TABLE 11. ORDER GUIDE • V7 SERIES SWITCHES, FLANGE MOUNT WITH BOOT SEALED ACTUATOR**

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

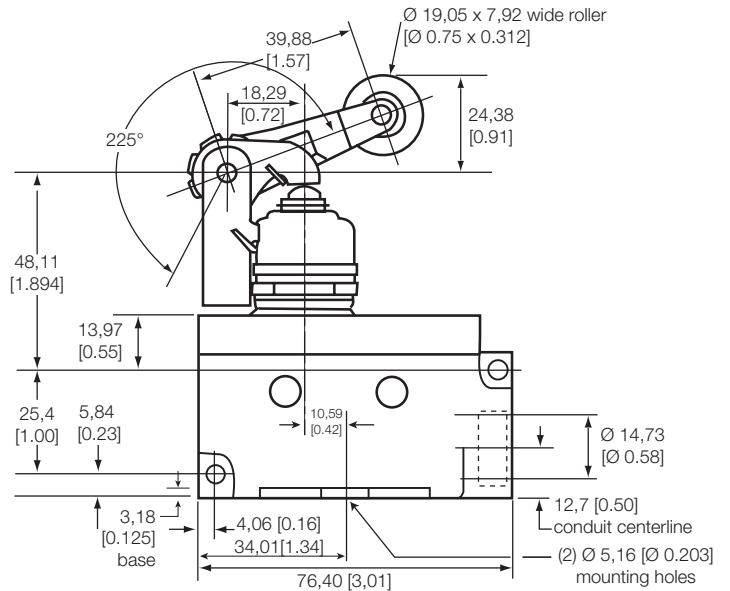
	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 5]	Operate Force g [oz]	Operate Point mm [in]	Pretravel max. mm [in]	Over Travel min. mm [in]	Differential Travel max. mm [in]	Conduit Thread	Comments
 <b>Pin Plunger</b> (see Figure 26)	<b>BZV7-2RN-C</b>	BZ, SPDT	A300, Q300	255 to 680 [9 to 24]	69,85 ±1,57 [2.75 ±0.062]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	20 mm	
	<b>BZV7-2RN-PG</b>	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	
 <b>Roller Lever</b> (see Figure 27)	<b>BZV7-2RN2-C</b>	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	
	<b>BZV7-2RN2-PG</b>	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	

## DIMENSIONS

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







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



# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

**TABLE 12. ORDER GUIDE • V7 SERIES SWITCHES, FLANGE MOUNT WITHOUT 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
 <b>Pin Plunger</b> (see Figure 28)	<b>BZV7-2RQ-PG</b>	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	
 <b>Inline Roller Plunger</b> (see Figure 29)	<b>BZV7-2RQ8-C</b>	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	
	<b>BZV7-2RQ8-PG</b>	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]	PG 13,5	
 <b>Cross Roller Plunger</b> (see Figure 30)	<b>BZV7-2RQ81-C</b>	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	
	<b>BZV7-2RQ81-PG</b>	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	
 <b>Roller Lever</b> (see Figure 31)	<b>BZV7-2RQ2-C</b>	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	
	<b>BZV7-2RQ2-PG</b>	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	

# MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E7/V7 SERIES

## DIMENSIONS

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

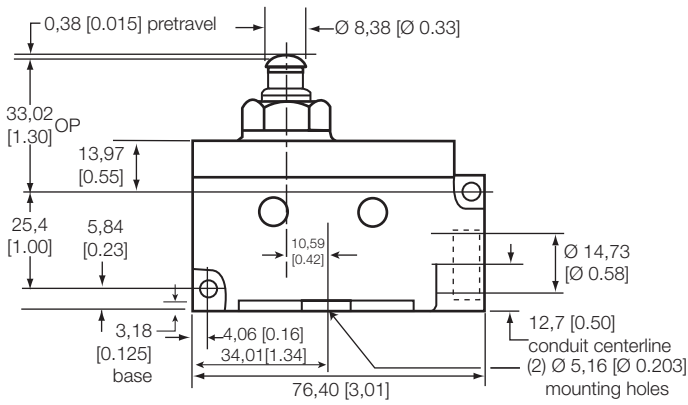


Figure 29. V7 Series, inline roller plunger, flange mount

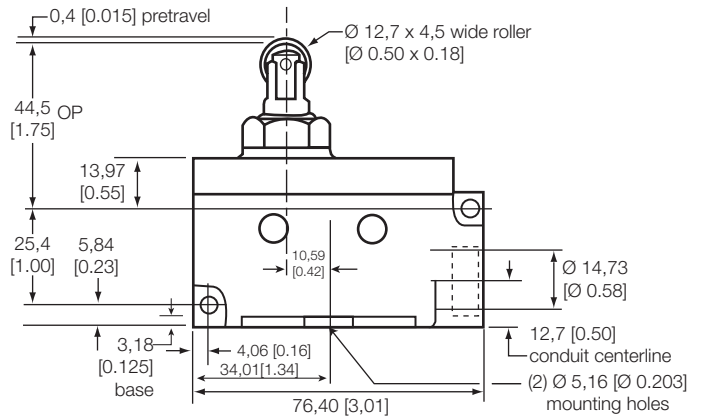


Figure 30. V7 Series, cross roller plunger, flange mount

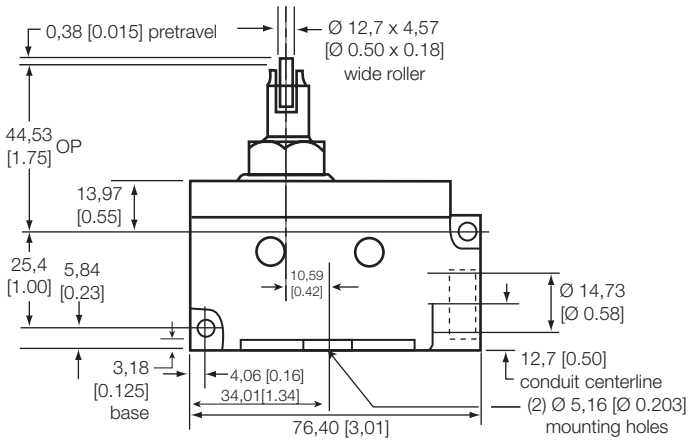
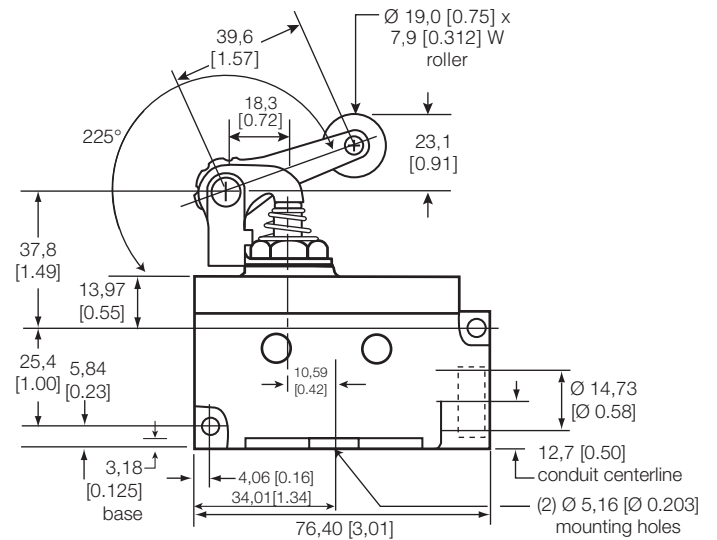


Figure 31. V7 Series, roller lever, flange mount



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

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