

Enclosed Switches

ZE/ZV/ZV2/XE/XV/XV2**Long Service Life and Large Breaking Power**

- ZE, ZV, and ZV2 incorporate Model Z Basic Switches with rugged diecast cases.
- Available with various models of built-in switches (including split contact model, maintained operation type, magnetic blowout model) and various actuators.
- XE, XV, and XV2 Switches have a built-in X-type magnetic blowout basic switch for DC applications.
- Three mounting methods: Side, base, and diagonal side.
- Easy wiring: Terminals on internal switch are facing forward when the cover is opened.
- Switches with ground terminals have CE marking.
- Approved by UL, CSA, and CCC (Chinese standard).

**Model Number Structure****Model Number Legend**

□□-□-2□
1 2 3 4

1. Built-in Switch

- Z: SPDT (AC)
X: SPDT (DC)

2. Mounting Direction

- E: Side mounting
V: Base mounting
V2: Diagonal side mounting

3. Actuator

- Q: Plunger
Q22: Roller plunger
Q21: Crossroller plunger
QA2: Roller arm lever
QA277: One-way action roller arm lever
N: Sealed plunger
N22: Sealed roller plunger (ZE, ZV, ZV2 only)
N21: Sealed crossroller plunger (ZE, ZV, ZV2 only)
NA2: Sealed roller arm lever
NA277: Sealed one-way action roller arm lever

4. Conduit/Ground Terminal

- None: G 1/2"/without ground terminal
G1: G 1/2"/with ground terminal
G: Pg13.5/with ground terminal
SG1: 1/2"-14NPSM/with ground terminal
YG1: M20/with ground terminal
S: 1/2"-14NPSM/without ground terminal
Y: M20/without ground terminal

Ordering Information

List of Models

Standard Switches

| Contact | | Actuator | Side mounting | | Diagonal side mounting | | Base mounting | |
|------------|------|---------------------------------|-----------------|-----------------|------------------------|-----------------|-----------------|-----------------|
| | | | General purpose | Sealed (Booted) | General purpose | Sealed (Booted) | General purpose | Sealed (Booted) |
| AC/DC load | SPDT | Plunger | ZE-Q-2 | ZE-N-2 | ZV2-Q-2 | ZV2-N-2 | ZV-Q-2 | ZV-N-2 |
| | | Roller plunger | ZE-Q22-2 | ZE-N22-2 | ZV2-Q22-2 | ZV2-N22-2 | ZV-Q22-2 | ZV-N22-2 |
| | | Crossroller plunger | ZE-Q21-2 | ZE-N21-2 | ZV2-Q21-2 | ZV2-N21-2 | ZV-Q21-2 | ZV-N21-2 |
| | | Roller arm lever | ZE-QA2-2 | ZE-NA2-2 | ZV2-QA2-2 | ZV2-NA2-2 | ZV-QA2-2 | ZV-NA2-2 |
| | | One-way action roller arm lever | ZE-QA277-2 | ZE-NA277-2 | ZV2-QA277-2 | ZV2-NA277-2 | ZV-QA277-2 | ZV-NA277-2 |
| DC load | SPDT | Plunger | XE-Q-2 | XE-N-2 | XV2-Q-2 | XV2-N-2 | XV-Q-2 | XV-N-2 |
| | | Roller plunger | XE-Q22-2 | --- | XV2-Q22-2 | --- | XV-Q22-2 | --- |
| | | Crossroller plunger | XE-Q21-2 | --- | XV2-Q21-2 | --- | XV-Q21-2 | --- |
| | | Roller arm lever | XE-QA2-2 | XE-NA2-2 | XV2-QA2-2 | XV2-NA2-2 | XV-QA2-2 | XV-NA2-2 |
| | | One-way action roller arm lever | XE-QA277-2 | XE-NA277-2 | --- | XV2-NA277-2 | XV-QA277-2 | XV-NA277-2 |

- Note:** 1. The diagonal side mounting model feature improved sealing property, improved mounting strength through use of M5 screws, increased stability in seating with large mounting width (31 x 75 mm) and permit coupling of a number of Switch units.
 2. ZE, ZV, and ZV2 series are approved by UL, CSA, and CCC.

Specifications

Approved Standards

| Agency | Standard | File No. |
|-----------|------------------|------------------|
| UL | UL508 | E76675 |
| CSA | CSA C22.2 No. 14 | LR45746 |
| CCC (CQC) | GB14048.5 | 2003010303077623 |

- Note:** 1. Models XE, XV, and XV2 are not approved by UL, CSA, and CCC.
 2. Ask your OMRON representative for information on approved models.

Approved Standard Ratings

UL/CSA

| Model | Rated voltage | Current | Horsepower |
|-------|-------------------------------|-----------------|------------------|
| ZE | 125 VAC 250 VAC 480 VAC | 15 A | 1/8 HP 1/4 HP |
| | 125 VDC 250 VDC | 0.5 A 0.25 A | --- |

CCC (GB14048.5)

| Applicable category and ratings |
|---------------------------------|
| AC-12 10 A/250 VAC |

General Ratings

| Contact | Contact | Rated voltage | Non-inductive load | | | | Inductive load | | | |
|-----------------------|---------|---------------|--------------------|----|-----------|--------|----------------|-------|------------|--------|
| | | | Resistive load | | Lamp load | | Inductive load | | Motor load | |
| | | | NC | NO | NC | NO | NC | NO | NC | NO |
| ZE-□ ZV-□ ZV2-□ | | 125 VAC | 15 A | | 3 A | 1.5 A | 15 A | | 5 A | 2.5 A |
| | | 250 VAC | 15 A | | 2.5 A | 1.25 A | 15 A | | 3 A | 1.5 A |
| | | 480 VAC | 10 A | | 1.5 A | 0.75 A | 6 A | | 1.5 A | 0.75 A |
| | | 125 VDC | 0.5 A | | 0.5 A | | 0.05 A | | 0.05 A | |
| | | 250 VDC | 0.25 A | | 0.25 A | | 0.03 A | | 0.03 A | |
| XE-□ XV-□ XV2-□ | | 8 VDC | 10 A | | 3 A | 1.5 A | 10 A | 10 A | 5 A | 2.5 A |
| | | 14 VDC | 10 A | | 3 A | 1.5 A | 10 A | 10 A | 5 A | 2.5 A |
| | | 30 VDC | 10 A | | 3 A | 1.5 A | 10 A | 10 A | 5 A | 2.5 A |
| | | 125 VDC | 10 A | | 3 A | 1.5 A | 7.5 A | 6 A | 2 A | 2.5 A |
| | | 250 VDC | 3 A | | 1.5 A | 0.75 A | 2 A | 1.5 A | 2 A | 1.5 A |

- Note:** 1. The above figures are for standard currents.
 2. Inductive loads have a power factor of 0.4 min. (AC) and a time constant of 7 ms max. (DC).
 3. Lamp load has an inrush current of 10 times the steady-state current.
 4. Motor load has an inrush current of 6 times the steady-state current.

| Inrush current | NC | NO |
|----------------|-----------|-----------|
| | 30 A max. | 15 A max. |

■ Characteristics

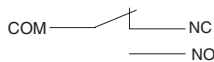
| | |
|----------------------------------|---|
| Degree of protection | IP65 (see note 2) |
| Durability (see note 3) | Mechanical: Z□: 10,000,000 operations min. X□: 1,000,000 operations min. Electrical: Z□: 500,000 operations min., for 15 A, 250 VAC resistive load X□: 100,000 operations min., for 10 A, 125 VDC resistive load |
| Operating speed | Plunger type: 0.01 mm to 0.5 m/s Lever type: 0.02 mm to 0.5 m/s |
| Operating frequency | Mechanical: 120 operations/min Electrical: 20 operations/min |
| Rated frequency | 50/60 Hz |
| Insulation resistance | 100 MΩ min. (at 500 VDC) |
| Contact resistance | 15 mΩ max. (initial value) |
| Terminal temperature rise | 50°C max. |
| Dielectric strength | 1,000 VAC, 50/60 Hz for 1 min between terminals of the same polarity 2,000 VAC, 50/60 Hz for 1 min between current-carrying metal part and ground, and between each terminal and non-current-carrying metal part (1,500 VAC for Z□ models and X□ models) |
| Vibration resistance | Malfunction: 10 to 55 Hz, 1.5-mm double amplitude (see note 4) |
| Shock resistance (see note 4) | Destruction: 1,000 m/s ² min. Malfunction: 100 m/s ² min. (see note 5), 50 m/s ² min. (see note 6) |
| Ambient temperature (see note 1) | Operating: -10°C to 80°C (with no icing) |
| Ambient humidity | Operating: General-purpose type: 85% max. Sealed type: 95% max. |
| Weight | Approx. 260 to 280 g |

Note: 1. The above figures are initial values.

2. IP65 for □E-N models and IP60 for □E-Q models.
3. The values are calculated at an operating temperature of 5°C to 35°C, and an operating humidity of 40% to 70%. Contact your OMRON sales representative for more detailed information on other operating environments.
4. At the operation limit positions.
5. Only for plunger, sealed plunger, roller arm lever, and sealed roller arm lever.
6. Only for crossroller plunger, sealed crossroller plunger, roller plunger, and sealed roller plunger.

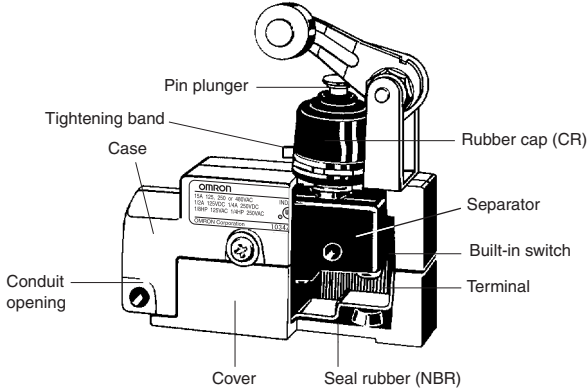
Connections

■ Contact Form



Note: With the XE-□, XV-□, and XV2-□, be sure to connect COM to the + terminal.

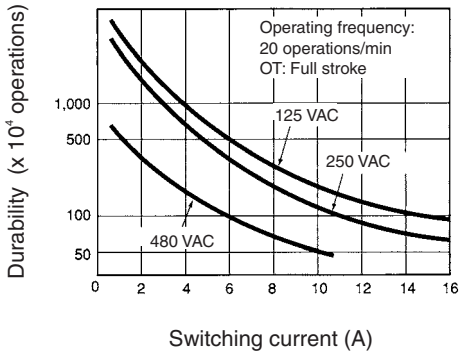
Nomenclature



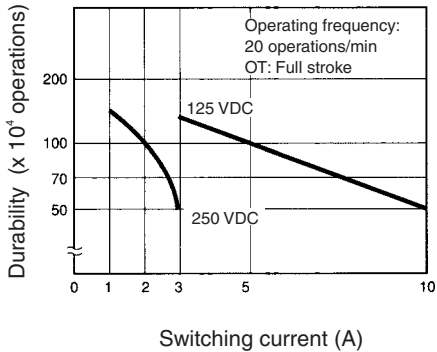
Engineering Data

■ Electrical Durability

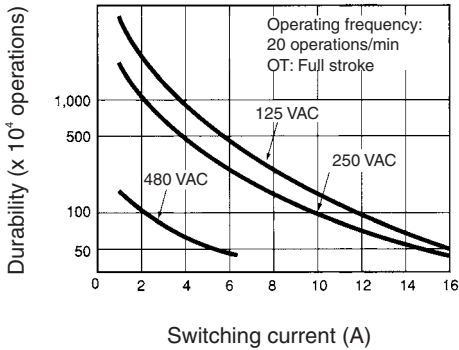
ZE ($\cos\phi = 1$)



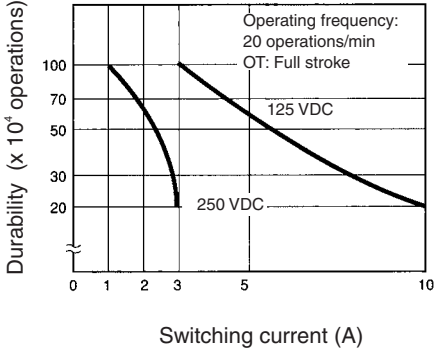
XE ($L/R = 0$)



ZE ($\cos\phi = 0.4$)



XE ($L/R = 7$ ms)

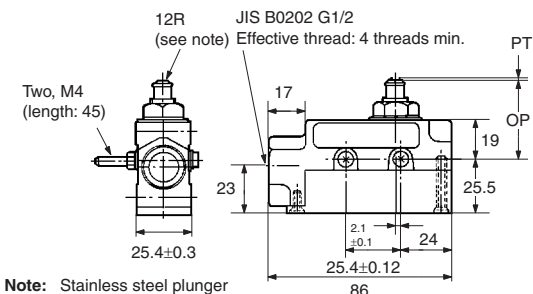
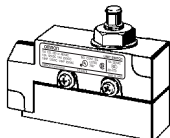


Dimensions

- Note:** 1. All units are in millimeters unless otherwise indicated.
 2. Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.
 3. In the drawings for the Base Mounting Type Switches (ZV), the mounting surfaces (flanges) are shown by lines of alternate long and two short dashes.

Side Mounting

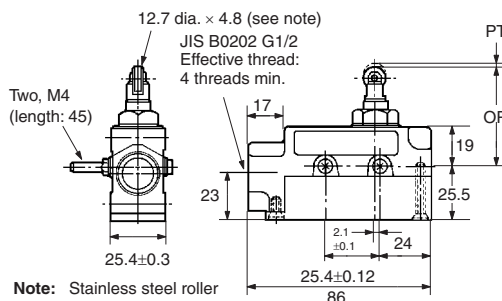
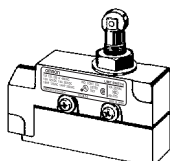
Plunger ZE-Q-2, XE-Q-2



Note: Stainless steel plunger

| Model | ZE-Q-2 | XE-Q-2 |
|---------|----------------|-------------|
| OF | 2.45 to 3.43 N | 5.00 N max. |
| RF min. | 1.12 N | 1.12 N |
| PT max. | 0.4 mm | 0.9 mm |
| OT min. | 5.5 mm | 5.5 mm |
| MD max. | 0.05 mm | 0.47 mm |
| OP | 38.2±0.8 mm | |

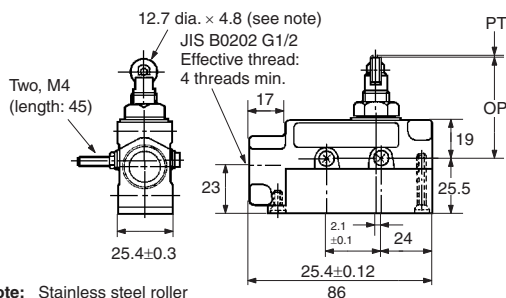
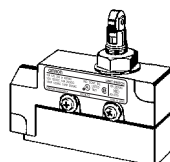
Roller Plunger ZE-Q22-2, XE-Q22-2



Note: Stainless steel roller

| Model | ZE-Q22-2 | XE-Q22-2 |
|---------|----------------|-------------|
| OF | 2.45 to 3.43 N | 5.00 N max. |
| RF min. | 1.12 N | 1.12 N |
| PT max. | 0.5 mm | 0.9 mm |
| OT min. | 3.6 mm | 3.6 mm |
| MD max. | 0.05 mm | 0.47 mm |
| OP | 49.7±1 mm | |

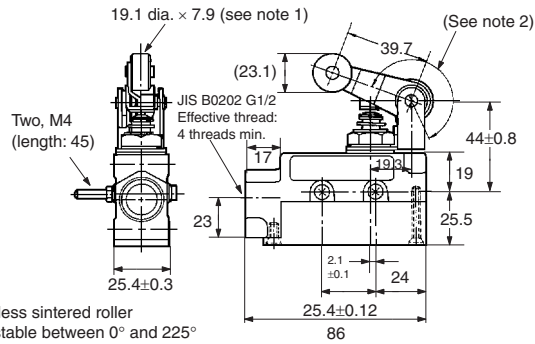
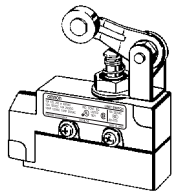
Crossroller Plunger ZE-Q21-2, XE-Q21-2



Note: Stainless steel roller

| Model | ZE-Q21-2 | XE-Q21-2 |
|---------|----------------|-------------|
| OF | 2.45 to 3.43 N | 5.00 N max. |
| RF min. | 1.12 N | 1.12 N |
| PT max. | 0.5 mm | 0.9 mm |
| OT min. | 3.6 mm | 3.6 mm |
| MD max. | 0.05 mm | 0.47 mm |
| OP | 49.7±1 mm | |

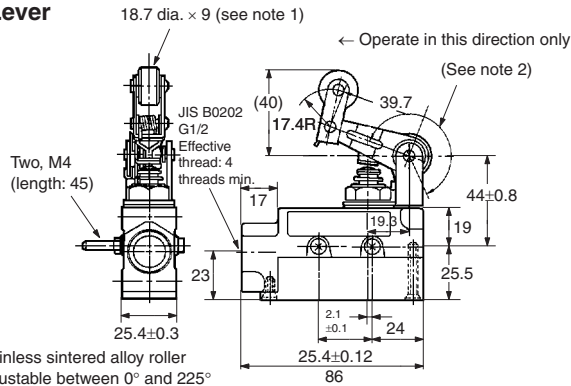
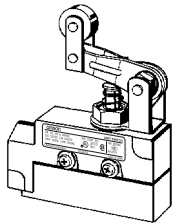
Roller Arm Lever
ZE-QA2-2, XE-QA2-2



Note: 1. Stainless sintered roller
2. Adjustable between 0° and 225°

| Model | ZE-QA2-2 | XE-QA2-2 |
|---------|-------------|------------|
| OF | 5.59 N max. | 6.47N max. |
| RF min. | 1.67 N | 1.67 N |
| PT max. | 4 mm | 6 mm |
| OT min. | 6 mm | 5.5 mm |
| MD max. | 0.4 mm | 0.72 mm |
| OP | --- | --- |

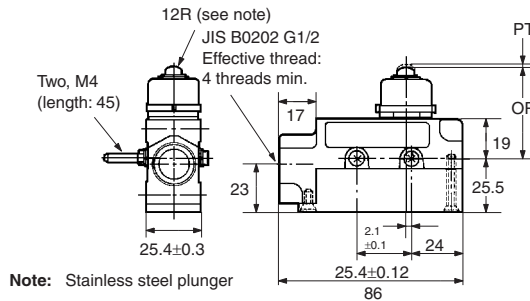
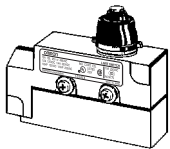
One-way Action Roller Arm Lever
ZE-QA277-2, XE-QA277-2



Note: 1. Stainless sintered alloy roller
2. Adjustable between 0° and 225°

| Model | ZE-QA277-2 | XE-QA277-2 |
|---------|------------|------------|
| OF | 5.59 N | 6.47 N |
| RF min. | 1.67 N | 1.67 N |
| PT max. | 4 mm | 6 mm |
| OT min. | 6 mm | 5.5 mm |
| MD max. | 0.4 mm | 0.72 mm |
| OP | --- | --- |

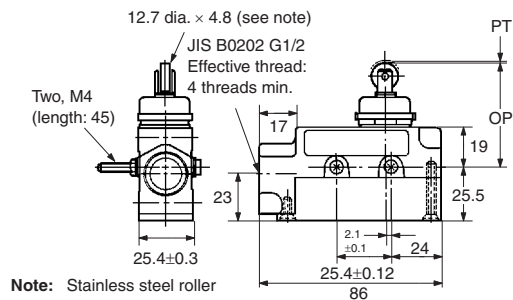
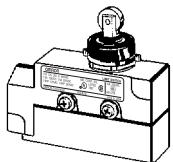
Sealed Plunger
ZE-N-2, XE-N-2



Note: Stainless steel plunger

| Model | ZE-N-2 | XE-N-2 |
|---------|-------------|---------|
| OF | 7.85 N | 10.20 N |
| RF min. | 2.35 N | 2.35 N |
| PT max. | 2 mm | 3 mm |
| OT min. | 5 mm | 4 mm |
| MD max. | 0.1 mm | 0.47 mm |
| OP | 45.8±0.8 mm | |

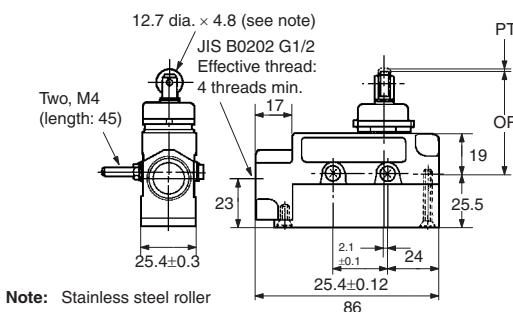
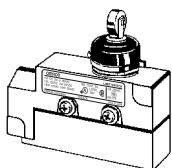
Sealed Roller Plunger
ZE-N22-2



Note: Stainless steel roller

| Model | ZE-N22-2 |
|---------|-------------|
| OF | 4.90 N |
| RF min. | 0.98 N |
| PT max. | 1 mm |
| OT min. | 3.5 mm |
| MD max. | 0.12 mm |
| OP | 49.7±0.8 mm |

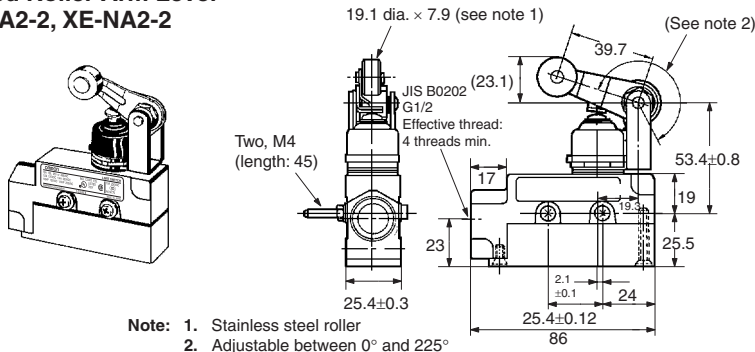
Sealed Crossroller Plunger
ZE-N21-2



Note: Stainless steel roller

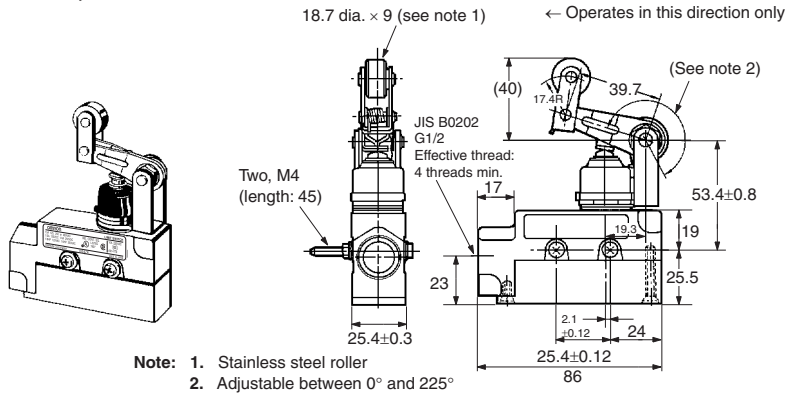
| Model | ZE-N21-2 |
|---------|-------------|
| OF | 4.90 N |
| RF min. | 0.98 N |
| PT max. | 1 mm |
| OT min. | 3.5 mm |
| MD max. | 0.12 mm |
| OP | 49.7±0.8 mm |

Sealed Roller Arm Lever
ZE-NA2-2, XE-NA2-2



| Model | ZE-NA2-2 | XE-NA2-2 |
|---------|----------|----------|
| OF | 6.28 N | 7.26 N |
| RF min. | 2.26 N | 2.26 N |
| PT max. | 5 mm | 6 mm |
| OT min. | 6 mm | 5.5 mm |
| MD max. | 0.4 mm | 0.72 mm |
| OP | --- | --- |

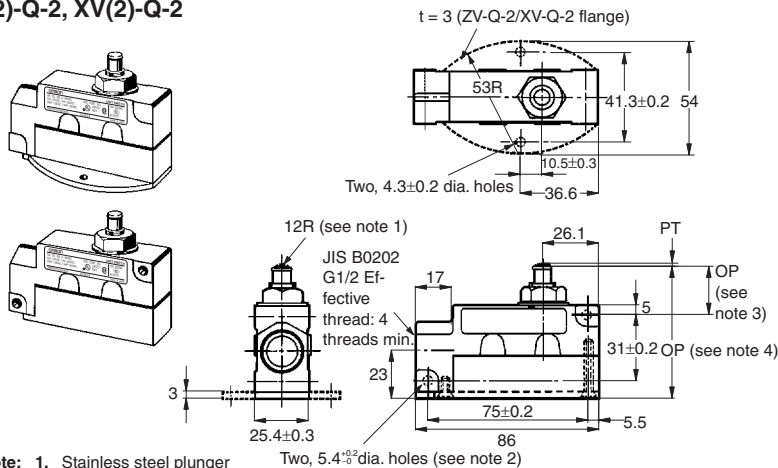
One-way Action Sealed Roller Arm Lever
ZE-NA277-2, XE-NA277-2



| Model | ZE-NA277-2 | XE-NA277-2 |
|---------|------------|------------|
| OF | 6.28 N | 7.26 N |
| RF min. | 2.26 N | 2.26 N |
| PT max. | 5 mm | 6 mm |
| OT min. | 6 mm | 5.5 mm |
| MD max. | 0.4 mm | 0.72 mm |
| OP | --- | --- |

Base Mounting/Diagonal Side Mounting

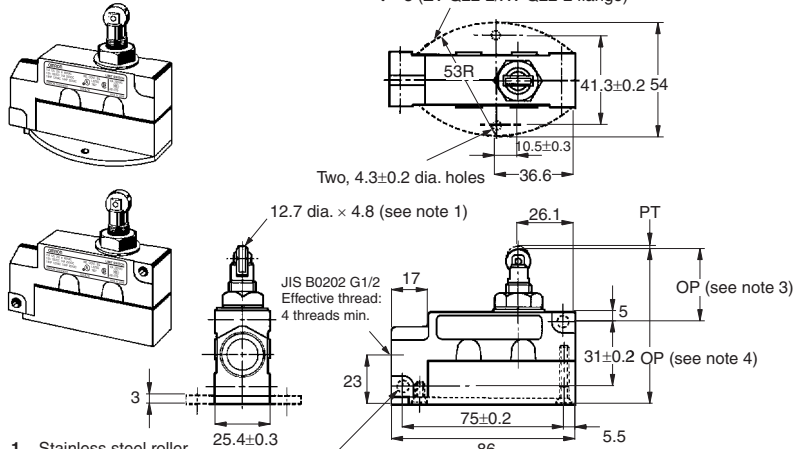
Plunger
ZV(2)-Q-2, XV(2)-Q-2



- Note:** 1. Stainless steel plunger
2. Only the ZV2-Q-2 and XV2-Q-2 incorporate mounting holes.
3. OP for ZV2-Q-2 and XV2-Q-2 is 24.2 ± 0.8 mm.

| Model | ZV(2)-Q-2 | XV(2)-Q-2 |
|---------|------------------------------|-------------|
| OF | 2.45 to 3.43 N | 5.00 N max. |
| RF min. | 1.12 N | 1.12 N |
| PT max. | 0.4 mm | 0.9 mm |
| OT min. | 5.5 mm | 5.5 mm |
| MD max. | 0.05 mm | 0.47 mm |
| OP | 63.7±0.8 mm (ZV-Q-2, XV-Q-2) | |

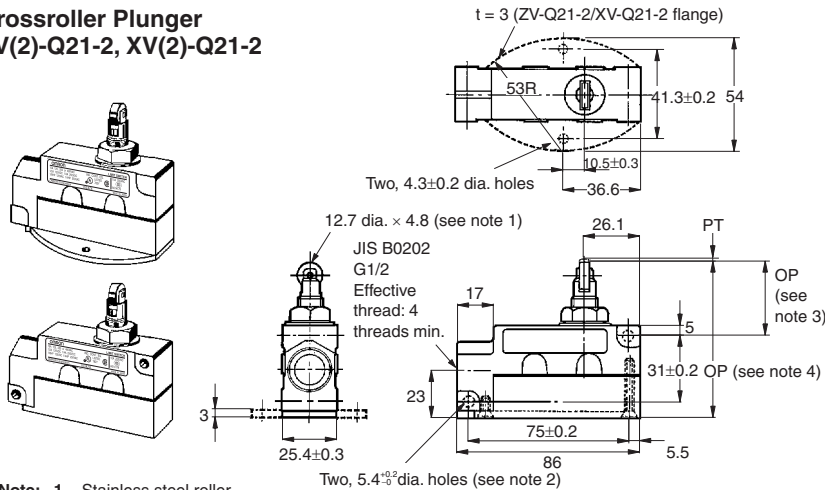
Roller Plunger
ZV(2)-Q22-2, XV(2)-Q22-2



- Note:**
1. Stainless steel roller
 2. Only the ZV2-Q22-2 and XV2-Q22-2 incorporate mounting holes.
 3. OP for ZV2-Q22-2 and XV2-Q22-2 is 35.7 ±1 mm.

| Model | ZV(2)-Q22-2 | XV(2)-Q22-2 |
|---------|----------------------------------|-------------|
| OF | 2.45 to 3.43 N | 5.00 N max. |
| RF min. | 1.12 N | 1.12 N |
| PT max. | 0.5 mm | 0.9 mm |
| OT min. | 3.6 mm | 3.6 mm |
| MD max. | 0.05 mm | 0.47 mm |
| OP | 75.2±0.8 mm (ZV-Q22-2, XV-Q21-2) | |

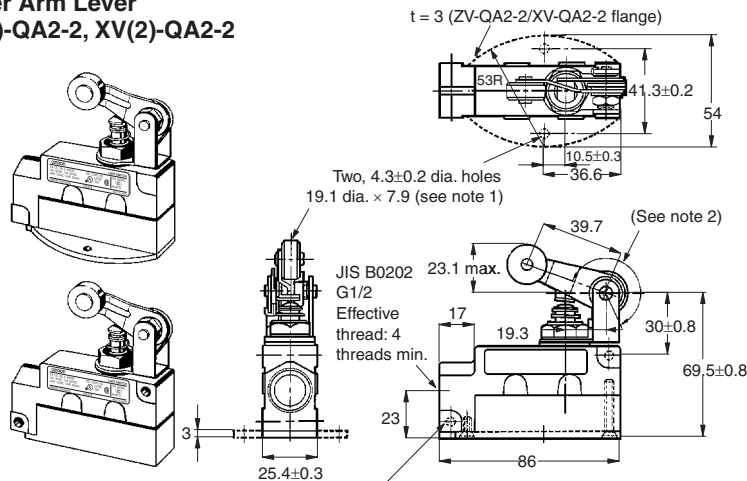
Crossroller Plunger
ZV(2)-Q21-2, XV(2)-Q21-2



- Note:**
1. Stainless steel roller
 2. Only the ZV2-Q21-2 and XV2-Q21-2 incorporate mounting holes.
 3. OP for ZV2-Q21-2 and XV2-Q21-2 is 35.7 ±0.8 mm.

| Model | ZV(2)-Q21-2 | XV(2)-Q21-2 |
|---------|----------------------------------|-------------|
| OF | 2.45 to 3.43 N | 5.00 N max. |
| RF min. | 1.12 N | 1.12 N |
| PT max. | 0.5 mm | 0.9 mm |
| OT min. | 3.6 mm | 3.6 mm |
| MD max. | 0.05 mm | 0.47 mm |
| OP | 75.2±0.8 mm (ZV-Q22-2, XV-Q21-2) | |

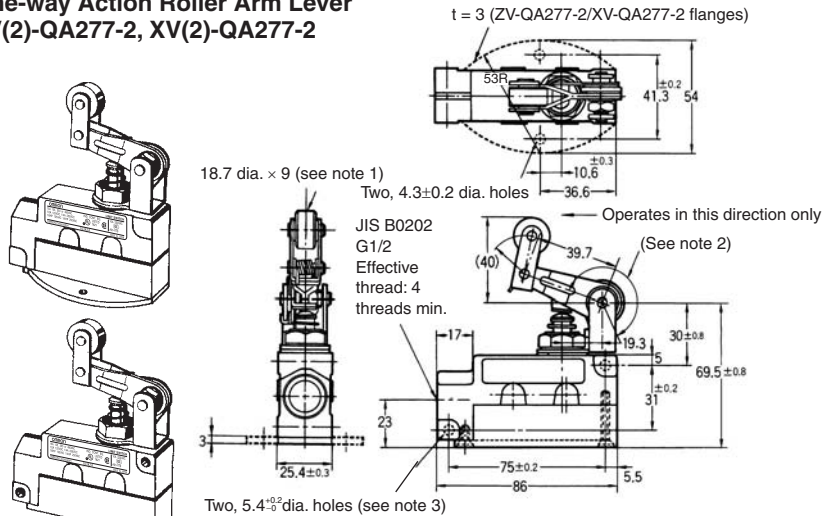
Roller Arm Lever
ZV(2)-QA2-2, XV(2)-QA2-2



- Note:**
1. Stainless sintered alloy roller
 2. Adjustment between 0° to 225°.
 3. Only the ZV2-QA2-2 and XV2-QA2-2 incorporate mounting holes.

| Model | ZV(2)-QA2-2 | XV(2)-QA2-2 |
|---------|-------------|-------------|
| OF | 5.59 N max. | 6.47 N max. |
| RF min. | 1.67 N | 1.67 N |
| PT max. | 4 mm | 6 mm |
| OT min. | 6 mm | 5.5 mm |
| MD max. | 0.4 mm | 0.72 mm |
| OP | --- | |

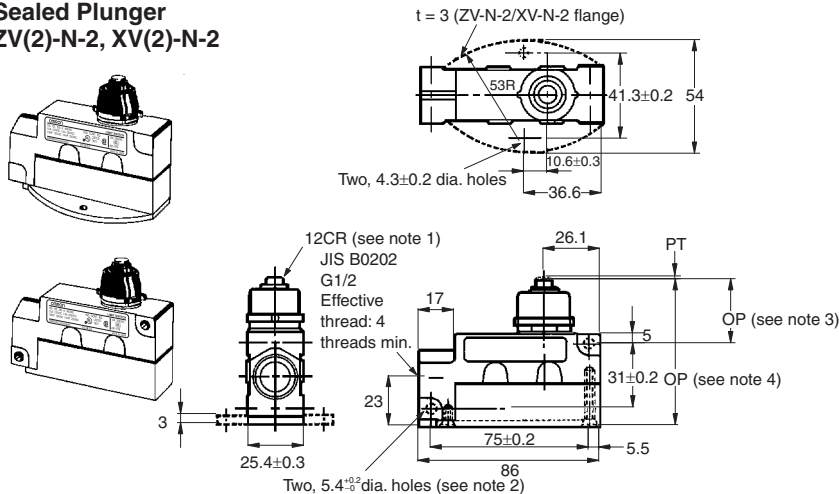
One-way Action Roller Arm Lever
ZV(2)-QA277-2, XV(2)-QA277-2



- Note:**
1. Stainless steel roller
 2. Adjustment between 0° to 225°.
 3. Only the ZV2-QA277-2 and XV2-QA277-2 incorporate mounting holes.

| Model | ZV(2)-QA277-2 | XV(2)-QA277-2 |
|---------|---------------|---------------|
| OF | 5.59 N | 6.47 N |
| RF min. | 1.67 N | 1.67 N |
| PT max. | 4 mm | 6 mm |
| OT min. | 6 mm | 5.5 mm |
| MD max. | 0.4 mm | 0.72 mm |
| OP | --- | --- |

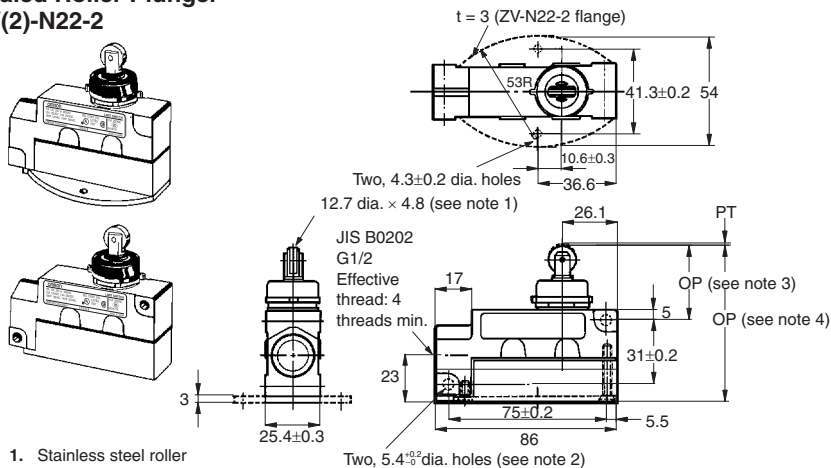
Sealed Plunger
ZV(2)-N-2, XV(2)-N-2



- Note:**
1. Stainless steel plunger
 2. Only the ZV2-N-2 and XV2-N-2 incorporate mounting holes.
 3. OP for ZV2-N-2 and XV2-N-2 is 31.9 ±0.8 mm.

| Model | ZV(2)-N-2 | XV(2)-N-2 |
|---------|------------------------------|-----------|
| OF | 7.85 N | 10.20 N |
| RF min. | 2.35 N | 2.35 N |
| PT max. | 2 mm | 3 mm |
| OT min. | 5 mm | 4 mm |
| MD max. | 0.1 mm | 0.47 mm |
| OP | 71.4±0.8 mm (ZV-N-2, XV-N-2) | |

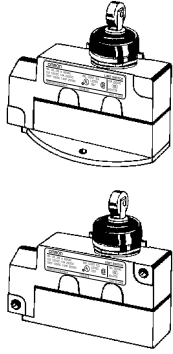
Sealed Roller Plunger
ZV(2)-N22-2



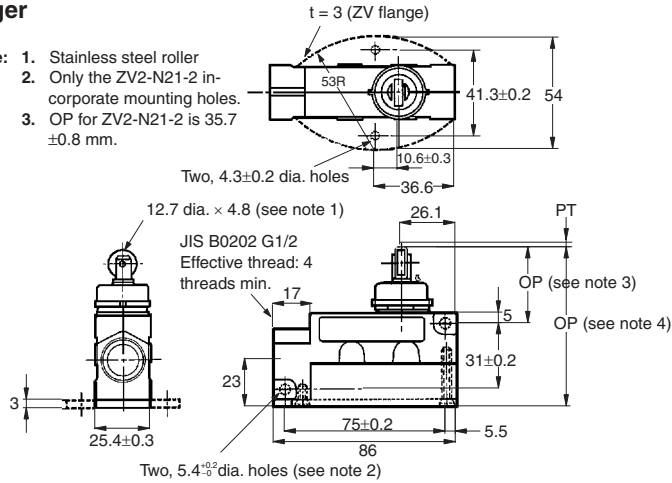
- Note:**
1. Stainless steel roller
 2. Only the ZV2-N22-2 incorporate mounting holes.
 3. OP for ZV2-N22-2 is 35.7 ±0.8 mm.

| Model | ZV(2)-N22-2 |
|---------|----------------------------------|
| OF | 4.90 N |
| RF min. | 0.98 N |
| PT max. | 1 mm |
| OT min. | 3.5 mm |
| MD max. | 0.12 mm |
| OP | 75.2±0.8 mm (ZV-N22-2, ZV-N21-2) |

**Sealed Crossroller Plunger
ZV(2)-N21-2**

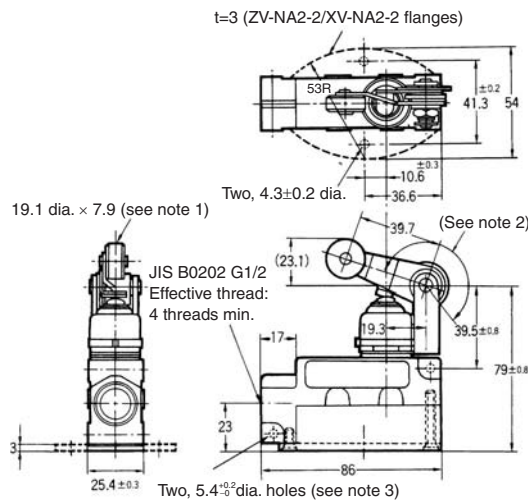
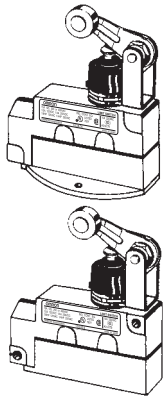


- Note:**
1. Stainless steel roller
 2. Only the ZV2-N21-2 incorporate mounting holes.
 3. OP for ZV2-N21-2 is 35.7 ±0.8 mm.



| Model | ZV(2)-N21-2 |
|---------|----------------------------------|
| OF | 4.90 N |
| RF min. | 0.98 N |
| PT max. | 1 mm |
| OT min. | 3.5 mm |
| MD max. | 0.12 mm |
| OP | 75.2±0.8 mm (ZV-N22-2, ZV-N21-2) |

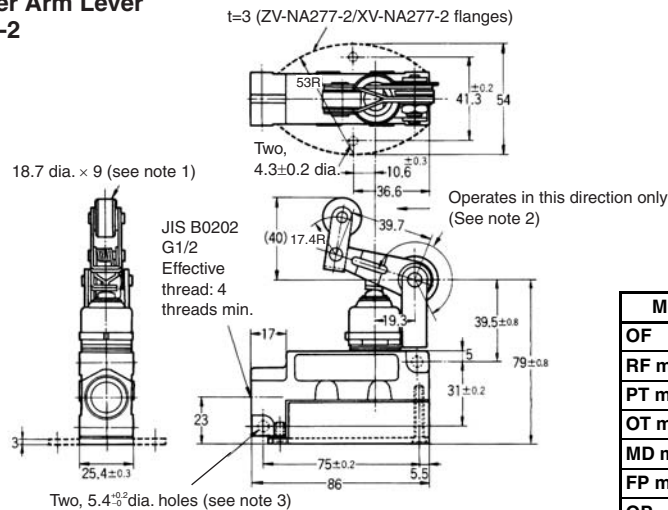
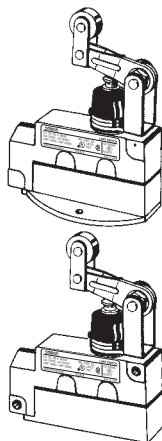
**Sealed Roller Arm Lever
ZV(2)-NA2-2, XV(2)-NA2-2**



- Note:**
1. Stainless steel roller
 2. Adjustment between 0° to 225°.
 3. Only the ZV2-NA2-2 and XV2-NA2-2 incorporate mounting holes.

| Model | ZV(2)-NA2-2 | XV(2)-NA2-2 |
|---------|-------------|-------------|
| OF | 6.28 N | 7.26 N |
| RF min. | 2.26 N | 2.26 N |
| PT max. | 5 mm | 6 mm |
| OT min. | 6 mm | 5.5 mm |
| MD max. | 0.4 mm | 0.72 mm |
| FP max. | --- | --- |
| OP | --- | --- |

**One-way Action Sealed Roller Arm Lever
ZV(2)-NA277-2, XV(2)-NA277-2**



- Note:**
1. Stainless steel roller
 2. Adjustment between 0° to 225°.
 3. Only the ZV2-NA277-2 and XV2-NA277-2 incorporate mounting holes.

| Model | ZV(2)-NA277-2 | XV(2)-NA277-2 |
|---------|---------------|---------------|
| OF | 6.28 N | 7.26 N |
| RF min. | 2.26 N | 2.26 N |
| PT max. | 5 mm | 6 mm |
| OT min. | 6 mm | 5.5 mm |
| MD max. | 0.4 mm | 0.72 mm |
| FP max. | --- | --- |
| OP | --- | --- |

Precautions

Refer to the "Precautions for All Switches" on page 17 and "Precautions for General-purpose Limit Switches (Including Multiple Limit Switches, Mechanical Touch Switches, High-precision Switches, Touch Switches, On-site Flexible Switches; Not Including Safety Switches)" on page 23.

Correct Use

Mounting

With the Roller Lever-type Enclosed Switches, the roller arm has been temporarily tightened prior to shipment, so that its position may be adjusted later. When mounting the Switch, be sure to re-tighten the roller arm so as to prevent it from becoming loose during operation.

To adequately maintain the seals at the mounting screw section on the side of the Enclosed Switch, insert each O-ring correctly and secure it with the lock nut.

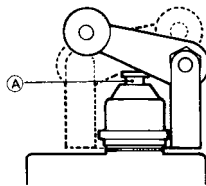
To provide the Switch with improved sealing property, use of the SC Connector is recommended.

When routing wires into the conduit opening, be sure that cuttings and other foreign matter do not enter the Switch.

Environmental Precautions

Sealing materials may deteriorate when used outdoors or when exposed to cutting oil, solvents, or chemicals. Check this on actual equipment and, if deterioration is foreseen, consult your OMRON representative in advance.

Be sure to protect part A with grease in order to maintain the mechanical durability and performance of the Limit Switch. The use of molybdenum disulfide grease is recommended.



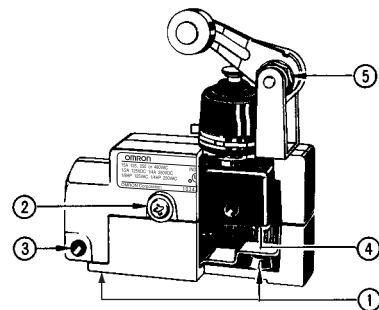
Tightening Torque

A loose screw may result in a malfunction. Be sure to tighten each screw to the proper tightening torque as shown below.

| No. | Type | Torque |
|-----|--|------------------|
| 1 | Cover mounting screw | 1.18 to 1.37 N·m |
| 2 | Switch mounting screw (see note 1) | 1.18 to 1.37 N·m |
| 3 | Switch mounting screw (see note 2) | 4.90 to 5.88 N·m |
| 4 | Switch terminal screw (M4 screws for head) | 0.78 to 1.18 N·m |
| 5 | Roller arm mounting nut | 4.90 to 5.88 N·m |

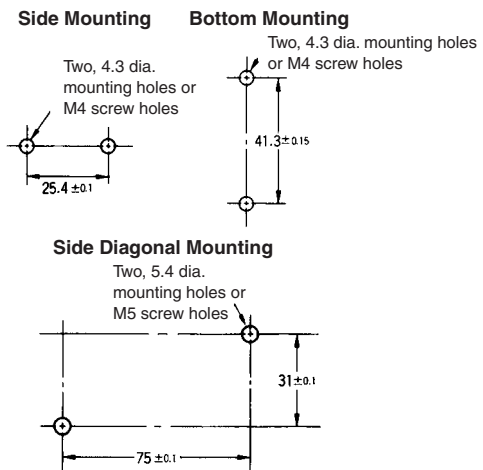
Note: 1. This torque range applies to side mounting or bottom mounting. (M4 screws for head)

2. This torque range applies to side diagonal mounting. (M5 Allen-head bolt)



Mounting

Mounting Holes



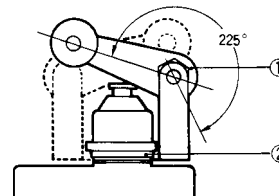
Operation

- Operating method, shape of cam or dog, operating frequency, and the overtravel (OT) have significant effect on the service life and precision of the Limit Switch. Make sure that the shape of the cam is smooth enough.
- Check that OT has a sufficient margin. The actual OT should be rated OT x 0.7 to 1.

Dedicated Wrench

The roller arm can be set freely within a range of 225° after loosening the nut.

The roller arm mounting bracket can be set in any direction after loosening the nut.



A dedicated wrench is provided separately.

Model: SUPANA FOR ZE

Make sure that the nut is free of foreign substances when the nut is loosened.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.