

E6/V6 SERIES

002383

Issue 3

MICRO SWITCH Medium-Duty Light Switches



DESCRIPTION

Honeywell MICRO SWITCH E6/V6 Series medium-duty limit switches are designed for a wide variety of indoor and outdoor applications. Typical applications include equipment for commercial, industrial, transportation, and agriculture industries. The electrostatic applied epoxy coating to the zinc housings enhance the durability of the product in most environments. The E6/V6 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 (actuators with boots) E6/V6 Series switches are preferred for applications where there could be exposure to liquid and/or particulate environments. The general purpose (actuators without boot seals) E6/V6 Series switches are ideal for applications where there will not be exposure to liquid or dust environments.

The compact size of these limit switches permits installation where there is limited space available on equipment. Most SPDT (Single Pole Double Throw) E6/V6 catalog listings are certified to UL, CSA, CE and UKCA while the DPDT (Double Pole Double Throw) E6/V6 catalog listings are certified to UL and CSA.

FEATURES

- MICRO SWITCH E6/V6 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, BM, or DT basic switches to deliver precise switching of electrical and mechanical operating characteristics
- High capacity (22 A) available with BME6 Series switch
- Small footprint with easy access to wiring terminals
- Available in a configuration suited to the application with variety of actuators, circuitries, connectivities, and mounting options

POTENTIAL APPLICATIONS

Industrial

- Packaging equipment (balers, door interlocks)
- Air curtains (control of air movement)
- Conveyors (diverters, gates)

Transportation

- Construction machinery and equipment (door and panel interlocks)
- Rail maintenance equipment (door and panel interlocks, position sensing)
- Agricultural equipment (grain handling)

VALUE TO CUSTOMERS

- The E6/V6 Series are available with SPDT contacts with momentary or maintained action, or DPDT contacts with momentary action. These switches also offer gold-plated switch contacts for logic-level circuits and silver alloy contacts for power duty circuits. The internal ground screw is provided to meet electrical codes as required
- These limit switches are offered with multiple connectivity options: three different conduit offerings, four-pin "mini" style connector, pre-wired 16-gage four-conductor cable, pigtail with three-pin Deutsch connector
- E6/V6 Series switches are UL, CSA, CE and UKCA certified for most SPDT catalog listings. The DPDT catalog listings are UL and CSA certified
- The E6/V6 Series' standard temperature range is -32 °C to 71 °C [-25 °F to 160 °F] with an optional -40 °C [-40 °F] low temperature

PORTFOLIO



The E6/V6 Series are part of the MICRO SWITCH subminiature basic switch family that also includes HD, HD1, SM, SX, ZD, ZW and ZX.

Honeywell

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E6/V6 SERIES

Figure 1. MICRO SWITCH E6 Side Mount and V6 Flange Mount with Features and Options

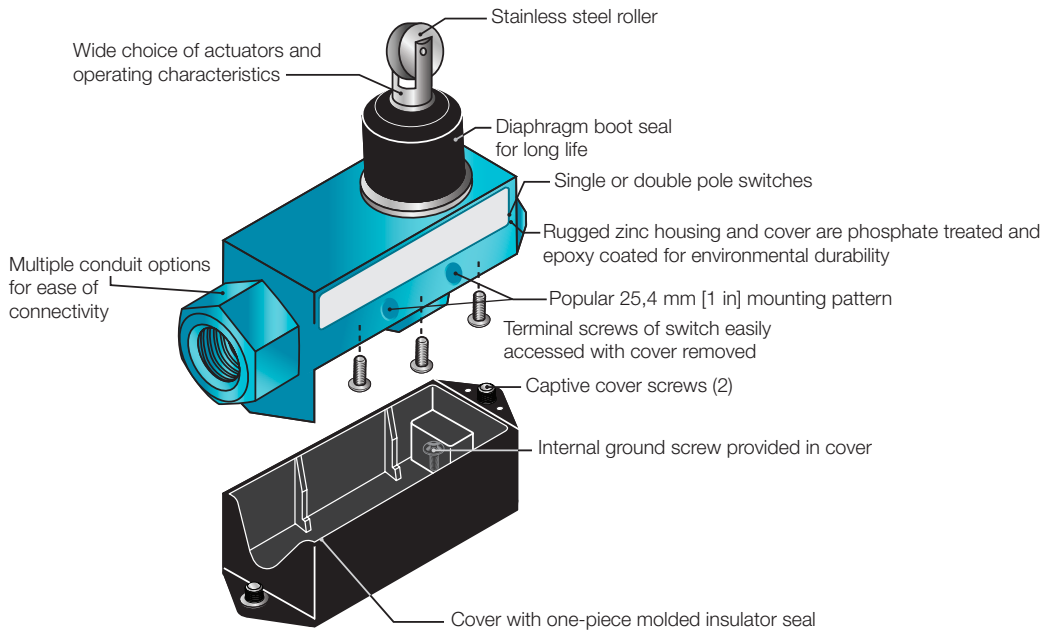


Figure 1A. E6 Side mount with boot sealed actuator (typical)

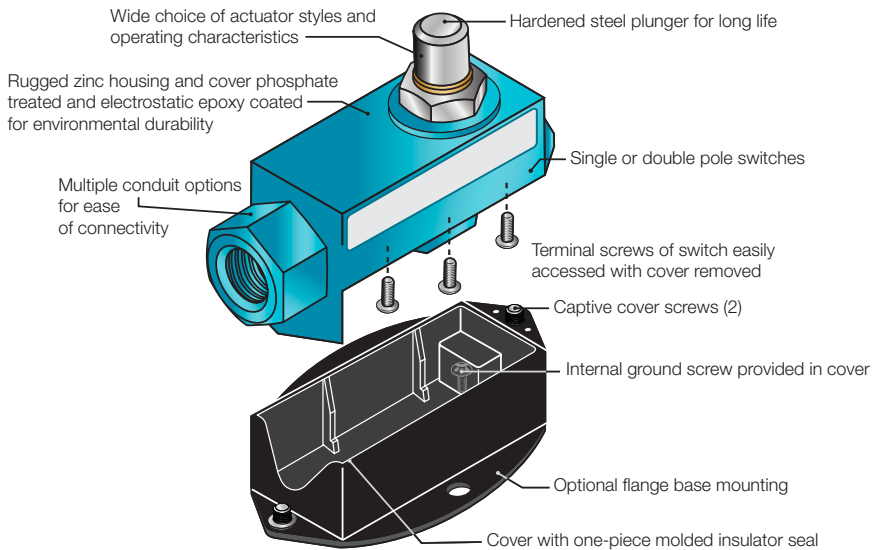


Figure 1B. V6 SFlange mount without boot sealed actuator (typical)

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES

E6/V6 SERIES

TABLE 1. SPECIFICATIONS

Characteristic	Parameter
Actuators	top pin plunger (with and without boot seal) top roller plunger, parallel with long axis of switch (with and without boot seal) cross roller plunger, perpendicular with long axis of switch (with and without boot seal) manually operated (with boot seal) roller arm, adjustable (with and without boot seal) one-way roller lever (with boot seal) low-force rod lever (with and without boot seal) wobble (with boot seal) manual reset switches: top pin plunger, top roller plunger, adjustable roller arm, wobble
Housing material	electrostatic epoxy coated zinc die-cast
Termination	see table 2 below
Sealing	actuator with boot seal: NEMA 1, 3, 4, IP66 actuator without seal boot: NEMA 1, IP40
Switching options	SPDT (snap-action contacts, 1NO/1NC) SPDT-DB (double break snap-action contacts, 1NO/1NC) DPDT (snap-action contacts, 2NO/2NC)
Mechanical endurance	up to five million cycles for BZx6 and BMx6 switches; up to two million cycles for DTx6 switches
Electrical endurance	up to 50K cycles at full rated load
Operating temperature	-32 °C to 71 °C [-25 °F to 160 °F] (standard) -40 °C to 71 °C [-40 °F to 160 °F] (optional low temperature)
Agency approvals	UL, CSA, CE, UKCA

TABLE 2. TERMINATIONS

Catalog Listing Suffixes	Description
none	0.5 - 14 NPT conduit thread
S	0.5 - 14 NPSM conduit thread
M	M20 - 1,5 mm conduit thread
R	four-pin "mini" style connector
F1	305 mm [12 in] pigtail STOW-A, three conductor, 16-gage cable with three-pin Deutsch connector
F3	914 mm [36 in] 16-gage, four-conductor STO, PVC jacketed cable

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E6/V6 SERIES

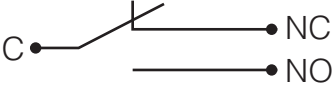
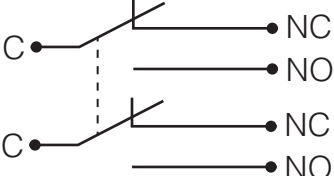
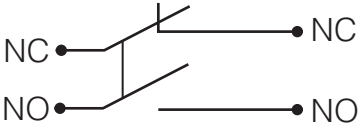
TABLE 3. ELECTRICAL RATINGS

Rating Code	UL, CSA Rating	CE UKCA Rating
A	15 A @ 125 Vac, 250 Vac or 480 Vac; 2 A @ 600 Vac; 1/8 HP @ 125 Vac, 1/4 HP @ 250 Vac; 0.5 A @ 125 Vdc, 0.25 A @ 250 Vdc	EN60947-5-1, IEC60947-5-1 AC15, B300
B	10 A @ 125 Vac, 250 Vac 0.3 A @ 125 Vdc, 0.15 A @ 250 Vdc	–
C	15 A @ 125 Vac, 250 Vac or 480 Vac; 1/4 HP @ 125 Vac, 1/2 HP @ 250 Vac; 0.5 A @ 125 Vdc, 0.25 A @ 250 Vdc	EN60947-5-1, IEC60947-5-1 AC15, B300
D	8 A @ 125 Vac, 250 Vac or 480 Vac; 2 A @ 600 Vac; 1/8 HP @ 125 Vac, 1/4 HP @ 250 Vac; 0.5 A @ 125 Vdc, 0.25 A @ 250 Vdc	EN60947-5-1, IEC60947-5-1 AC15, B300
E	10 A @ 125 Vac, 250 Vac or 480 Vac; 2 A @ 600 Vac; 1/8 HP @ 125 Vac, 1/4 HP @ 250 Vac; 0.5 A @ 125 Vdc, 0.25 A @ 250 Vdc	EN60947-5-1, IEC60947-5-1 AC15, B300
F	15 A @ 125 Vac, 250 Vac or 480 Vac; 1/4 HP @ 125 Vac, 1/2 HP @ 250 Vac; 1.0 A @ 125 Vdc, 0.5 A @ 250 Vdc	EN60947-5-1, IEC60947-5-1 AC15, B300
G	22 A @ 125 Vac, 250 Vac or 480 Vac; 1/4 HP @ 125 Vac, 1/2 HP @ 250 Vac; 0.5 A @ 125 Vdc, 0.25 A @ 250 Vdc	–
H	1A @ 125 Vac (Gold-plated contacts)	IEC 61058-1 1A, 250 Vac

TABLE 4. CE, UKCA ELECTRICAL RATING, EN60947-5-1, IEC 60947-5-1

Designation & Category	Vac	Amps Make	Amps Break	Continuous Current (A)	VA Rating Make	VA Rating Break
AC15, B300	120	30	3.0	5	3600	360
AC15, B300	240	15	1.5	5	3600	360

TABLE 5. SWITCHING

SPDT	DPDT	SPDT-DB
		

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES
E6/V6 SERIES

MICRO SWITCH E6/V6 SERIES PRODUCT NOMENCLATURE

BZ	E6	—	2	R	N		
Switch Type	Enclosure Type		Internal Basic Switch Construction	Contact	Plunger Type	Actuator Modifications ³	Additional Modifications
BZ Series Basic Switch SPDT, 15 A	E6 Side mount		For use with "X" actuator, maintained contact ² (blank)	R Standard (Single-break)	N Seal boot	Pin plunger (blank)	0.5-14 NPT conduit thread (blank)
DT Series Basic Switch DPDT, 10 A	V6 Flange mount		2 Standard	A Double-break (BZ basic switch only)	Q No seal boot	X Maintained contact with reset plunger ²	C3 Pre-leaded, 3 ft cable, conduit area epoxy sealed
BM Series Basic Switch SPDT, 22 A			7 Special ²			2 Adjustable roller lever	F1 12-inch pigtail cable with 3-pin Deutsch connect.
						4 Manual, palm button	F3 Epoxy sealed, 3 ft of cable
						7 #8 mounting screws	F5 Epoxy sealed, 5 ft of cable
						8 Roller plunger	F6 Epoxy sealed, 6 ft of cable
						80	
						18 Coil spring wobble stick	FR Epoxy sealed, 4-pin "mini style" connector
						28 One-way roller lever	R 4-pin "mini style" connector
						34 Low temp.	S 1/4-14 NPSM conduit threads
						62 Rod lever	M M20 x 1.5 mm conduit thread
						72 Gold-contact switch	
						722	
						81 Cross roller plunger	

NOTE:
1. Not all combinations of model codes are available. Contact your Honeywell rep or distributor for assistance.
2. BZ Series only.
3. More than one actuator modification may be permissible. For example, BZE6-2RN8034 is a roller plunger with low temperature seals.

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES

E6/V6 SERIES

TABLE 6. ORDER GUIDE • E6 SERIES SWITCHES, SIDE MOUNT WITH BOOT SEAL

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

	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 6]	Operate Force N [oz]	Operate Point mm [in]	Pretravel mm [in] max.	Over Travel mm [in] min.	Differential Travel mm [in] max.	Comments
 Pin Plunger	BZE6-2RN	BZ, SPDT	A, 15 A	2,50 to 6,67 [9 to 24]	43,66 ±0,76 [1.719 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	
	BZE6-2RN-F1	BZ, SPDT	E, 10 A	2,50 to 6,67 [9 to 24]	43,66 ±0,76 [1.719 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	12 in. pigtail, 3 wire STO cable w/ Deutsch connector
	BZE6-2RN-F3	BZ, SPDT	E, 10 A	2,50 to 6,67 [9 to 24]	43,66 ±0,76 [1.719 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	Epoxy sealed with 36 in. 4 wire STO cable
	BZE6-2RN-M	BZ, SPDT	A, 15 A	2,50 to 6,67 [9 to 24]	43,66 ±0,76 [1.719 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	M20-1,5 conduit thread
	BZE6-2RN-R	BZ, SPDT	D, 8 A	2,50 to 6,67 [9 to 24]	43,66 ±0,76 [1.719 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	4-pin "mini" style connector
	BZE6-2RN-S	BZ, SPDT	A, 15 A	2,50 to 6,67 [9 to 24]	43,66 ±0,76 [1.719 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	0.5-14 NPSM conduit thread
	BZE6-2RN7	BZ, SPDT	A, 15 A	2,50 to 6,67 [9 to 24]	43,66 ±0,76 [1.719 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	#8 mounting screws
	BZE6-2RN34	BZ, SPDT	A, 15 A	2,50 to 6,67 [9 to 24]	43,66 ±0,76 [1.719 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	Low temperature -40 °C [-40 °F]
	BZE6-2RN72	BZ, SPDT	H, 1 A	2,50 to 6,67 [9 to 24]	43,66 ±0,76 [1.719 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	Gold-plated contacts
	BZE6-2AN	BZ, SPDT, Double break	F, 15 A	2,50 to 6,67 [9 to 24]	43,66 ±0,76 [1.719 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	Recommended for dc applications
 Inline Roller Plunger	BME6-2RN	BM, SPDT	G, 22 A	2,50 to 6,67 [9 to 24]	43,66 ±0,76 [1.719 ±0.030]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	Higher current ac applications
	DTE6-2RN	DT, DPDT	B, 10 A	7,23 to 16,4 [26 to 59]	46,02 ±0,76 [1.812 ±0.030]	2,80 [0.110]	3,17 [0.125]	1,52 [0.060]	Double pole applications
	BZE6-2RN80	BZ, SPDT	A, 15 A	2,50 to 6,67 [9 to 24]	56,7 ±1,14 [2.232 ±0.045]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	
	BZE6-2RN8034	BZ, SPDT	A, 15 A	2,50 to 6,67 [9 to 24]	56,7 ±1,14 [2.232 ±0.045]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	Low temperature -40 °C [-40 °F]
 Cross Roller Plunger	DTE6-2RN80	DT, DPDT	B, 10 A	5,56 to 13,3 [20 to 48]	59,6 ±1,0 [2.345 ±0.040]	2,80 [0.110]	3,17 [0.125]	1,52 [0.060]	Double pole applications
	DTE6-2RN8034-M	DT, DPDT	B, 10 A	5,56 to 13,3 [20 to 48]	59,6 ±1,0 [2.345 ±0.040]	2,80 [0.110]	3,17 [0.125]	1,52 [0.060]	Low temp. -40 °C [-40 °F], M20 -1,5 conduit, Double pole applications
	BZE6-2RN81	BZ, SPDT	A, 15 A	2,50 to 6,67 [9 to 24]	56,7 ±1,14 [2.232 ±0.045]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E6/V6 SERIES

TABLE 6. (CONTINUED) ORDER GUIDE • E6 SERIES SWITCHES, SIDE MOUNT WITH BOOT SEAL

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

	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 6]	Operate Force N [oz]	Operate Point mm [in]	Pretravel mm [in] max.	Over Travel mm [in] min.	Differential Travel mm [in] max.	Comments
 Roller Lever	BZE6-2RN2	BZ, SPDT	A, 15 A	2,78 to 5,57 [10 to 20]	71,42 Ref [2.812]	4,83 [0.188]	5,56 [0.219]	0,15 [0.006]	
	BZE6-2RN2-S	BZ, SPDT	A, 15 A	2,78 to 5,57 [10 to 20]	71,42 Ref [2.812]	4,83 [0.188]	5,56 [0.219]	0,15 [0.006]	0.5-14 NPSM conduit thread
	BZE6-2RN234	BZ, SPDT	A, 15 A	2,78 to 5,57 [10 to 20]	71,42 Ref [2.812]	4,83 [0.188]	5,56 [0.219]	0,15 [0.006]	Low temperature -40 °C [-40 °F]
	BZE6-2RN272	BZ, SPDT	H, 1 A	2,78 to 5,57 [10 to 20]	71,42 Ref [2.812]	4,83 [0.188]	5,56 [0.219]	0,15 [0.006]	Gold-plated contacts
	DTE6-2RN2	DT, DPDT	B, 10 A	2,78 to 8,35 [10 to 30]	69,44 Ref [2.734]	6,76 [0.266]	5,56 [0.219]	4,19 [0.165]	Double pole applications
 One-way Roller Lever	BZE6-2RN28	BZ, SPDT	A, 15 A	2,22 to 5,56 [8 to 20]	-	5,94 [0.234]	5,56 [0.219]	0,15 [0.006]	
	BZE6-2RN28-S	BZ, SPDT	A, 15 A	2,22 to 5,56 [8 to 20]	-	5,94 [0.234]	5,56 [0.219]	0,15 [0.006]	0.5-14 NPSM conduit thread
	DTE6-2RN28	DT, DPDT	B, 10 A	5,56 to 10 [20 to 36]	-	7,92 [0.312]	5,56 [0.219]	4,19 [0.165]	Double pole applications
 Low-force Rod Lever	BZE6-2RN62	BZ, SPDT	A, 15 A	0,83 to 1,95 [3 to 7]	-	18,24 [0.718]	21,29 [838]	5,82 [0.229]	
 Coil-spring Wobble	BZE6-2RN18	BZ, SPDT	A, 15 A	1,95 N max. [7.0 oz max.]	-	15°	20° Ref	-	
	BZE6-2RN1872	BZ, SPDT	H, 1 A	1,95 N max. [7.0 oz max.]	-	15°	20° Ref	-	Gold-plated contacts
 Manual Palm Button	BZE6-2RN4	BZ, SPDT	A, 15 A	2,78 to 5,57 [10 to 20]	80,0 Ref [3.15]	4,83 [0.188]	5,56 [0.219]	0,15 [0.006]	

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES

E6/V6 SERIES

TABLE 6. (CONTINUED) ORDER GUIDE • E6 SERIES SWITCHES, SIDE MOUNT WITH BOOT SEAL

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

	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 6]	Operate Force N [oz]	Operate Point mm [in]	Pretravel mm [in] max.	Over Travel mm [in] min.	Differential Travel mm [in] max.	Comments
 Pin Plunger w Manual Reset	BZE6-RNX1	BZ, SPDT	A, 15 A	1,67 to 5,56 [6 to 20]	43,64 ± 0,76 [1.718 ± 0.030]	1,98 [0.078]	5,56 [0.219]	NA	Reset position: 53,19 [2.094] max.
 Inline roller plunger w/ manual reset	BZE6-RN80X2	BZ, SPDT	A, 15 A	5,85 to 15,57 [21 to 56]	56,70 ± 1,14 [2.232 ± 0.045]	1,98 [0.078]	4,75 [0.187]	NA	Reset position: 53,19 [2.094] max.
 Roller Lever w/ Manual Reset	BZE6-RN2X1	BZ, SPDT	A, 15 A	4,45 N max. [16 oz max.]	71,42 Ref [2.812 in.]	4,83 [0.188]	5,56 [0.219]	NA	Reset position: 50,40 ± 1,14 [1.984 ± 0.045]
 Coil Spring Wobble w/ Manual Reset	BZE6-RN18X1	BZ, SPDT	A, 15 A	1,95 N max. [7.0 oz max.]	-	15°	20° Ref	NA	Reset position: 50,40 ± 1,14 [1.984 ± 0.045]

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E6/V6 SERIES

MICRO SWITCH E6/V6 SERIES DIMENSIONS

Figure 2. Top pin plunger, side mount with boot seal

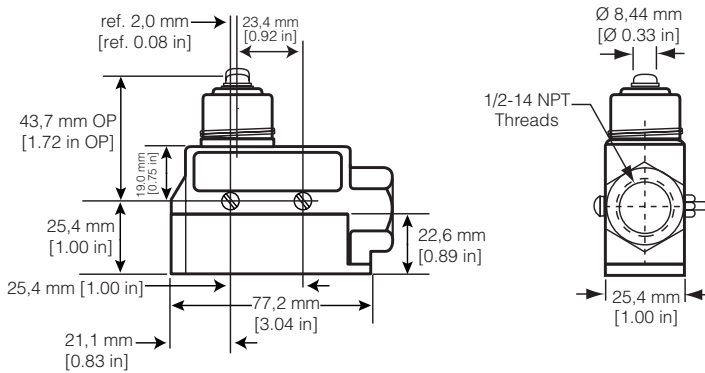


Figure 3. Top roller plunger, side mount with boot seal

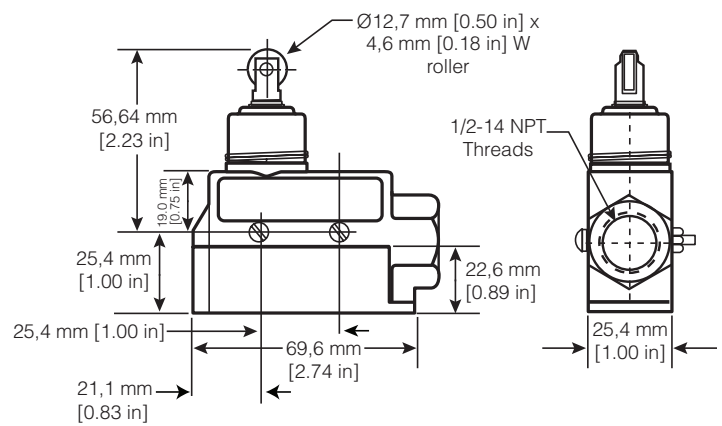


Figure 4. Cross roller plunger, side mount with boot seal

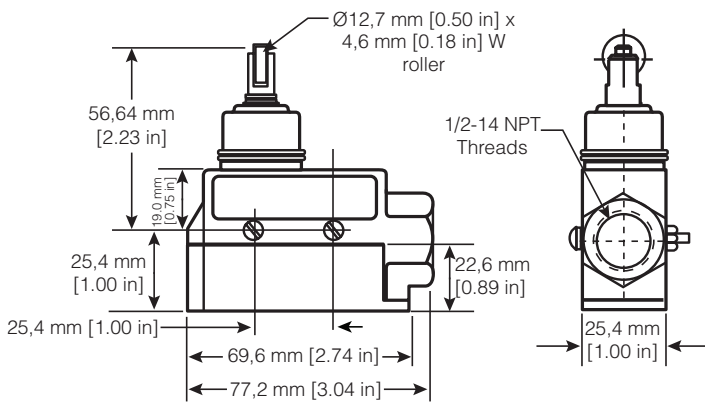


Figure 5. Roller lever, adjustable, side mount with boot seal

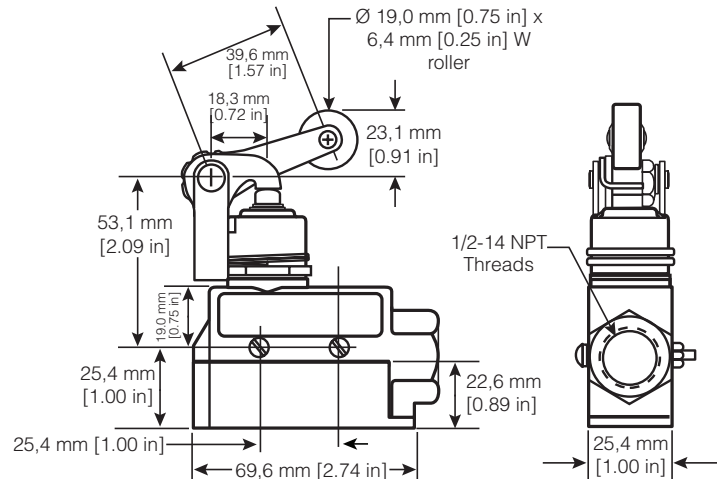


Figure 6. One-way roller lever, side mount with boot seal

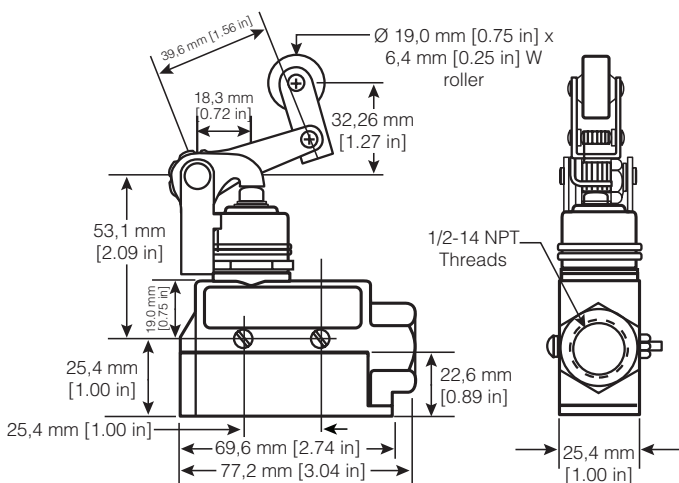
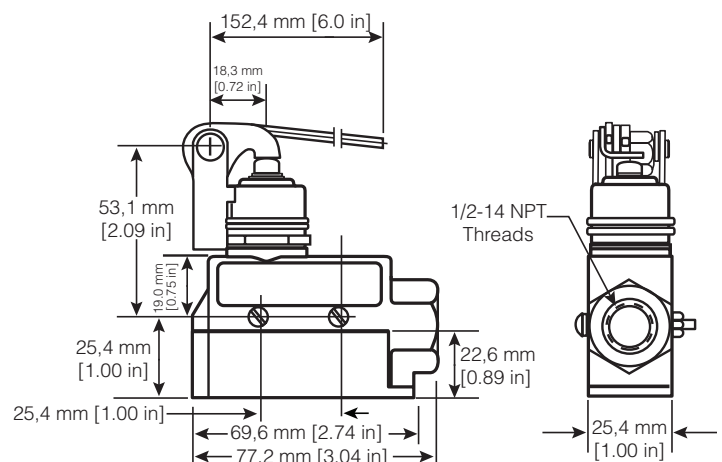


Figure 7. Rod lever, side mount with boot seal



MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E6/V6 SERIES

Figure 8. Manual palm button, side mount with boot seal

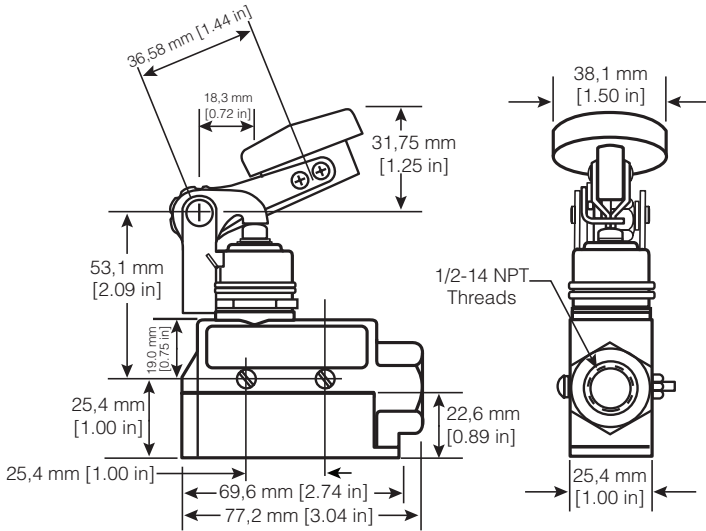


Figure 10. Top pin plunger, reset, side mount with boot seal

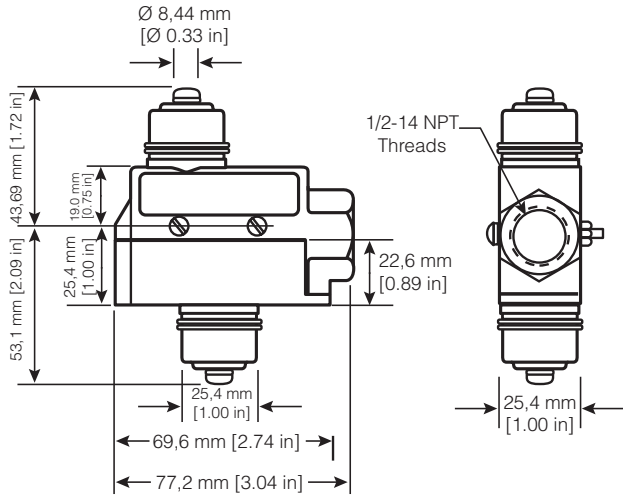


Figure 12. Roller lever plunger, reset, side mount with boot seal

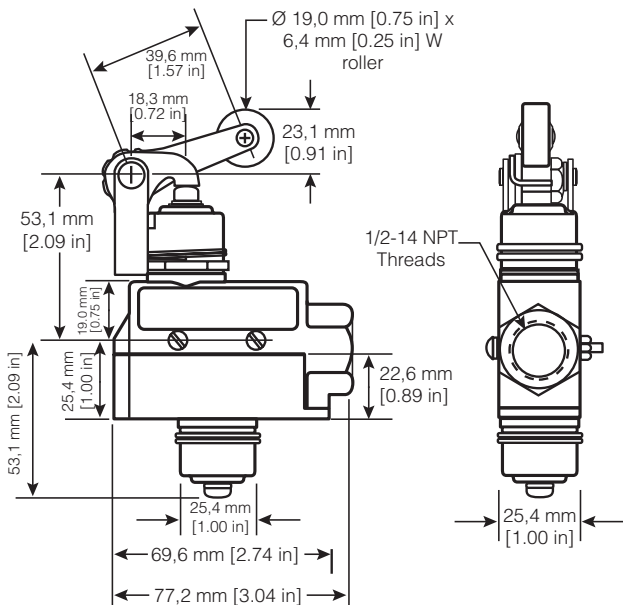


Figure 9. Coil wobble, side mount with boot seal

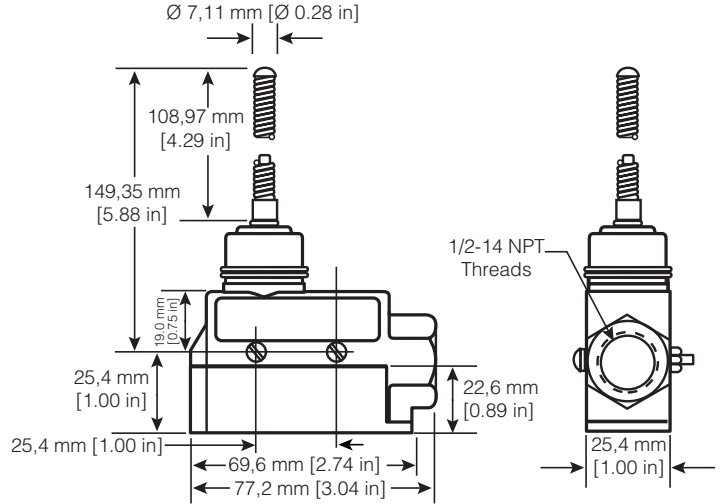


Figure 11. Top roller plunger, reset, side mount with boot seal

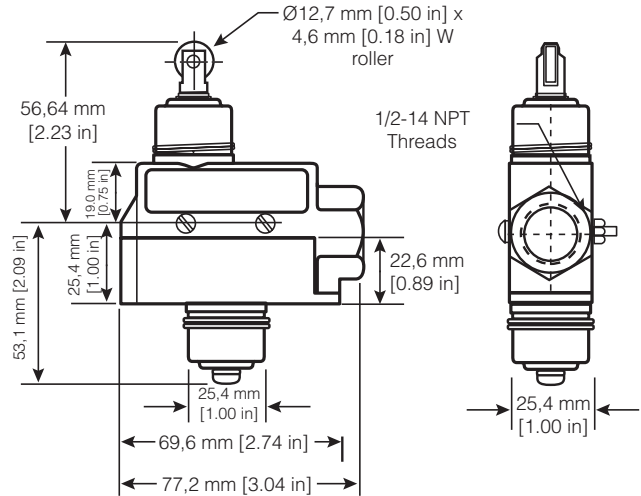
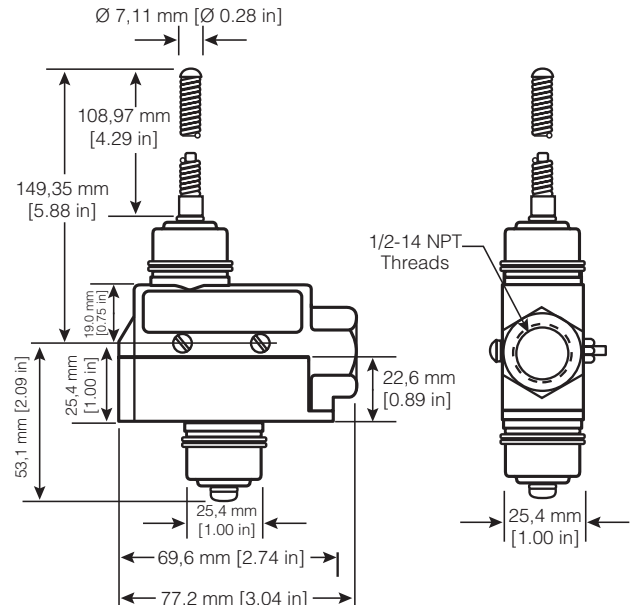


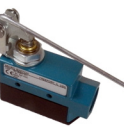
Figure 13. Coil wobble plunger, reset, side mount with boot seal



MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E6/V6 SERIES

TABLE 7. ORDER GUIDE • E6 SERIES SWITCHES, SIDE MOUNT WITHOUT BOOT SEAL

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

	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 6]	Operate Force N [oz]	Operate Point mm [in]	Pretravel mm [in] max.	Over Travel mm [in] min.	Differential Travel mm [in] max.	Comments
 Pin Plunger	BZE6-2RQ	BZ, SPDT	A, 15 A	2,50 to 3,61 [9 to 13]	38,1 ±0,76 [1.5 ±0.030]	0,38 [0.015]	5,56 [0.219]	0,05 [0.002]	
	BZE6-2RQ-S	BZ, SPDT	A, 15 A	2,50 to 3,61 [9 to 13]	38,1 ±0,76 [1.5 ±0.030]	0,38 [0.015]	5,56 [0.219]	0,05 [0.002]	0.5-14 NPSM conduit thread
	BZE6-2RQ7	BZ, SPDT	A, 15 A	2,50 to 3,61 [9 to 13]	38,1 ±0,76 [1.5 ±0.030]	0,38 [0.015]	5,56 [0.219]	0,05 [0.002]	#8 mounting screws
	BZE6-2RQ72	BZ, SPDT	H, 1 A	2,50 to 3,61 [9 to 13]	38,1 ±0,76 [1.5 ±0.030]	0,38 [0.015]	5,56 [0.219]	0,05 [0.002]	Gold-plated contacts
	BME6-2RQ	BM, SPDT	G, 22 A	2,50 to 3,61 [9 to 13]	38,1 ±0,76 [1.5 ±0.030]	0,38 [0.015]	5,56 [0.219]	0,05 [0.002]	Higher current ac applications
	DTE6-2RQ	DT, DPDT	B, 10 A	5,56 to 11,12 [20 to 40]	47,88 ±0,76 [1.885 ±0.030]	3,81 [0.150]	2,24 [0.088]	1,52 [0.060]	Double pole applications
 Inline Roller Plunger	BZE6-2RQ8	BZ, SPDT	A, 15 A	2,50 to 3,61 [9 to 13]	49,61 ±1,14 [1.953 ±0.045]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	
	BZE6-2RQ8-S	BZ, SPDT	A, 15 A	2,50 to 3,61 [9 to 13]	49,61 ±1,14 [1.953 ±0.045]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	0.5-14 NPSM conduit thread
	BZE6-2RQ8722	BZ, SPDT	H, 1 A	2,50 to 3,61 [9 to 13]	49,61 ±1,14 [1.953 ±0.045]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	Gold-plated contacts
	BZE6-2RQ81	BZ, SPDT	A, 15 A	2,50 to 3,61 [9 to 13]	49,61 ±1,14 [1.953 ±0.045]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	
 Cross Roller Plunger	BZE6-2RQ81-S	BZ, SPDT	A, 15 A	2,50 to 3,61 [9 to 13]	49,61 ±1,14 [1.953 ±0.045]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	0.5-14 NPSM conduit thread
	BME6-2RQ81	BM, SPDT	G, 22 A	2,50 to 3,61 [9 to 13]	49,61 ±1,14 [1.953 ±0.045]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	Higher current ac applications
	DTE6-2RQ81	DT, DPDT	B, 10 A	6,67 to 13,34 [24 to 48]	49,61 ±1,14 [1.953 ±0.045]	3,58 [0.141]	3,18 [0.125]	1,52 [0.060]	Double pole applications
	BZE6-2RQ2	BZ, SPDT	A, 15 A	2,78 to 5,00 [10 to 18]	61,11 Ref [2.406]	4,83 [0.188]	5,56 [0.219]	0,15 [0.006]	
 Roller Lever	BZE6-2RQ2-S	BZ, SPDT	A, 15 A	2,78 to 5,00 [10 to 18]	61,11 Ref [2.406]	4,83 [0.188]	5,56 [0.219]	0,15 [0.006]	0.5-14 NPSM conduit thread
	DTE6-2RQ2	DT, DPDT	B, 10 A	2,78 to 5,57 [10 to 20]	69,44 Ref [2.734]	6,76 [0.266]	5,56 [0.219]	4,19 [0.165]	Double pole applications
	BZE6-2RQ28	BZ, SPDT	A, 15 A	2,22 to 5,00 [8 to 18]	-	5,94 [0.234]	5,56 [0.219]	0,15 [0.006]	
	BZE6-2RQ62	BZ, SPDT	A, 15 A	0,56 to 1,39 [2 to 5]	-	18,24 [0.718]	21,29 [0.838]	5,82 [0.229]	
 One-way Roller Lever	BZE6-2RQ62-S	BZ, SPDT	A, 15 A	0,56 to 1,39 [2 to 5]	-	18,24 [0.718]	21,29 [0.838]	5,82 [0.229]	0.5-14 NPSM conduit thread
	DTE6-2RQ62	DT, DPDT	B, 10 A	1,39 to 3,34 [5 to 12]	-	27,94 [1.100]	21,29 [0.838]	14,22 [0.560]	Double pole applications
	BZE6-2RQ62	BZ, SPDT	A, 15 A	0,56 to 1,39 [2 to 5]	-	18,24 [0.718]	21,29 [0.838]	5,82 [0.229]	
 Low-force Rod Lever	BZE6-2RQ62	BZ, SPDT	A, 15 A	0,56 to 1,39 [2 to 5]	-	18,24 [0.718]	21,29 [0.838]	5,82 [0.229]	
	DTE6-2RQ62	DT, DPDT	B, 10 A	1,39 to 3,34 [5 to 12]	-	27,94 [1.100]	21,29 [0.838]	14,22 [0.560]	Double pole applications

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES

E6/V6 SERIES

TABLE 7. (CONTINUED) ORDER GUIDE • E6 SERIES SWITCHES, SIDE MOUNT WITHOUT BOOT SEAL

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

	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 6]	Operate Force N [oz]	Operate Point mm [in]	Pretravel mm [in] max.	Over Travel mm [in] min.	Differential Travel mm [in] max.	Comments
 Manual Palm Button	BZE6-2RQ4	BZ, SPDT	A, 15 A	2,78 to 5,00 [10 to 18]	-	-	5,56 [0.219]	0,15 [0.006]	
 Pin Plunger w Manual Reset	BZE6-RQX2	BZ, SPDT	A, 15 A	1,67 to 2,64 [6 to 9.5]	38,1 ±0,76 [1.5 ±0.030]	0,30 [0.012]	4,75 [0.187]	NA	Reset position: 46,84 [1.844] max.
 Inline Roller Plunger w/ Manual Reset	BZE6-RQ8X2	BZ, SPDT	A, 15 A	1,47 to 2,64 [6 to 9.5]	51,18 ± 1,14 [2.015 ±0.045]	0,30 [0.012]	3,56 [0.140]	NA	Reset position: 46,84 [1.844] max.
 Cross Roller Plunger w/ Manual Reset	BZE6-RQ81X2	BZ, SPDT	A, 15 A	1,47 to 2,64 [6 to 9.5]	51,18 ± 1,14 [2.015 ±0.045]	0,30 [0.012]	3,56 [0.140]	NA	Reset position: 46,84 [1.844] max.
 Roller Lever w/ Manual Reset	BZE6-RQ2X2	BZ, SPDT	A, 15 A	3,34 approx. [12 oz]	61,11 Ref [2.406]	4,83 [0.188]	5,56 [0.219]	NA	Reset position: 46,84 [1.844] max.

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E6/V6 SERIES

MICRO SWITCH E6/V6 SERIES DIMENSIONS

Figure 14. Top pin plunger, side mount

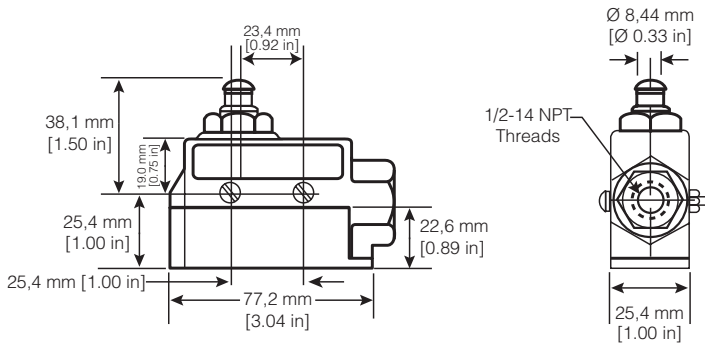


Figure 15. Top roller plunger, side mount

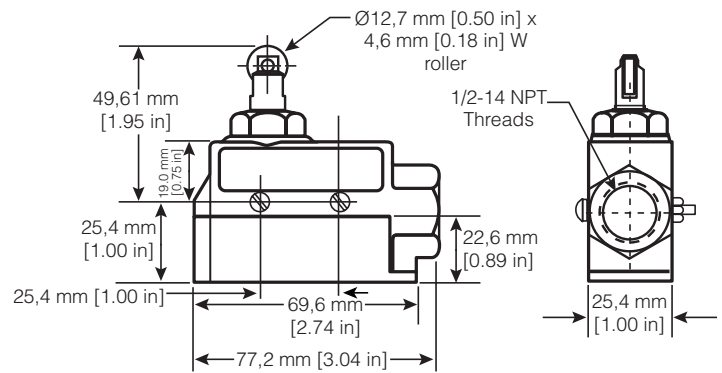


Figure 16. Cross roller plunger, side mount

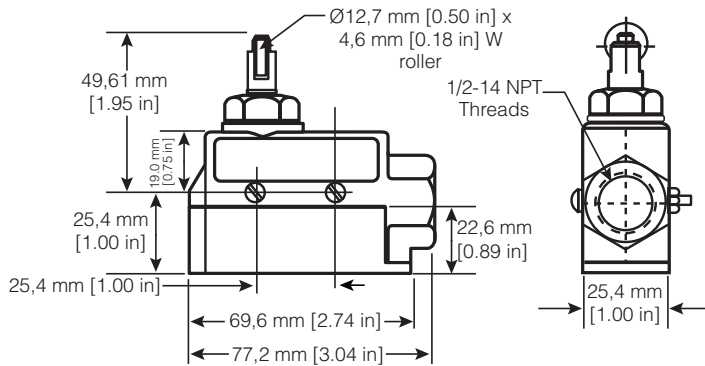


Figure 17. Roller lever, adjustable, side mount

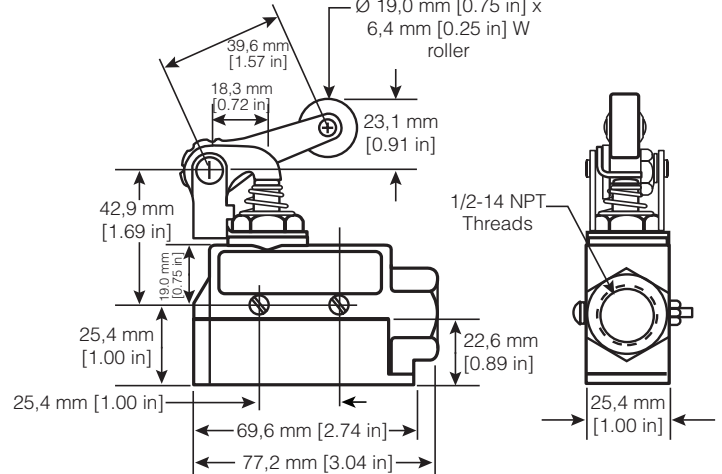


Figure 18. One-way roller lever, side mount

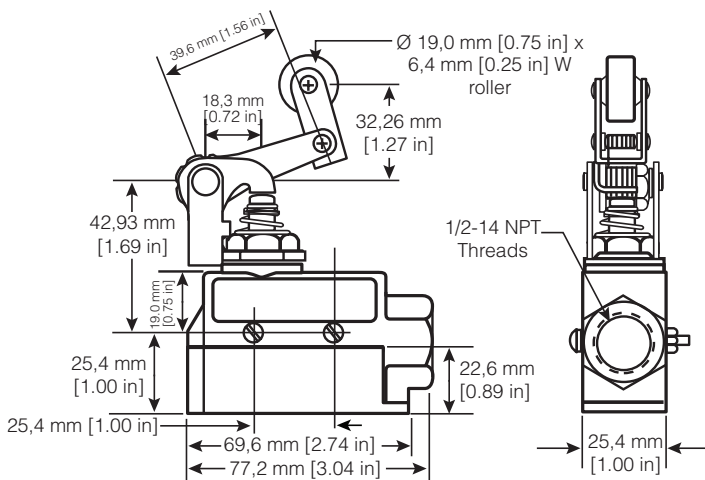
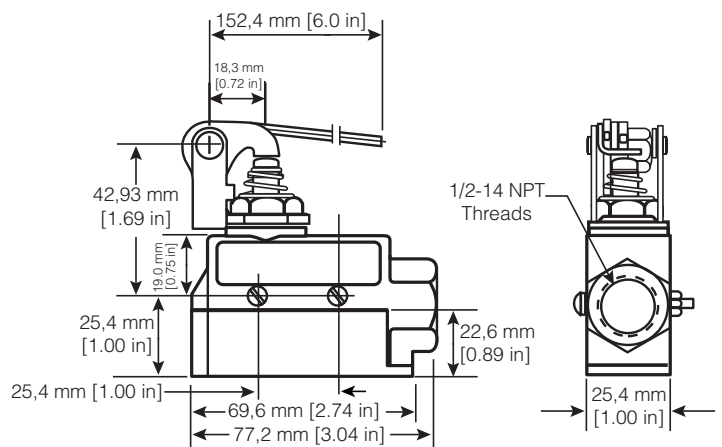


Figure 19. Rod lever, side mount



MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E6/V6 SERIES

MICRO SWITCH E6/V6 SERIES DIMENSIONS

Figure 20. Manual palm button, side mount

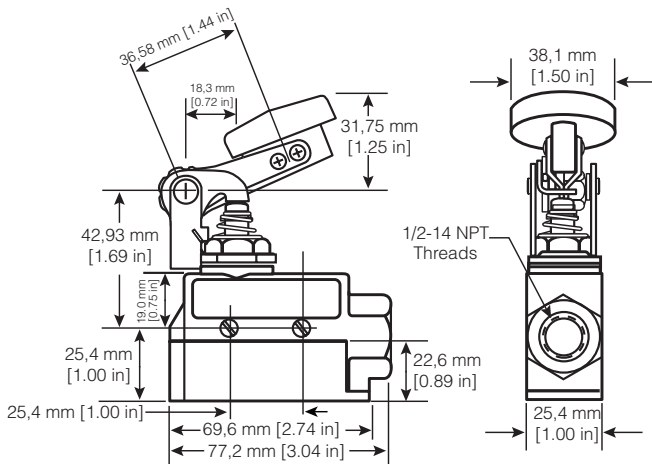


Figure 21. Top pin plunger, reset, side mount

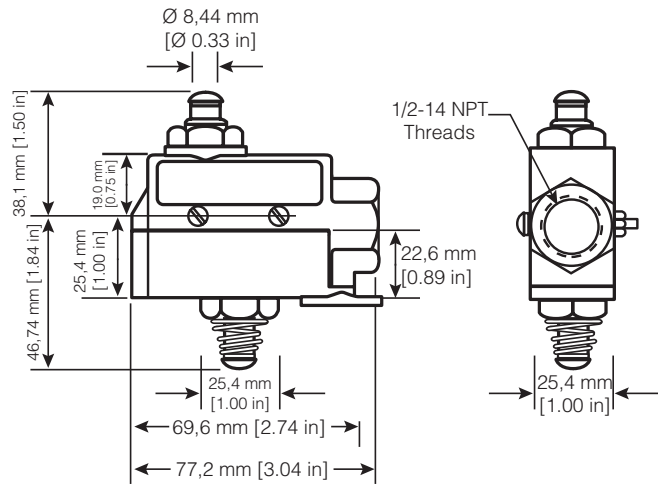


Figure 22. Roller plunger, reset, side mount

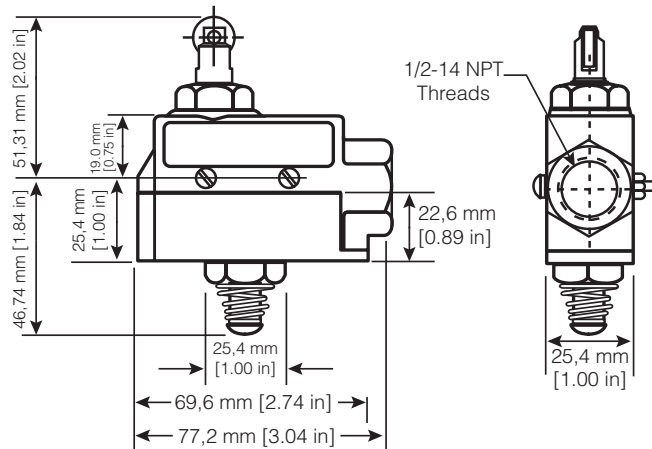


Figure 23. Cross roller plunger, reset, side mount

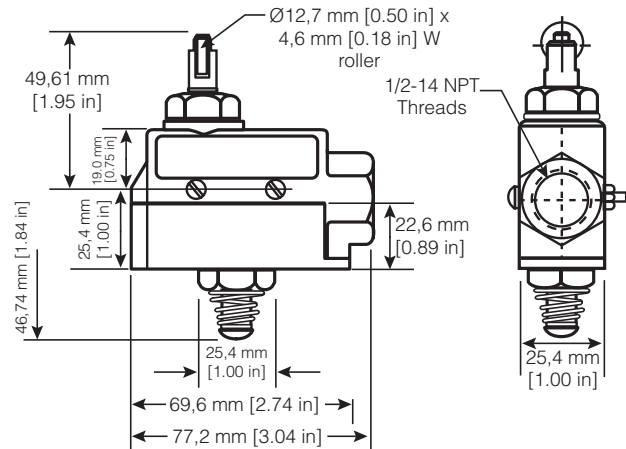
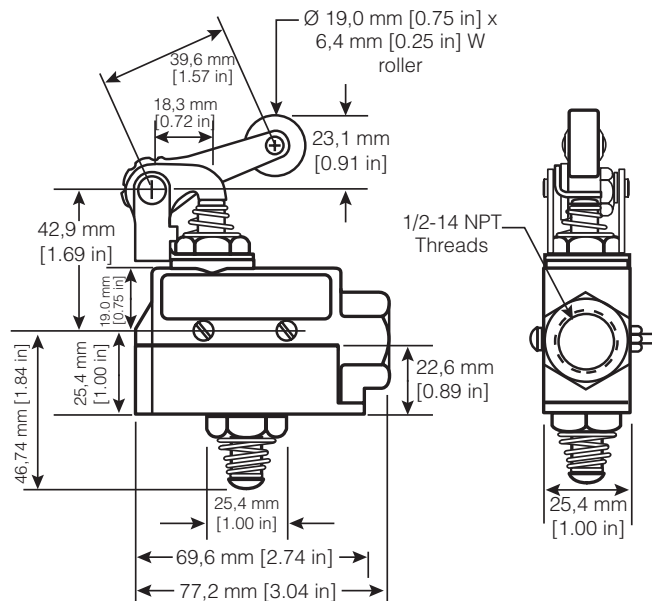


Figure 24. Roller lever, reset, side mount



MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES

E6/V6 SERIES

TABLE 8. ORDER GUIDE • V6 SERIES SWITCHES, FLANGE MOUNT WITH BOOT SEAL

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

	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 6]	Operate Force N [oz]	Operate Point mm [in]	Pretravel mm [in] max.	Over Travel mm [in] min.	Differential Travel mm [in] max.	Comments
 Pin plunger	BZV6-2RN	BZ, SPDT	A, 15 A	2,50 to 6,67 [9 to 24]	69,09 ±1,52 [2.720 ±0.060]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	
	BZV6-2RN-S	BZ, SPDT	A, 15 A	2,50 to 6,67 [9 to 24]	69,09 ±1,52 [2.720 ±0.060]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	0.5-14 NPSM conduit thread
	BZV6-2RN34	BZ, SPDT	A, 15 A	2,50 to 6,67 [9 to 24]	69,09 ±1,52 [2.720 ±0.060]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	Low temperature -40 °C [-40 °F]
	DTV6-2RN	DT, DPDT	B, 10 A	7,23 to 16,4 [26 to 59]	71,42 ±0,76 [2.812 ±0.030]	2,79 [0.110]	3,18 [0.125]	1,52 [0.060]	Double pole applications
 Inline Roller Plunger	BZV6-2RN80	BZ, SPDT	A, 15 A	2,50 to 6,67 [9 to 24]	82,09 ±1,14 [3.232 ±0.045]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	
 Cross Roller Plunger	BZV6-2RN81	BZ, SPDT	A, 15 A	2,50 to 6,67 [9 to 24]	82,09 ±1,14 [3.232 ±0.045]	1,98 [0.078]	5,56 [0.219]	0,05 [0.002]	
 Roller Lever	BZV6-2RN2	BZ, SPDT	A, 15 A	2,78 to 5,57 [10 to 20]	96,82 Ref [3.812]	4,83 [0.188]	5,56 [0.219]	0,15 [0.006]	
	DTV6-2RN2	DT, DPDT	B, 10 A	2,78 to 8,35 [10 to 30]	94,84 Ref [3.734]	6,76 [0.266]	5,56 [0.219]	4,19 [0.165]	Double pole applications
 One-way Roller Lever	BZV6-2RN28	BZ, SPDT	A, 15 A	2,22 to 5,56 [8 to 20]	-	5,94 [0.234]	5,56 [0.219]	0,15 [0.006]	
 Low-force Rod Lever	BZV6-2RN62	BZ, SPDT	A, 15 A	0,83 to 1,95 [3 to 7]	-	18,24 [0.718]	21,29 [0.838]	5,82 [0.229]	

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES

E6/V6 SERIES

TABLE 8. (CONTINUED) ORDER GUIDE • V6 SERIES SWITCHES, FLANGE MOUNT WITH BOOT SEAL

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

	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 6]	Operate Force N [oz]	Operate Point mm [in]	Pretravel mm [in] max.	Over Travel mm [in] min.	Differential Travel mm [in] max.	Comments
 Coil-spring Wobble	BZV6-2RN18	BZ, SPDT	A, 15 A	1,95 N. max. [7.0 oz max.]	-	15°	20° Ref	-	
 Manual Palm Button	BZV6-2RN4	BZ, SPDT	A, 15 A	2,78 to 5,57 [10 to 20]	105,56 Ref. [4.156]	4,83 [0.188]	5,56 [0.219]	0,15 [0.006]	
 Pin Plunger w Manual Reset	BZV6-RNX1	BZ, SPDT	A, 15 A	1,67 to 5,56 [6 to 20]	69,09 ±1,52 [2.720 ±0.060]	1,98 [0.078]	4,78 [0.188]	NA	Reset position: 26,97 [1.062] max.

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E6/V6 SERIES

MICRO SWITCH E6/V6 SERIES DIMENSIONS

Figure 25. Top pin plunger, flange mount with boot seal

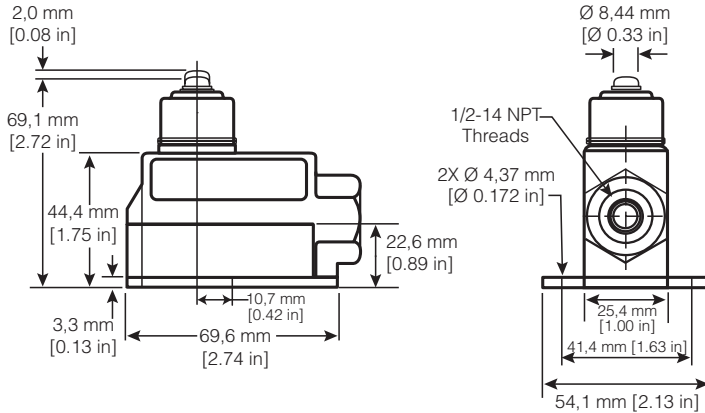


Figure 26. Top roller plunger, flange mount with boot seal

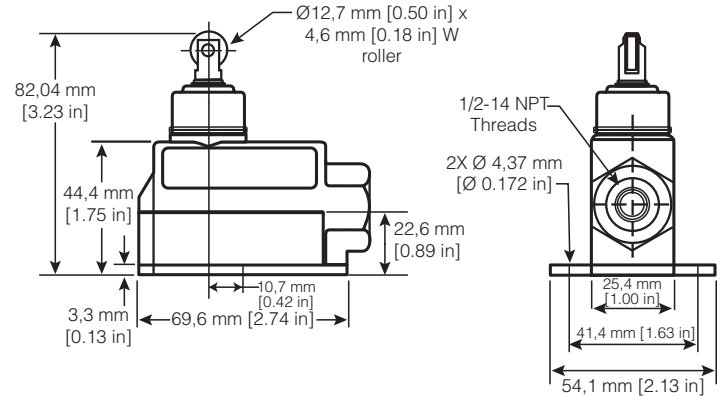


Figure 27. Cross roller plunger, flange mount with boot seal

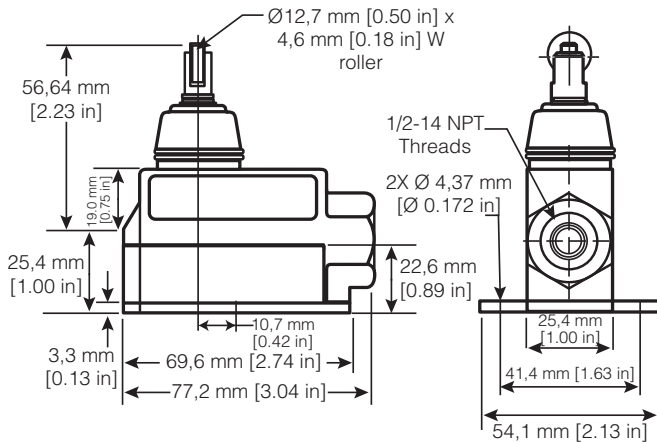


Figure 28. Roller lever adjustable, flange mount with boot seal

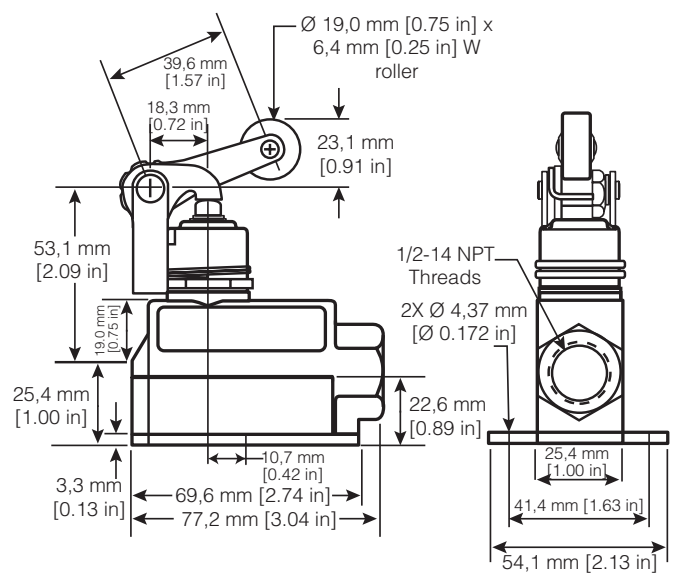


Figure 29. One-way roller lever, flange mount with boot seal

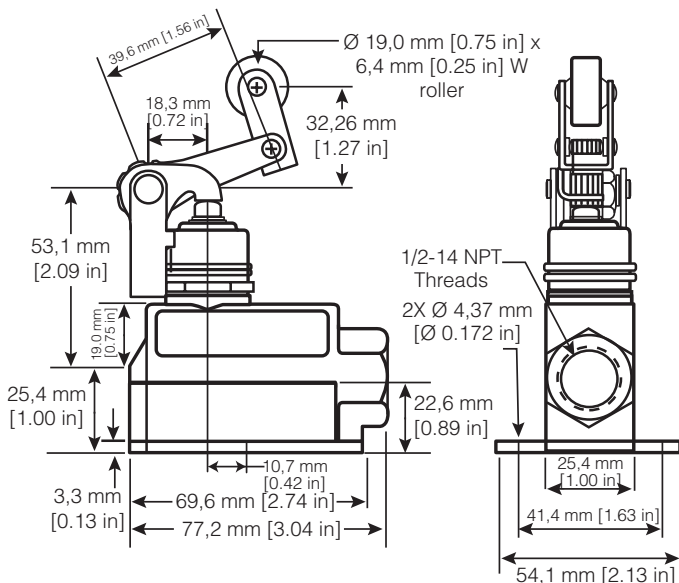
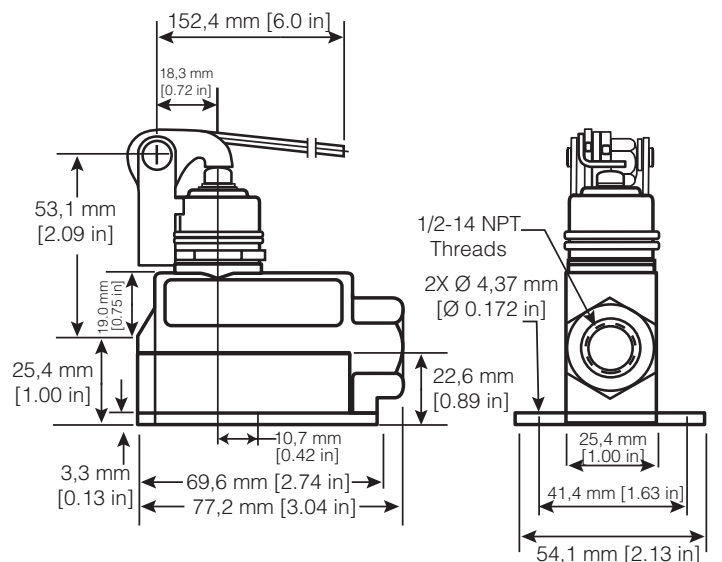


Figure 30. Rod lever, flange mount with boot seal



MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E6/V6 SERIES

MICRO SWITCH E6/V6 SERIES DIMENSIONS

Figure 31. Manual palm button, flange mount with boot seal

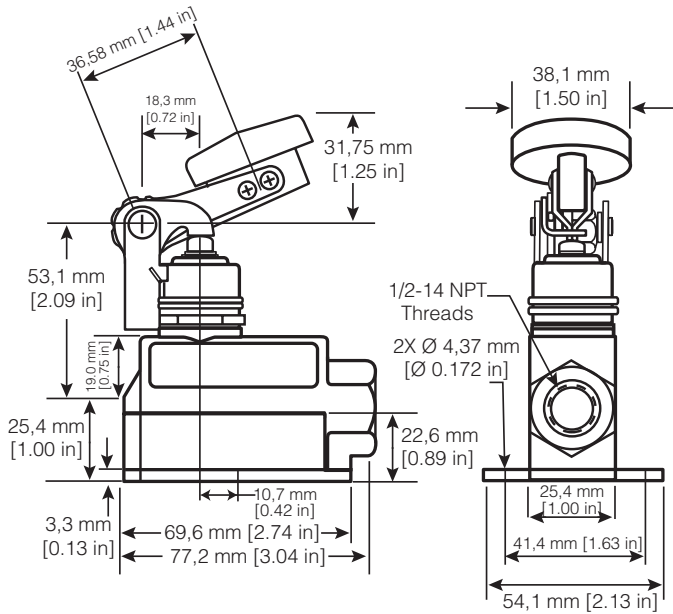


Figure 32. Coil wobble, flange mount with boot seal

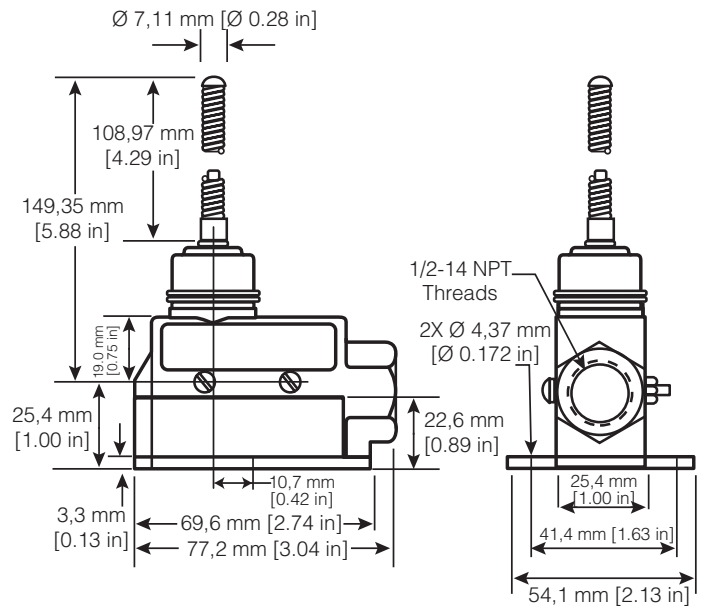
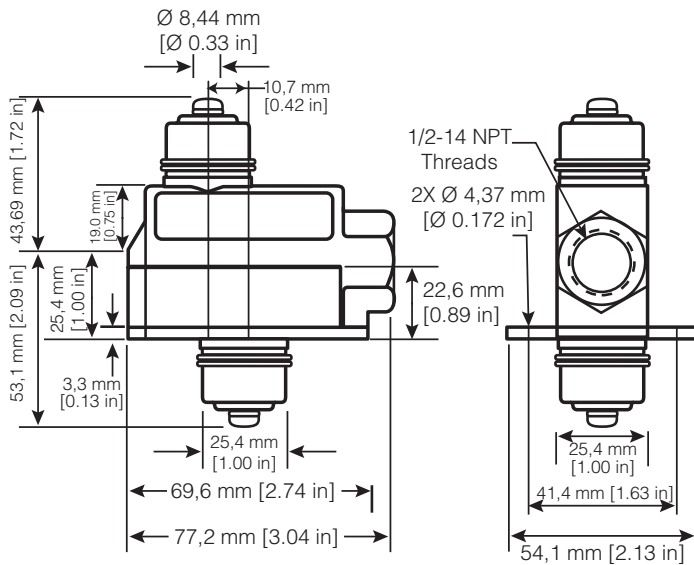


Figure 33. Top pin plunger, reset, flange mount with boot seal



MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES

E6/V6 SERIES

TABLE 9. ORDER GUIDE • V6 SERIES SWITCHES, FLANGE MOUNT WITHOUT BOOT SEAL

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

	Catalog Listing	Switch type, Circuitry	Electrical Rating [page 6]	Operate Force N [oz]	Operate Point mm [in]	Pretravel mm [in] max.	Over Travel mm [in] min.	Differential Travel mm [in] max.	Comments
 Pin plunger	BZV6-2RQ	BZ, SPDT	A, 15 A	2,50 to 3,61 [9 to 13]	63,50 ±1,14 [2.50 ±0.045]	0,38 [0.015]	5,56 [0.219]	0,05 [0.002]	
 Inline Roller Plunger	BZV6-2RQ8	BZ, SPDT	A, 15 A	2,50 to 3,61 [9 to 13]	75,01 ±1,52 [2.953 ±0.060]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	
 Cross Roller Plunger	BZV6-2RQ81	BZ, SPDT	A, 15 A	2,50 to 3,61 [9 to 13]	75,01 ±1,52 [2.953 ±0.060]	0,38 [0.015]	3,56 [0.140]	0,05 [0.002]	
 Roller Lever	BZV6-2RQ2	BZ, SPDT	A, 15 A	2,78 to 5,00 [10 to 18]	86,51 Ref [3.406]	4,83 [0.188]	5,56 [0.219]	0,15 [0.006]	
 Low-force Rod Lever	BZV6-2RQ62	BZ, SPDT	A, 15 A	0,56 to 1,39 [2 to 5]	-	18,24 [0.718]	21,29 [0.838]	5,82 [0.229]	

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E6/V6 SERIES

MICRO SWITCH E6/V6 SERIES DIMENSIONS

Figure 34. Top pin plunger, flange mount

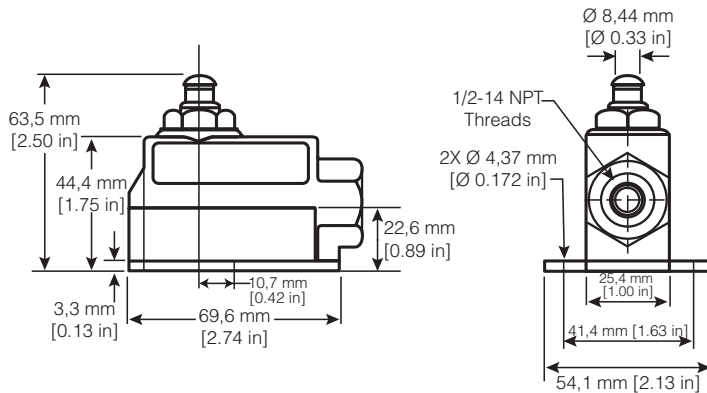


Figure 35. Top roller plunger, flange mount

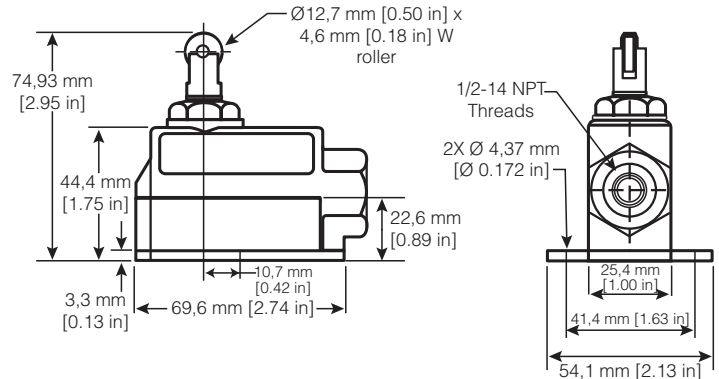


Figure 36. Cross roller plunger, flange mount

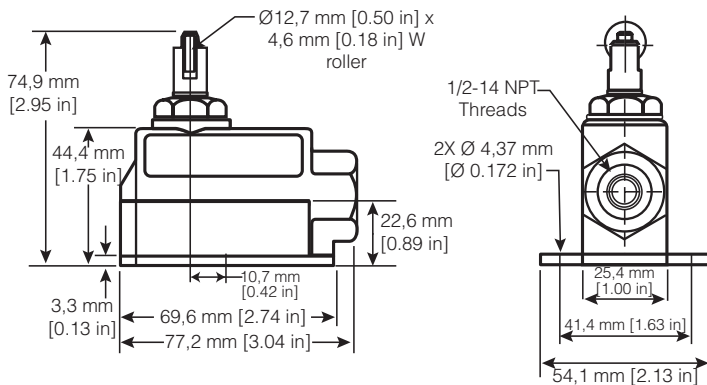


Figure 37. Roller lever adjustable, flange mount

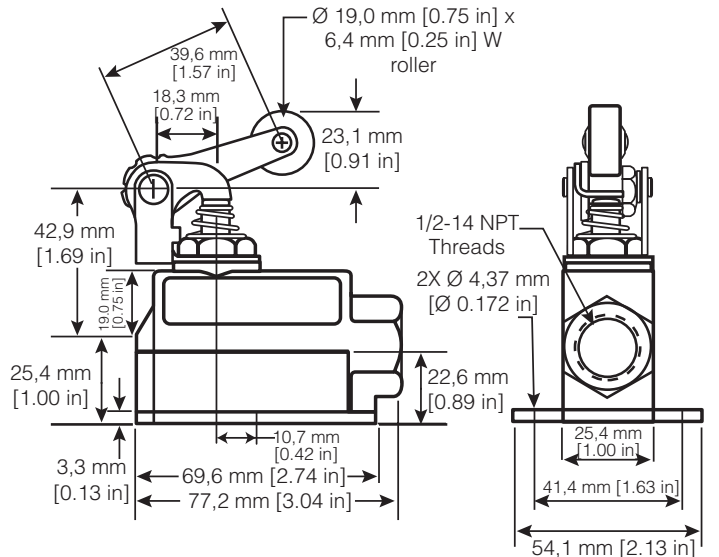
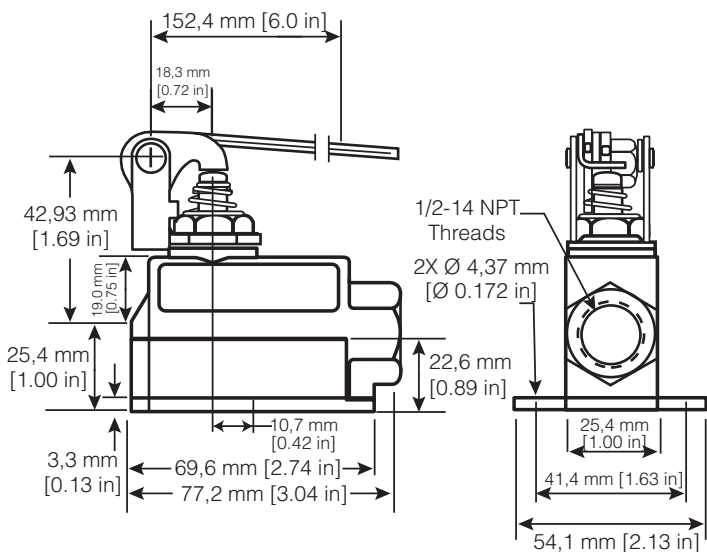


Figure 38. Rod lever, flange mount



MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E6/V6 SERIES

E6/V6 REPLACEMENT PARTS

The metal bottom cover includes the insulator seal and two cover screws

The plunger seal boot includes the plunger seal and retaining hardware

The hardware packet includes mounting hardware and seal boot as noted in the tables

TABLE 10. ACTUATOR WITH BOOT SEAL REPLACEMENT PARTS

Catalog Listing	Bottom Cover	Plunger Seal Boot ¹	Hardware Packet	Internal Basic Switch	Actuator
BZE6-2RN	3PA13-E6	10PA2	1PA2*	BZ-2RQ77**	Integral to internal basic switch
BZV6-2RN	3PA14-V6	10PA2	1PA2*	BZ-2RQ77**	Integral to internal basic switch
BZE6-2RN7	3PA13-E6	10PA2	1PA46**	BZ-2RN730**	Integral to internal basic switch
BZE6-2RN72	3PA13-E6	10PA2	1PA2*	BZ-2RQ7722**	Integral to internal basic switch
BZE6-2RN80	3PA13-E6	10PA2	1PA47	BZ-2RN784	Integral to internal basic switch
BZE6-2RN2	3PA13-E6	10PA2	1PA13*	BZ-2RN702**	6PA2*
BZV6-2RN2	3PA14-V6	10PA2	1PA13*	BZ-2RN702**	6PA2*
BZE6-2RN18	3PA13-E6	10PA2	-	BZ-2R-A2	6PA195 ³
BZV6-2RN18	3PA14-V6	10PA2	-	BZ-2R-A2	6PA195 ³
DTE6-2RN	3PA13-E6	10PA2	1PA2	DT-2R3-A7	8PA14
DTV6-2RN	3PA14-V6	10PA2	1PA2	DT-2R3-A7	8PA14
DTE6-2RN2	3PA13-E6	10PA2	-	DT-2R3-A7	6PA2*
DTV6-2RN2	3PA14-V6	10PA2	-	DT-2R3-A7	6PA2*

*Includes plunger seal boot

**Includes hardware packet

1. To order replacement low temperature plunger boot seal (switch code 34), specify **10PA1**
2. 1PA46 hardware packet cannot be ordered separately. When BZ-2RN730 internal basic switch is ordered, the 1PA46 hardware packet is included with internal basic switch.
3. To order replacement wobble actuator including internal threaded bushing, specify **6PA188-F**

TABLE 11. ACTUATOR WITHOUT BOOT SEAL REPLACEMENT PARTS

Catalog Listing	Bottom Cover	Hardware Packet	Internal Basic Switch	Actuator
BZE6-2RQ	3PA13-E6	1PA1	BZ-2RQ66	Integral to internal basic switch
BZV6-2RQ	3PA14-V6	1PA1	BZ-2RQ66	Integral to internal basic switch
BZE6-2RQ8	3PA13-E6	1PA19	BZ-2RQ784**	Integral to internal basic switch
BZV6-2RQ8	3PA14-V6	1PA19	BZ-2RQ784**	Integral to internal basic switch
BZE6-2RQ81	3PA13-E6	1PA19	BZ-2RQ785**	Integral to internal basic switch
BZV6-2RQ81	3PA14-V6	1PA19	BZ-2RQ785**	Integral to internal basic switch
BZE6-2RQ2	3PA13-E6	1PA3	BZ-2RQ68**	6PA1
BZV6-2RQ2	3PA14-V6	1PA3	BZ-2RQ68**	6PA1

**Includes hardware packet

MICRO SWITCH MEDIUM-DUTY LIGHT SWITCHES E6/V6 SERIES

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.

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

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.