

# G12系列 / G12 Series

## 大型微动开关

Large Basic Limit Switch



### ■ 特点/Features

- ◆ 外壳采用耐高温的酚醛塑料
  - ◆ 非常灵敏的差动行程
  - ◆ 精确的操作重复性
  - ◆ 超长的机械寿命
  - ◆ 通过ENEC/UL/Cul/CQC认证
- Housing are Made of High Temperature Bakelite
  - High Sensitive Differential Travel
  - Precise Operation Repeatability
  - Long Mechanical Life
  - ENEC/UL/Cul/CQC Approved

### ■ 应用/Application

- ◆ 机床设备
  - ◆ 电梯
  - ◆ 汽车生产线
  - ◆ 民用、产业机械领域
  - ◆ 自动化领域内的任何自动化应用
- Machine Tools
  - Elevators
  - Auto Production Line
  - Civilian, Industrial Machinery Field
  - Any Automation Applications in Automotive Field

### ■ 特性参数/Parameters

|   |                                     |   |
|---|-------------------------------------|---|
| 额定值/Rating                                      | 16 A                                | ENEC/CQC<br>16A 125/250 or 480VAC 1/8HP 125VAC 1/4HP<br>250VAC 0.5A 125VDC 0.25A 250VDC |
|   | 22 A                                | UL/cUL<br>16A 125/250VAC 5E4 $\mu$ 40T85  |
|   | 26 A                                | ENEC/CQC<br>22A 125/250 or 480VAC 1/4HP 125VAC 1/2HP 250VAC<br>0.5A 125VDC 0.25A 250VDC |
| 操作频率/Operating Frequency                        | 电气/Electrical                       | 10 ~ 30 次/分 cycles/min  |
|   | 机械/Mechanical                       | 240 次/分 cycles/min  |
| 触点电阻 (初始值)<br>Contact Resistance(Initial Value) |                                     | 50m $\Omega$ Max.   |
| 绝缘电阻/Insulation Resistance                      |                                     | 100M $\Omega$ Min(at 500VDC)  |
| 抗电强度/Dielectric Strength                        | 端子间/between terminals               | 1500VAC 50/60Hz 1min  |
|   | 端子与外壳/between terminals and housing | 2500VAC 50/60Hz 1min  |
| 环境温度/Storage Temperature                        |                                     | -40° C ~ +85° C   |
| 保存湿度/Storage Humidity                           |                                     | 85%RH Max   |
| 寿命/Life   | 电气/Electrical                       | 50,000 次 cyles or 100,000次 cyles<br>取决于具体型号/Depends on Part No.                         |
|   | 机械/Mechanical                       | 10,000,000次 cyles   |
| 单重/Unit Net Weight                              |                                     | 约60g (防滴型面板安装式)<br>Approx 60g(Drip proof panel mounting type)                           |

## G12系列微动开关订货型号指引

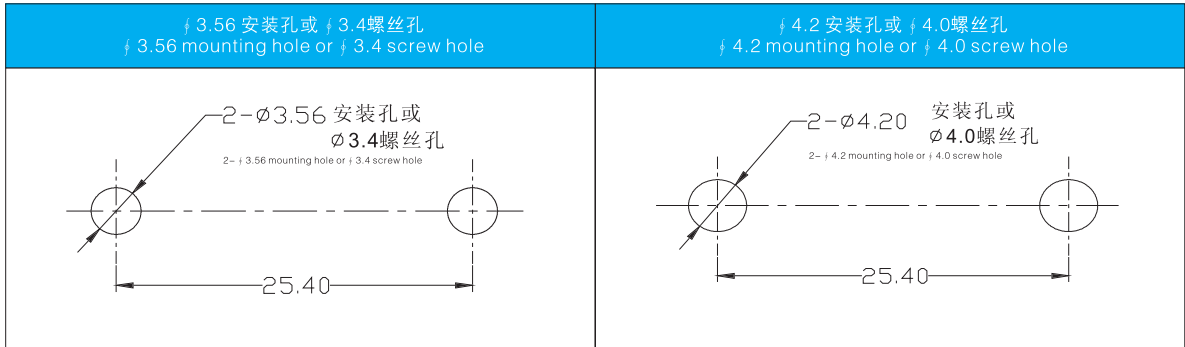
### G12 Series Micro Switch Ordering Instruction

| G12                                  | 16                      | 1  | R1  | A                                  | A                             | X   | X                                 |
|--------------------------------------|-------------------------|--|---|------------------------------------|-------------------------------|---|-----------------------------------|
| 开关类别<br>Switch Type                  | 额定电流<br>Electrical Life | 保护类型<br>Protection Type  | 操作类型<br>Level Type  | 接插形式<br>Circuit Code               | 端子类型<br>Terminal Type         | 特别设计代码<br>Special designator                | 特别设计代码<br>Special designator      |
| G12系列微动开关<br>G12 Series Micro Switch | 16                      | 1<br>一般型<br>General Type   | R1<br>柱塞式<br>Pin Plunger  | A<br>SPDT<br>单极双投                  | A<br>螺钉端子<br>Screw Terminals  | ( 4.2 安装孔<br>Mounting Hole                  | X<br>特别设计代码<br>Special designator |
|                                      | 22                      | 2<br>防滴型 IP62<br>Drip Proof Type                                   | RD1<br>弹簧柱塞式<br>Spring Pin Plunge                               | B<br>SPST-NC<br>单极单投-常闭            | B<br>焊接端子<br>Solder Terminals | ( 3.56 安装孔<br>Mounting Hole                 |                                   |
|                                      |                         | 3<br>防滴型 IP63<br>(含端子部分)<br>Drip Proof Type<br>(Terminal Included) | RQ1<br>面板安装柱塞式<br>Panel Mounting<br>Plunger                     | C<br>SPST-NO<br>单极单投-常开            | ...<br>其他<br>Other            | 特别用于大电<br>流直流(Special for<br>High DC Rating |                                   |
| 26                                   | 26                      | RQ2<br>面板安装滚轮柱塞式<br>Panel mounting<br>roller plunger               | RQ3<br>面板安装正交滚轮柱塞式<br>Panel Mounting<br>Cross Roller<br>Plunger | RW1<br>摆杆式<br>Swing Lever          | ...<br>其他<br>Other            | ...<br>其他<br>Other                          |                                   |
|                                      |                         | RW2<br>短摆杆式<br>Short Swing Lever                                   | RW3<br>滚轮摆杆式<br>Roller Swing Lever                              | RW4<br>滚轮短摆杆式<br>Short Swing Lever |                               |   |                                   |
|                                      |                         | RL1<br>簧片型手柄<br>Spring Straight Lever                              | RL2<br>滚轮簧片型手柄<br>Spring Roller Lever                           | ...<br>其他<br>Other                 |                               |   |                                   |
| ...<br>其他<br>Other                   | ...<br>其他<br>Other      |  |   |                                    |                               |   |                                   |

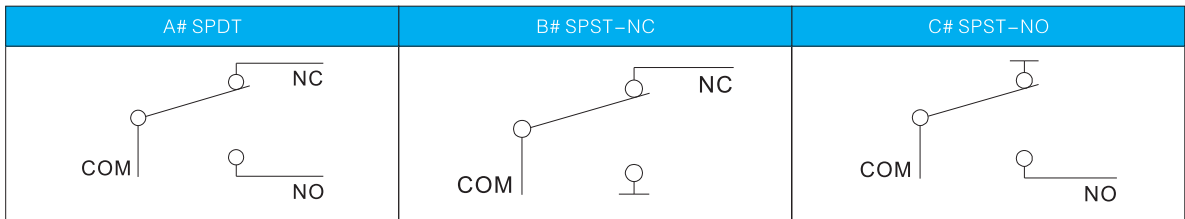
## G12系列 | 安装孔位、接触形式、端子尺寸、外形介绍 G12 Series | Mounting Hole, Circuit, Terminal Type, Shape

### ■ 安装孔尺寸 Mounting Hole Dimensions

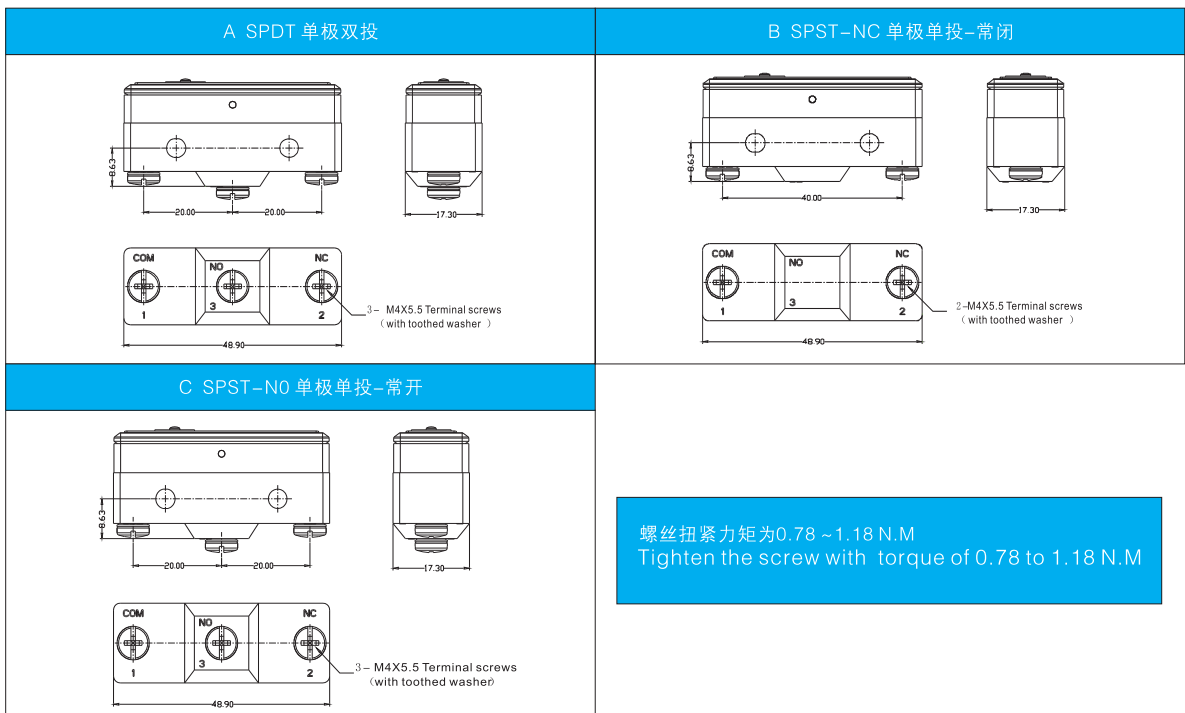
(单位Unit:mm)



### ■ 接触型式 Circuit Configuration

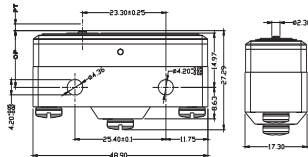


### ■ 接线端子尺寸/Terminal Type and Dimensions



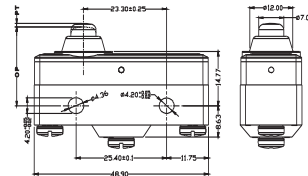
## ■外形尺寸和操作特征Dimensions and Operating Characteristics

### ◆G12□□-1R1□□-□



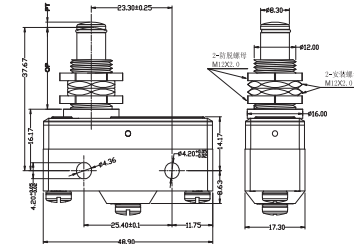
|       | OF Max. (gf) | RF Min. (gf) | PT Max. (mm) | OT Min. (mm) | MD Max. (mm) | FP Max. (mm) | OP (mm)    |
|-------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| G1216 | 370          | 115          | 0.7          | 0.13         | 0.1          | 16.7         | 15.9 ± 0.4 |
| G1222 | 620          |              |              |              | 0.2          |              |            |
| G1226 |              |              |              |              |              |              |            |

### ◆G12□□-1RD1□□-□



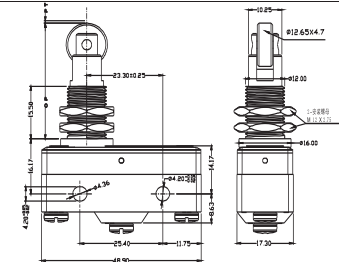
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|-------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| G1216 | 370          | 115          | 0.7          | 1.5          | 0.1          | 22.5         | 21.5 ± 0.5 |
| G1222 | 620          |              |              |              | 0.2          |              |            |
| G1226 |              |              |              |              |              |              |            |

### ◆G12□□-1RQ1□□-□



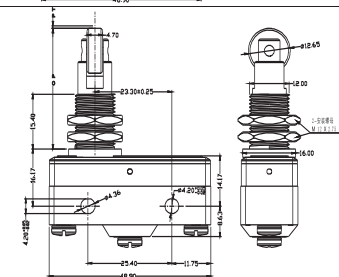
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|-------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| G1216 | 370          | 115          | 0.7          | 5.5          | 0.1          | 23           | 21.8 ± 0.8 |
| G1222 | 620          |              |              |              | 0.2          |              |            |
| G1226 |              |              |              |              |              |              |            |

### ◆G12□□-1RQ2□□-□



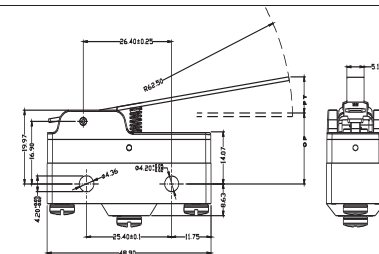
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|-------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| G1216 | 370          | 115          | 0.7          | 3.58         | 0.1          | 35           | 33.4 ± 1.2 |
| G1222 | 620          |              |              |              | 0.2          |              |            |
| G1226 |              |              |              |              |              |              |            |

### ◆G12□□-1RQ3□□-□



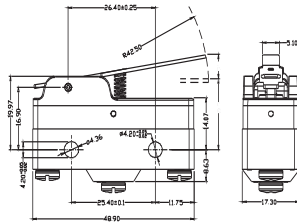
|       | OF Max. (gf) | RF Min. (gf) | PT Max. (mm) | OT Min. (mm) | MD Max. (mm) | FP Max. (mm) | OP (mm)    |
|-------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| G1216 | 370          | 115          | 0.7          | 3.58         | 0.1          | 35           | 33.4 ± 1.2 |
| G1222 | 620          |              |              |              | 0.2          |              |            |
| G1226 |              |              |              |              |              |              |            |

### ◆G12□□-1RW1□□-□



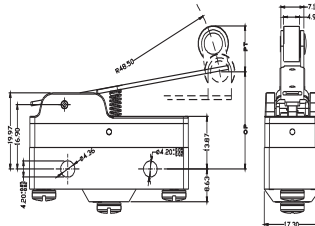
|       | OF Max. (gf) | RF Min. (gf) | PT Max. (mm) | OT Min. (mm) | MD Max. (mm) | FP Max. (mm) | OP (mm)    |
|-------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| G1216 | 70           | 14           | 10.0         | 5.6          | 2            | 28.2         | 19.0 ± 2.0 |
| G1222 | 120          |              |              |              |              |              |            |
| G1226 |              |              |              |              |              |              |            |

## ◆G12□□-1RW2□□-□



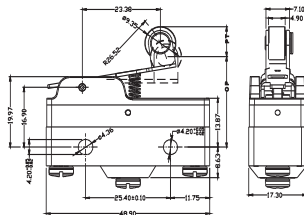
|       | OF Max. (gf) | RF Min. (gf) | PT Max. (mm) | OT Min. (mm) | MD Max. (mm) | FP Max. (mm) | OP (mm)    |
|-------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| G1216 | 105          |              |              |              |              |              |            |
| G1222 |              | 20           | 6.6          | 3.7          | 0.85         | 24.5         | 19.0 ± 1.5 |
| G1226 |              |              |              |              |              |              |            |

## ◆G12□□-1RW3□□-□



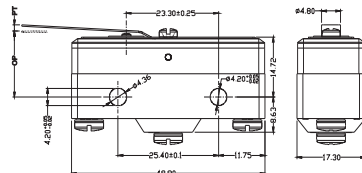
|       | OF Max. (gf) | RF Min. (gf) | PT Max. (mm) | OT Min. (mm) | MD Max. (mm) | FP Max. (mm) | OP (mm)    |
|-------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| G1216 | 100          |              |              |              |              |              |            |
| G1222 |              | 20           | 7.1          | 4            | 1.02         | 36.5         | 30.2 ± 2.0 |
| G1226 | 170          |              |              |              |              |              |            |

## ◆G12□□-1RW4□□-□



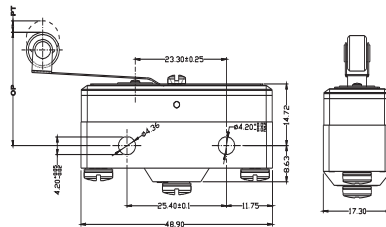
|       | OF Max. (gf) | RF Min. (gf) | PT Max. (mm) | OT Min. (mm) | MD Max. (mm) | FP Max. (mm) | OP (mm)  |
|-------|--------------|--------------|--------------|--------------|--------------|--------------|----------|
| G1216 | 160          |              |              |              |              |              |          |
| G1222 |              | 40           | 2.7          | 2.4          | 0.8          | 32.5         | 30.2 ± 1 |
| G1226 | 270          |              |              |              |              |              |          |

## ◆G12□□-1RL1□□-□



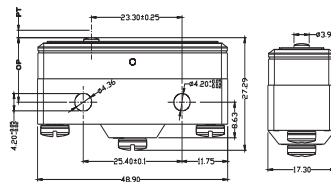
|       | OF Max. (gf) | RF Min. (gf) | PT Max. (mm) | OT Min. (mm) | MD Max. (mm) | FP Max. (mm) | OP (mm)    |
|-------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| G1216 | 140          |              |              |              |              |              |            |
| G1222 |              | 14           | 4.0          | 1.6          | 1.3          | 20.6         | 17.4 ± 0.8 |
| G1226 | 230          |              |              |              |              |              |            |

## ◆G12□□-1RL2□□-□



|       | OF Max. (gf) | RF Min. (gf) | PT Max. (mm) | OT Min. (mm) | MD Max. (mm) | FP Max. (mm) | OP (mm)    |
|-------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| G1216 | 150          |              |              |              |              |              |            |
| G1222 |              | 14           | 4.0          | 1.6          | 1.3          | 31.8         | 28.6 ± 0.8 |
| G1226 | 250          |              |              |              |              |              |            |

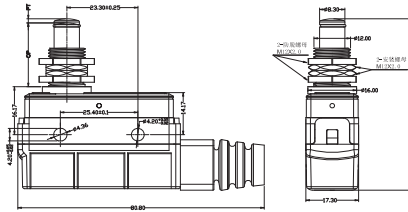
## ◆G12□□-2R1□□-□



|       | OF Max. (gf) | RF Min. (gf) | PT Max. (mm) | OT Min. (mm) | MD Max. (mm) | FP Max. (mm) | OP (mm)    |
|-------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| G1216 | 430          |              |              |              |              |              |            |
| G1222 |              | 115          | 0.7          | 0.13         | 0.06         | 16.5         | 15.9 ± 0.4 |
| G1226 |              |              |              |              |              |              |            |

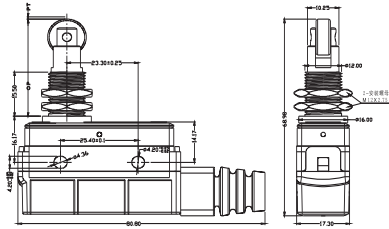


## ◆G12□□-3RQ1□□-□



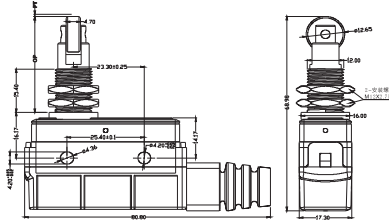
| OF Max. (gf) | RF Min. (gf) | PT Max. (mm) | OT Min. (mm) | MD Max. (mm) | FP Max. (mm) | OP (mm) |
|--------------|--------------|--------------|--------------|--------------|--------------|---------|
| G1216        | 370          | 115          | 0.7          | 5.5          | 0.05         | 23      |

## ◆G12□□-3RQ2□□-□



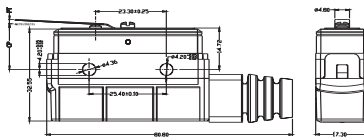
| OF Max. (gf) | RF Min. (gf) | PT Max. (mm) | OT Min. (mm) | MD Max. (mm) | FP Max. (mm) | OP (mm) |
|--------------|--------------|--------------|--------------|--------------|--------------|---------|
| G1216        | 370          | 115          | 0.7          | 3.58         | 0.05         | 35      |

## ◆G12□□-3RQ3□□-□



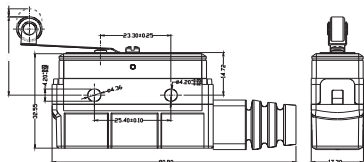
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|--------------|--------------|--------------|--------------|--------------|--------------|---------|
| G1216        | 370          | 115          | 0.7          | 3.58         | 0.05         | 35      |

## ◆G12□□-3RL1□□-□



| OF Max. (gf) | RF Min. (gf) | PT Max. (mm) | OT Min. (mm) | MD Max. (mm) | FP Max. (mm) | OP (mm) |
|--------------|--------------|--------------|--------------|--------------|--------------|---------|
| G1216        | 140          | 14           | 4.0          | 1.6          | 1.3          | 20.6    |

## ◆G12□□-3RL2□□-□



| OF Max. (gf) | RF Min. (gf) | PT Max. (mm) | OT Min. (mm) | MD Max. (mm) | FP Max. (mm) | OP (mm) |
|--------------|--------------|--------------|--------------|--------------|--------------|---------|
| G1216        | 150          | 14           | 4.0          | 1.6          | 1.3          | 31.8    |