Honeywell



MICRO SWITCH™ Medium-Duty Limit Switches

E7 and V7 Series



Datasheet

MICRO SWITCH™ E7 and V7 Series Medium-Duty Limit Switches

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

What makes our switches better?

- 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



HIGH PERFORMANCE • DURABILITY
CUSTOMIZATION • EASY TO INSTALL

Features and Benefits

DESIGNED FOR DEMANDING ENVIRONMENTS AND APPLICATIONS

MICRO SWITCH™ E7/V7 Series switches include a wide variety of actuators and feature an electrostatic epoxy coated aluminum housing for durability in a wide range of applications. The products are engineered with MICRO SWITCH™ BZ or DT internal basic switches that have years of proven service.

Side and flange mounting options

RELIABLY HANDLES ELECTRICAL LOADS

The E7/V7 Series are available with SPDT contacts or DPDT contacts with momentary action to meet circuit requirements. The BZE/BZV Series with SPDT contacts is rated for AC15, A300 and DC13, Q300 for typical ac and dc applications. The DTE Series with DPDT contacts is rated for AC15, B300 and DC13, R300 for typical ac and dc applications. An internal ground screw is provided to meet electrical codes as required.

DESIGN FLEXIBILITY

These limit switches are offered with multiple connectivity options: two different conduit offerings, with single or double conduits.

GLOBAL APPROVALS

The BZE7, BZE7S, BZV7, and BZE9 Series with SPDT (single-pole double throw) contacts are certified to CE and CSA for worldwide applications. The DTE7 and DTE7S Series with DPDT (double-pole double throw) contacts are certified to CE for many uses.

INDOOR AND OUTDOOR OPTIONS

The Series' temperature range of -30 °C to 70 °C [-22 °F to 158 °F] makes the switch well suited for a wide range of indoor and outdoor applications.

Potential Applications



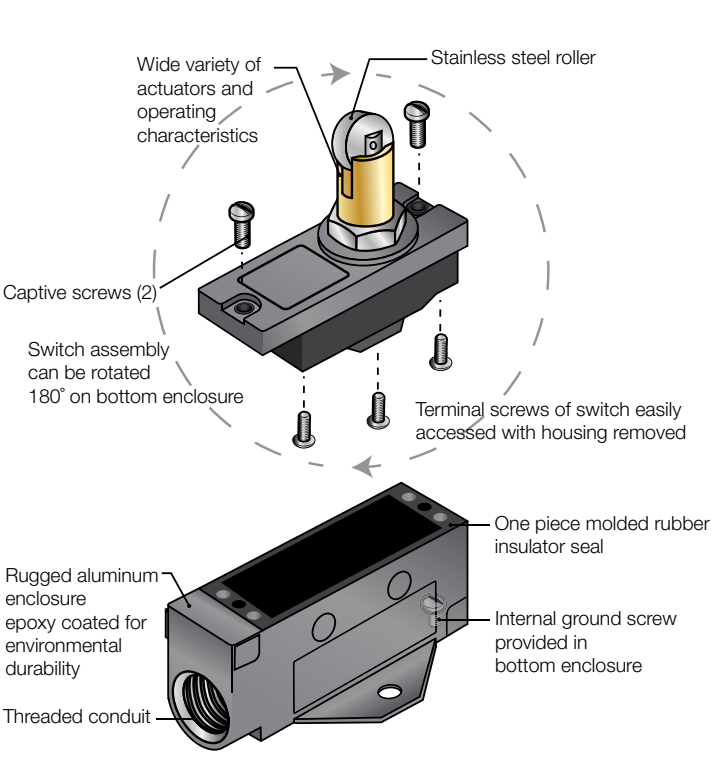
INDUSTRIAL

- 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

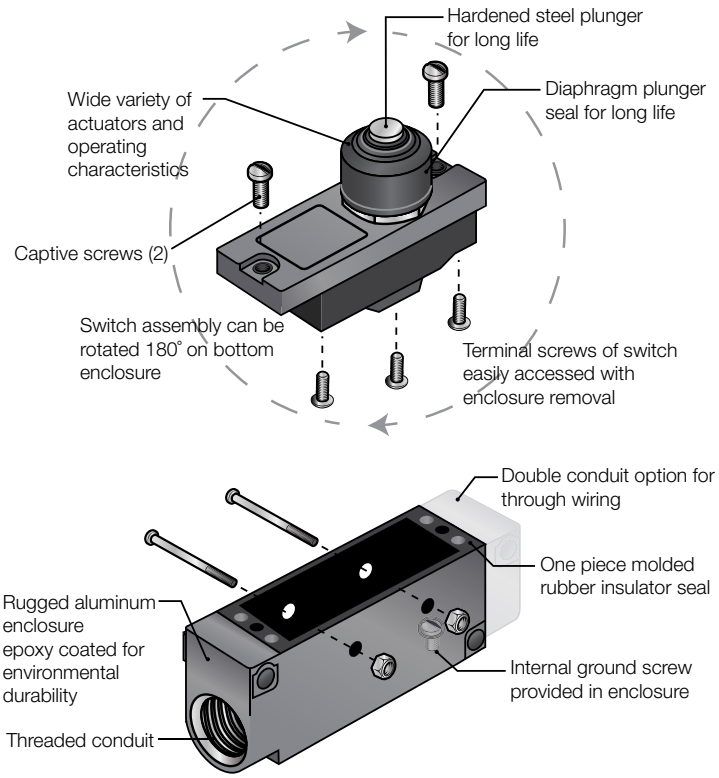
TRANSPORTATION

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

Figure 1. MICRO SWITCH™ E7/V7 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 Limit Switches

Table 1. Specifications

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 aluminum
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)

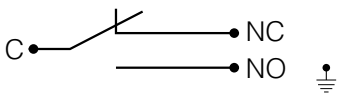
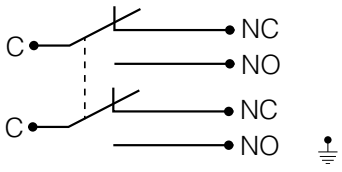
Table 2. BZE and BZV Series Electrical Ratings: EN60947-5-1, IEC 60947-5-1

Designation & Category	Thermal Current, It (Amps)	Rated Operational Voltage, Ue	Rated Operational Amps, 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)
	

E7 and V7 Series

PRODUCT NOMENCLATURE

BZ **E7** — **2** **R** **N** **2** — **C**

Switch Type

BZ Series Basic Switch, SPDT

DT Series Basic Switch[2], DPDT

Enclosure Type

E7	Diagonal side mount w/ single conduit entry[2]
V7	Flange mount version of E7
E7S	Side mount w/ single conduit entry*[2]
E9	Side mount w/ double conduit entry

* mounting holes provide interchangeability with BZE6 products

Internal Base Switch Construction

2	Standard (single break)

Contact

R	Standard

Plunger Type

N	Seal boot
Q	No seal boot
QN	Inline roller plunger with internal plunger seal[3]

Actuator Code

	Pin plunger (blank)
2	Adjustable roller lever
8 **80**	Roller plunger
9	Inline roller plunger with removeable roller[3]
18	Coil spring wobble stick
28	One-way roller lever
81	Cross roller plunger

Conduit Thread

PG	PG 13,5 mm conduit
C	20 mm conduit

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

MICRO SWITCH™ Medium-Duty Limit Switches

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
 **Pin Plunger (see Figure 1)**	**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	
	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	
	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	
 **Inline Roller Plunger (see Figure 2)**	**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 [0.002]	20 mm	Roller plunger assembly can be positioned at 90° increments
	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	
	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	
	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	
 **Roller Lever (see Figure 3)**	**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	
	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	
	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	
 **One-way Roller Lever (see Figure 4)**	**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	
	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	
	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 Figure 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	

DIMENSIONS

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

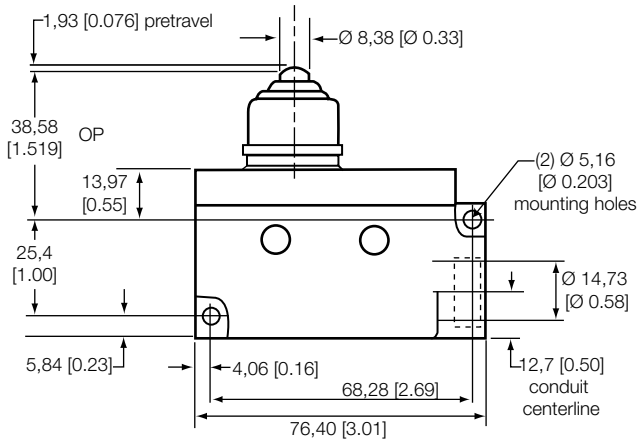


Figure 2. E7 Series, inline roller plunger, diagonal mount, sealed

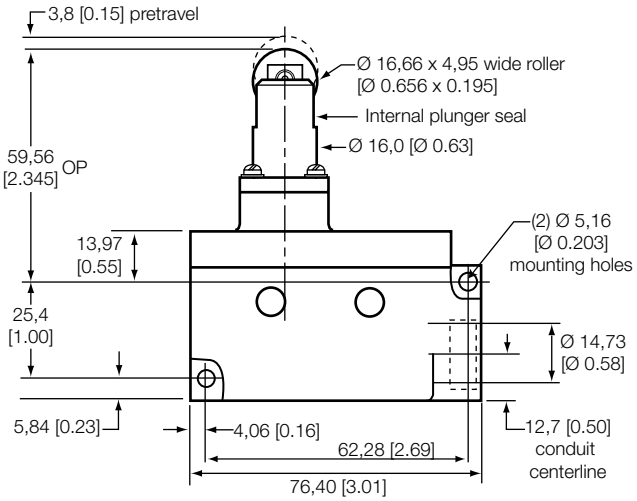


Figure 3. E7 Series, roller lever, diagonal mount with boot seal

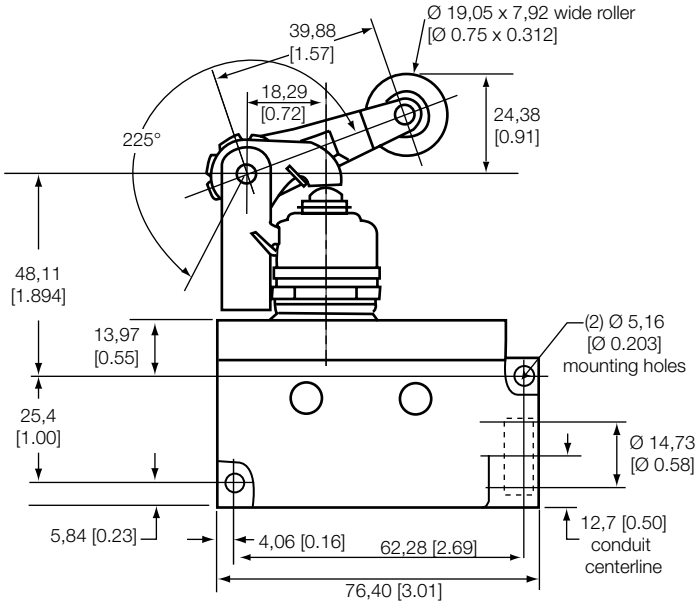


Figure 4. E7 Series, one-way roller lever, diagonal mount with boot seal

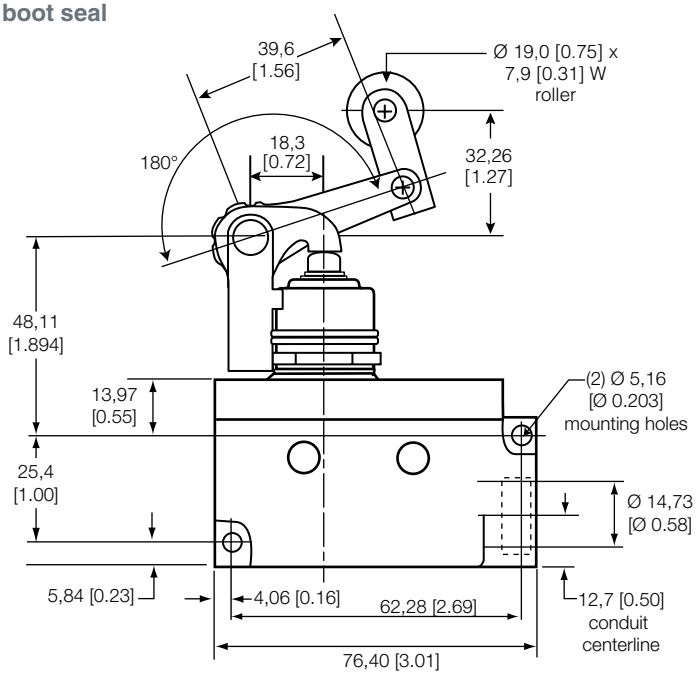
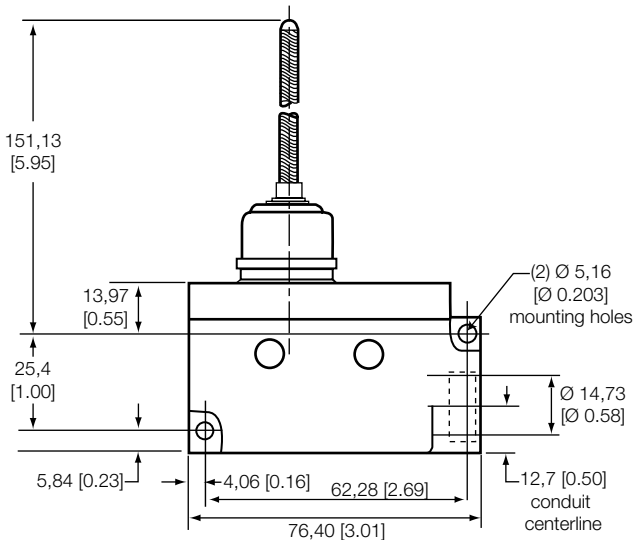


Figure 5. E7 Series, coil wobble, diagonal mount with boot seal



MICRO SWITCH™ Medium-Duty Limit Switches

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
 **Pin Plunger (see Figure 6)**	**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	
	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	
 **Inline Roller Plunger (see Figure 7)**	**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	
	BZE7-2RQ9-C [1]	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
	BZE7-2RQ9-PG [1]	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
 **Cross Roller Plunger (see Figure 8)**	**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	
	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	
 **Roller Lever (see Figure 9)**	**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	
	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	

[1] With roller removed, plunger can be rotated 90° and roller re-assembled for a cross roller plunger.

DIMENSIONS

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

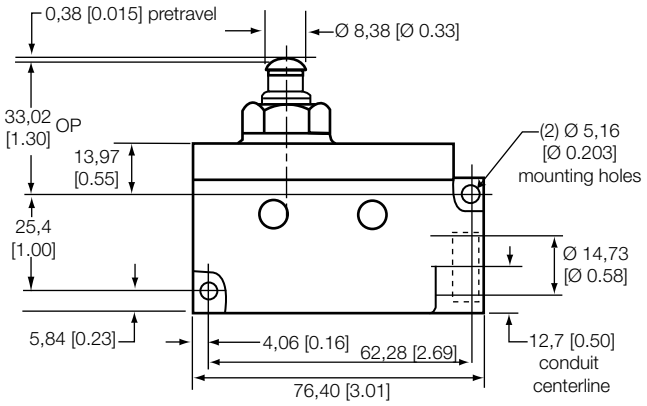


Figure 7. E7 Series, inline roller plunger, diagonal mount

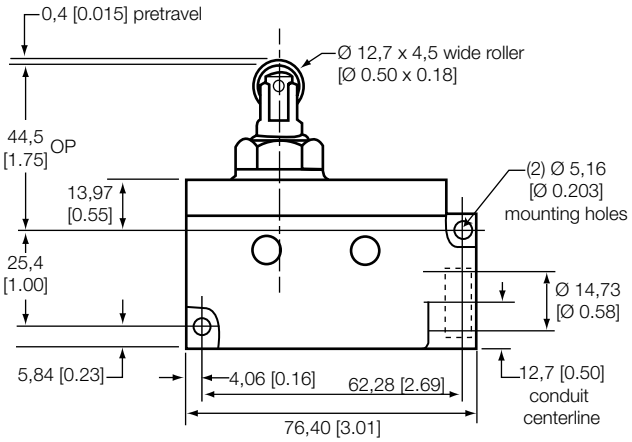


Figure 8. E7 Series, cross roller plunger, diagonal mount

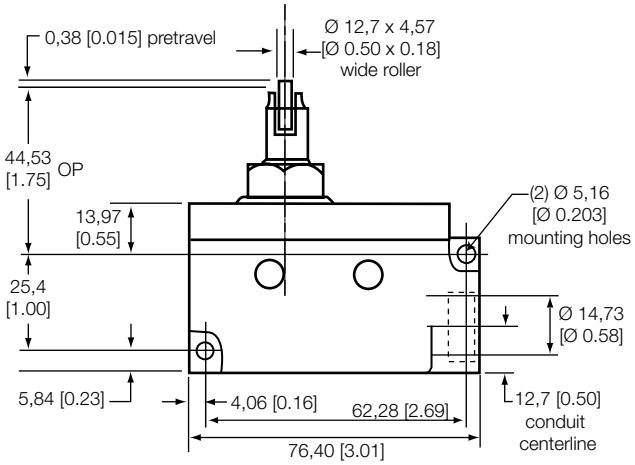
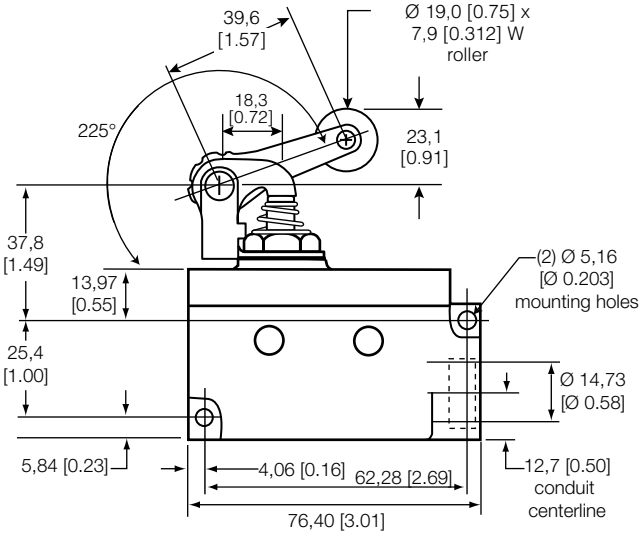


Figure 9. E7 Series, roller lever, diagonal mount



MICRO SWITCH™ Medium-Duty Limit Switches

Table 7. Order Guide • E7S Series Switches, Side or Diagonal 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
 **Pin Plunger (see Figure 10)**	**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	
	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	
	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	
 **Inline Roller Plunger (see Figure 11)**	**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 can be positioned at 90° increments
	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	
 **Roller Lever (see Figure 12)**	**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	
	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	
	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	

DIMENSIONS

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

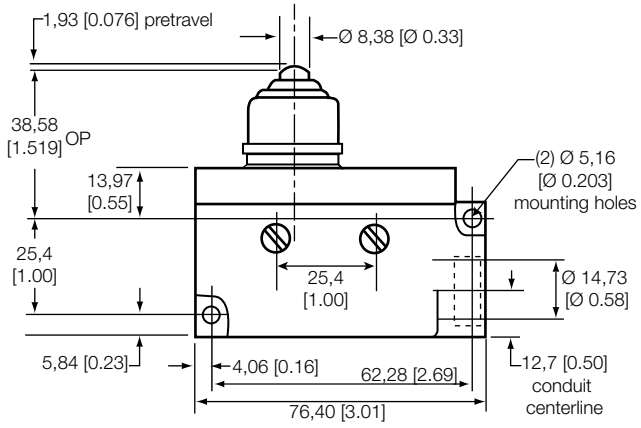


Figure 11. E7S Series, inline roller plunger, side mount, sealed

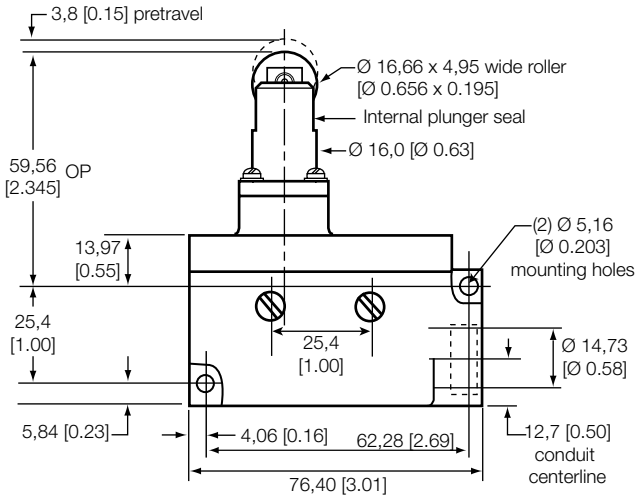


Figure 12. E7S Series, roller lever, side mount with boot seal

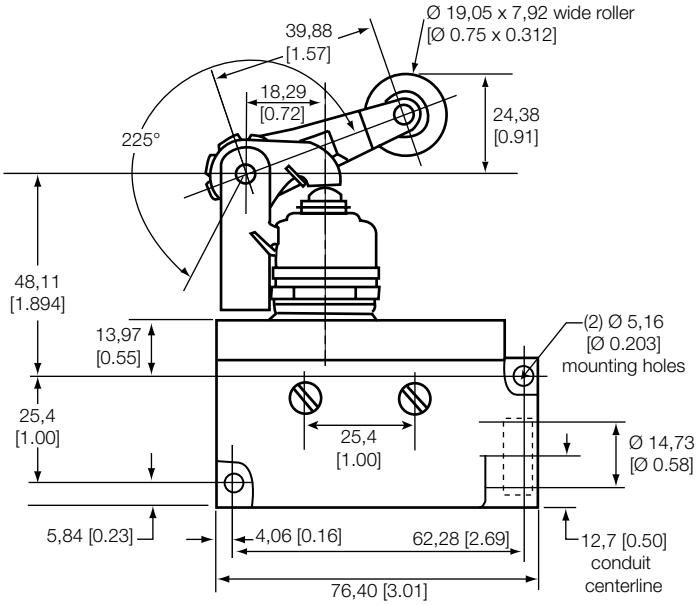
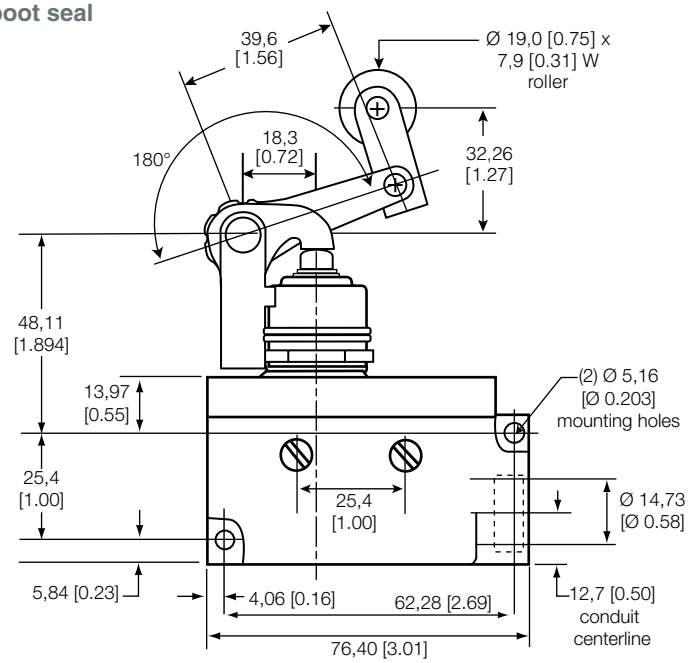


Figure 13. E7S Series, one-way roller lever, side mount with boot seal



MICRO SWITCH™ Medium-Duty Limit Switches

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
 **Pin Plunger (see Figure 14)**	**BZE7S-2RQ-C**	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	
	BZE7S-2RQ-PG	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	
 **Inline Roller Plunger (see Figure 15)**	**BZE7S-2RQ8-C**	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	
	BZE7S-2RQ8-PG	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	
	BZE7S-2RQ9-C[1]	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
	DTE7S-2RQ9-C	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
	DTE7S-2RQ9-PG	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	
 **Cross Roller Plunger (see Figure 16)**	**BZE7S-2RQ81-C**	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	
 **Roller Lever (see Figure 17)**	**BZE7S-2RQ2-C**	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	

[1] With roller removed, plunger can be rotated 90° and roller re-assembled for a cross roller plunger.

DIMENSIONS

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

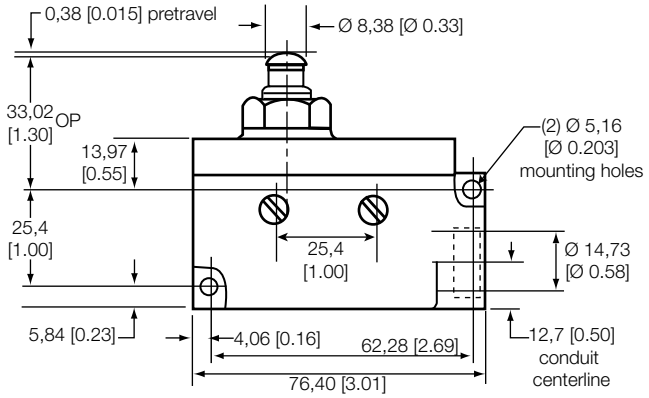


Figure 15. E7S Series, inline roller plunger, side mount

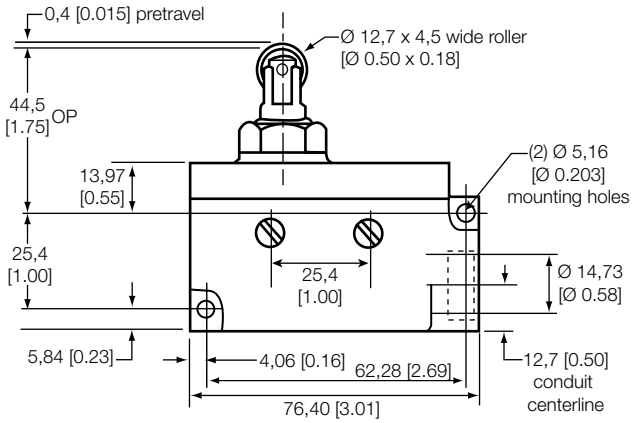


Figure 16. E7S Series, cross roller lever, side mount

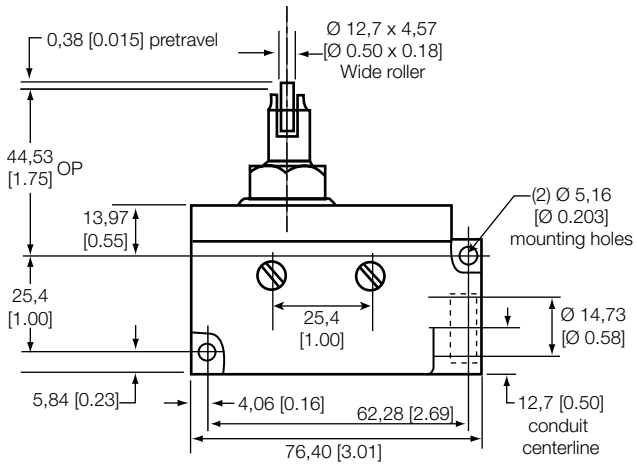
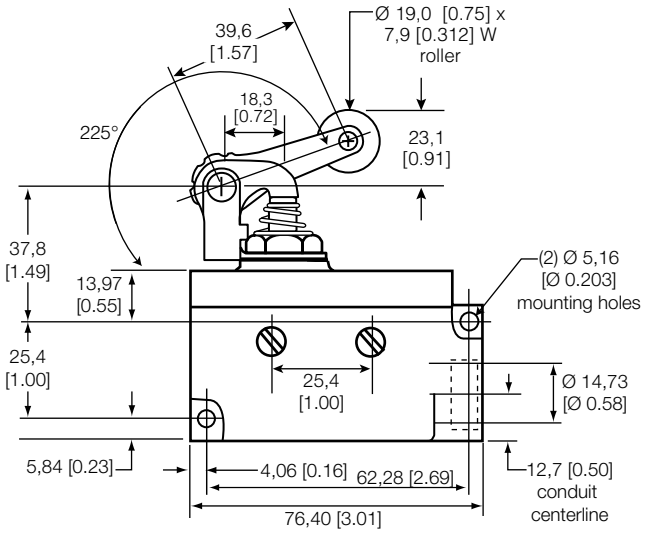


Figure 17. E7S Series, roller lever, side mount



MICRO SWITCH™ Medium-Duty Limit Switches

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
 **Pin Plunger (see Figure 18)**	**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	
	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
 **Roller Lever (see Figure 20)**	**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	
	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	

DIMENSIONS

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

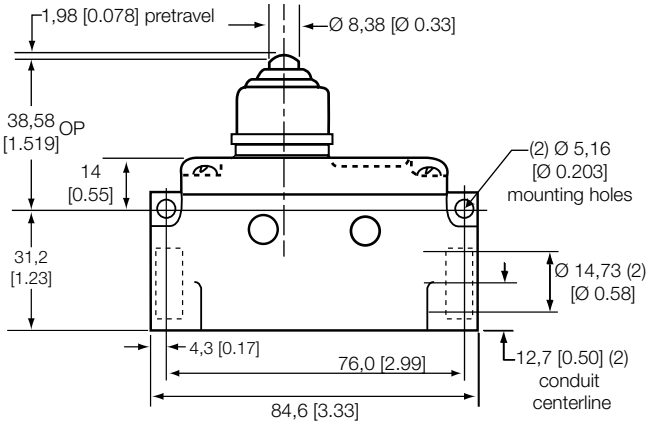


Figure 19. E9 Series, inline roller plunger, side mount with seal

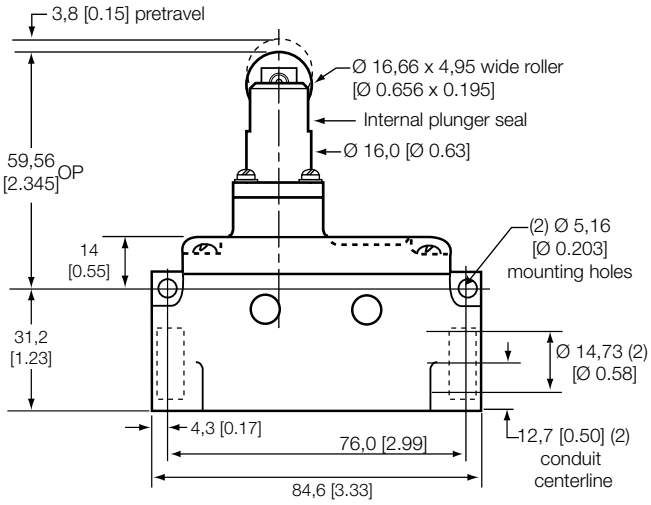


Figure 20. E9 Series, roller lever, side mount with boot seal

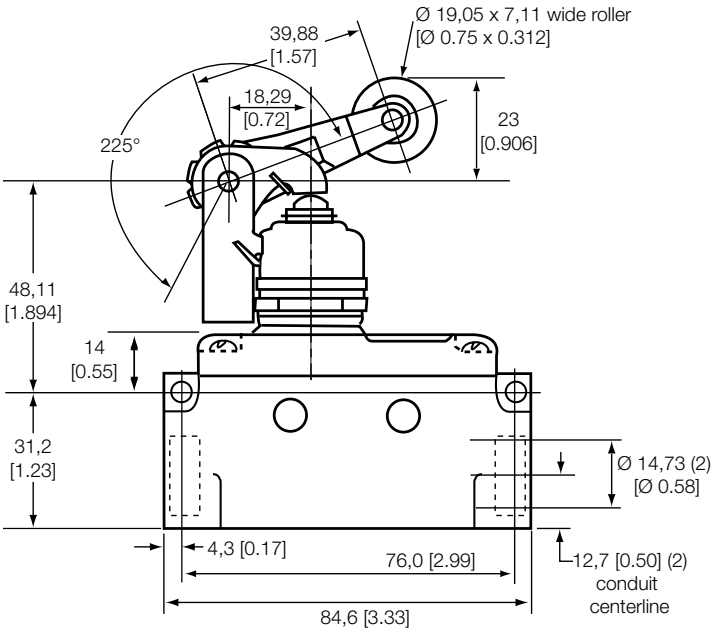
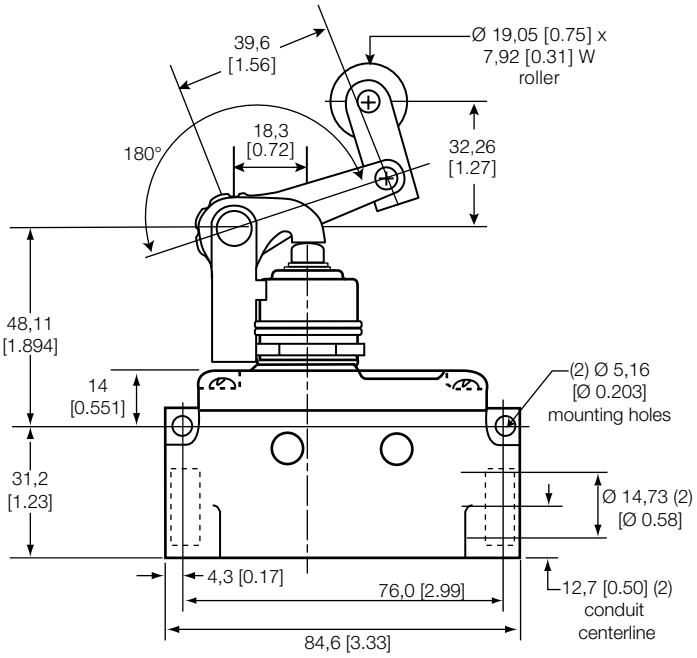


Figure 21. E9 Series, one-way roller lever, side mount with boot seal



MICRO SWITCH™ Medium-Duty Limit Switches

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
 **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	
 **Inline Roller Plunger (see Figure 23)**	**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	
	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	

DIMENSIONS

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

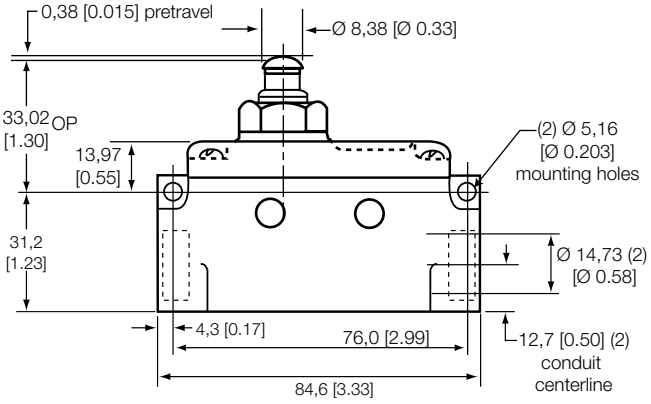


Figure 23. E9 Series, inline roller plunger, side mount

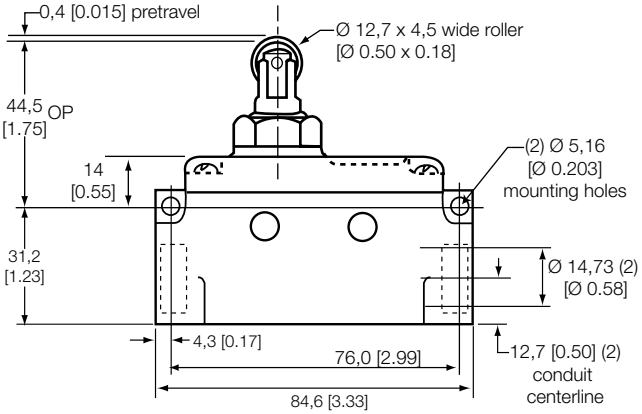


Figure 24. E9 Series, cross roller lever, side mount

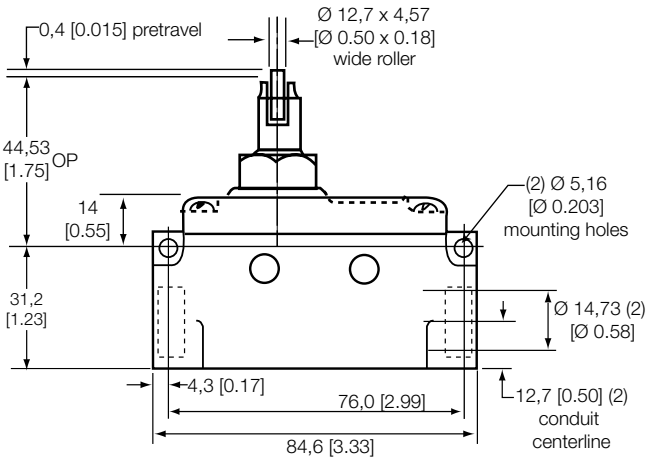
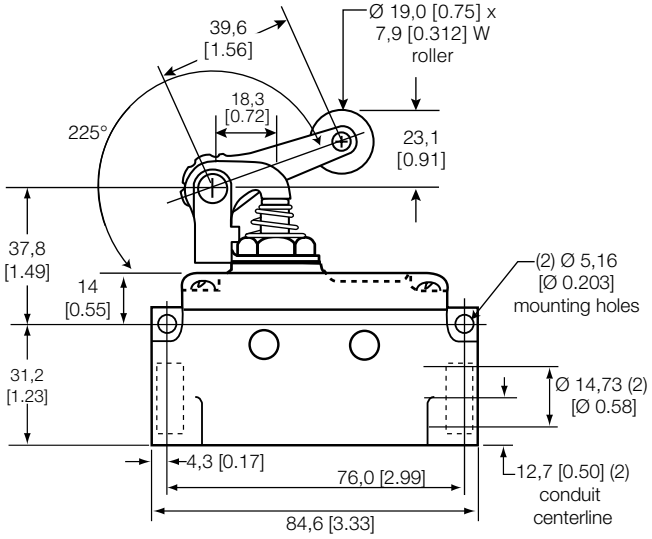


Figure 25. E9 Series, roller lever, side mount



MICRO SWITCH™ Medium-Duty Limit Switches

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
 **Pin Plunger (see Figure 26)**	**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	
	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	

DIMENSIONS

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

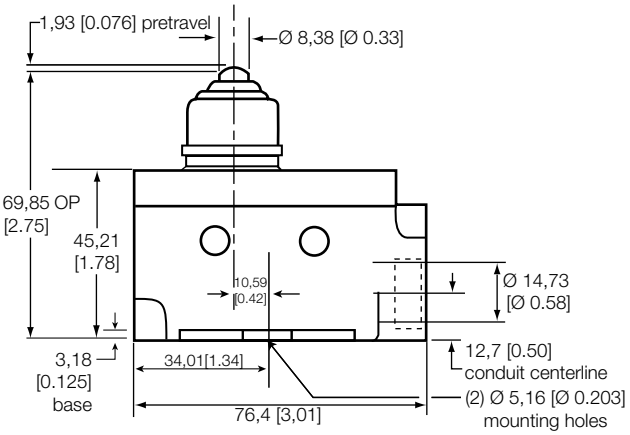
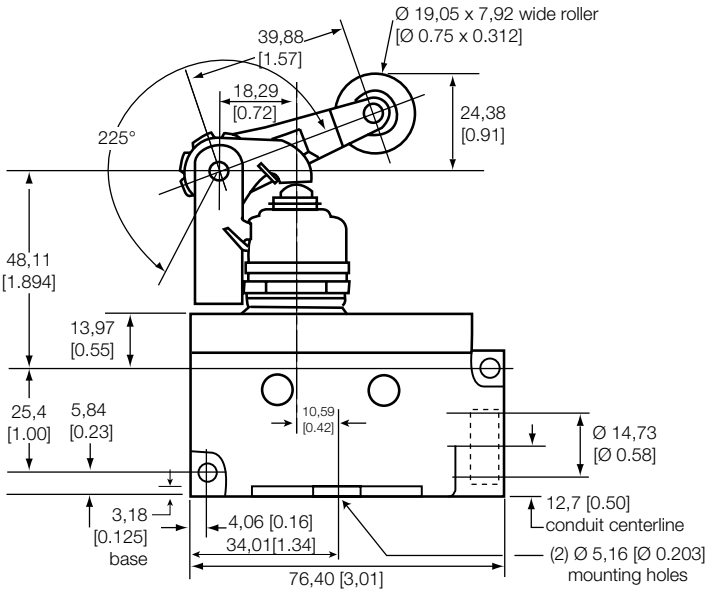


Figure 27. V7 Series, roller lever, flange mount with booth seal



E7 and 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
 **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	
 **Inline Roller Plunger (see Figure 29)**	**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	
	BZV7-2RQ8-PG	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	
 **Cross Roller Plunger (see Figure 30)**	**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	
	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	
 **Roller Lever (see Figure 31)**	**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	
	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	

MICRO SWITCH™ Medium-Duty Limit Switches

DIMENSIONS

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

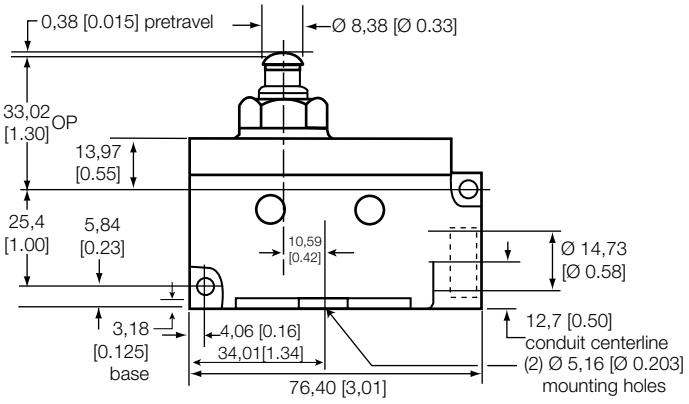


Figure 29. V7 Series, inline roller plunger, flange mount

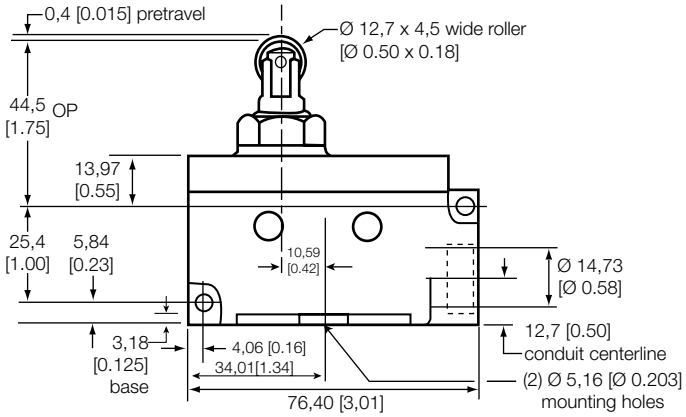


Figure 30. V7 Series, cross roller plunger, flange mount

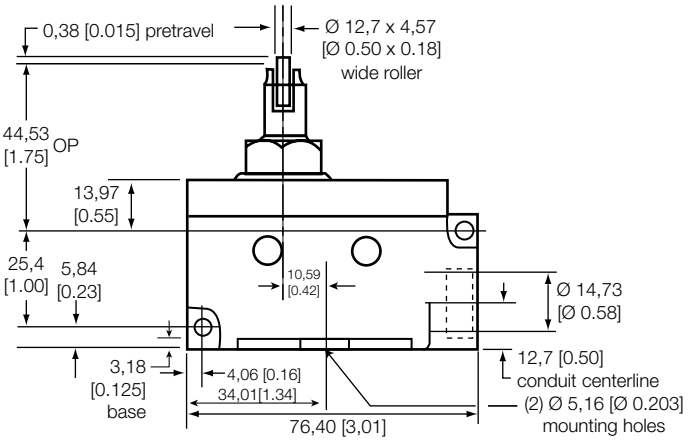
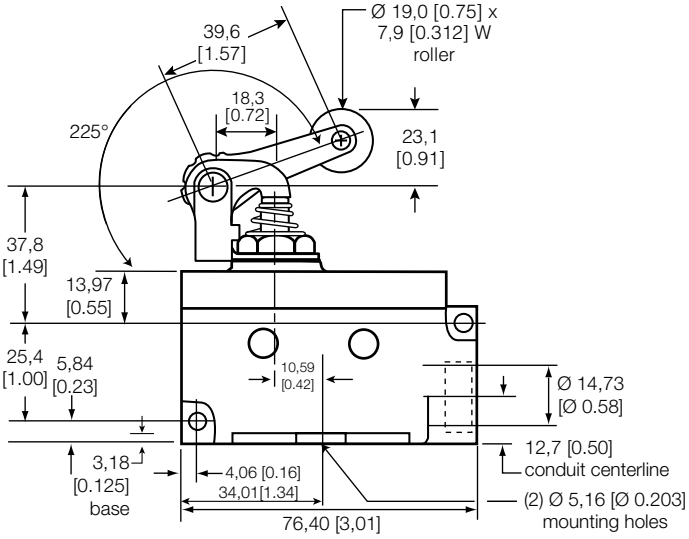


Figure 31. V7 Series, roller lever, flange mount



E7 and V7 Series

This Honeywell datasheet supports the following MICRO SWITCH™ E7/V7 Series Limit Switch Listings

BZE7-2RN2-PG
BZE7-2RN-PG
BZE7-2RQ8-PG
BZE7-2RQ81C
BZE7-2RN18-PG
BZE7-2RQN8-C
BZE7-2RQ-PG
BZE7S-2RN-PG
BZE9-2RQ-PG
BZE7-2RN18-C
BZE7-2RN18-CN14
BZE7-2RN2-6NC
BZE7-2RN28-C
BZE7-2RN28-PG
BZE7-2RN2-C
BZE7-2RN2-CN6
BZE72RNC
BZE7-2RN-C
BZE7-2RN-CN5
BZE7-2RN-D
BZE72RNPG
BZE7-2RQ2-C
BZE72RQ2PG
BZE7-2RQ2-PG
BZE7-2RQ81-C
BZE7-2RQ81-PG
BZE7-2RQ8-C
BZE7-2RQ9-C
BZE7-2RQ9-PG
BZE7-2RQ-C
BZE72RQN8C
BZE7-2RQN8-PG
BZE7S-2RN
BZE7S-2RN28-C
BZE7S-2RN2-C
BZE7S-2RN2-PG
BZE7S-2RN-C
BZE7S-2RQ2-C
BZE7S-2RQ81-C
BZE7S-2RQ8-C
BZE7S-2RQ8-PG
BZE7S-2RQ9-C
BZE7S-2RQ-C
BZE7S-2RQN8-C
BZE7S-2RQ-PG
BZE9-2RN28-PG
BZE9-2RN2-C
BZE9-2RN2-PG
BZE9-2RN-C
BZE9-2RN-PG
BZE9-2RN-PG11
BZE9-2RQ2-PG
BZE9-2RQ81-PG
BZE9-2RQ8-C
BZE9-2RQ8-PG
BZE9-2RQN8-PG
BZV7-2RN2-C
BZV7-2RN2-PG
BZV7-2RN-C
BZV7-2RN-PG
BZV7-2RQ2-C
BZV7-2RQ2-PG
BZV7-2RQ81-C
BZV7-2RQ81-PG
BZV7-2RQ8-C
BZV7-2RQ8-PG
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DTE7-2RN2-C
DTE72RN2PG
DTE7-2RN2-PG
DTE7-2RN-C
DTE72RNPG
DTE7-2RN-PG
DTE7-2RQN8-C
DTE7-2RQN8PC
DTE72RQN8PG
DTE7-2RQN8-PG
DTE7S-2RN2-C
DTE7S-2RN-C
DTE7S-2RQ9-C
DTE7S-2RQ9-PG
DTE7S-2RQN8-C

ADDITIONAL INFORMATION

The following associated literature is available on the Honeywell web site at sensing.honeywell.com:

- Product installation instructions
- Product range guide
- Product nomenclature tree
- Product application-specific information
  - Limit and enclosed switch reference standards

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

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Sensing and Control
Honeywell
1985 Douglas Drive North
Golden Valley, MN 55422
honeywell.com

002393-1-EN IL50 GLO
March 2015
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