# GENERAL-PURPOSE MICRO SWITCHES
## Z-15 SERIES

### Specifications

| | |
|---|---|
| Operating Speed | 0.01mm-1m/sec |
| Operating Frequency | Mechanical: 240ops/min<br>Electrical: 20 ops/min |
| Insulation Resistance | >100MΩ@500V DC |
| Contact Resistance | <15mΩ |
| Rated Current/Voltage | 15A,125/250/480VAC;3/4HP/125VAC<br>1.5HP/250VAC (UL file E321073) |
| Dielectric Strength | 1000VAC for 1 min between current carrying parts<br>2500VAC for 1 min between non-current carrying parts |
| Service Life | Mechanically 1.0 x$10^7$ (operations)<br>Electrically 5 x$10^5$ (operations) |
| Operating Temperature | -40~+105°C (-40~221°F)<br>High temp. model available up to 204°C (400°F) |
| Humidity | 35-85%RH / 35-95%RH for -55 sealed version |
| Degree of Protection | IP40 / IP64 for -55 sealed version |

### Definitions of Operating Characteristics

| | | | |
|---|---|---|---|
| OF | Operating Force | PT | Pretravel |
| RF | Releasing Force | MD | Movement Differential |
| OT | Overtravel | OP | Operating Position |
| TT | Total Travel | | |

### Rated indicators Z-15G

| Operating voltage | Non-inductive load (A) | | | | Inductive load (A) | | | | Inrush current | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Resistive load | | Bulb load | | Inductive load | | Motor load | | | |
| | NC | NO | NC | NO | NC | NO | NC | NO | NC | NO |
| 125 VAC | 15 | | 3 | 1.5 | 15 | | 5 | 2.5 | 30 Max | 15 Max |
| 250 VAC | 15 | | 2.5 | 1.25 | 15 | | 3 | 1.5 | | |
| 500 VAC | 10 | | 1.5 | 0.75 | 6 | | 1.5 | 0.75 | | |
| 8 VDC | 15 | | 3 | 1.5 | 15 | | 5 | 2.5 | | |
| 14 VDC | 15 | | 3 | 1.5 | 10 | | 5 | 2.5 | | |
| 30 VDC | 6 | | 3 | 1.5 | 5 | | 5 | 2.5 | | |
| 125 VDC | 0.5 | | 0.5 | 0.5 | 0.05 | | 0.05 | 0.05 | | |
| 250 VDC | 0.25 | | 0.25 | 0.25 | 0.03 | | 0.03 | 0.03 | | |

### Selection Guide:

Z - 15 G ■ - ■ ■ - ■ - ■ *

**15 Current**

| | |
|---|---|
| 15 | 15A |
| 20 | 20A |
| 25 | 25A |

**■ Actuating Style**

**■ Sealing**

| | |
|---|---|
| None | Standard |
| 55 | Sealed |

**■ Contact Material**

| | |
|---|---|
| None | Silver |
| K | Plated gold |

**■ Reset**

| | |
|---|---|
| None | No Reset |
| R | Resettable with spring overtravel |
| R1 | Short reset |
| R2 | Long reset |

**■ Terminal Style** See Page 8 for Details

| | |
|---|---|
| None | Screw terminal |
| P0 | Screw on soldering tab |
| P1 | Screw on soldering tab |
| P2 | Screw on soldering tab |
| P3 | Screw terminal P3 |
| P4 | Screw terminal P4 |
| P5 | Screw terminal P5 |
| P6 | Screw terminal P6 |
| P7 | Screw terminal P7 |
| P8 | Terminal Potted |
| D6 | QC terminal |
| Q2 | 30° QC terminal |
| S1 | Screw Terminal |

**■ Circuitry**

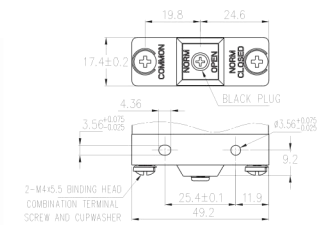
| | |
|---|---|
| none | 1NO/1NC |
| X | 1NC |
| Y | 1NO |

*add (US) as suffix to have US standard ø3.55 mounting holes

### Circuitry:

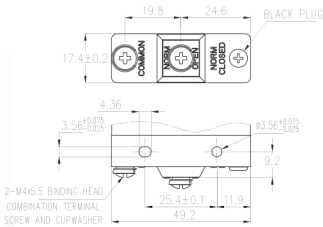
**-X 1NC only**





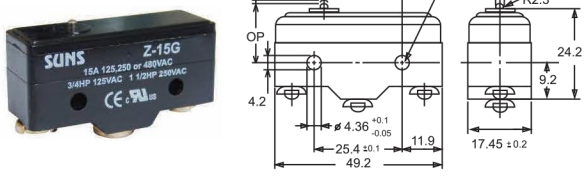

**-Y 1NO only**





## GENERAL-PURPOSE MICRO SWITCHES
## Z-15 SERIES

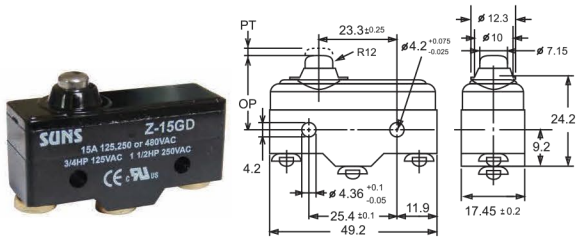
**Product Dimensions Unit: mm**




### Z-15G

**Operating Characteristics**

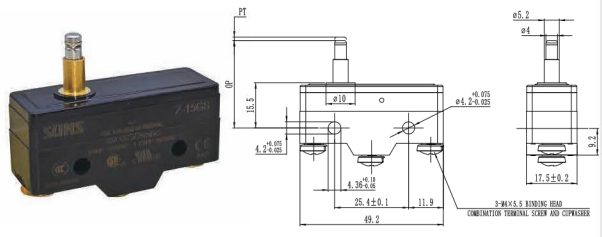
- OFmax 3.43N
- RFmin 1.12N
- PTmax 0.4mm
- OTmin 0.13mm
- MDmax 0.05mm
- OP 15.9±0.4mm




### Z-15GD

**Operating Characteristics**

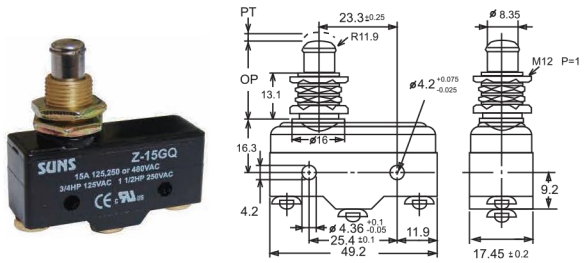
- OFmax 3.43N
- RFmin 1.12N
- PTmax 0.4mm
- OTmin 1.6mm
- MDmax 0.05mm
- OP 21.5±0.5mm




### Z-15GS

**Operating Characteristics**

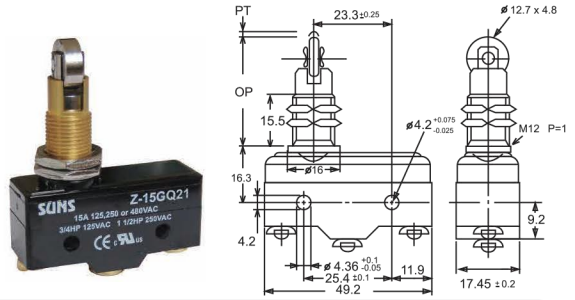
- OFmax 3.43N
- RFmin 1.12N
- PTmax 0.4mm
- OTmin 1.6mm
- MDmax 0.05mm
- OP 28.2±0.6mm




### Z-15GQ

**Operating Characteristics**

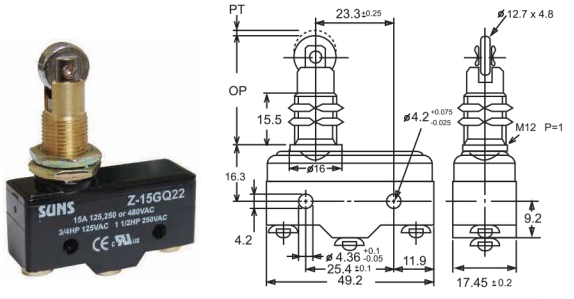
- OFmax 3.43N
- RFmin 1.12N
- PTmax 0.4mm
- OTmin 5.5mm
- MDmax 0.05mm
- OP 21.8±0.8mm




### Z-15GQ21

**Operating Characteristics**

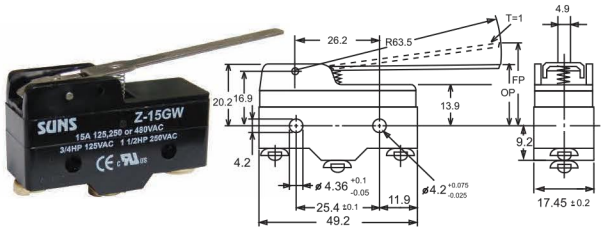
- OFmax 3.43N
- RFmin 1.12N
- PTmax 0.4mm
- OTmin 3.58mm
- MDmax 0.05mm
- OP 33.4±1.2mm




### Z-15GQ22

**Operating Characteristics**

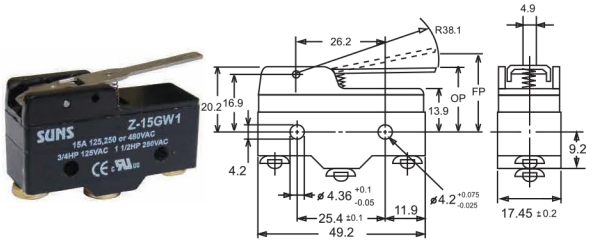
- OFmax 3.43N
- RFmin 1.12N
- PTmax 0.4mm
- OTmin 3.58mm
- MDmax 0.05mm
- OP 33.4±1.2mm




### Z-15GW

**Operating Characteristics**

- OFmax 0.69N
- RFmin 0.14N
- PTmax 10mm
- OTmin 5.6mm
- MDmax 2mm
- FPmax 28.2mm
- OP 19.1±0.7mm




### Z-15GW1

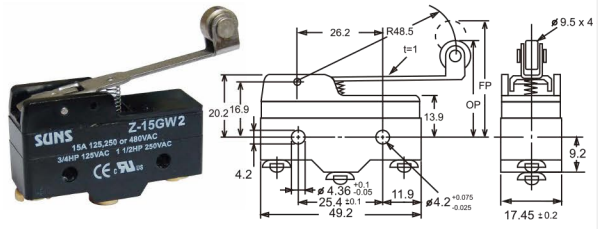
**Operating Characteristics**

- OFmax 1.03N
- RFmin 0.21N
- PTmax 6.6mm
- OTmin 3.7mm
- MDmax 0.85mm
- FPmax 24.5mm
- OP 18.4±0.5mm



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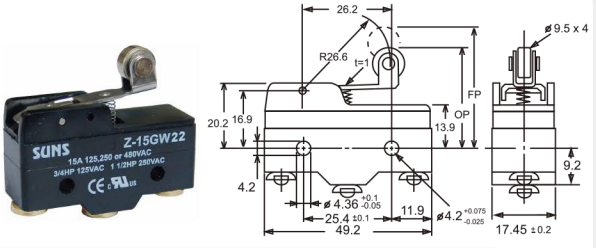
## GENERAL-PURPOSE MICRO SWITCHES
## Z-15 SERIES




### Z-15GW2

**Operating Characteristics**

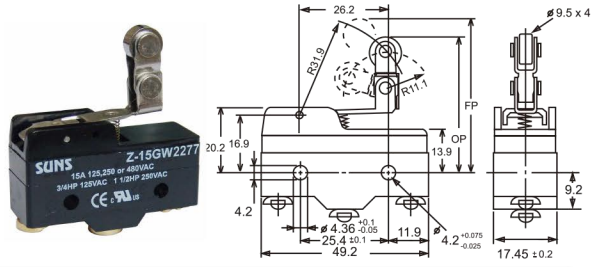
- OF$_{max}$ 0.98N
- RF$_{min}$ 0.21N
- OT$_{min}$ 4mm
- FP$_{max}$ 36.5mm
- PT$_{max}$ 7.1mm
- MD$_{max}$ 1.02mm
- OP 30.2±0.8mm




### Z-15GW22

**Operating Characteristics**

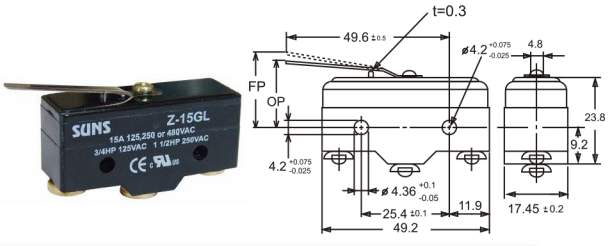
- OF$_{max}$ 1.57N
- RF$_{min}$ 0.41N
- OT$_{min}$ 2.4
- FP$_{max}$ 32.5mm
- PT$_{max}$ 2.7mm
- MD$_{max}$ 0.8mm
- OP 30.2±0.4mm




### Z-15GW2277

**Operating Characteristics**

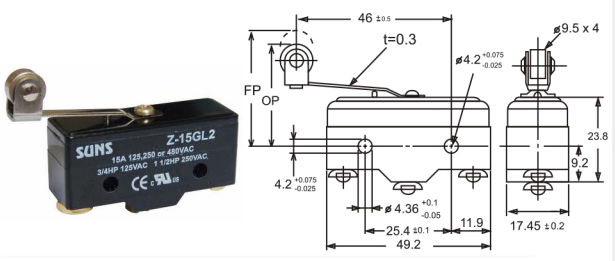
- OF$_{max}$ 1.67N
- RF$_{min}$ 0.41N
- PT$_{max}$ 3mm
- OT$_{min}$ 2.4mm
- MD$_{max}$ 0.8mm
- FP$_{max}$ 43.5mm
- OP 41.3±0.8mm




### Z-15GL

**Operating Characteristics**

- OF$_{max}$ 1.47N
- RF$_{min}$ 0.14N
- OT$_{min}$ 1.6mm
- FP 20.6mm
- PT$_{max}$ 4mm
- MD$_{max}$ 1.3mm
- OP 17.4±0.8mm

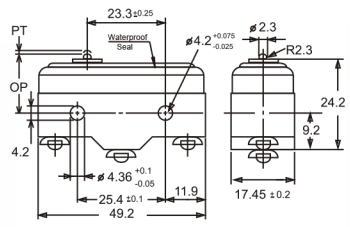



### Z-15GL2

**Operating Characteristics**

- OF$_{max}$ 1.47N
- RF$_{min}$ 0.14N
- PT$_{max}$ 4mm
- FP 31.8mm
- OT$_{min}$ 1.6mm
- MD$_{max}$ 1.3mm
- OP 28.6±0.8mm

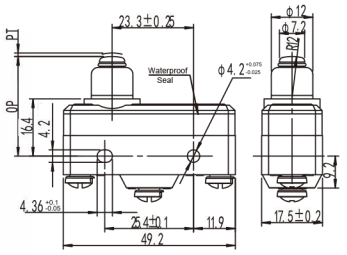
## GENERAL-PURPOSE MICRO SWITCHES
## Z-15 SERIES(SEALED TO IP64)


### Z-15G-55

**Operating Characteristics**

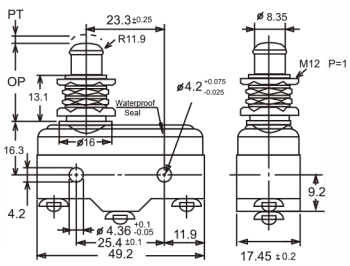
- OFmax 3.43N
- RFmin 1.12N
- PTmax 0.4mm
- OTmin 0.13mm
- MDmax 0.05mm
- OP 15.9±0.4mm


### Z-15GK-55

**Operating Characteristics**

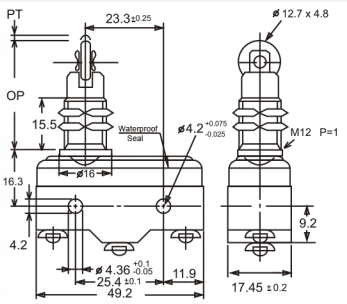
- OFmax 5.3N
- RFmin 1.11N
- OTmin 1.6mm
- PTmax 2.3mm
- MDmax 0.06mm
- OP 28.2±0.5mm


### Z-15GQ-55

**Operating Characteristics**

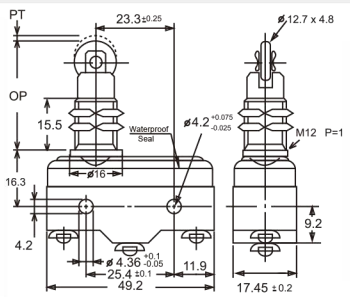
- OFmax 3.43N
- RFmin 1.12N
- PTmax 0.4mm
- OTmin 5.5mm
- MDmax 0.05mm
- OP 21.8±0.8mm


### Z-15GQ21-55

**Operating Characteristics**

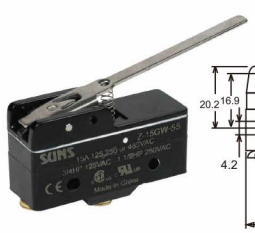
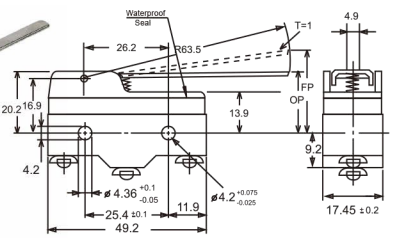
- OFmax 3.43N
- RFmin 1.12N
- PTmax 0.4mm
- OTmin 3.58mm
- MDmax 0.05mm
- OP 33.4±1.2mm


### Z-15GQ22-55

**Operating Characteristics**

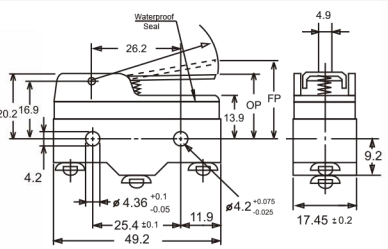
- OFmax 3.43N
- RFmin 1.12N
- PTmax 0.4mm
- OTmin 3.58mm
- MDmax 0.05mm
- OP 33.4±1.2mm


### Z-15GW-55

**Operating Characteristics**

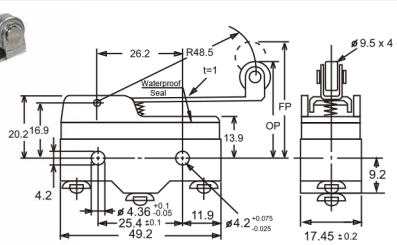
- OFmax 0.69N
- RFmin 0.14N
- PTmax 10mm
- OTmin 5.6mm
- MDmax 2mm
- FPmax 28.2mm
- OP 19.1±0.7mm


### Z-15GW1-55

**Operating Characteristics**

- OFmax 1.03N
- RFmin 0.21N
- PTmax 6.6mm
- OTmin 3.7mm
- MDmax 0.85mm
- FPmax 24.5mm
- OP 18.4±0.5mm


### Z-15GW2-55

**Operating Characteristics**

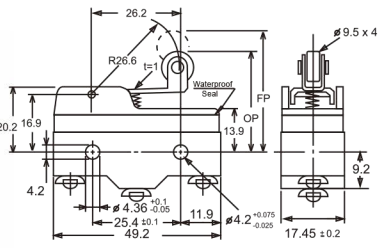
- OFmax 0.98N
- RFmin 0.21N
- PTmax 7.1mm
- OTmin 4mm
- MDmax 1.02mm
- FPmax 36.5mm
- OP 30.2±0.8mm



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## GENERAL-PURPOSE MICRO SWITCHES
## Z-15 SERIES(SEALED TO IP64)



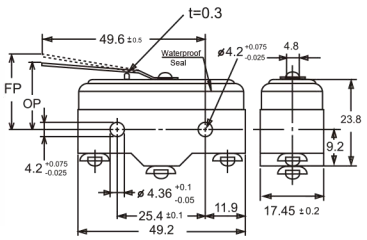



### Z-15GW22-55

**Operating Characteristics**

- OF$_{max}$ 1.57N
- RF$_{min}$ 0.41N
- OT$_{min}$ 2.4
- FP$_{max}$ 32.5mm
- PT$_{max}$ 2.7mm
- MD$_{max}$ 0.8mm
- OP 30.2±0.4mm



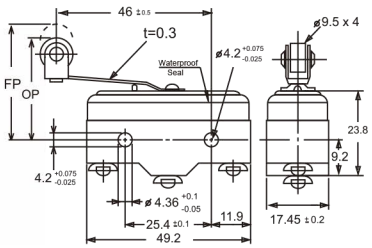



### Z-15GL-55

**Operating Characteristics**

- OF$_{max}$ 1.47N
- RF$_{min}$ 0.14N
- OT$_{min}$ 1.6mm
- FP 20.6mm
- PT$_{max}$ 4mm
- MD$_{max}$ 1.3mm
- OP 17.4±0.8mm



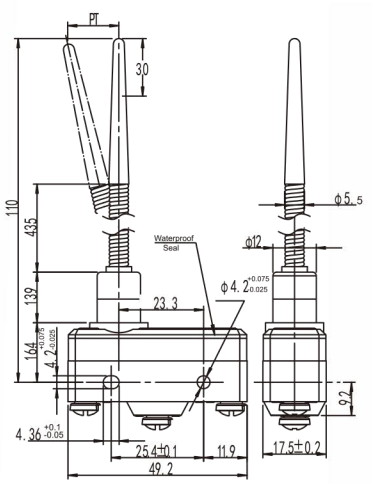



### Z-15GL2-55

**Operating Characteristics**

- OF$_{max}$ 1.47N
- RF$_{min}$ 0.14N
- PT$_{max}$ 4mm
- FP 31.8mm
- OT$_{min}$ 1.6mm
- MD$_{max}$ 1.3mm
- OP 28.6±0.8mm



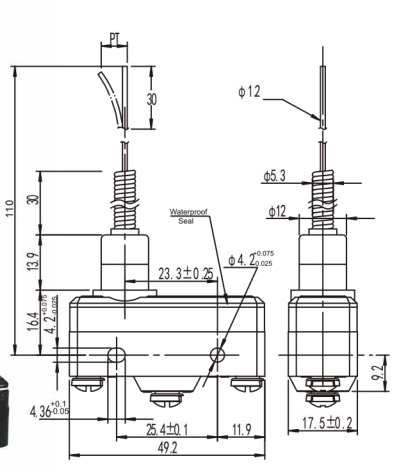



### Z-15GN66-55

**Operating Characteristics**

- OF$_{max}$ 0.7N
- PT$_{max}$ 25mm






### Z-15GN69-55

**Operating Characteristics**

- OF$_{max}$ 0.7N
- PT$_{max}$ 25mm



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