



广东百能堡科技有限公司

GUANGDONG BAINENGBAO TECHNOLOGY CO.,LTD

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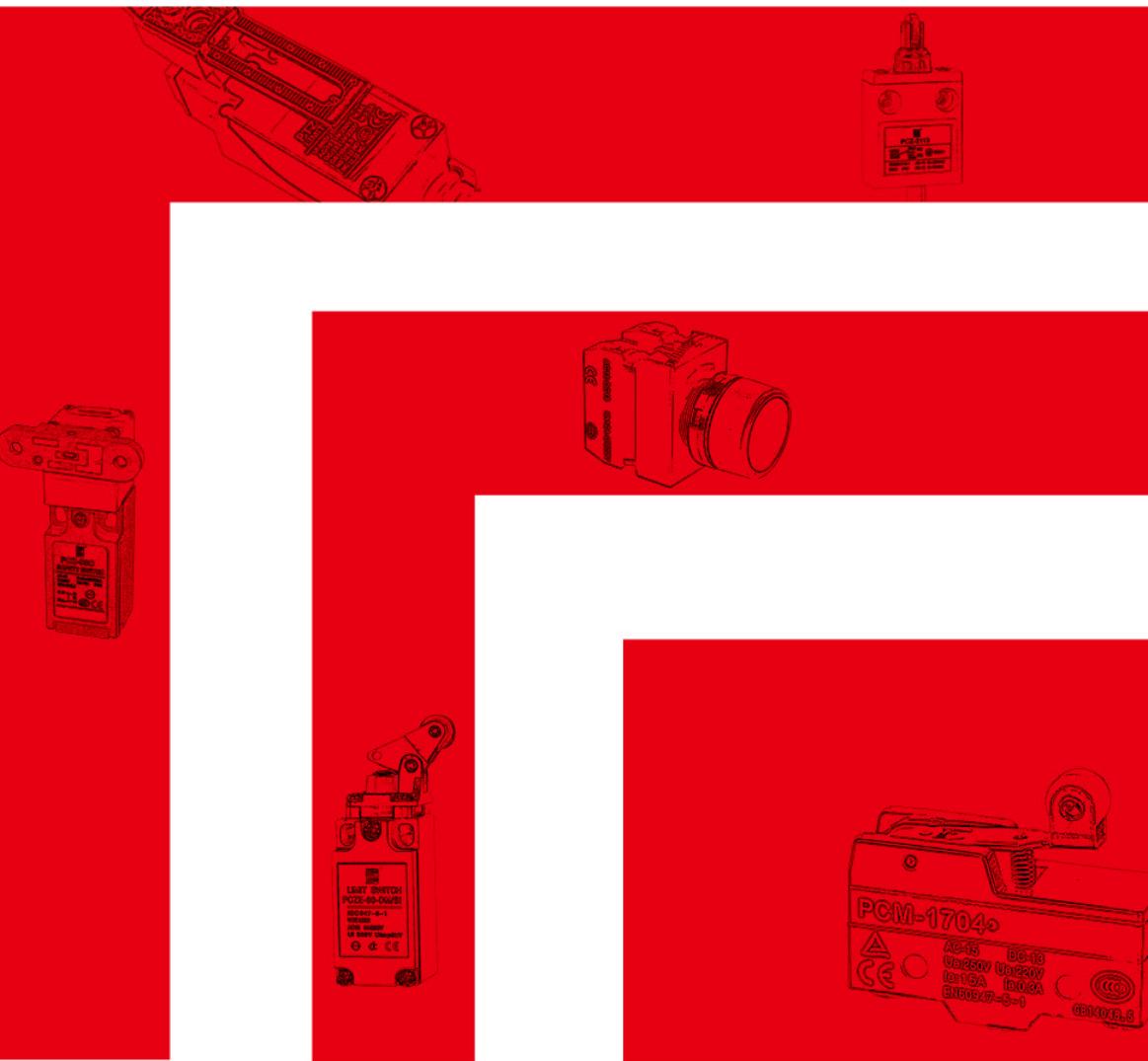
E-mail: gdbainengbao201206@163.com

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诚招代理商



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Company Introduction

企业简介

广东百能堡科技有限公司坐落于历史悠久的工业城市---佛山。我司位置距离佛山西火车站不远，大约5公里路程。

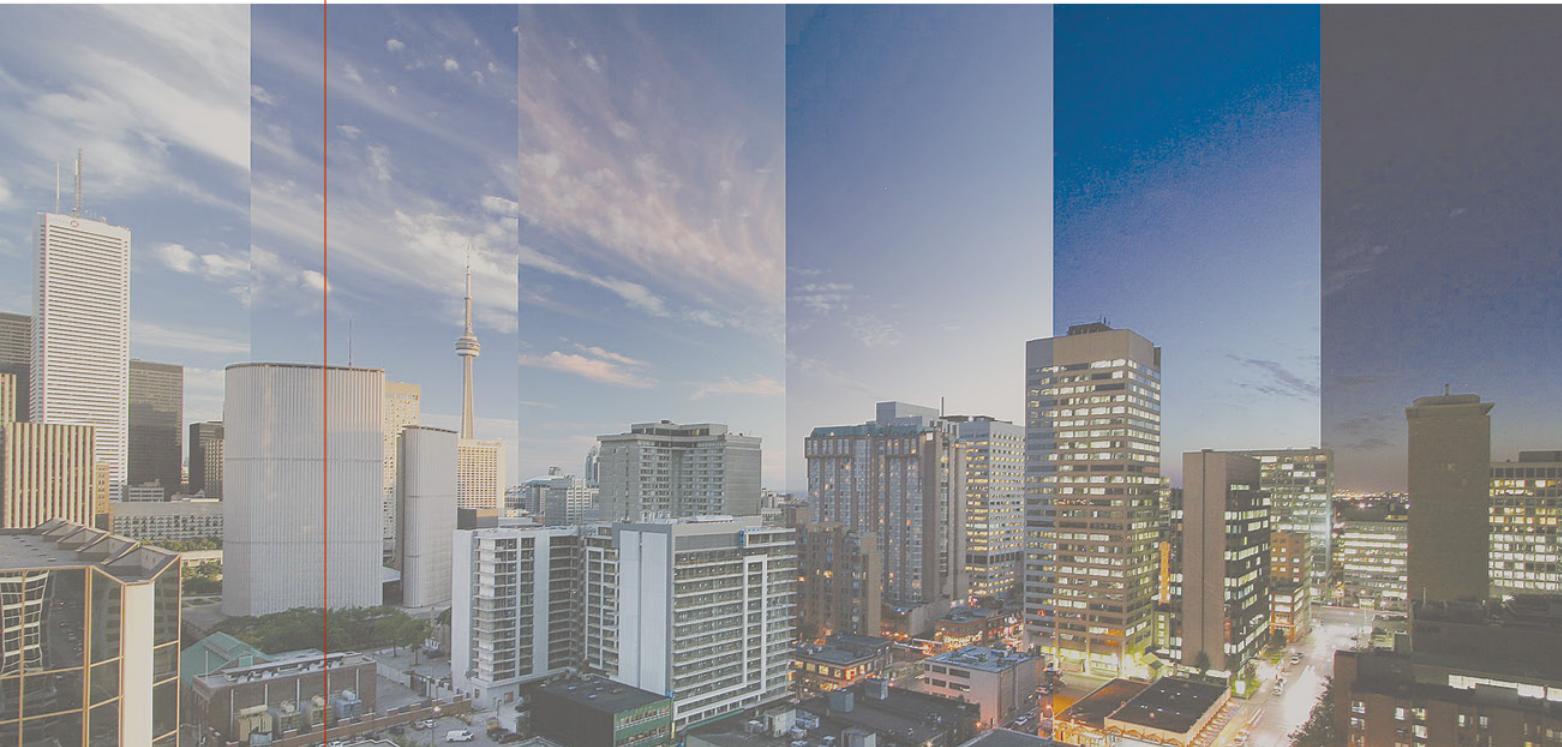
公司专业研制、开发、生产销售通风过滤网组、防水电箱、铝合金防爆接线盒，电柜成套以及各种气动元件，液压元件等。我们以领先的技术、先进的设备、科学的管理和服务，竭诚为广大客户服务。本产品广泛用于控制箱、转接线、分电箱、屏蔽箱、自动化控制装置、电子电源设备、医疗设备、电焊机、包装、印刷设备。自动化的通风、防尘散热之用，具有防尘效率高、体积小、免维护、安装方便等特点。公司在国际大市场下练就自己的能力，增强与国际市场的互动，从而取得更大的生存与可持续发展的空间，在激烈的市场竞争中保持良好的发展态势。

百能堡科技本着“创新、发展、和谐、诚信、务实”的企业宗旨，对市场技术研发关注17年，坚持打造质量第一的方针，不断开发新产品，并以高品质、完善的售后服务，深受广大用户的好评。我们热切希望能与全世界的朋友携手合作，共创辉煌。

Guangdong BaiNengBao Technology Co.Ltd. is located in the historic and industrial city--Foshan. Location of our company is not far from Foshan western railway station, about 5 kilometers away.

Our company specializes in R&D, manufacturing and sales for filter fan series, waterproof enclosure, aluminium explosionproof enclosure, complete electrical cabinet, pneumatic unit, hydraulic unit, etc. Our leading technology, advanced equipment, scientific management and perfect service, wholeheartedly for the general customer service. This product is widely used in the control box, switch box, distribution box, shielding box, automatic control device, electronic power supply equipment, medical equipment, electric welding machine, packaging, printing equipment. Office automation ventilation, dust cooling purposes, has the characteristics of high efficiency, small size, dust free of maintenance, easy installation. The company in the international market have their own ability, enhance the interaction with the international market, so as to achieve greater survival and sustainable development of space, the pfannenberg has always been able to maintain the good momentum of development in the fierce competition in the market.

Putnam, the spirit of "innovation, science and technology development, harmony, integrity, pragmatic" business purpose, Having been concentrating on technology R&D for 17 years, we adhere to the principle of quality first, and constantly develop new products, and with high quality, perfect after service, praised by the majority of the brave tiger. We sincerely hope to cooperate with friends all over the world, to create brilliant.



BaiNengBao Technology

创新、发展、和谐、诚信、务实 Innovation, Science and Technology Development, Harmony, Integrity, Pragmatic



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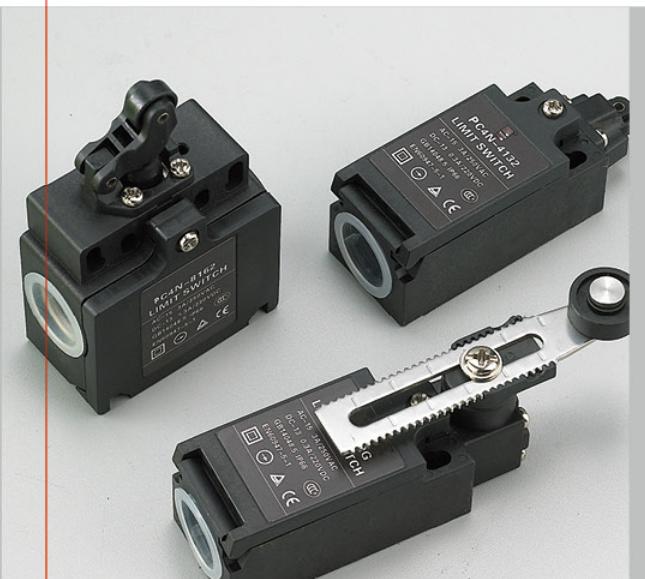
微动开关
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按钮开关、控制盒
Pushbutton Switch,
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| | | |
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PTZ-8 行程开关 Limit Switch

额定值 Ratings

| 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | | | 电感性负载 Inductive Load (A) | | | |
|------------------------|---|-----|-------------------|-----|-----------------------------|----|--------------------|-----|
| | 电阻性负载 Resistance Load | | 灯泡负载 Lamp Load | | 电感性负载 Inductive Load | | 马达负载 Motor Load | |
| | NC | NO | NC | NO | NC | NO | NC | NO |
| 125VAC | 5 | 5 | 1.5 | 0.7 | 3 | 3 | 2 | 1 |
| 250VAC | 5 | 5 | 1 | 0.5 | 3 | 3 | 1.5 | 0.8 |
| 8VDC | 5 | 5 | 3 | 3 | 5 | 4 | 3 | 3 |
| 14VDC | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 3 |
| 30VDC | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 3 |
| 125VDC | 0.4 | 0.4 | | | | | | |
| 250VDC | 0.2 | 0.2 | | | | | | |
| 突入电流 Inrush Current | N.C.:24A以下、N.O.:12A以下 N.C.: below 24A, N.O.: below 12A | | | | | | | |

注: 1. 电感性负载之功率因素在0.4以上(AC), 时间常数在7msec以下(DC)。
 2. 灯泡负载之突入电流为稳定状态电流之10倍。马达负载之突入电流为稳定状态电流之6倍。
 3. 带弹簧系列产品, 操作体的使用范围从弹簧的前端到弹簧全长的1/3以内。
 NOTES: 1. Inductive load has a power factor of 0.4 min.(AC) and a time constant of 7 msec.max.(DC).
 2. Lamp load has an inrush current of 10 times the steady-state current, while motor load has an inrush current of 6 times the steady-state current.
 3. Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

动作特性 Operating Characteristics

| 型号Models | PTZ-8104 | PTZ-8108 | PTZ-8107 | PTZ-8111 | PTZ-8112/8122 | PTZ-8166/8167/8168/8169 |
|------------|----------|----------|----------|------------|---------------|-------------------------|
| OF最大(Max.) | 750g | 750g | 750g | 900g | 900g | 150g |
| RF最小(Min.) | 100g | 100g | 100g | 150g | 150g | - |
| PT最大(Max.) | 20° | 20° | 20° | 1.5mm | 1.5mm | 30mm |
| OT最小(Min.) | 50° | 50° | 50° | 4mm | 4mm | - |
| MD最大(Max.) | 12° | 12° | 12° | 1mm | 1mm | - |
| OP | - | - | - | 26 ± 0.8mm | 37 ± 0.8mm | - |

特征 Features

- 双回路型限动开关
- 结构坚固, 由锌合金及强化塑胶组成
- 体积小, 可防水、防油
- 内藏微动开关有双簧片机构, 机械寿命更长
- 具较大之OT动作
- 容易配线之导管设计
- 引动器种类多, 方便使用
- Double circuit type of limit switch
- Highly rigid construction, consists of intensive plastic and aluminum cast (Head and cover snugly fit in box)
- Small volume, water-proof and oil-proof construction
- Built-in basic switch with double spring mechanism, longer mechanical life
- Smooth operation with greater OT
- Easy-to-wire circuit opening design
- Wide variety of actuators, easily use

接点型式 Contact Form



PTZ-8 行程开关 Limit Switch

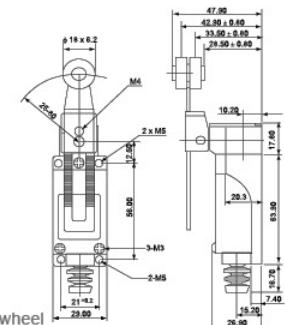
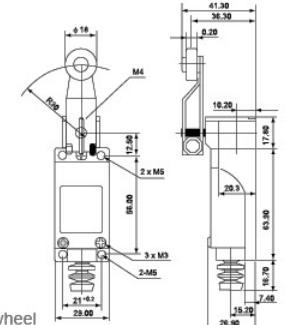
外观和尺寸 Appearance and Dimension

PTZ-8104

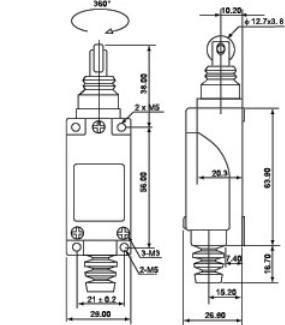
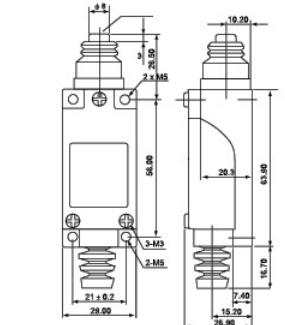


可选配不锈钢滚轮
Optional Stainless steel idler wheel

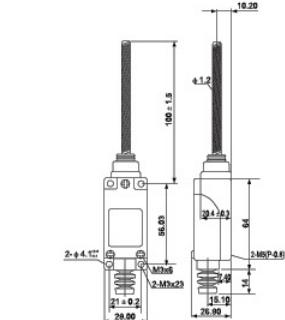
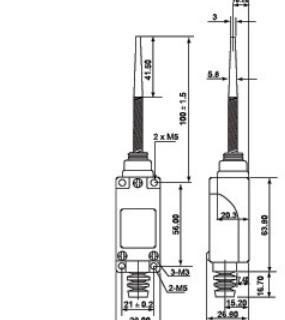
PTZ-8107



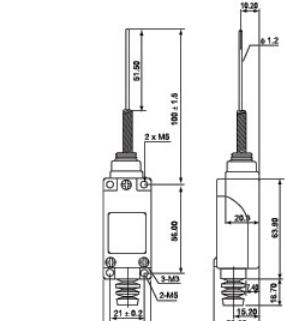
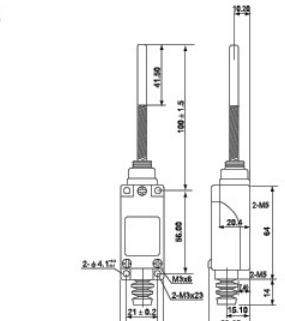
PTZ-8111



PTZ-8166



PTZ-8168



PCZ-8 行程开关 Limit Switch

额定值 Ratings

| 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | | | 电感性负载 Inductive Load (A) | | | |
|------------------------|---|-----|-------------------|-----|-----------------------------|----|--------------------|-----|
| | 电阻性负载 Resistance Load | | 灯泡负载 Lamp Load | | 电感性负载 Inductive Load | | 马达负载 Motor Load | |
| | NC | NO | NC | NO | NC | NO | NC | NO |
| 125VAC | 5 | 5 | 1.5 | 0.7 | 3 | 3 | 2 | 1 |
| 250VAC | 5 | 5 | 1 | 0.5 | 3 | 3 | 1.5 | 0.8 |
| 8VDC | 5 | 5 | 3 | 3 | 5 | 4 | 3 | 3 |
| 14VDC | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 3 |
| 30VDC | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 3 |
| 125VDC | 0.4 | 0.4 | | | | | | |
| 250VDC | 0.2 | 0.2 | | | | | | |
| 突入电流 Inrush Current | N.C.:24A以下、N.O.:12A以下 N.C.: below 24A, N.O.: below 12A | | | | | | | |

注: 1. 电感性负载之功率因素在0.4以上(AC)。时间常数在7msec以下(DC)。

2. 灯泡负载之突入电流为稳定状态电流之10倍。马达负载之突入电流为稳定状态电流之6倍。

3. 带弹簧系列产品，操作体的使用范围从弹簧的前端到弹簧全长的1/3以内。

NOTES: 1. Inductive load has a power factor of 0.4 min.(AC) and a time constant of 7 msec. max.(DC).

2. Lamp load has an inrush current of 10 times the steady-state current, while motor load has an inrush current of 6 times the steady-state current.

3. Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

特性 Characteristics

| | |
|-------------------------------|--|
| 操作速度 Operation speed | 0.5mm至50cm/sec(锁住塞型) 0.5mm-50cm/sec |
| 动作频率 Operating frequency | 机械:120次/分 电气:30次/分 Mechanical: 120 operations/minute Electrical: 30 operations/minute |
| 接点电阻 Contact resistance | 25mΩ (mm)(初期) 25mΩ max. (initial value) |
| 绝缘电阻 Insulation resistance | 100MΩ 以上(在500VDC下) 100MΩ min. (below 500VDC) |
| 电介强度 Dielectric strength | 非连续端子间1,000VAC, 50/60Hz持续1分钟 1000VAC, 50/60 Hz for 1 minute between terminals of the same polarity 载电流与无载电流零件间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts 端子和接地之间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between each terminal and ground |
| 振动 振动 Vibration | 10至55Hz, 1.5mm双振幅 10-55Hz, 1.5mm double amplitude |
| 冲击 Shock | 机械耐久:1,000m/Sec ² (约100G' S) 误动作耐久:300m/Sec ² (约30G' S) Mechanical durable: 1,000m/Sec ² (about 100G'S) Malfunction: 300m/Sec ² (about 30G'S) |
| 周围温度 Ambient temperature | 使用时:-10~+70°C (没有结冰With no icing) |
| 湿度 Humidity | 95%RH以下 <95% RH |
| 使用寿命 Life | 机械:10,000,000次以上 电气:500,000次以上 Mechanical: 10,000,000 operations above Electrical: 500,000 operations above |
| 保护构造 Degree of protection | IP65 (IEC 规格 Standard) |

动作特性 Operating Characteristics

| 型号 Models | PCZ-8104 | PCZ-8108 | PCZ-8107 | PCZ-8111 | PCZ-8112/8122 | PCZ-8166/8167/8168/8169 |
|------------|----------|----------|----------|------------|---------------|-------------------------|
| OF最大(Max.) | 750g | 750g | 750g | 900g | 900g | 150g |
| RF最小(Min.) | 100g | 100g | 100g | 150g | 150g | - |
| PT最大(Max.) | 20° | 20° | 20° | 1.5mm | 1.5mm | 30mm |
| OT最小(Min.) | 50° | 50° | 50° | 4mm | 4mm | - |
| MD最大(Max.) | 12° | 12° | 12° | 1mm | 1mm | - |
| OP | - | - | - | 26 ± 0.8mm | 37 ± 0.8mm | - |

特征 Features

- 双回路型限位开关
- 结构坚固，由锌合金及强化塑胶组成
- 体积小，可防水、防油
- 内藏微动开关有双簧片机构，机械寿命更长
- 具较大之OT动作
- 容易配线之导管设计
- 引动器种类多，方便使用
- 强制断开功能，可将接点强制推开，使回路切断。
- 接点采用24K镀金工艺。
- Double circuit type of limit switch
- Highly rigid construction, consists of intensive plastic and aluminum cast (Head and cover snugly fit in box)
- Small volume, water-proof and oil-proof construction
- Built-in basic switch with double spring mechanism, longer mechanical life
- Smooth operation with greater OT
- Easy-to-wire circuit opening design
- Wide variety of actuators, easily use

接点型式 Contact Form



PCZ-8 行程开关 Limit Switch

外观和尺寸 Appearance and Dimension

PCZ-8104



PCZ-8107



PCZ-8111



PCZ-8166



PCZ-8168



PCZ-8108



PCZ-8112



PCZ-8167



PCZ-8169





PCSA 行程开关 Limit Switch

额定值 Ratings

| 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | | | 电感性负载 Inductive Load (A) | | | |
|------------------------|---|-----|-------------------|-----|-----------------------------|----|--------------------|-----|
| | 电阻性负载 Resistance Load | | 灯泡负载 Lamp Load | | 电感性负载 Inductive Load | | 马达负载 Motor Load | |
| | NC | NO | NC | NO | NC | NO | NC | NO |
| 125VAC | 5 | 5 | 1.5 | 0.7 | 3 | 3 | 2 | 1 |
| 250VAC | 5 | 5 | 1 | 0.5 | 3 | 3 | 1.5 | 0.8 |
| 8VDC | 5 | 5 | 3 | 3 | 5 | 4 | 3 | 3 |
| 14VDC | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 3 |
| 30VDC | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 3 |
| 125VDC | 0.4 | 0.4 | | | | | | |
| 250VDC | 0.2 | 0.2 | | | | | | |
| 突入电流 Inrush Current | N.C.:24A以下、N.O.:12A以下 N.C.: below 24A, N.O.: below 12A | | | | | | | |

注: 1. 电感性负载之功率因素在0.4以上(AC)。时间常数在7msec以下(DC)。
2. 灯泡负载之突入电流为稳定状态电流之10倍。马达负载之突入电流为稳定状态电流之6倍。
3. 带弹簧系列产品, 操作体的使用范围为从弹簧的前端到弹簧全长的1/3以内。

NOTES: 1. Inductive load has a power factor of 0.4 min.(AC) and a time constant of 7 msec. max.(DC).
2. Lamp load has an inrush current of 10 times the steady-state current, while motor load has an inrush current of 6 times the steady-state current.
3. Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

规格 Specifications

| 型号 Model | Model | PCSA | PCSA-001 | PCSA-003 | PCSA-012 | PCSA-021 | PCSA-041 | PCSA-031 | PCSA-051 | PCSA-061 | PCSA-071 | PCSA-081 |
|----------------------------------|---------------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 操作力 Operating force | OF (最大)(Max.) | 800g | 800g | 800g | 400g-cm | 400g-cm | 400g-cm | 100g-cm | 100g-cm | 150g | 150g | 150g |
| 回弹力 Release force | RF (最小)(Min.) | 400g | 400g | 400g | 100g-cm | 100g-cm | 100g-cm | 50g | 50g | 50g | 50g | 50g |
| 前预行程 Pre-travel | PT (最大)(Max.) | 1.8mm | 1.8mm | 1.8mm | 20° | 20° | 20° | 20° | 20° | 30mm | 30mm | 30mm |
| 触发位置 Tripping position | TP ± 10% | 2.0mm | 2.0mm | 2.0mm | 22.5° | 22.5° | 22.5° | 22.5° | 22.5° | 22.5° | 22.5° | 22.5° |
| 行程移动分辨率 Movement differential | MD(最大)(Max.) | 1.2mm | 1.2mm | 1.2mm | 10° | 10° | 10° | 10° | 10° | 14° | 14° | 14° |
| 触后行程 Over travel | OT (最小)(Min.) | 4.0mm | 4.0mm | 4.0mm | 75° | 75° | 75° | 75° | 75° | 20mm | 20mm | 20mm |
| 累积总行程 Total travel | TT (最小)(Min.) | 5.8mm | 5.8mm | 5.8mm | 95° | 95° | 95° | 95° | 95° | 50mm | 50mm | 50mm |
| 摇臂转换分角度 Rotary indexing | | | | | 22.5° | 22.5° | 22.5° | 22.5° | 22.5° | | | |



特征 Features

- 引动器种类多, 方便使用
- 坚硬金属外壳, 极大摇臂角度 ± 95°
- 不锈钢滚轮, 冲头及弹簧
- 导管连接器尺寸标配M18x1.5

- A variety of actuators that is easy to use
- Strong metal outer shell, swing arm max. ± 95°
- Stainless steel idler wheel, punch and spring
- Standard size configuration M18x1.5 for conduit connector

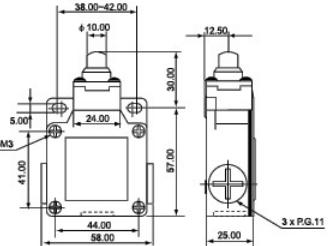
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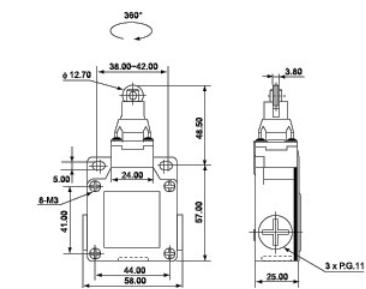
PCAS 行程开关 Limit Switch

外观和尺寸 Appearance and Dimension

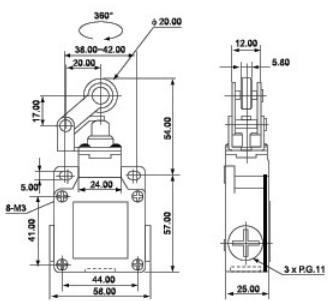
PCSA-001



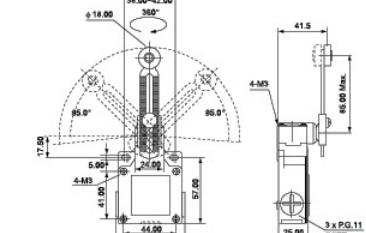
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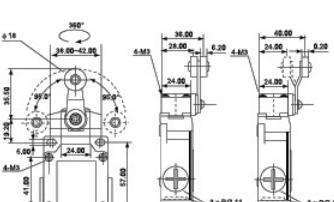
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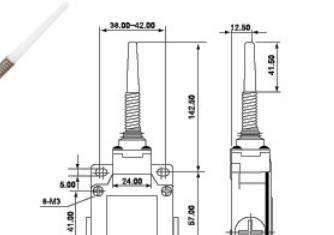
PCSA-031



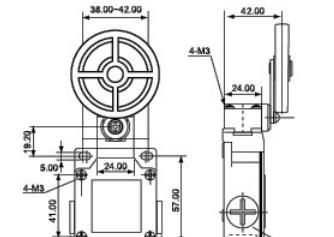
PCSA-021



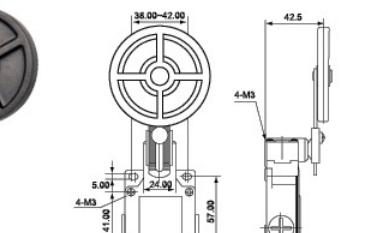
PCSA-071



PCSA-041



PCSA-051





PCWL 行程开关 Limit Switch

额定值 Ratings

| 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | | | 电感性负载 Inductive Load (A) | | | |
|-----------------------|---------------------------------|-----|-------------------|----|-----------------------------|-----|--------------------|----|
| | 电阻性负载 Resistance Load | | 灯泡负载 Lamp Load | | 电感性负载 Inductive Load | | 马达负载 Motor Load | |
| | NC | NO | NC | NO | NC | NO | NC | NO |
| 125VAC | 10 | 3 | 1.5 | | 10 | 5 | 2.0 | |
| 250VAC | 5 | 2 | 1 | | 5 | 3 | 1.0 | |
| 480VAC | 3 | 1.5 | 0.8 | | 3 | 1.5 | 0.8 | |
| 600VAC | 1 | 1 | 0.5 | | 1.5 | 1 | 0.5 | |
| 8VDC | 10 | 6 | 3 | | 10 | 6 | | |
| 14VDC | 10 | 6 | 3 | | 10 | 6 | | |
| 30VDC | 6 | 4 | 3 | | 6 | 4 | | |
| 125VDC | 0.8 | 0.2 | 0.2 | | 0.8 | 0.2 | | |
| 250VDC | 0.4 | 0.1 | 0.1 | | 0.4 | 0.1 | | |

注：1. 电感性负载：功率因素=0.4; 时间常数=7msec。
2. 灯泡负载之突入电流为稳定状态电流之10倍，马达负载之突入电流为稳定状态电流之6倍。

3. 带弹簧系列产品，操作体的使用范围为从弹簧的前端到弹簧全长的1/3以内。

NOTES: 1.Inductive load has a power factor of 0.4 min.(AC) and a time constant of 7 msec. max.(DC).

2.Lamp load has an inrush current of 10 times the steady-state current,while motor load has an inrush current of 6 times the steady-state current.

3.Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

特性 Characteristics

| | |
|-------------------------------|--|
| 操作速度 Operation speed | 1mm至2m/s(PCWLCA2型) 1mm-2m/s |
| 动作频率 Operating frequency | 机械: 120次/分 电气: 30次/分 Mechanical: 120 operations/minute Electrical: 30 operations/minute |
| 接点电阻 Contact resistance | 15mΩ以下(初期) 15mΩ max. (initial value) |
| 绝缘电阻 Insulation resistance | 100MΩ以上(在500VDC以下) 100MΩ min. (at 500VDC) |
| 介电强度 Dielectric strength | 非连续端子间1,000VAC, 50/60Hz持续1分钟 1000VAC, 50/60 Hz for 1 minute between terminals of the same polarity 载电流与无载电流零件间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts 端子和接地之间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between each terminal and ground |
| 振动 Vibration | 10至50Hz, 1.5mm双振幅10-55Hz, 1.5mm amplitude |
| 冲击 Shock | 机械耐久: 1,000m/Sec ² (约100G'S) 误动作耐久: 300m/Sec ² (约30G'S) Mechanical durable: 1,000m/Sec ² (about 100G'S) Malfunction: 300m/Sec ² (about 30G'S) |
| 周围温度 Ambient temperature | 使用时:-10~+80°C (没有结冰With no icing) |
| 湿度 Humidity | 95%RH以下 <95% RH |
| 使用寿命 Life | 机械: 10,000,000次以上(在额定OT值下) 电气: 500,000次以上 Mechanical: 10,000,000 operations above (under rated OT) Electrical: 500,000 operations above |
| 保护构造 Degree of protection | IEC规格: IP66 IEC specification: IP66 |

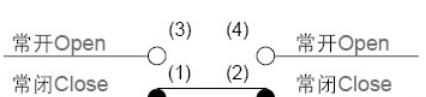
动作特性 Operating Characteristics

| 型号 Models | PCWLCA2-2 | PCWL2 | PCWLNJ | PCWLNJ-S2 | PCWLCA12-2-Q | PCWLCA12-2-QD | PCWL | PCWLNJ-2 | PCWLNJ-30 | PCWL1 | PCWL3 | |
|------------|-----------|-----------|--------|-----------|--------------|---------------|-----------------------|----------|-----------|-----------|---------|-------|
| OF最大(Max.) | 1360g | 2720g | 150g | 29g | 1360g | 142g | 1200g | 2720g | 120g | 80g | 2720g | 2720g |
| RF最小(Min.) | 227g | 910g | - | - | 227g | 28g | - | 910g | - | - | 910g | 910g |
| PT最大(Max.) | 20° | 1.7mm | 28mm | 28mm | 20° | 20° | 55° | 1.7mm | 28mm | 28mm | 1.7mm | 1.7mm |
| OT最小(Min.) | 30° | 5.6mm | - | - | 30° | 30° | 35° | 6.4mm | - | - | 5.6mm | 5.6mm |
| MD最大(Max.) | 12° | 1mm | - | - | 12° | 12° | - | 1mm | - | - | 1mm | 1mm |
| TF最大(Max.) | 2720g | - | - | - | 2720g | 200g | - | - | - | - | 2720g | 2720g |
| TT最小(Min.) | 50° | 6.5±0.8mm | - | - | 50° | 50° | OP:90±10° OP:34±2.8mm | - | - | 6.5±0.8mm | 9±0.8mm | |

特征 Features

- 双回路型限位开关，用途广泛
- 具坚固之一体铸造铝合金外壳
- 高机械强度
- 具耐油、防水和防压结构
- 因装有设定位置指示板，故维护容易
- 引动器种类多，方便使用
- 内藏接点座有双簧片设计，机械寿命长
- 导管连接器尺寸标配M20x1.5
- Double-circuit type of limit switch, is widely used
- With strong aluminum cast outer shell
- High mechanical strength
- Structure preventing oil, water and pressure
- Indicating plate with setting position is installed in it, so it is easy to maintain
- Various of actuators is taken convenience for using
- Built-in contact stand has double-spring, so it has long mechanical life
- Standard size configuration M20x1.5 for conduit connector

接点型式 Contact Form



PCWL 行程开关 Limit Switch

外观和尺寸 Appearance and Dimension

PCWLCA2-2



可选配塑胶滚轮
Optional plastic idler wheel

PCWLCL



PCWL1



PCWL3



PCWLCA12-2-Q



可选配塑胶滚轮
Optional plastic idler wheel

PCWL2

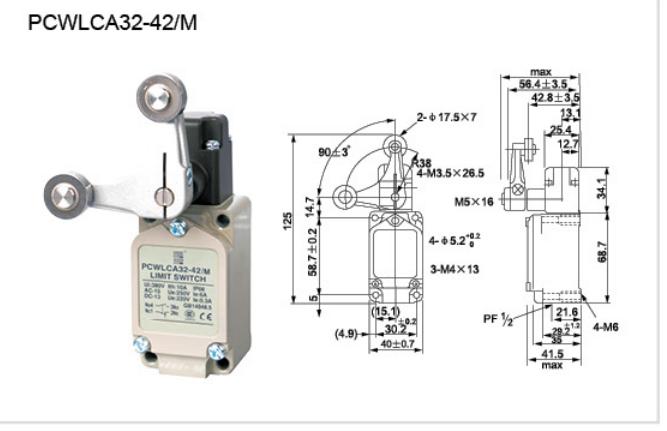
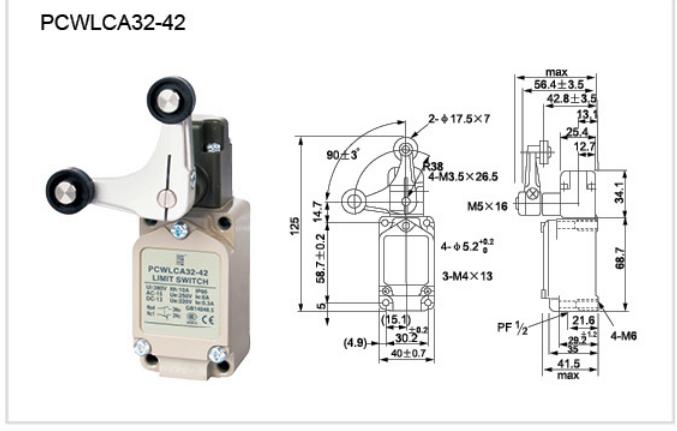
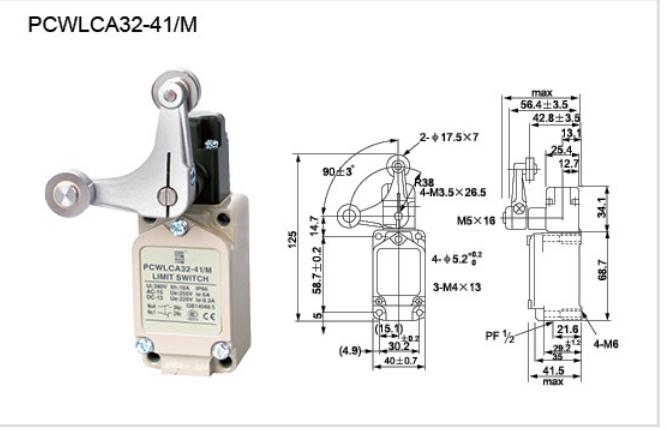
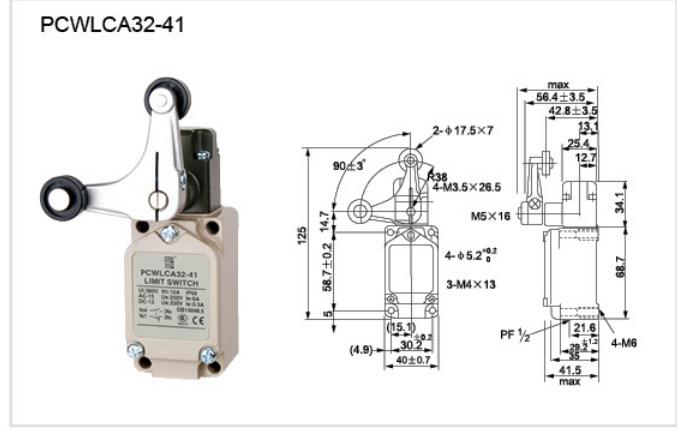
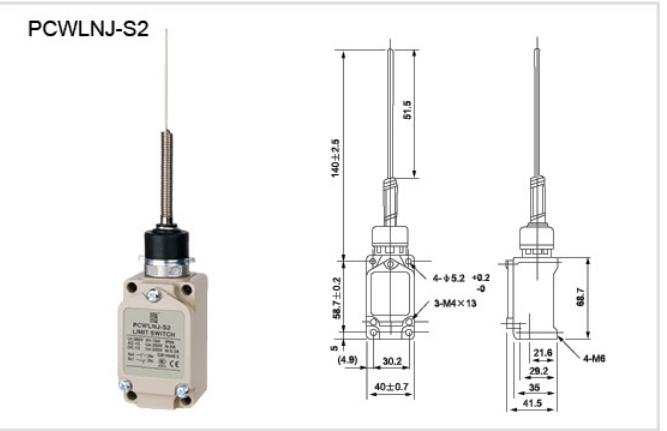
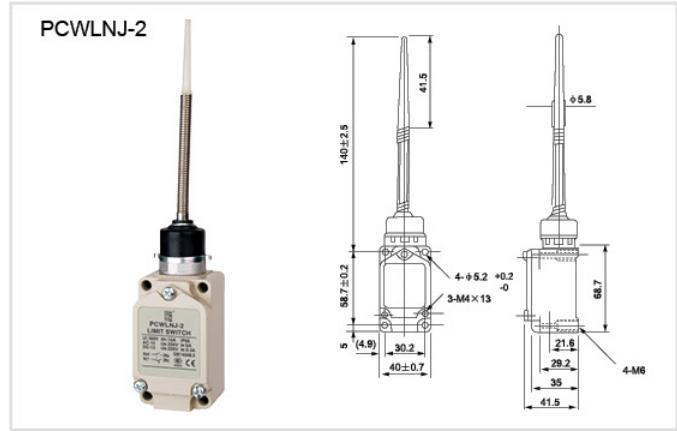
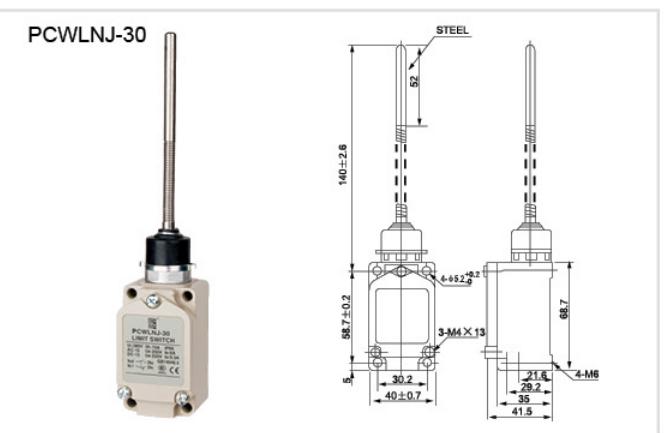
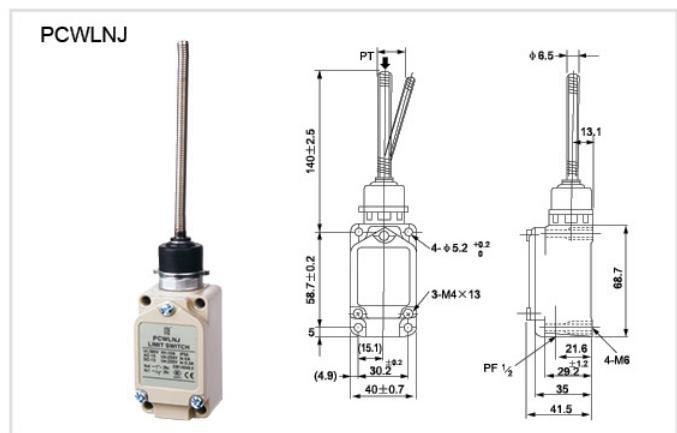


PCWLCA12-2-QD



PCWL 行程开关 Limit Switch

外观和尺寸 Appearance and Dimension



PCHL 行程开关 Limit Switch

额定值 Ratings

| 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | | | 电感性负载 Inductive Load (A) | | | |
|------------------------|---|-----|-------------------|-----|-----------------------------|----|--------------------|-----|
| | 电阻性负载 Resistance Load | | 灯泡负载 Lamp Load | | 电感性负载 Inductive Load | | 马达负载 Motor Load | |
| | NC | NO | NC | NO | NC | NO | NC | NO |
| 125VAC | 5 | 5 | 1.5 | 0.7 | 3 | 3 | 2 | 1 |
| 250VAC | 5 | 5 | 1 | 0.5 | 3 | 3 | 1.5 | 0.8 |
| 8VDC | 5 | 5 | 3 | 3 | 5 | 4 | 3 | 3 |
| 14VDC | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 3 |
| 30VDC | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 3 |
| 125VDC | 0.4 | 0.4 | | | | | | |
| 250VDC | 0.2 | 0.2 | | | | | | |
| 突入电流 Inrush Current | N.C.:24A以下、N.O.:12A以下 N.C.: below 24A, N.O.: below 12A | | | | | | | |

注: 1. 电感性负载之功率因素在0.4以上(AC)。时间常数在7msec以下(DC)。

2. 灯泡负载之突入电流为稳定状态电流之10倍。马达负载之突入电流为稳定状态电流之6倍。

3. 带弹簧系列产品，操作体的使用范围为从弹簧的前端到弹簧全长的1/3以内。

NOTES: 1.Inductive load has a power factor of 0.4 min.(AC) and a time constant of 7 msec. max.(DC).

2.Lamp load has an inrush current of 10 times the steady-state current,while motor load has an inrush current of 6 times the steady-state current.

3.Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

特性 Characteristics

| | |
|---|--|
| 操作速度 Operation speed | 0.5mm至50cm/sec(锁住塞型) 0.5mm-50cm/sec |
| 动作频率 Operating frequency | 机械:120次/分 电气:30次/分 Mechanical: 120 operations/minute Electrical: 30 operations/minute |
| 接点电阻 Contact resistance | 25mΩ (mm)(初期) 25mΩ max. (initial value) |
| 绝缘电阻 Insulation resistance | 100MΩ 以上(在500VDC下) 100mΩ min. (below 500VDC) |
| 电介强度 Dielectric strength | 非连续端子间1,000VAC, 50/60Hz持续1分钟 1000VAC, 50/60 Hz for 1 minute between terminals of the same polarity |
| 戴电流与无载电流零件间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts | 戴电流与无载电流零件间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts |
| 端子和接地之间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between each terminal and ground | 端子和接地之间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between each terminal and ground |
| 振动 Vibration | 10至55Hz, 1.5mm双振幅 10-55Hz, 1.5mm double amplitude |
| 冲击 Shock | 机械耐久:1,000m/Sec ² (约100G' S) 误动作耐久:300m/Sec ² (约30G' S) Mechanical durable: 1,000m/Sec ² (about 100G'S) Malfunction: 300m/Sec ² (about 30G'S) |
| 周围温度 Ambient temperature | 使用时:-10~+70°C (没有结冰With no icing) |
| 湿度Humidity | 95%RH以下 <95% RH |
| 使用寿命 Life | 机械:10,000,000次以上 电气:500,000次以上 Mechanical: 10,000,000 operations above Electrical: 500,000 operations above |
| 保护构造 Degree of protection | IP65 (IEC 规格 Standard) |

规格 Specification

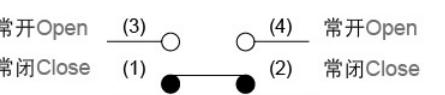
| 型号 Model | PCHL | 5000 | 5030 | 5050 | 5100 | 5200 | 5220 | 5300 | 5330 | 5381 | 5391 |
|----------------------------------|---------------|---------|---------|---------|---------|---------|---------|-------|-------|-------|---------|
| 操作力 Operating force | OF (最大)(Max.) | 750g-cm | 750g-cm | 750g-cm | 750g-cm | 900g-cm | 900g-cm | 150g | 150g | 150g | 550g-cm |
| 回弹力 Release force | RF (最小)(Min.) | 100g-cm | 100g-cm | 100g-cm | 100g-cm | 200g | 200g | 30g | 30g | 30g | 100g-cm |
| 前预行程 Pre-travel | PT (最大)(Max.) | 20° | 20° | 20° | 20° | 1.8mm | 1.8mm | 30mm | 30mm | 30mm | 20° |
| 触发位置 Tripping position | TP ± 10% | 22.5° | 22.5° | 22.5° | 22.5° | 2.0mm | 2.0mm | 2.0mm | 2.0mm | 2.0mm | 22.5° |
| 行程移动分辨率 Movement differential | MD(最大)(Max.) | 10° | 10° | 10° | 10° | 1.2mm | 1.2mm | 1.2mm | 1.2mm | 1.2mm | 14° |
| 触后行程 Over travel | OT (最小)(Min.) | 75° | 75° | 75° | 75° | 4.0mm | 4.0mm | 4.0mm | 4.0mm | 4.0mm | 75° |
| 累积总行程 Total travel | TT (最小)(Min.) | 95° | 95° | 95° | 95° | 5.8mm | 5.8mm | 5.8mm | 5.8mm | 5.8mm | 95° |

特征 Features

- 引动器种类多，方便使用
- 容易配线之导管设计
- 金属外壳，高机械强度
- 内藏接点座有双簧片设计，机械寿命长

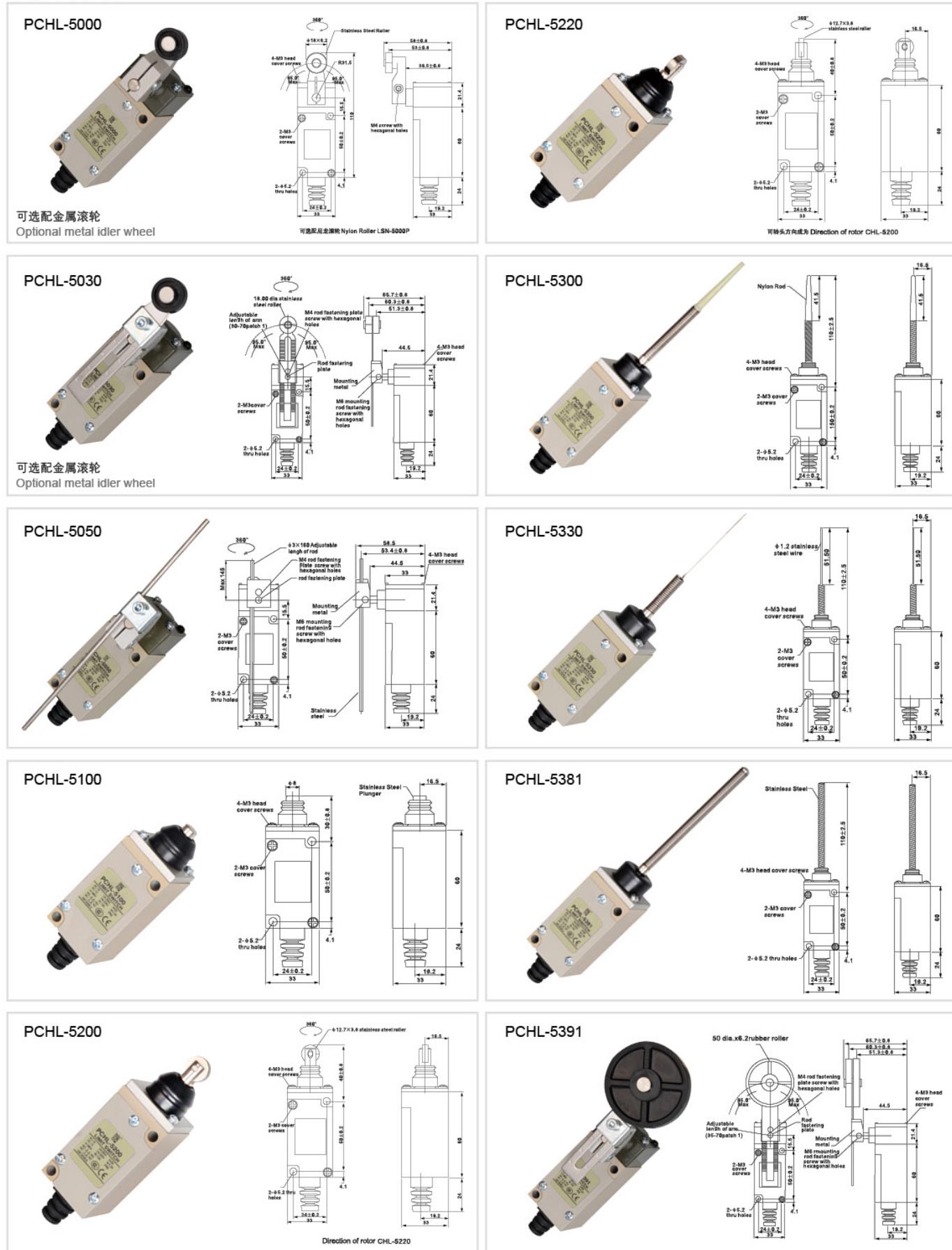
- A variety of actuators that is easy to use
- Conduit design that is convenient for wiring
- Metal shell with high mechanical strength
- Built-in contact stand has double-spring, so it has long mechanical life

接点型式 Contact Form



PCHL 行程开关 Limit Switch

外观和尺寸 Appearance and Dimension



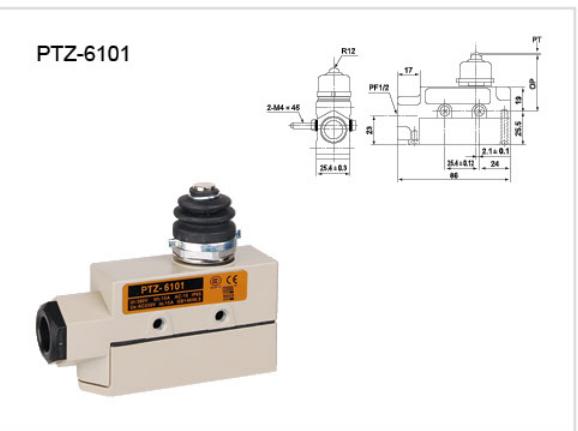
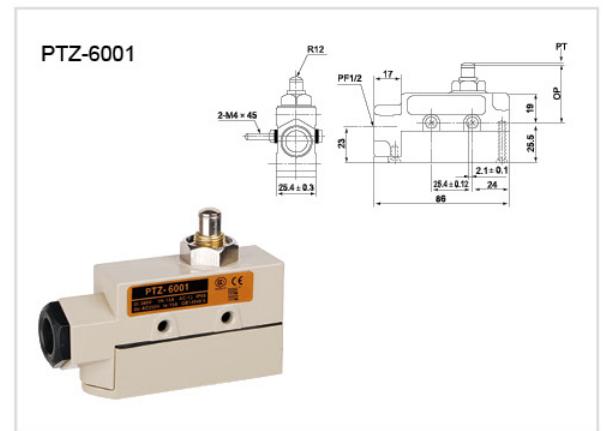
PTZ-6 密封型行程开关 Sealed Limit Switch

动作特性 Operating Characteristics

| 型式Models | PTZ-6001 | PTZ-6002 | PTZ-6003 | PTZ-6004 | PTZ-6043 |
|------------|------------|----------|----------|----------|----------|
| OF最大(Max.) | 250~350g | 250~350g | 570g | 570g | |
| RF最小(Min.) | 114g | 114g | 170g | 170g | |
| PT最大(Max.) | 0.4mm | 0.5mm | 4mm | 4mm | |
| OT最小(Min.) | 5.5mm | 3.6mm | 6mm | 6mm | |
| MD最大(Max.) | 0.05mm | 0.05mm | 0.4mm | 0.4mm | |
| OP | 38.2±0.8mm | 49.7±1mm | | | |

| 型式Models | PTZ-6101 | PTZ-6102 | PTZ-6103 | PTZ-6104 | PTZ-6143 |
|------------|------------|------------|----------|----------|----------|
| OF最大(Max.) | 800g | 500g | 640g | 640g | |
| RF最小(Min.) | 240g | 100g | 230g | 230g | |
| PT最大(Max.) | 2mm | 1mm | 5mm | 5mm | |
| OT最小(Min.) | 5mm | 3.5mm | 6mm | 6mm | |
| MD最大(Max.) | 0.1mm | 0.12mm | 0.4mm | 0.4mm | |
| OP | 45.8±0.8mm | 49.7±0.8mm | | | - |

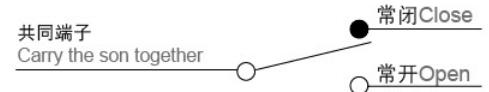
外观和尺寸 Appearance and Dimension



特征 Features

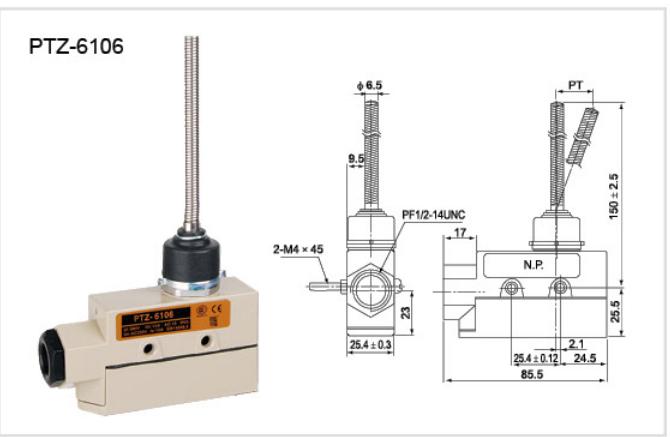
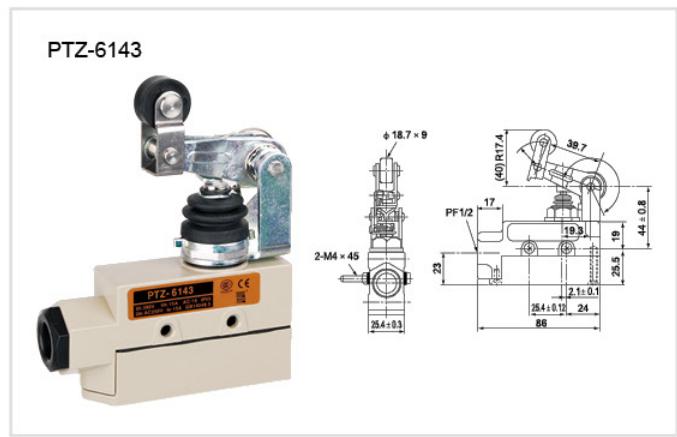
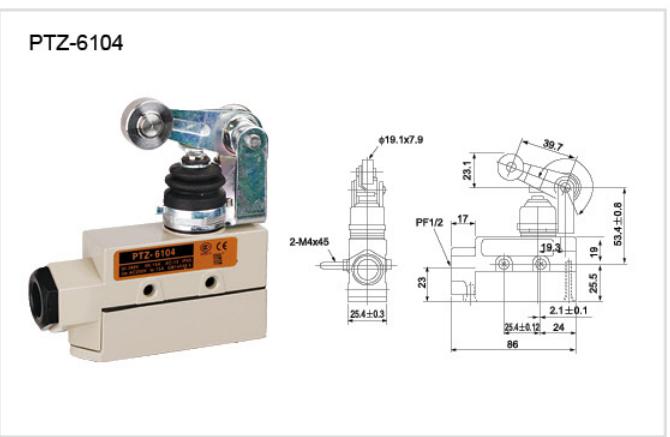
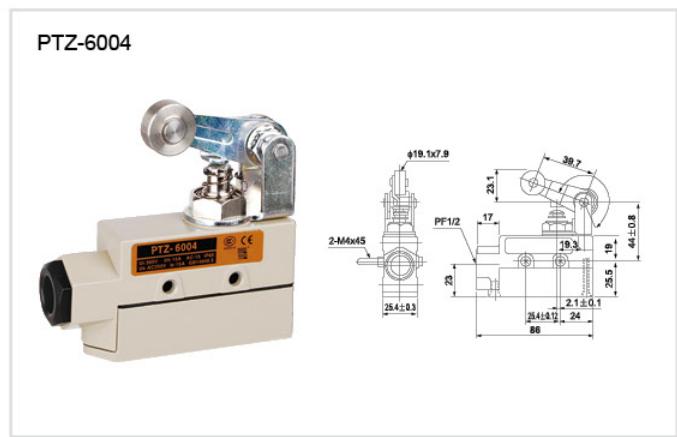
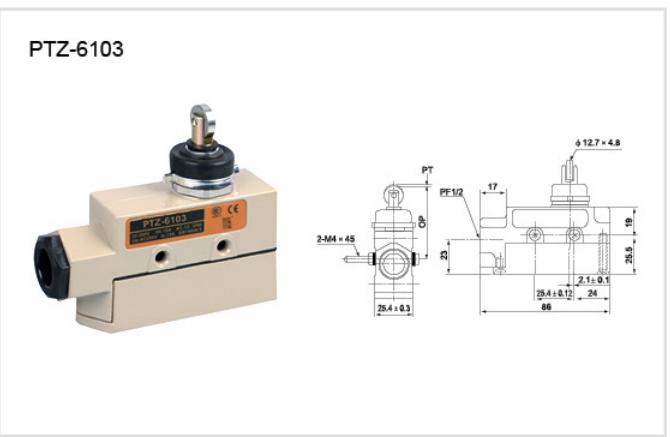
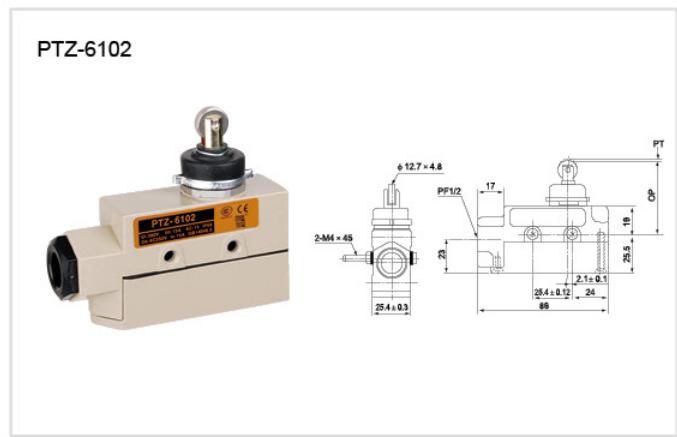
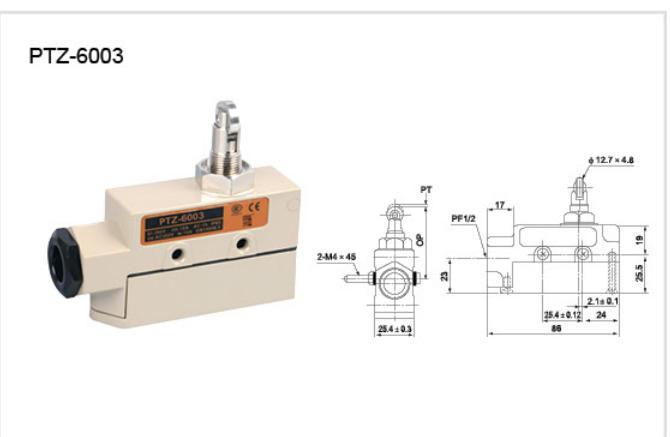
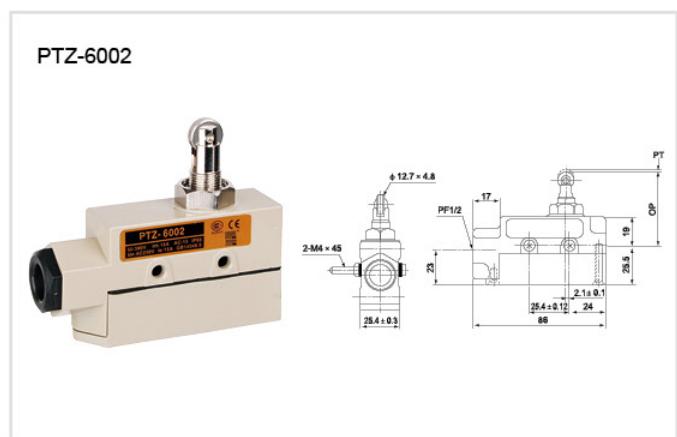
- 内藏PCM微动开关，及坚固的铸造铝合金外壳，并有防水、防油之密封设计
- 额定值及特性同PCM微动开关
- 引动器种类多，方便使用
- 每只开关均附电缆固定器。
- 导管连接器尺寸标配M20x1.5
- Built-in PCM miniature limit switch, strong aluminum cast shell, design for water-proof and oil-proof
- It is the same as PCM micro switch in the rated value and characteristics
- Various of actuators that are taken convenience for using
- Each switch is equipped with cable fixator
Standard size configuration M20x1.5 for conduit connector

接点型式 Contact Form



PTZ-6 密封型行程开关 Sealed Limit Switch

外观和尺寸 Appearance and Dimension



PCZ-93 门式安全开关 Safety Key Interlock Switch

额定值 Ratings

| 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | | | 电感性负载 Inductive Load (A) | | | |
|-----------------------|---------------------------------|-----|-------------------|-----|-----------------------------|-----|--------------------|----|
| | 电阻性负载 Resistance Load | | 灯泡负载 Lamp Load | | 电感性负载 Inductive Load | | 马达负载 Motor Load | |
| | NC | NO | NC | NO | NC | NO | NC | NO |
| 125 VAC | 10 | 3 | 1.5 | 10 | 5 | 2.5 | | |
| 250 VAC | 10 | 2 | 1 | 10 | 3 | 1.5 | | |
| 400 VAC | 10 | 1.5 | 0.8 | 3 | 1.5 | 0.8 | | |
| 8 VDC | 10 | 6 | 3 | 10 | 6 | 6 | | |
| 14 VDC | 10 | 6 | 3 | 10 | 6 | 6 | | |
| 30 VDC | 6 | 4 | 3 | 6 | 4 | 4 | | |
| 125 VDC | 0.8 | 0.2 | 0.2 | 0.8 | 0.2 | 0.2 | | |
| 250 VDC | 0.4 | 0.1 | 0.1 | 0.4 | 0.1 | 0.1 | | |

特性 Characteristics

| | |
|-----------------------------------|---|
| 额定电流 Rating | 3A 240VAC (A300) |
| 操作速度 Operating speed | 0.1m ~0.5m/s |
| 动作频率 Operating frequency | 30次/分以下 operations/minute |
| 接点电阻 Contact resistance | 25mΩ 以下 25mΩ max. (initial). |
| 绝缘电阻 Insulation resistance | 100mΩ 以上 (在500VDC以下) 100mΩ min. (at 500VDC) |
| 绝缘电压 Rated insulation voltage(UI) | 400V |
| 介电强度 Dielectric strength | AC2500V/Ump 4KV |
| 振动 Vibration | 10至55HZ, 1.5mm双振幅 |
| 冲击 Shock | 机械耐久: 1000ms ² 以上(约100G以上) 误动作耐久: 300ms ² 以上(约30G以上) Mechanical: Approx. 1000ms ² (Approx. 100G'S) Electrical: Approx. 300ms ² (Approx. 30G'S) |
| 使用温度 Ambient temperature | -10°C ~+70°C (没有结冰) |
| 使用湿度 Ambient Humidity | < 95% RH |
| 使用寿命 Life | 机械: 100万次以上 电气: 15万次以上 Mechanical: 10,000,000 operations/min. Electrical: 150,000 operations/min. |
| 防水等级 Degree of protection | IP65 (IEC 规格 Standard) |

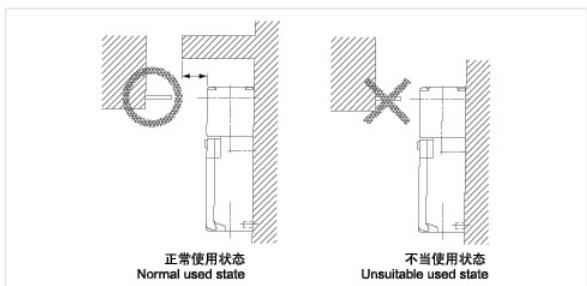
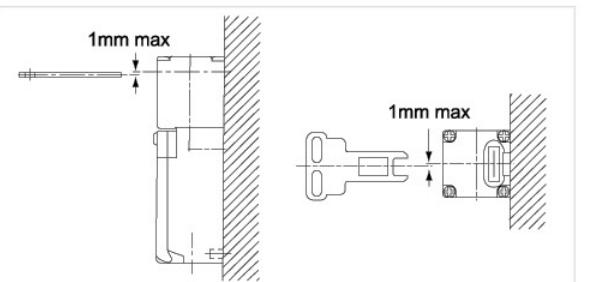
使用注意事项 Use Attention Affair

钥匙与插入孔之中心上下左右位置应在1mm以内，以避免机构磨损和破坏。

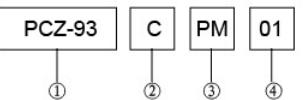
To prevent the wear and the space should be within 1mm between the key and middle of the insert hole.

使用开关时，应于上方设置一挡板，以防止钥匙过于插入使机构损坏。而挡板与开关间a之距离应在3mm以下，以防止不动作。

When in use, there should put a plate on the top to prevent the key overinsert. To prevent nonmovement, the space between the plate and the switch should be under 3 mm.

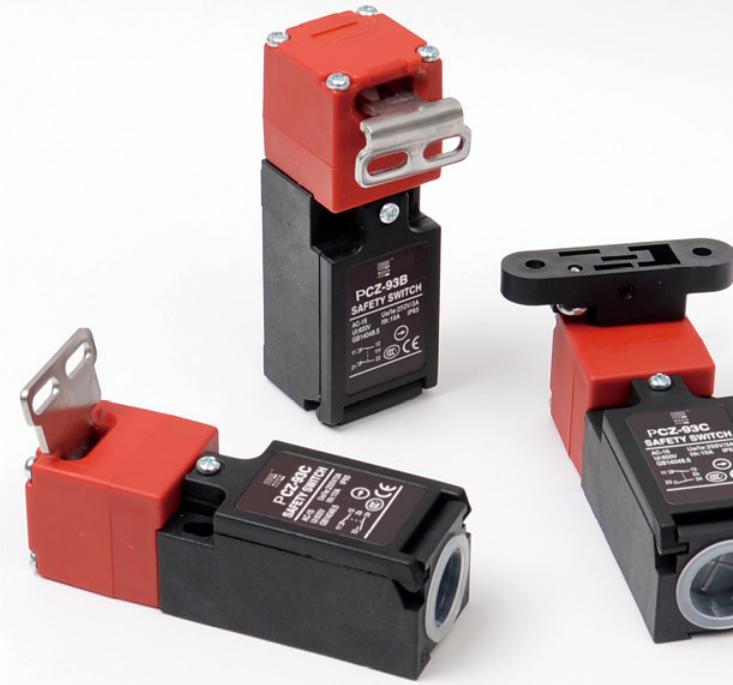


型号说明 Model Designations



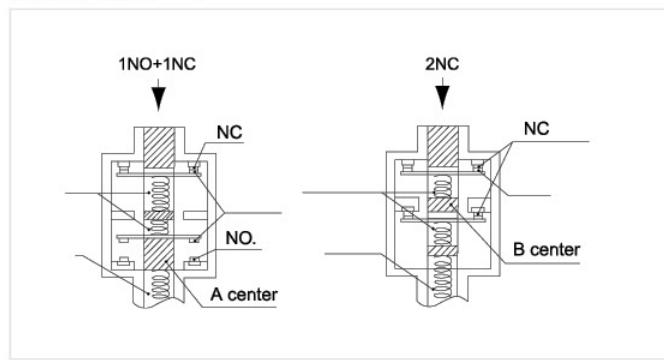
| 项次Designation | 代号Signal | 说明Description |
|------------------------------------|----------------|---------------------|
| 型号Type | PCZ-93 | 门式安全开关Safety switch |
| 接点型式 Type of contact blocks fitted | B | 2B(2NC) |
| C | 1A1B(NO-NC) | |
| 导管/连接器尺寸 Conduit/connector size | PG | PG 13.5XP1.5(公制牙) |
| PM | M20X1.5 | |
| 钥匙型式 Actuating keys | None | 无附钥匙None |
| 01 | 平钥匙Horizontal | |
| 02 | 90°钥匙Vertical | |
| 03 | 摆动钥匙Adjustable | |

导管连接器尺寸标配M20x1.5
Standard size configuration M20x1.5 for conduit connector



PCZ-93 门式安全开关 Safety Key Interlock Switch

强制脱离机构 Required to Have Positive Machine

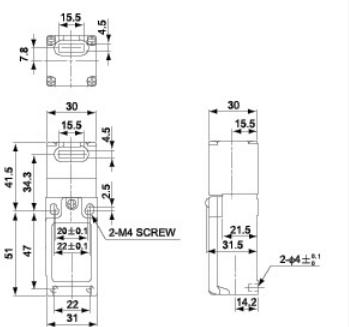


NC接点的强制脱离机构，作用是当接点发生熔着时，下压钥匙机构中心，可将接点强制推开，使回路切断。(EN60947-5-1强制脱离认定)。

When the contact block get fire, press on the middle of the key structure, the NC strict leaving structure can push the contact block a way cut off the movement.

外观和尺寸 Appearance and Dimension

PCZ-93CPM

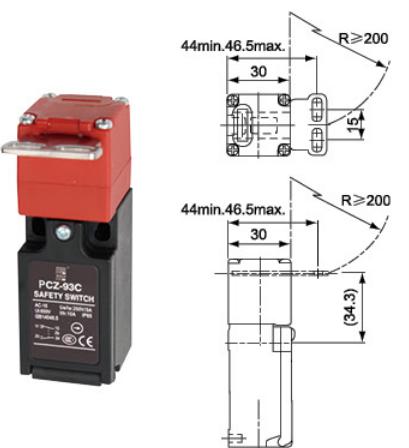


动作特性 Operating Characteristics

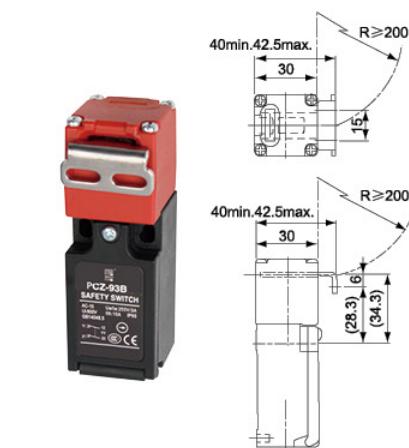
| | | | |
|--------|---------------------------------|----|-----------------|
| 操作插入力量 | Key plug in force | 最大 | 147.N(1,500gf) |
| 操作抽动力量 | key pull out force | 最大 | 29.42N(3,000gf) |
| 动作距离 | Pretravel | | 6 ± 3mm |
| 总行程 | Total travel | | (28mm) |
| 强制脱离力 | Force required to have positive | 最小 | 58.84N(6,000gf) |
| 强制脱离距离 | Positive opening travel | 最小 | 10mm |

外观和尺寸 Appearance and Dimension

PCZ-93CPM01



PCZ-93BPM02

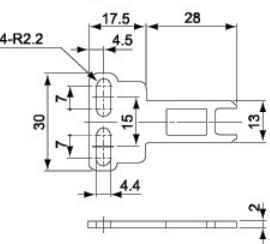


PCZ-93CPM03

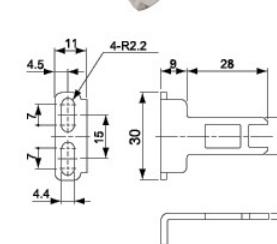


钥匙种类及尺寸 Key type and Dimension

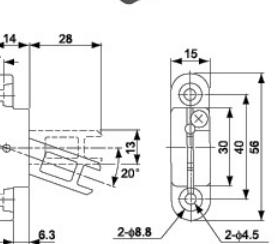
PCZ93-K1



PCZ93-K2



PCZ93-K3



PCZ-3 防水型行程开关 Compact Prewired Limit Switch

额定值 Ratings

| 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | | | 电感性负载 Inductive Load (A) | | | |
|-----------------------|---------------------------------|-----|-------------------|----|-----------------------------|-----|--------------------|------|
| | 电阻性负载 Resistance Load | | 灯泡负载 Lamp Load | | 电感性负载 Inductive Load | | 马达负载 Motor Load | |
| | NC | NO | NC | NO | NC | NO | NC | NO |
| 125 VAC | 5 (0.1) | 1.5 | 0.7 | | 3 | | 2.5 | 1.3 |
| 250 VAC | 3 | 1 | 0.5 | | 2 | | 1.5 | 0.8 |
| 8 VDC | 5 (0.1) | | 2 | | 5 | 4 | | 3 |
| 14 VDC | 5 (0.1) | | 2 | | 4 | 4 | | 3 |
| 30 VDC | 4 (0.1) | | 2 | | 3 | 3 | | 3 |
| 125 VDC | 0.4 | | 0.05 | | 0.4 | 0.4 | | 0.05 |
| 250 VDC | 0.2 | | 0.03 | | 0.2 | 0.2 | | 0.03 |

注: 带弹簧系列产品, 操作体的使用范围为从弹簧的前端到弹簧全长的1/3以内。

Note: Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

特性 Characteristics

| | |
|----------------------------|--|
| 额定值 Rating | 5A 125V,3A 250VAC |
| 操作速度 Operating speed | 1mm~1m/s |
| 动作频率 Operating frequency | 机械:120次/分 电气:30次/分 Mechanical:120 operations/min.Electrical:30 operations/min. |
| 接点电阻 Contact resistance | 15mΩ 以下 15mΩ max.(initial) |
| 绝缘电阻 Insulation resistance | 100mΩ 以上(在500VDC以下) 100mΩ min.(at 500VDC) |
| 介电强度 Dielectric strength | 不连续端子间: 1000VAC, 50/60Hz, 持续1分钟 1000VAC, 50/60 Hz for 1 minute between terminals of the same polarity |
| 振动 Vibration Frequency | 端子和接地之间: 1500VAC, 50/60Hz, 持续1分钟 1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts |
| 冲击 Shock | 端子和无载电流金属零件之间: 1500VAC, 50/60Hz, 持续1分钟 1500VAC, 50/60 Hz for 1 minute between each terminal and ground |
| 使用温度 Ambient temperature | 误动作耐久: 10-55Hz, 1.5mm双振幅 10 to 55Hz,1.5mm double amplitude |
| 湿度 Humidity | 机械耐久: 1000mm/s ² 以上(约100G以上) Mechanical: Approx.1000mm/s ² (Approx.100G) |
| 使用寿命 Life | 误动作耐久: 500mm/s ² 以上(约50G以上) Mechanical: Approx.500mm/s ² (Approx.50G) |
| 重量 Weight | 约360g(电缆线长3m) 约540g(电缆线长5m) Approx.360g(cable length 3m) Approx.540g(cable length 5m) |
| 防水等级 Degree of protection | IP67 |

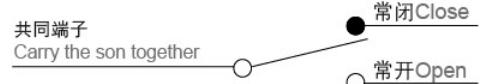
动作特性 Operating Characteristics

| 型号 Models | PCZ-3101 | PCZ-3102 | PCZ-3103 | PCZ-3104(3108) | PCZ-3110 | PCZ-3111 | PCZ-3112 | PCZ-3113 | PCZ-3169 (3166/3167) |
|------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------|
| OF最大(Max.) | 1200gf(11.77N) | 1200gf(11.77N) | 1200gf(11.77N) | 580gf(5.69N) | 1200gf(11.77N) | 1800gf(17.65N) | 1800gf(17.65N) | 1800gf(17.65N) | 150gf(1.47N) |
| RF最小(Min.) | 450gf(4.41N) | 450gf(4.41N) | 450gf(4.41N) | 150gf(1.47N) | 450gf(4.41N) | 450gf(4.41N) | 450gf(4.41N) | 450gf(4.41N) | - |
| PT最大(Max.) | 1.8mm | 1.8mm | 1.8mm | | 25 | 1.8mm | 1.8mm | 1.8mm | 15° |
| OT最小(Min.) | 3mm | 3mm | 3mm | | 40 | 3mm | 3mm | 3mm | - |
| MD最大(Max.) | 0.2mm | 0.2mm | 0.2mm | | 3 | 0.2mm | 0.2mm | 0.2mm | - |
| OP | 15.7 ± 1mm | 28.5 ± 1mm | 28.5 ± 1mm | | - | 28.5 ± 1mm | 24.9 ± 1mm | 34.3 ± 1mm | - |

特征 Features

- 双回路型限位开关, 用途广泛
- 具坚固之一体铸造铝合金外壳
- 高机械强度
- 具耐油, 防水和防尘结构
- DPDS 限位开关 for 多种应用
- Rugged aluminum alloy diecast housing
- High mechanical strength
- Oil resistance,waterproof and dustproof structure

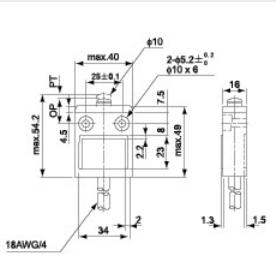
接点型式 Contact Form



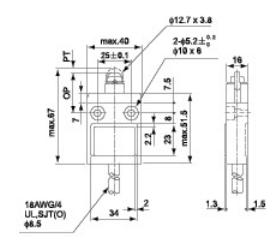
PCZ-3 防水型行程开关 Compact Prewired Limit Switch

外观和尺寸 Appearance and Dimension

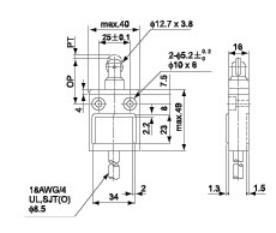
PCZ-3101



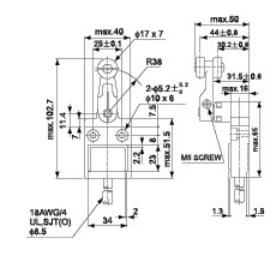
PCZ-3102



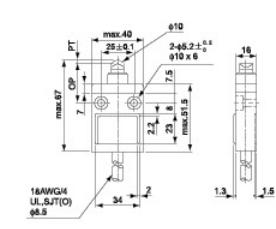
PCZ-3112



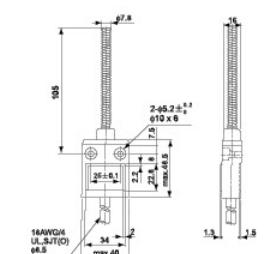
PCZ-3104



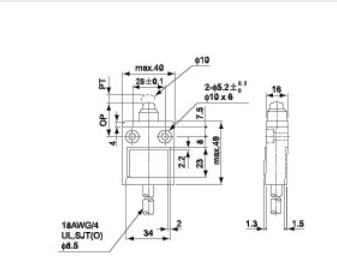
PCZ-3110



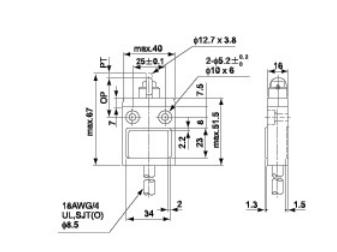
PCZ-3167



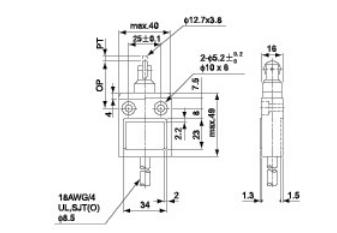
PCZ-3111



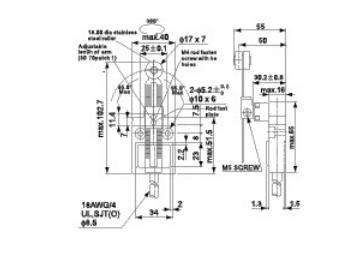
PCZ-3103



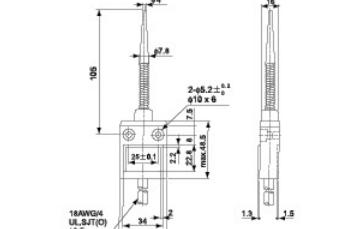
PCZ-3113



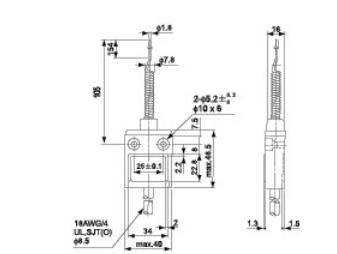
PCZ-3108



PCZ-3166



PCZ-3169

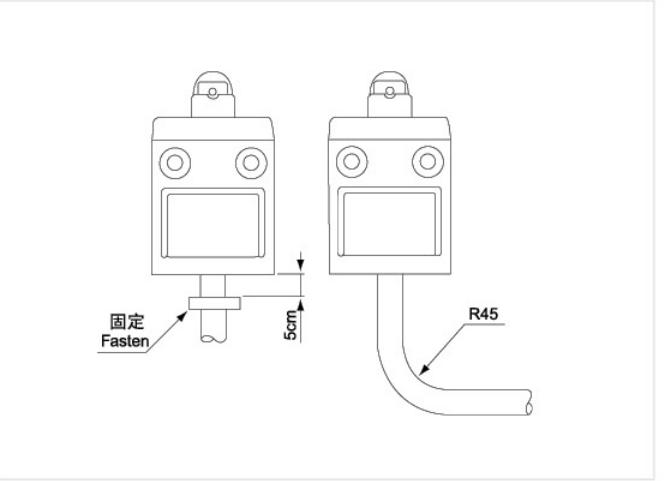


PCZ-3 防水型行程开关 Compact Prewired Limit Switch

配线注意事项 Fastening of the switch cable

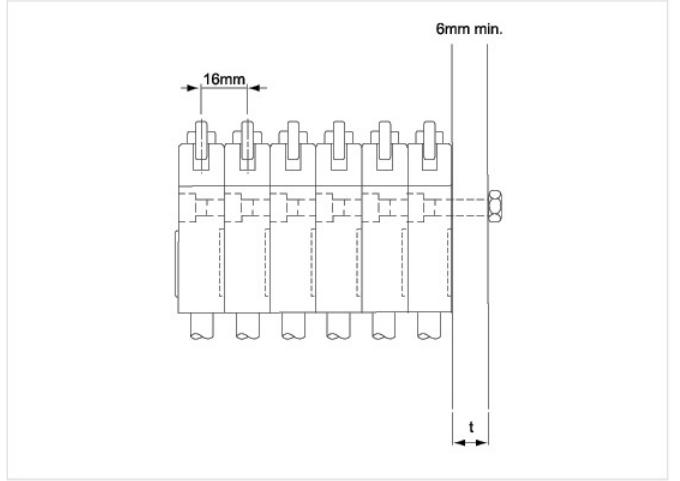
配线需注意于离开关5cm处须加以固定，而电线之弯曲半径不得小于R45cm，注意勿伤及电线绝缘体，以避免电线漏电等情形。

The switch bodies are filled with resin for sealing purposes. To avoid stressing the cable and switch body, fasten the switch at 5 cm or farther away from the switch body, should the wire be bent, the bending radius shall be at least 45mm.



多连接使用的场合 Switch bank mounting

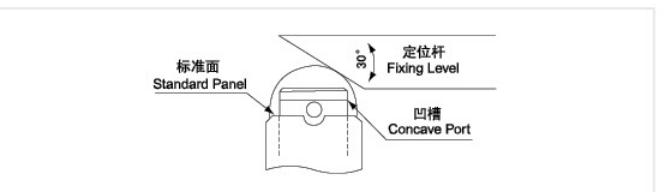
需连接多组使用的场合时，最多可连接6组开关，连接时，开关表面之凹凸槽相互配合，另板厚t之尺寸应在6mm以上为适当。A maximum of six switches may be mounted together as a switch bank. During the installation, the convex part of the switch back. The mounting panel shall be 6mm or thicker.



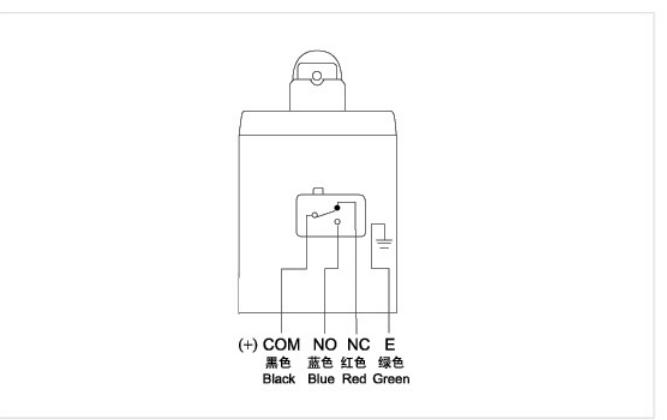
安装注意事项 Installation

凸轮与定位杆等形状，频率及动作后移动等，将会影响使用寿命与精准度，因此建议定位杆之角度约30°，而定位杆之表面粗糙度，以上，硬度HV400~500，在设定开关之行程时，凹沟必须高于标准面之上为最适当之位置。

The service life and accuracy of switches will be effected by the shape of actuator operation frequency & over travel. So the angular of the fixing level should be about 30° , the surface finish of the fixing level should be over, the hardness is from HV400~500. When installing, the position of the concave part should be above the standard panel



接点型式 Contact types



安装注意事项 Mounting

请依下表所示选择最适当之旋转扭力，施行锁紧作业，以避免伤害开关本体。

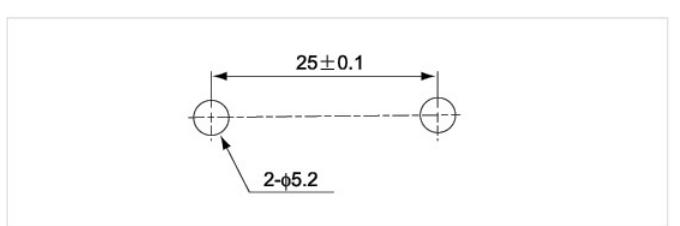
Recommended tightening torque according to the following form.

| 编号 Model | 螺丝尺寸 Screw type | 最适当之旋转扭力 Torque |
|----------|---------------------------------------|-------------------------------|
| 1 | M5六角孔螺栓之固定螺丝 M5 fastening screws | 43.4~52lb.in (50~60kgf.cm) |
| 2 | 头部M3.5之安装螺丝 M3.5 installing screws | 6.9~7.9lb.in (8~9kgf.cm) |

装配孔之尺寸 Mounting holes

安装板发生翘曲或凸起之状态，会造成安装上之不良，安装板请经筛选确认后，再予以使用。

Mount the switch body to a rigid mounting panel using two M5 screws.





PCZE 行程开关 Limit Switch

特性 Characteristics

| | |
|-------------------------------|--|
| 操作速度 Operation speed | 0.5mm至50cm/sec(锁住塞型) 0.5mm-50cm/sec |
| 动作频率 Operating frequency | 机械:120次/分 电气:30次/分 Mechanical: 120 operations/minute Electrical: 30 operations/minute |
| 接点电阻 Contact resistance | 25mΩ(mm)(初期) 25mΩ max. (initial value) |
| 绝缘电阻 Insulation resistance | 100MΩ以上(在500VDC下) 100MΩ min. (below 500VDC) |
| 电介强度 Dielectric strength | 非连续端子间1,000VAC, 50/60Hz持续1分钟 1000VAC, 50/60 Hz for 1 minute between terminals of the same polarity 载电流与无载电流零件间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts 端子和接地之间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between each terminal and ground |
| 振动 Vibration | 10至55Hz, 1.5mm双振幅 10-55Hz, 1.5mm double amplitude |
| 冲击 Shock | 机械耐久:1,000m/Sec ² (约100G'S) 误动作耐久:300m/Sec ² (约30G'S) Mechanical durable: 1,000m/Sec ² (about 100G'S) Malfunction: 300m/Sec ² (about 30G'S) |
| 周围温度 Ambient temperature | 使用时:-10~+70°C (没有结冰With no icing) |
| 湿度 Humidity | 95%RH以下 <95% RH |
| 使用寿命 Life | 机械:10,000,000次以上 电气:500,000次以上 Mechanical: 10,000,000 operations above Electrical: 500,000 operations above |
| 保护构造 Degree of protection | IP66 (IEC 规格 Standard) |

Contact block 触点

| | | |
|-----------|-------------------------------|----|
| 1 NO+1 NC | fast action 快动作 | 00 |
| 1 NO+1 NC | slow action 慢动作 | 01 |
| 1 NO+1 NC | slow overlapping action 慢重叠动作 | 02 |
| 2 NO | slow action 慢动作 | 03 |
| 2 NC | slow action 慢动作 | 04 |
| 2 NC | fast action 快动作 | 05 |



额定值 Ratings

| 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | | | 电感性负载 Inductive Load (A) | | | |
|-----------------------|---------------------------------|-----|-------------------|-----|-----------------------------|----|--------------------|-----|
| | 电阻性负载 Resistance Load | | 灯泡负载 Lamp Load | | 电感性负载 Inductive Load | | 马达负载 Motor Load | |
| | NC | NO | NC | NO | NC | NO | NC | NO |
| 125VAC | 5 | 5 | 1.5 | 0.7 | 3 | 3 | 2 | 1 |
| 250VAC | 5 | 5 | 1 | 0.5 | 3 | 3 | 1.5 | 0.8 |
| 8VDC | 5 | 5 | 3 | 3 | 5 | 4 | 3 | 3 |
| 14VDC | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 3 |
| 30VDC | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 3 |
| 125VDC | 0.4 | 0.4 | | | | | | |
| 250VDC | 0.2 | 0.2 | | | | | | |

突入电流
Inrush Current
N.C.:24A以下、N.O.:12A以下
N.C: below 24A, N.O: below 12A

注:1. 电感性负载之功率因素在0.4以上(AC)。时间常数在7msec以下(DC)。
2. 灯泡负载之突入电流为稳定状态电流之10倍。马达负载之突入电流为稳定状态电流之6倍。
3. 带弹簧系列产品, 操作体的使用范围为从弹簧的前端到弹簧全长的1/3以内。
NOTES: 1.Inductive load has a power factor of 0.4 min.(AC) and a time constant of 7 msec.max.(DC).
2.Lamp load has an inrush current of 10 times the steady-state current,while motor load has an inrush current of 6 times the steady-state current.
3.Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

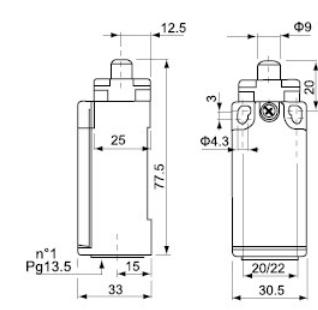
特征 Features

- 坚硬金属外壳和塑胶外壳选择, 极大摇臂角度 ± 95°
- 金属滚轮, 冲头及弹簧
- 导管连接器尺寸标配M20x1.5
- Strong metal outer shell, swing arm max. ± 95°
- Stainless steel idler wheel, punch and spring
- Standard size configuration M18x1.5 for conduit connector

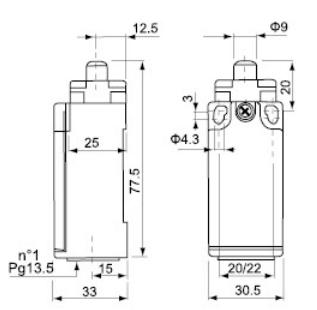
PCZE 行程开关 Limit Switch

塑料系列 Plastic Version

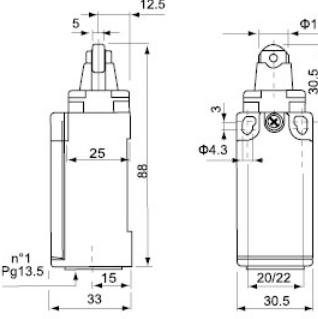
PCZE-00-AI
Steel plunger



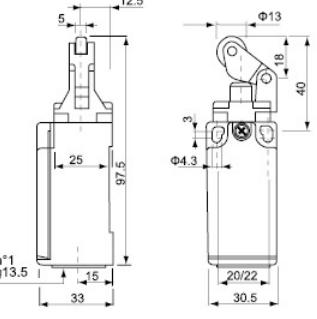
PCZE-00-AI/SI
Steel plunger with rubber gasket



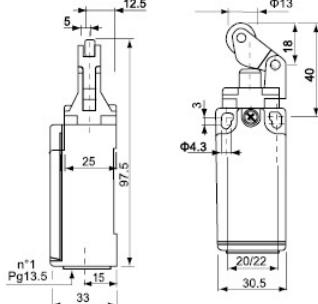
PCZE-00-BI
Steel roller plunger



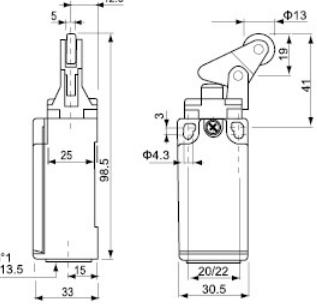
PCZE-00-CI
Thermoplastic roller lever, side actuation



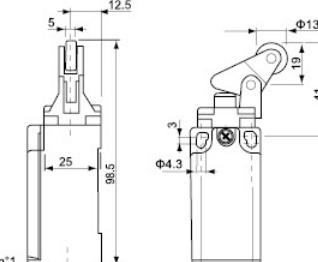
PCZE-00-CI/SI
Thermoplastic roller lever with rubber gasket, side actuation



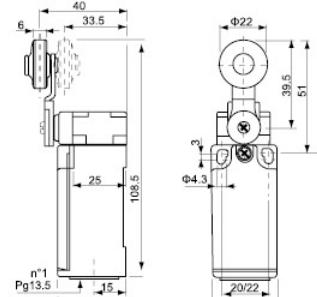
PCZE-00-DI
Thermoplastic roller lever, vertical actuation



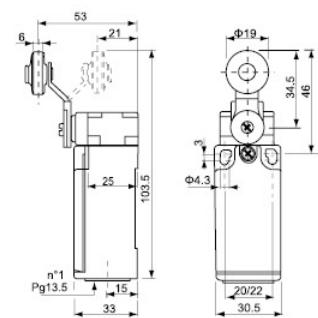
PCZE-00-DI/SI
Thermoplastic roller lever with rubber gasket, vertical actuation



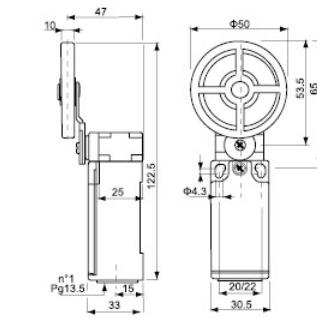
PCZE-00-EI
Side rotary lever with plastic roller



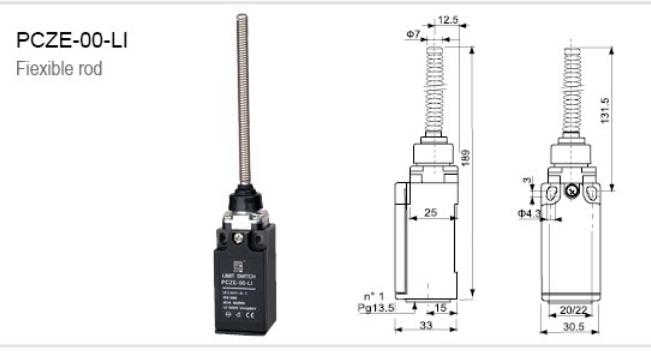
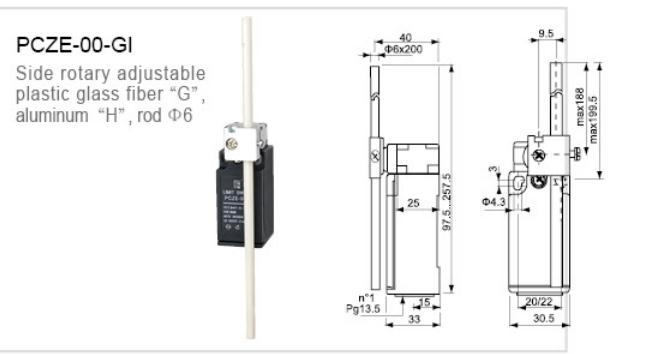
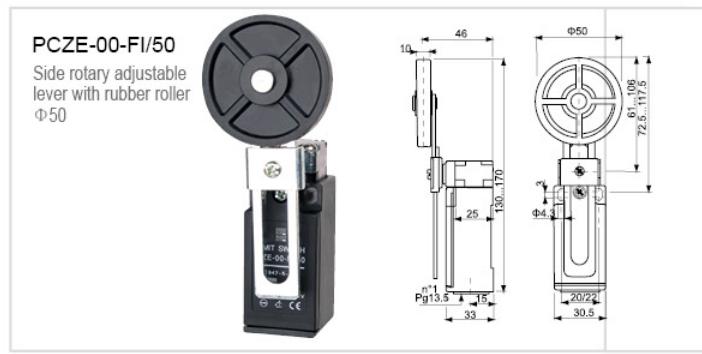
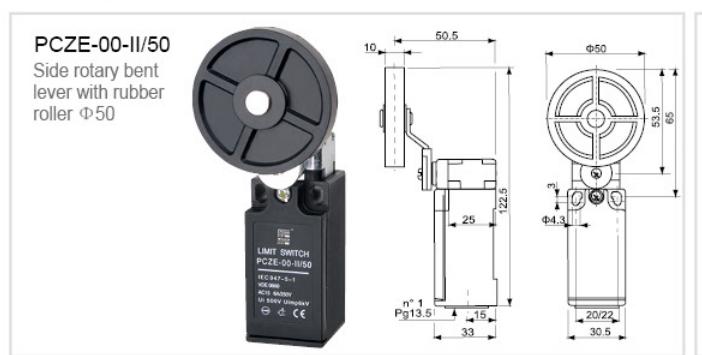
PCZE-00-II
Offset side rotary lever with plastic roller



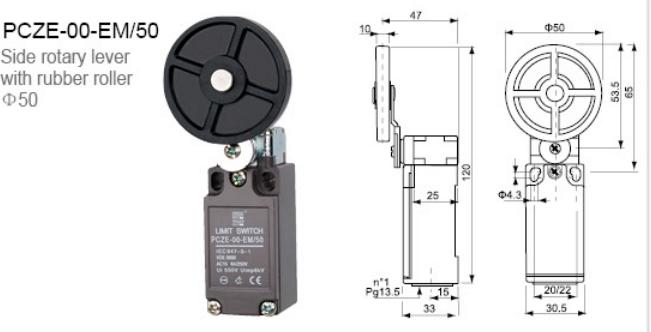
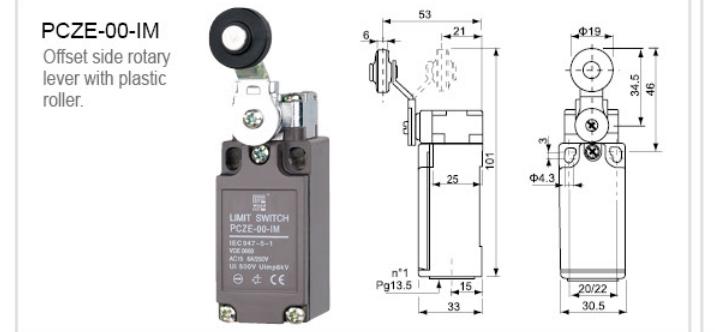
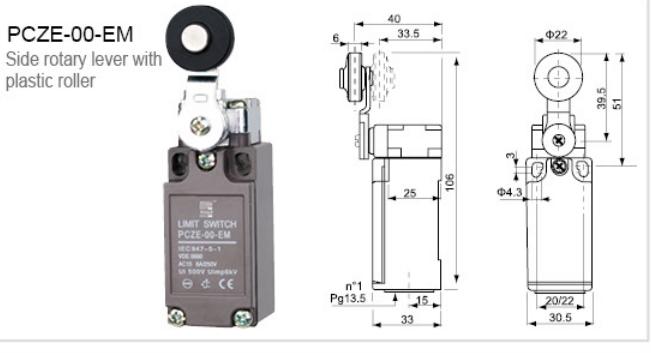
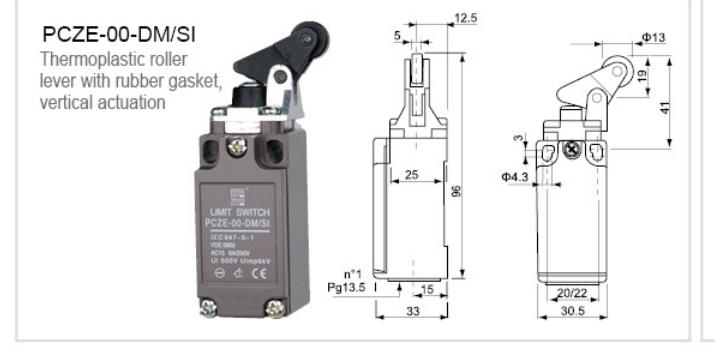
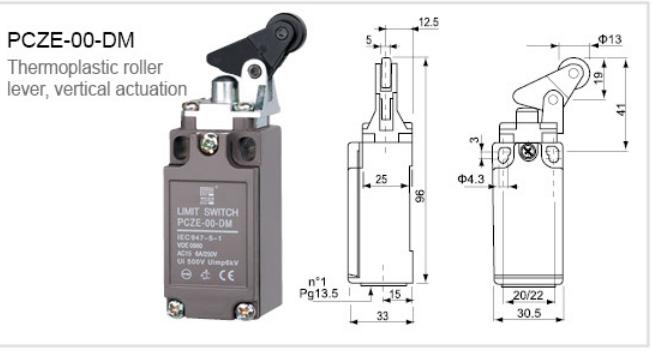
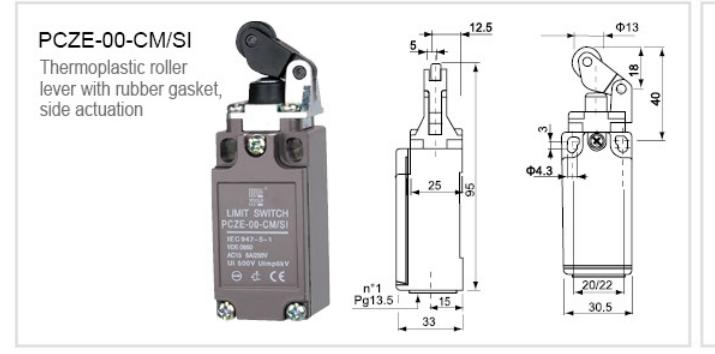
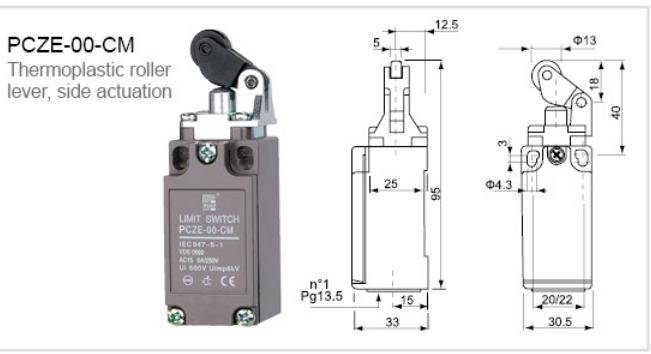
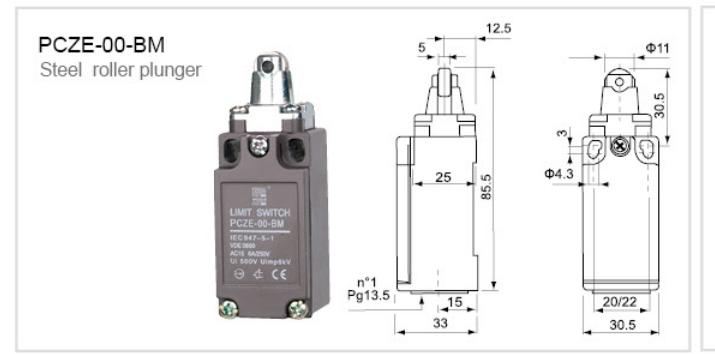
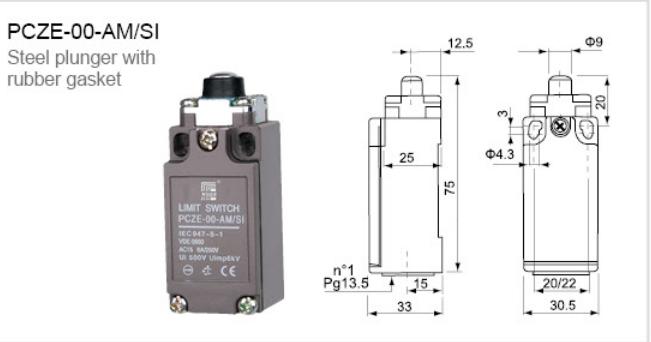
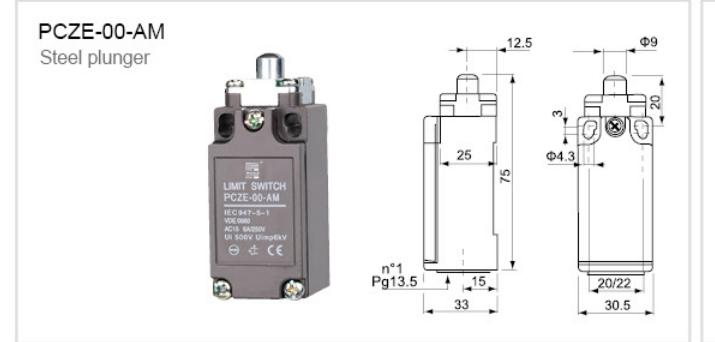
PCZE-00-EI/50
Side rotary lever with rubber roller Φ50



塑料系列 Plastic Version

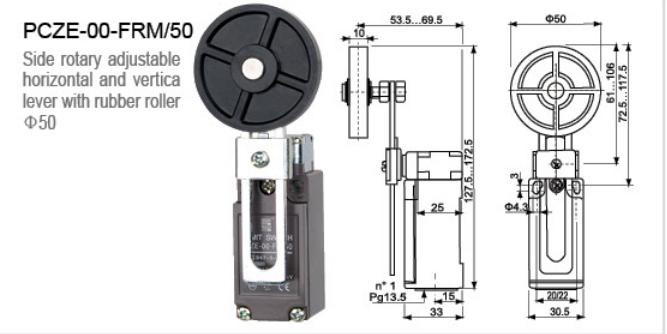
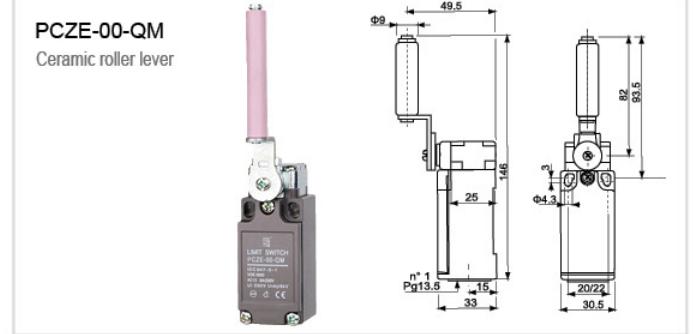
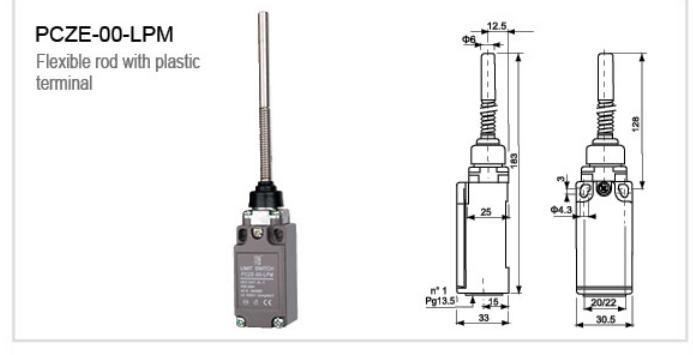
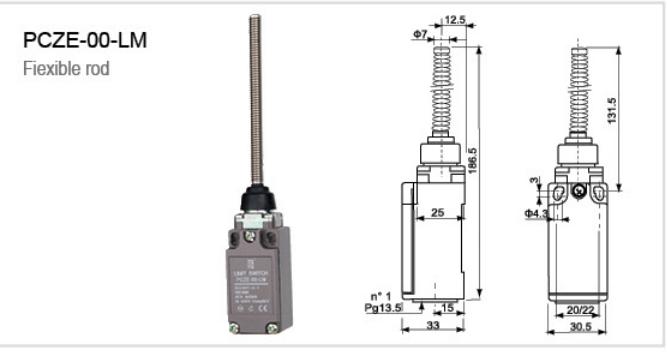
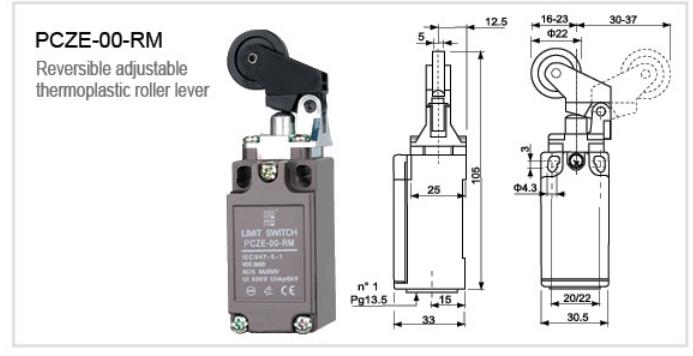
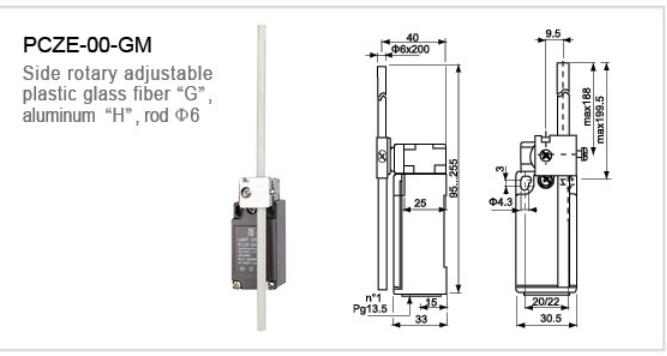
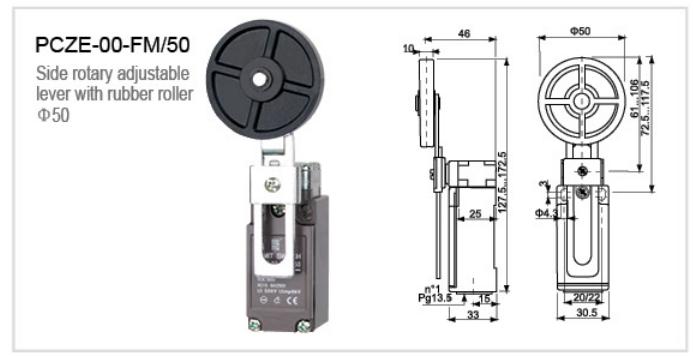
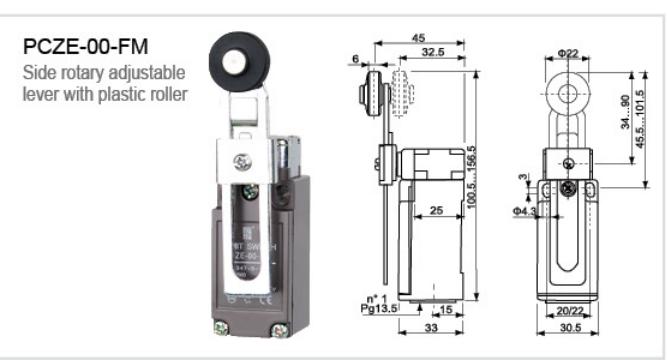
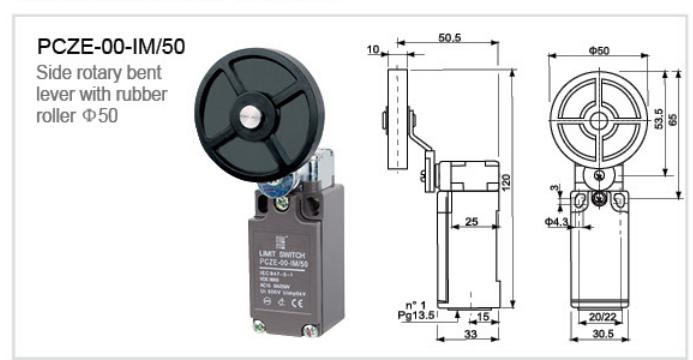


金属系列 Metal Version



PCZE 行程开关 Limit Switch

金属系列 Metal Version



PCLS 行程开关 Limit Switch

额定值 Ratings

| 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | | | 电感性负载 Inductive Load (A) | | | |
|-----------------------|---------------------------------|-----|-------------------|-----|-----------------------------|----|--------------------|-----|
| | 电阻性负载 Resistance Load | | 灯泡负载 Lamp Load | | 电感性负载 Inductive Load | | 马达负载 Motor Load | |
| NC | NO | NC | NO | NC | NO | NC | NO | NC |
| 125VAC | 5 | 5 | 1.5 | 0.7 | 3 | 3 | 2 | 1 |
| 250VAC | 5 | 5 | 1 | 0.5 | 3 | 3 | 1.5 | 0.8 |
| 8VDC | 5 | 5 | 3 | 3 | 5 | 4 | 3 | 3 |
| 14VDC | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 3 |
| 30VDC | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 3 |
| 125VDC | 0.4 | 0.4 | | | | | | |
| 250VDC | 0.2 | 0.2 | | | | | | |

突入电流
Inrush Current
N.C.:24A以下、N.O.:12A以下
N.C.: below 24A, N.O.: below 12A

注:1. 电感性负载之功率因素在0.4以上(AC)。时间常数在7msec以下(DC)。
2. 灯泡负载之突入电流为稳定状态电流之10倍。马达负载之突入电流为稳定状态电流之6倍。
3. 带弹簧系列产品, 操作体的使用范围为从弹簧的前端到弹簧全长的1/3以内。
NOTES: 1.Inductive load has a power factor of 0.4 min.(AC) and a time constant of 7 msec.max.(DC).
2.Lamp load has an inrush current of 10 times the steady-state current,while motor load has an inrush current of 6 times the steady-state current.
3.Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

特性 Characteristics

| | |
|-------------------------------|--|
| 操作速度 Operation speed | 0.5mm至50cm/sec(锁住塞型) 0.5mm-50cm/sec |
| 动作频率 Operating frequency | 机械:120次/分 电气:30次/分 Mechanical: 120 operations/minute Electrical: 30 operations/minute |
| 接点电阻 Contact resistance | 25mΩ (mm)(初期) 25mΩ max. (initial value) |
| 绝缘电阻 Insulation resistance | 100MΩ 以上(在500VDC下) 100mΩ min. (below 500VDC) |
| 电介强度 Dielectric strength | 非连续端子间1,000VAC, 50/60Hz持续1分钟 1000VAC, 50/60 Hz for 1 minute between terminals of the same polarity 载电流与无载电流零件间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts 端子和接地之间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between each terminal and ground |
| 振动 Vibration | 10至55Hz, 1.5mm双振幅 10-55Hz, 1.5mm double amplitude |
| 冲击 Shock | 机械耐久:1,000m/Sec ² (约100G'S) 误动作耐久:300m/Sec ² (约30G'S) Mechanical durable: 1,000m/Sec ² (about 100G'S) Malfunction: 300m/Sec ² (about 30G'S) |
| 周围温度 Ambient temperature | 使用时:-10~+70°C (没有结冰With no icing) |
| 湿度Humidity | 95%RH以下 <95% RH |
| 使用寿命 Life | 机械:10,000,000次以上 电气:500,000次以上 Mechanical: 10,000,000 operations above Electrical: 500,000 operations above |
| 保护构造 Degree of protection | IP65 (IEC 规格 Standard) |

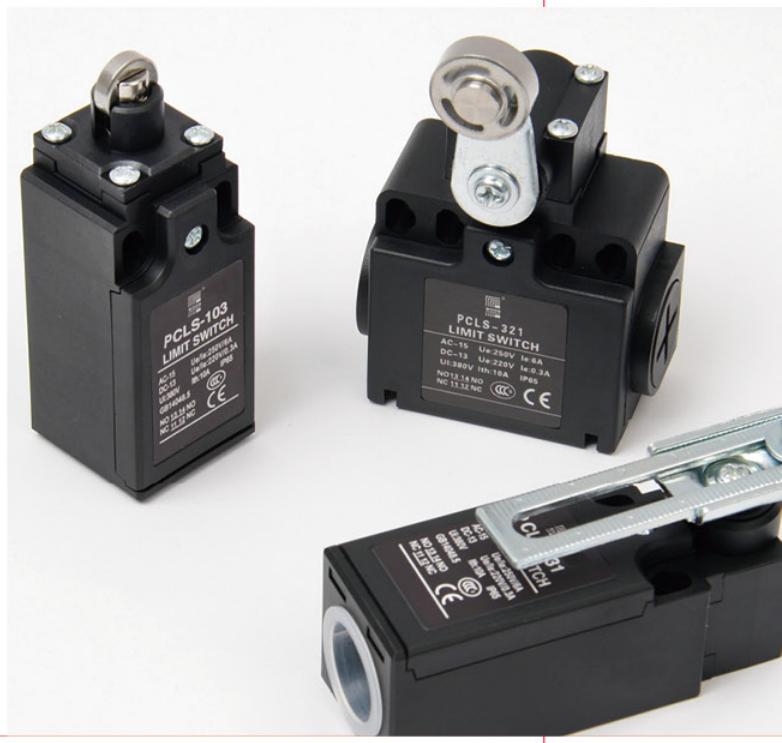
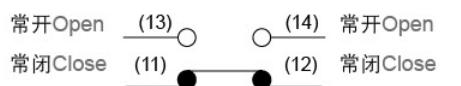
规格 Specification

| 型号 Model | Model | PCLS | 101 301 | 103 303 | 111 311 | 121 321 | 127 327 | 131 331 | 161 361 | 171 371 | 181 381 | 191 391 |
|----------------------------------|--------------|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 操作力 Operating force | OF(最大)(Max.) | 700g | 700g | 700g | 500g | 700g | 500g-cm | 100g | 100g | 100g | 100g | 500g-cm |
| 回弹力 Release force | RF(最小)(Min.) | 200g | 200g | 200g | 100g-cm | 200g | 100g-cm | 40g | 40g | 40g | 40g | 100g-cm |
| 前预行程 Pre-travel | PT(最大)(Max.) | 1.8mm | 1.8mm | 1.8mm | 20° | 1.8mm | 20° | 30mm | 30mm | 30mm | 30mm | 20° |
| 触发位置 Tripping position | TP±10% | 2.0mm | 2.0mm | 2.0mm | 22.5° | 2.0mm | 22.5° | 22.5° | 22.5° | 22.5° | 22.5° | 22.5° |
| 行程移动分辨率 Movement differential | MD(最大)(Max.) | 1.2mm | 1.2mm | 1.2mm | 10° | 1.2mm | 10° | 14° | 14° | 14° | 14° | 10° |
| 触后行程 Over travel | OT(最小)(Min.) | 4.0mm | 4.0mm | 4.0mm | 75° | 4.0mm | 75° | 20mm | 20mm | 20mm | 20mm | 75° |
| 累积总行程 Total travel | TT(最小)(Min.) | 5.8mm | 5.8mm | 5.8mm | 95° | 5.8mm | 95° | 50mm | 50mm | 50mm | 50mm | 95° |
| 摇臂转动分角度 Rotary indexing | | | | | 22.5° | | 22.5° | | | | | 22.5° |

特征 Features

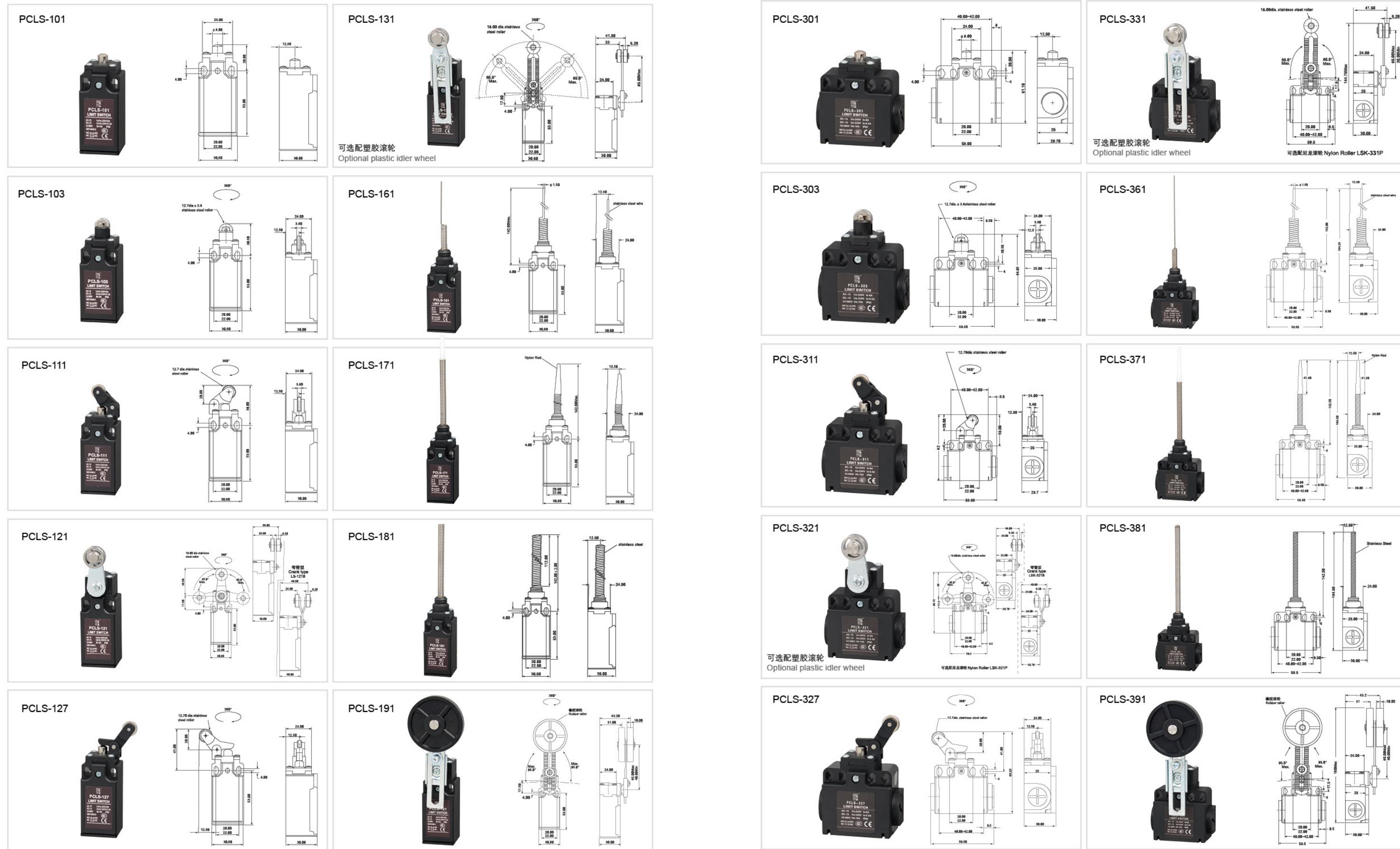
- 经济塑料型
- 不锈钢滚轮, 冲头及弹簧
- 特大 ± 95° 摆臂摆幅
- 导管连接器尺寸标配M20x1.5
- Economical & plastic type
- Stainless steel roller, punch and spring
- Swing amplitude, extra large ± 95°
- Standard size configuration M20x1.5 for conduit connector

接点型式 Contact Form



PCLS 行程开关 Limit Switch

外观和尺寸 Appearance and Dimension

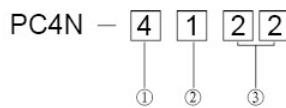


PCLS 行程开关 Limit Switch

外观和尺寸 Appearance and Dimension

PC4N 小型安全限位开关 Miniature Safety Limit Switch

型号说明 Model Designations



| 项目 Item | 代号 Code | 说明 Description |
|--|---------|--|
| ① 导管/连接器尺寸 Conduit / connector size | 1 | Pg13.5 (1导管型) Pg13.5 (1 conduit type) |
| | 2 | G1/2 (1导管型) G1/2 (1 conduit type) |
| | 4 | M20 (1导管型) M20 (1 conduit type) |
| | 5 | Pg13.5 (2导管型) Pg13.5 (2 conduits type) |
| | 6 | G1/2 (2导管型) G1/2 (2 conduit type) |
| | 8 | M20 (2导管型) M20 (2 conduits type) |
| | 1 | 1NC/1NO (速动型) 1NC/1NO (quick-action type) |
| | 2 | 2NC (速动型) 2NC (quick-action type) |
| | A | 1NC/1NO (慢动型) 1NC/1NO (slow-action type) |
| | B | 2NC (慢动型) 2NC (slow-action type) |
| ② 内藏开关 Built-in switch | 20 | 滚珠摆杆型 (树脂摆杆, 树脂滚珠) Roller lever (resin lever, resin ball) |
| | 22 | 滚珠摆杆型 (金属摆杆, 树脂滚珠) Roller lever (metal lever, resin ball) |
| | 25 | 滚珠摆杆型 (金属摆杆, 不锈钢滚珠) Roller lever (metal lever, Stainless steel resin ball) |
| | 2G | 可调滚珠摆杆, Form Lock (金属摆杆, 树脂滚珠) Adjustable roller lever, Form Lock (metal lever, resin ball) |
| | 2H | 可调滚珠摆杆, Form Lock (金属摆杆, 橡胶滚珠) Adjustable roller lever, Form Lock (metal lever, rubber ball) |
| | 2M | 可调滚珠摆杆, Form Lock (金属摆杆, 不锈钢滚珠) Adjustable roller lever, Form Lock (metal lever, Stainless steel resin ball) |
| | 31 | 顶部柱塞型 Top plunger type |
| | 32 | 顶部柱塞滚珠型 Top plunger ball type |
| | 62 | 单侧悬臂滚珠型 (水平) Unilateral cantilever ball type (horizontal) |
| | 72 | 单侧悬臂滚珠型 (垂直) Unilateral cantilever ball type (vertical) |
| ③ 头部及传动杆 Head and driving rod | 80 | 触须型 Whisker type |
| | 87 | 塑料棒型 Plastic stick type |
| | | 注1. 上述值为初始值。 注2. 一旦接点连接标准负载后，就不可用于连接更小容量的负载。否则可能导致接点表面粗糙，从而失去接触可靠性。 *1. 保护等级是根据(EN60947-5-1) 规格的测试法得出的。使用前务必在实际使用的环境、条件下确认其密封性。开关盒本体具有防尘、防水构造，但应尽可能保持头部在没有碎屑粉尘、油污、化学品的场所进行使用，否则可能导致过早磨损、损坏或故障。 *2. 耐久性的条件是使用环境温度 5°C ~ 35°C、使用环境湿度 40% ~ 70% RH。 其他详细条件请另行查询。 *3. 使用环境温度为 35°C 以上时，禁止使用 2 回路以上的 3A AC250V 负载。 *4. 这个值会因为开关频率、环境条件、可靠性等级等因素的影响而不同。请事先在实际负载上进行确认。 *5. 叉杆摆杆型的机械寿命为 1,000 万次以上。 |

性能 Performance

| 保护等级*1 Protection level*1 | IP66 |
|---|--|
| 寿命*2 Life *2 | 1,000万次以上*5 More than 10,000,000 times*5 |
| 电气 Electrical | 50万次以上(AC250V 3A, 电阻负载)*3 More than 500,000 times (AC250V 3A, resistive load)*3 30万次以上(AC250V 10A, 电阻负载) More than 300,000 times (AC250V 10A, resistive load) |
| 操作速度 Operating speed | 1 ~ 500mm/s(C4N-1120) |
| 操作频率 Operating frequency | 最大30次/min Max. 30 times/min |
| 接触电阻 Contact resistance | 25mΩ 以下 25 mΩ or less |
| 最小使用负载*4 Minimum working load *4 | DC5V 1mA 电阻负载(N标准参考值) 1mA resistive load below DC5V (N standard reference value) |
| 额定绝缘电压(Ui) Rated insulation voltage (Ui) | 300V |
| 防触电保护等级 Electric shock proof protection grade | Class II (双重绝缘) Class II (double insulated) |
| 污染度(使用环境) Pollution degree (environmental conditions) | 污染度3(EN60947-5-1) Pollution degree 3 (EN60947-5-1) |
| 耐电压 Withstand voltage (EN60947-5-1) | 同极端子间: 2.5kV Between homopolar terminals: 2.5kV 异极端子间: 4kV Between heteropolar terminals: 2.5kV 各端子和非充电金属部间: 6kV Between terminals and uncharged metal parts: 6kV |
| 绝缘电阻 Insulation resistance | 100MΩ 以上 Above 100MΩ |
| 接点间隙 Contact gap | 最小2 × 0.5mm速动型、最小2 × 2mm慢动型 Minimum 2 × 0.5mm quick-action type, Minimum 2 × 2mm slow-action type |
| 振动 Vibration | 10 ~ 55Hz 0.75mm单振幅 10 ~ 55Hz 0.75mm single amplitude |
| 冲击 Impact | 1,000m/s ² 300m/s ² |
| 环境温度 Ambient temperature | -20 ~ +70 °C (无结冰、结露) -20 ~ +70 °C (No ice or dew) |
| 环境湿度 Ambient humidity | 95%RH 以下 Less than 95% RH |
| | 约82g(C4N-1120) About 82g (D4N-1120) |
| 质量 Weight | 约99g(C4N-5120) About 99g (D4N-5120) |

Note 1. The above values are initial values.
Note 2. Once the contact is connected to a standard load, it can not be used to connect a smaller load. If so, the contact may result in rough surface, thus losing contact reliability.
*1. The protection level is gotten based on test method of (EN60947-5-1). Please make sure its sealing under actual environmental conditions before use. The switch box has dust and oil resistance structure, but it should be used in places without dust, oil and chemicals. Otherwise it may lead to premature wear, damage or malfunction.
*2. The durability is for ambient temperature of 5°C ~ 35°C and humidity of 40% to 70% RH. For additional details, please contact us.
*3. When the ambient temperature is above 35°C, more than 2 circuits 3A 250VAC loads are prohibited.
*4. The values will vary with different switching frequency, environmental conditions, reliability level and other factors. Please confirm on the actual load in advance.
*5. The mechanical life of deadman lever type is more than 10,000,000 times.

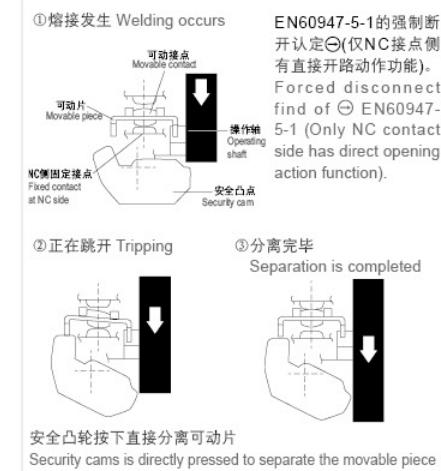
特征 Features

- 强制断开动作装置(仅NC接点)，可以在发生像接点熔断等故障时断开接点。
- 摆杆设置的安全性确保了动作位置指示灯面板和摆杆之间采用齿轮齿合的装置。
- 强化了顶部密封结构，以提高密封性能。
- 内藏接点座具有速动型: 1NC/1NO、2NC; 慢动型: 1NC/1NO、2NC
- Forced open action device(NC contacts only), it can disconnect the contact when the contact has fusing and other failures.
- The set safety of lever ensures that gear ratcheting device is used between the action position indicator panel and the lever.
- Strengthened top seal structure improves the sealing performance.
- Built-in contact holder has fast-action type: 1NC/1NO; Slow-action: 1NC /1NO and 2NC

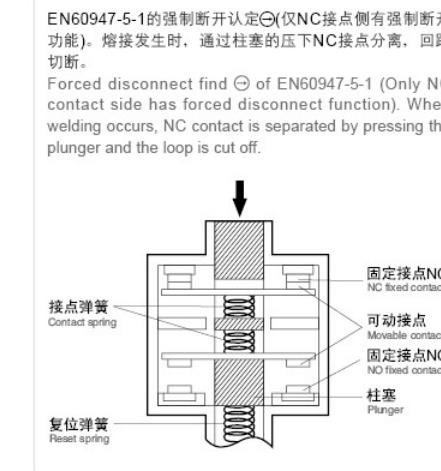
PC4N 小型安全限位开关 Miniature Safety Limit Switch

强制断开构造 Forced disconnect structure

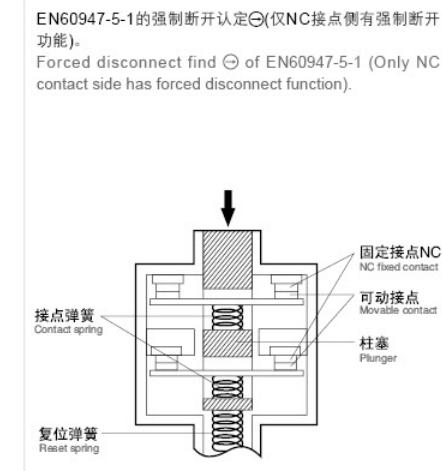
■ 1NC、1NO接点(速动型) 1NC and 1NO contacts (quick-action type)



■ 1NC、1NO接点(慢动型) 1NC and 1NO contacts (slow-action type)



■ 2NC接点(慢动型) 2NC contacts (slow-action type)



接点形式 Contact form

| 型号 Model | 接点 Contact | 接点形式 Contact form | 动作模式 Operation mode | 说明 Explanation |
|----------|--|---|---------------------|------------------------------|
| PC4N-□1□ | 1NC/1NO (速动型) 1NC/1NO (Quick-action type) |  | 13-14 31-32 | □ 导通 Conductive 行程 Travel |
| PC4N-□2□ | 2NC (速动型) 2NC (Quick-action type) |  | 11-12 31-32 | □ 导通 Conductive 行程 Travel |
| PC4N-□A□ | 1NC/1NO (慢动型) 1NC/1NO (Slow-action type) |  | 11-12 33-34 | □ 导通 Conductive 行程 Travel |
| PC4N-□B□ | 2NC (慢动型) 2NC (Slow-action type) |  | 11-12 31-32 | □ 导通 Conductive 行程 Travel |

动作特性 Action characteristics

■ 速动型(1NC/1NO)(2NC)、慢动型(2NC)

Quick-action type (1NC/1NO)(2NC), slow-action type (2NC)

| 动作特性 Action characteristics | 型号 Model | | | | | | | | | | | |
|---------------------------------------|-----------|-----------|-----------|-----------|--------------|--------------|------------|------------|-----------|-----------|----------|----------|
| | PC4N-□120 | PC4N-□122 | PC4N-□125 | PC4N-□226 | PC4N-□131 | PC4N-□132 | PC4N-□162 | PC4N-□172 | PC4N-□12H | PC4N-□12G | PC4N-□80 | PC4N-□87 |
| 动作力 Action force | OF | 最大 Max. | 5.0N | | 6.5N | 6.5N | 5.0N | 5.0N | 4.5N | 1.5N | 1.5N | |
| 回复力 Restore force | RF | 最小 Min. | 0.5N | | 1.5N | 1.5N | 0.8N | 0.8N | 0.4N | | | |
| 预行程 Pretravel | PT | | 18~27° | | 2mm | 2mm | 4mm | 4mm | 40° | | | |
| 过行程 Overtravel | OT | 最小 Min. | 40° | | 4mm | 4mm | 5mm | 5mm | 40° | | | |
| 响应差的行程 Poor response travel | MD | 最大 Max.*1 | 14° | | 1mm | 1mm | 1.5mm | 1.5mm | 14° | | | |
| 动作位置 Action position | OP | | — | | 18.2 ± 0.5mm | 28.6 ± 0.8mm | 37 ± 0.8mm | 27 ± 0.8mm | — | | | |
| 总行程 Total travel | TT | *2 | (80°) | | (6mm) | (6mm) | (9mm) | (9mm) | (80°) | | | |
| 强制断开预行程 Forced disconnected pretravel | DOT | 最小 Min.*3 | 50° | | 3.2mm | 3.2mm | 5.8mm | 4.8mm | 50° | | | |
| 强制断开力 Forced disconnected force | DOF | 最小 Min.*3 | 20N | | 20N | 20N | 20N | 20N | 20N | | | |

注 2 NC 接点的闭路/开路动作的同时性会有偏差，使用时请注意确认。

Note The simultaneity of ON / OFF operation of 2NC contacts have difference, please make sure before using it.

*1. 仅限速动型。

*1. Only for quick-action type.

*2. 为参考值。

*2. Reference values.

*3. 仅限慢动型。为了安全使用，请确保所有值在最大或最小范围内。

*3. Only for slow-action type. For safe use, please make sure that all values are within the range of maximum or minimum.

*4. 为摆杆长度32 mm时的特性。

*4. The property value when length of lever is 32mm.

PC4N 小型安全限位开关 Miniature Safety Limit Switch

动作特性 Action characteristics

慢动型(1NC/1NO)

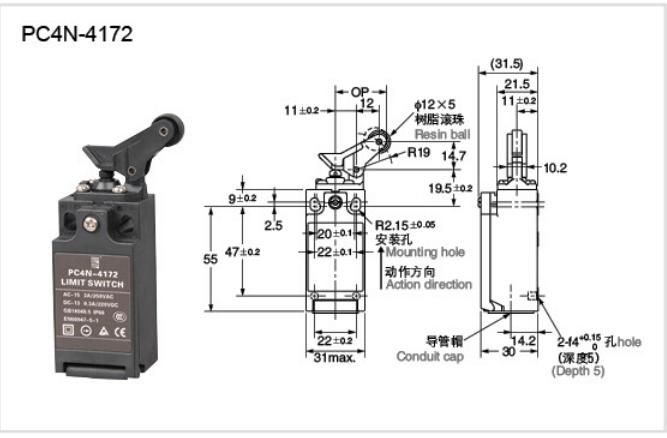
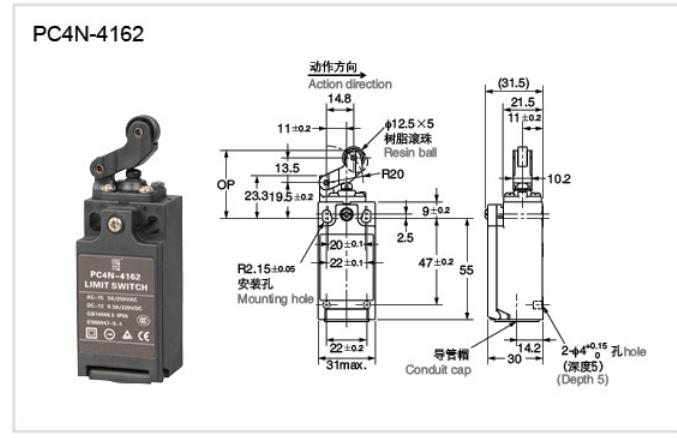
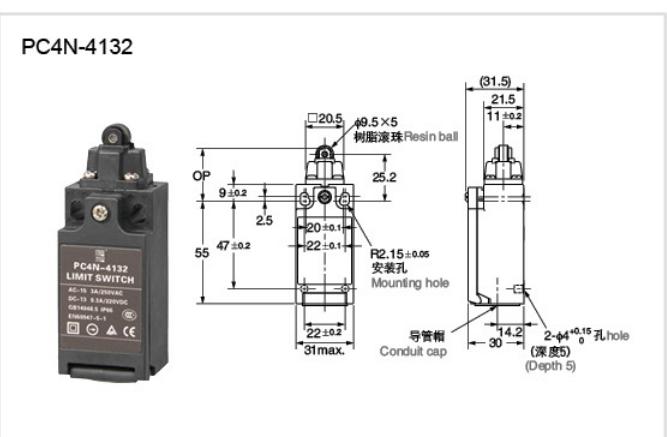
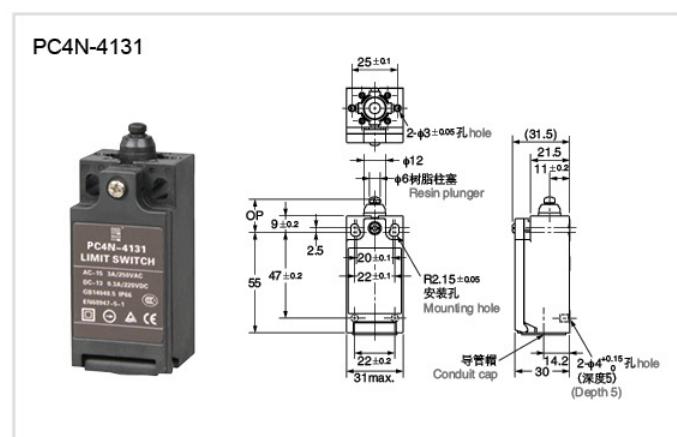
Slow-action type (1NC/1NO)

| 动作特性 Model | | PC4N-□A20 | PC4N-□A22 | PC4N-□A25 | PC4N-□A26 | PC4N-□A31 | PC4N-□A32 | PC4N-□A62 | PC4N-□A72 | PC4N-□A2H | PC4N-□A2G*8 |
|----------------------|-----|-----------|------------|-----------|-----------|------------|------------|-----------|------------|------------|-------------|
| 动作力 Action force | OF | 最大 Max. | 5.0N | | | 6.5N | 6.5N | 5.0N | 5.0N | 4.5N | |
| 回复力 Restore force | RF | 最小 Min. | 0.5N | | | 1.5N | 1.5N | 0.8N | 0.8N | 0.4N | |
| 预行程 Pretravel | PT | *1 | 18~27° | | | 2mm | 2mm | 4mm | 4mm | 18~27° | |
| | PT | (2nd)*2 | (44°) | | | (2.9mm) | (2.9mm) | (5.2mm) | (4.3mm) | (44°) | |
| | PT | *3 | 27.5~36.5° | | | 2.8mm | 2.8mm | 4mm | 4mm | 27.5~36.5° | |
| | PT | (2nd)*4 | (18°) | | | (1mm) | (1mm) | (1.5mm) | (1.5mm) | (18°) | |
| 过行程 Overtravel | OT | 最小 Min. | 40° | | | 4mm | 4mm | 5mm | 5mm | 40° | |
| 动作位置 Action position | OP | | — | | | 18.2±0.5mm | 28.6±0.8mm | 37±0.8mm | 27±0.8mm | — | |
| | OP | *5 | — | | | 17.4±0.5mm | 28±0.8mm | 36±0.8mm | 26.1±0.8mm | — | |
| 总行程 Total travel | TT | *6 | (80°) | | | (6mm) | (6mm) | (9mm) | (9mm) | (80°) | |
| 强制断开预行程 | DOT | 最小 Min.*7 | 50° | | | 3.2mm | 3.2mm | 5.8mm | 4.8mm | 50° | |
| 强制断开力 | DOF | 最小 Min.*7 | 20N | | | 20N | 20N | 20N | 20N | 20N | |
| 强制断开力 | DOF | 最小 Min.*7 | 20N | | | 20N | 20N | 20N | 20N | 20N | |

- *1. NC接点呈开路。
- *2. NO接点呈闭路。
- *3. 仅限MBB型。
- *4. 为MBB型的参考值。
- *5. 仅限MBB型。
- *6. 为参考值。
- *7. 为了安全使用, 请确保所有值在最大或最小范围内。
- *8. 为摆杆长度32 mm时的特性。

- *1. NC contact is open.
- *2. NO contact is closed.
- *3. Only for MBB type.
- *4. It is the reference value of MBB type.
- *5. Only for MBB type.
- *6. Reference values
- *7. For safe use, please make sure that all values are within the range of maximum or minimum.
- *8. The property value when length of lever is 32mm.

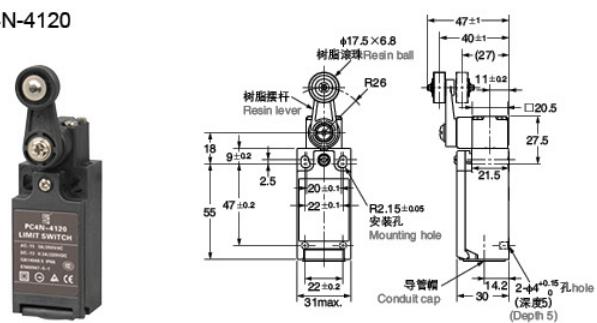
外观和尺寸 Appearance and Dimension



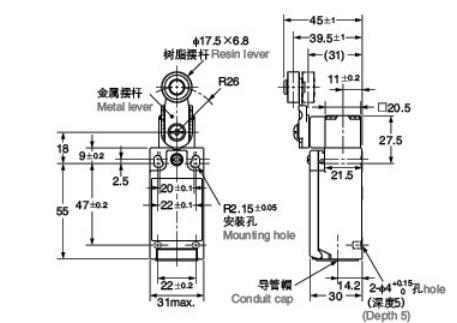
PC4N 小型安全限位开关 Miniature Safety Limit Switch

外观和尺寸 Appearance and Dimension

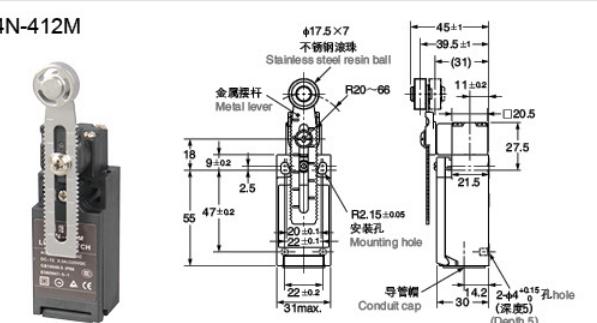
PC4N-4120



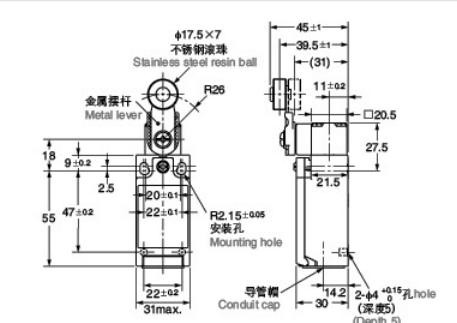
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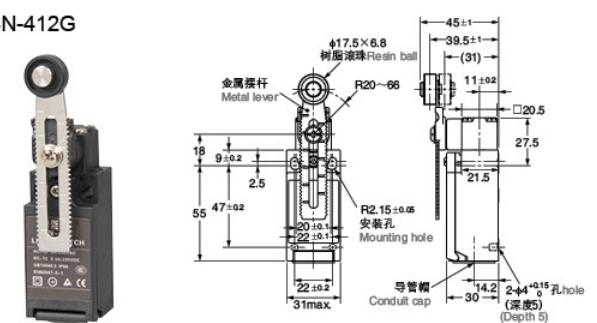
PC4N-412M



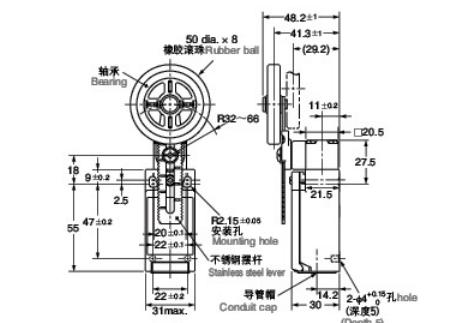
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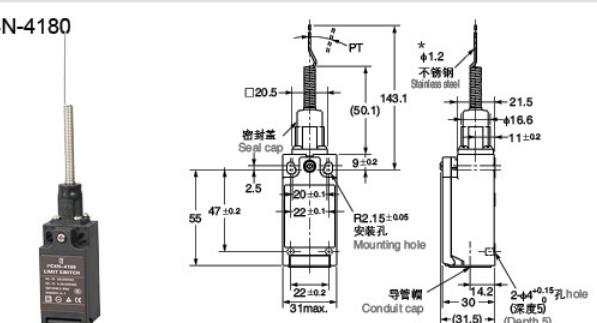
PC4N-412G



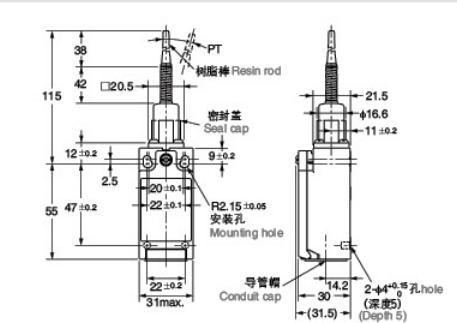
PC4N-412H



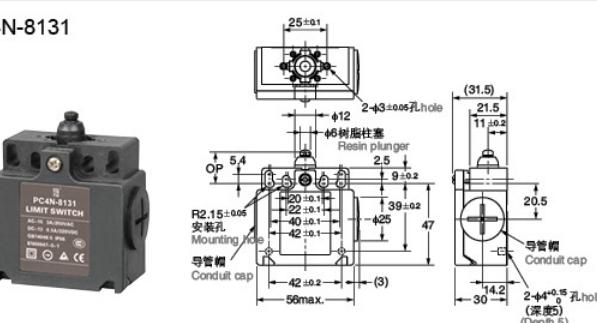
PC4N-4180



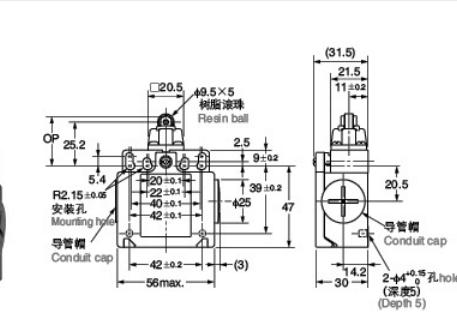
PC4N-4187



PC4N-8131



PC4N-8132

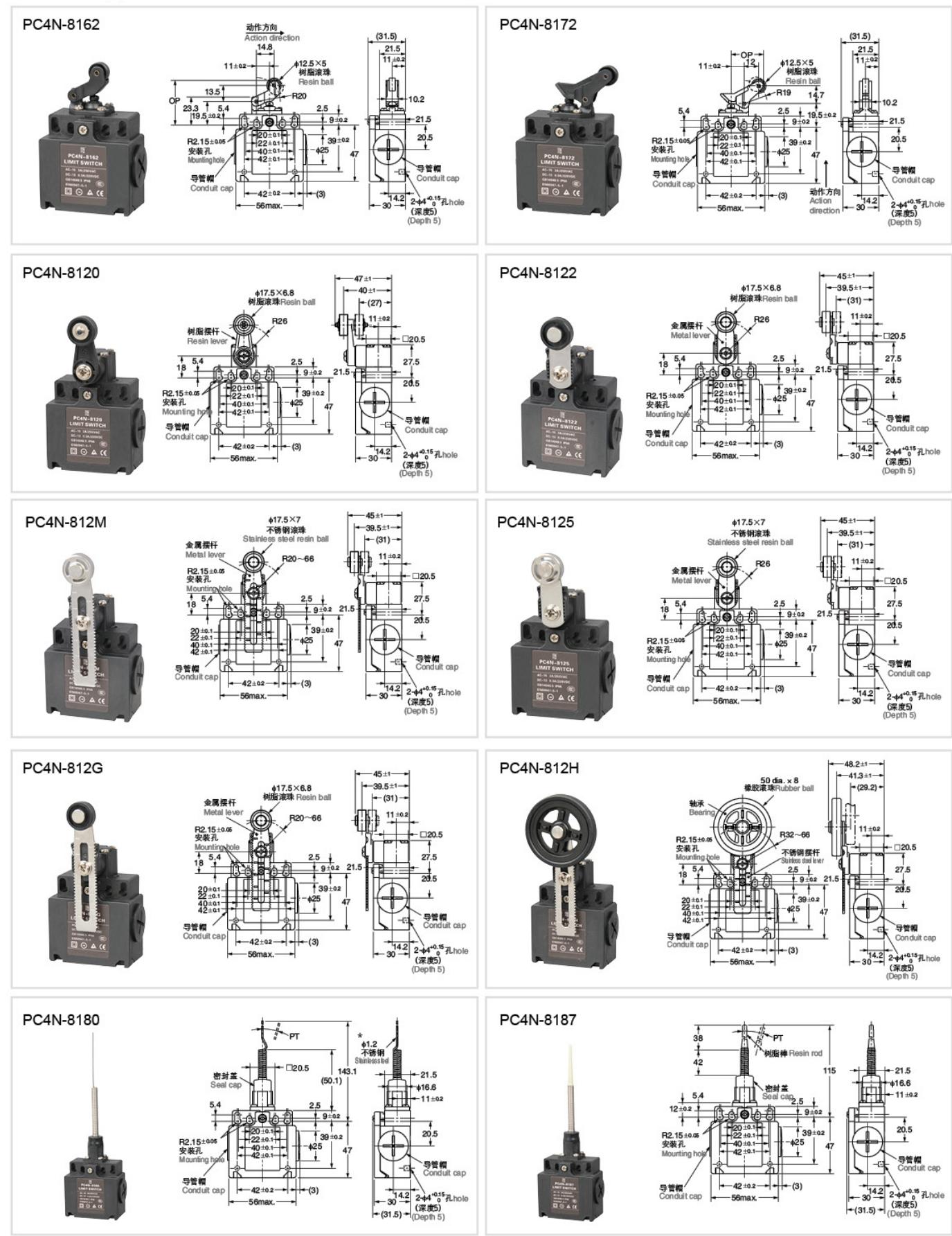


*不锈钢垫圈和塑料棒的使用范围从前端35mm以内, 整个动作在70mm以内

* Use of application of stainless steel washers and plastic stick are within 35mm from the front end, the entire action is within 70mm

PC4N 小型安全限位开关 Miniature Safety Limit Switch

外观和尺寸 Appearance and Dimension



*不锈钢垫圈和塑料棒的使用范围从前端35mm以内，整个动作在70mm以内
* Use of application of stainless steel washers and plastic stick are within 35mm from the front end, the entire action is within 70mm

PC4N-□R 手动复位限位开关 Manual Reset Limit Switch

性能 Performance

| 保护等级*1 Protection level*1 | | IP66 |
|---------------------------|---|--|
| 寿命*4 | 机械 Mechanical | 1,000万次以上*5 More than 10,000,000 times*5 |
| 电气 Electrical | | 50万次以上(AC250V 3A、电阻负载)*3 More than 500,000 times (AC250V 3A, resistive load)*3 30万次以上(AC250V 10A、电阻负载) More than 300,000 times (AC250V 10A, resistive load) |
| 操作速度 | Operating speed | 1~500mm/s(C4N-1A20R) |
| 操作频率 | Operating frequency | 最大30次/min Max. 30 times/min |
| 接触电阻 | Contact resistance | 25mΩ以下 25 mΩ or less |
| 最小使用负载*4 | Minimum working load *4 | DC5V 1mA 电阻负载(N标准参考值) 1mA resistive load below DC5V (N standard reference value) |
| 额定绝缘电压(Ui) | Rated insulation voltage (Ui) | 300V |
| 防触电保护等级 | Electric shock proof protection grade | Class II (双重绝缘) Class II (double insulated) |
| 污染度(使用环境) | Pollution degree (environmental conditions) | 污染度3(EN60947-5-1) Pollution degree 3 (EN60947-5-1) |

| 耐电压 | |
|-------------------|--------------------------------------|
| Withstand voltage | (EN60947-5-1) |
| 同极端子间: 2.5kV | Between homopolar terminals: 2.5kV |
| 异极端子间: 4kV | Between heteropolar terminals: 2.5kV |

| 绝缘电阻 | |
|-----------------------|----------------------|
| Insulation resistance | 100MΩ 以上 Above 100MΩ |

| 接点间隙 | |
|-------------|---|
| Contact gap | 最小2×0.5mm速动型、最小2×2mm慢动型 Minimum 2×0.5mm quick-action type, Minimum 2×2mm slow-action type |

| 振动 | 误动作 |
|-----------|--|
| Vibration | 10~55Hz 0.75mm单振幅 10~55Hz 0.75mm single amplitude |

| 冲击 | 耐久 |
|--------|---|
| Impact | 1,000m/s ² Duration 1000m/s ² Malfunction 300m/s ² |

| 环境温度 | |
|---------------------|---|
| Ambient temperature | -20~+70°C (无结冰、结露) -20~+70°C (No ice or dew) |

| 环境湿度 | |
|------------------|--------------------------|
| Ambient humidity | 95%RH以下 Less than 95% RH |

| 质量 | |
|--------|---------------------------------------|
| Weight | 约92g(D4N-1A20R) About 92g (D4N-1A20R) |

- 注1. 上述值为初始值。
注2. 一旦接点连接标准负载后，就不可用于连接更小容量的负载。否则可能导致接点表面粗糙，从而失去接触可靠性。
*1. 保护等级是根据(EN60947-5-1) 规格的测试法得出的。使用前务必在实际使用的环境、条件下确认其密封性。开关盒本体具有防尘、防水构造，但应尽可能保持头部在没有碎屑粉尘、油污、化学品的场所进行使用。否则可能导致过早磨损、损坏或故障。
*2. 耐久性的条件是使用环境温度 5°C ~ 35°C、使用环境湿度 40% ~ 70% RH。
其他详细条件请另行查询。
*3. 使用环境温度为 35°C 以上时，禁止使用2回路以上的3A AC250V负载。
*4. 这个值会因为开关频率、环境条件、可靠性等级等因素的影响而不同。请事先在实际负载上进行确认。
*5. 叉杆摆杆型的机械寿命为1,000万次以上。

Note 1. The above values are initial values.

Note 2. Once the contact is connected to a standard load, it can not be used to connect a smaller load. If so, the contact may result in rough surface, thus losing contact reliability.

- The protection level is gotten based on test method of (EN60947-5-1). Please make sure its sealing under actual environmental conditions before use. The switch box has dust and oil resistance structure, but it should be used in places without dust, oil and chemicals. Otherwise it may lead to premature wear, damage or malfunction.
- The durability is for ambient temperature of 5°C ~ 35°C and humidity of 40% to 70% RH. For additional details, please contact us.
When the ambient temperature is above 35°C, more than 2 circuits 3A 250VAC loads are prohibited.
- The values will vary with different switching frequency, environmental conditions, reliability level and other factors. Please confirm on the actual load in advance.
The mechanical life of deadman lever type is more than 10,000,000 times.

特征 Features

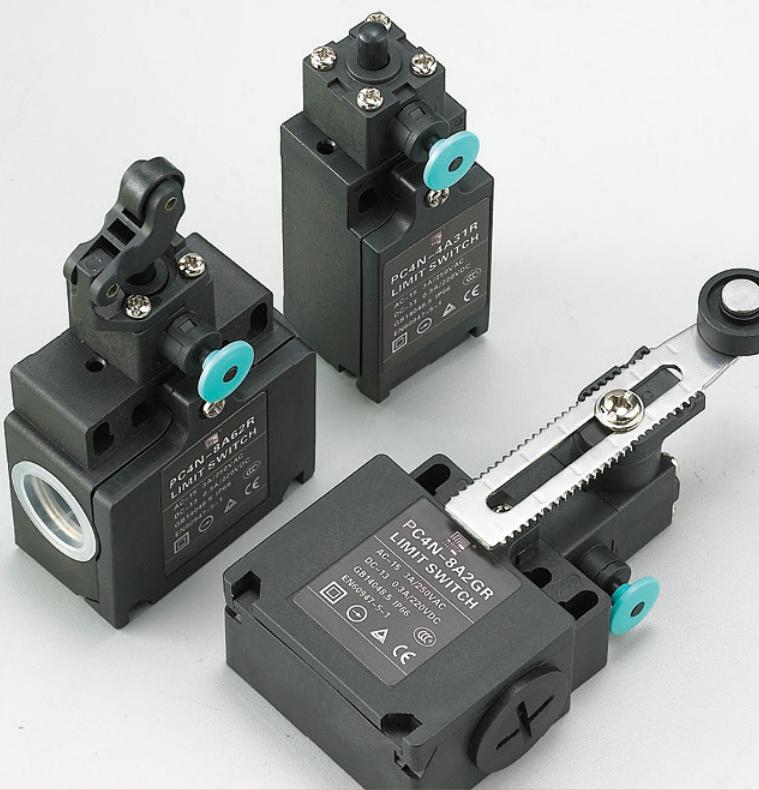
- 强制断开动作装置(仅NC接点)，可以在发生像接点熔断等故障时断开接点。
- 摆杆设置的安全性确保了动作位置指示灯面板和摆杆之间采用齿轮齿合的装置。
- 强化了顶部密封结构，以提高密封性能。
- 内藏接点座具有慢动型：1NC/1NO、2NC
- Forced open action device(NC contacts only), it can disconnect the contact when the contact has fusing and other failures.
- The set safety of lever ensures that gear ratcheting device is used between the action position indicator panel and the lever.
- Strengthened top seal structure improves the sealing performance.
- Built-in contact holder has slow-action: 1NC /1NO and 2NC

型号说明 Model Designations

PC4N - **4** **A** **3** **1** **R**

① ② ③

| 项目 Item | 代号 Code | 说明 Description |
|-------------------------------------|---|----------------|
| ① 导管 /连接器 | 1 Pg13.5(1导管型) Pg13.5 (1 conduit type) | |
| 尺寸 Conduit / connector size | 2 G1/2(1导管型) G1/2 (1 conduit type) | |
| ④ M20(1导管型) M20 (1 conduit type) | 4 M20(1导管型) M20 (1 conduit type) | |
| 6 G1/2(2导管型) G1/2 (2 conduits type) | 6 G1/2 (2 conduits type) | |
| 8 M20(2导管型) M20 (2 conduits type) | 8 M20 (2 conduits type) | |
| ② 内藏开关 Built-in switch | A 1NC/1NO (慢动型) 1NC/1NO (slow-action type) | |
| B 2NC (慢动型) 2NC (slow-action type) | B 2NC (slow-action type) | |
| 20 滚珠摆杆型 (树脂摆杆, 树脂滚珠) | 20 Roller lever (resin lever, resin ball) | |
| 22 滚珠摆杆型 (金属摆杆, 树脂滚珠) | 22 Roller lever (metal lever, resin ball) | |
| 25 滚珠摆杆型 (金属摆杆, 不锈钢滚珠) | 25 Roller lever (metal lever, stainless steel resin ball) | |
| 2G 可调滚珠摆杆, Form Lock(金属摆杆, 树脂滚珠) | 2G Adjustable roller lever, Form Lock (metal lever, resin ball) | |
| 2H 可调滚珠摆杆, Form Lock(金属摆杆, 橡胶滚珠) | 2H Adjustable roller lever, Form Lock (metal lever, rubber ball) | |
| 2M 可调滚珠摆杆, Form Lock(金属摆杆, 不锈钢滚珠) | 2M Adjustable roller lever, Form Lock (metal lever, stainless steel resin ball) | |
| 31 顶部柱型 Top plunger type | 31 Top plunger type | |
| 32 顶部柱塞滚珠型 Top plunger ball type | 32 Top plunger ball type | |
| 62 单侧悬臂滚珠型(水平) | 62 Unilateral cantilever ball type (horizontal) | |
| 72 单侧悬臂滚珠型(垂直) | 72 Unilateral cantilever ball type (vertical) | |



PC4N-□R 手动复位限位开关 Manual Reset Limit Switch

强制断开构造 Forced disconnect structure

■ 1NC、1NO接点(慢动型)

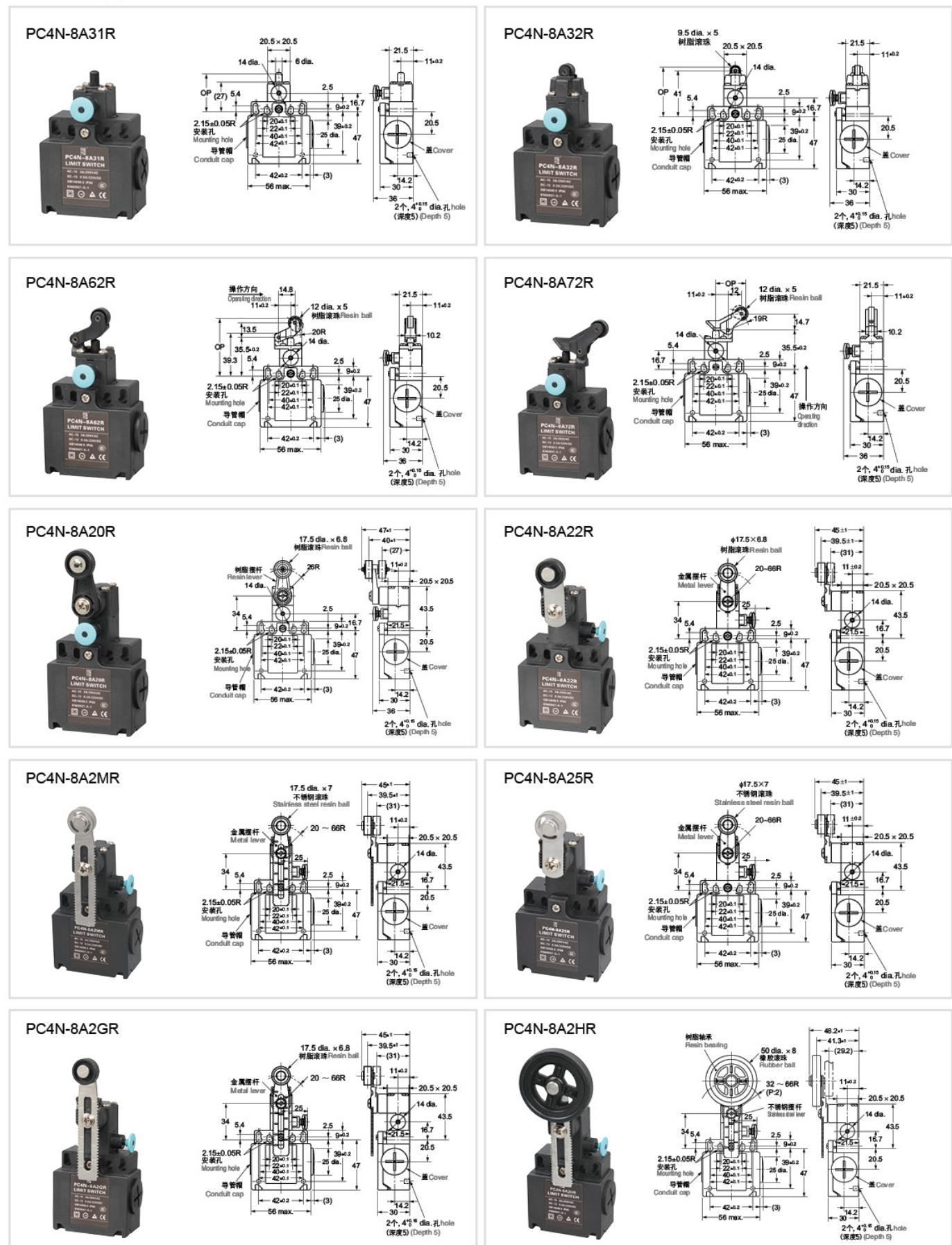
1NC and 1NO contacts (slow-action type)

仅限 NC 接点侧有强制断开构造。
当发生熔化时，通过按下柱塞，可以分离接点，切断回路。(符合EN60947-5-1
强制断开操作)。

Only NC contact has forced disconnect structure.
When melting occurs, the contact can be isolated by pressing the plunger to cut
off the loop. (In accordance with EN60947-5-1 force disconnect operation).

PC4N-□R 手动复位限位开关 Manual Reset Limit Switch

外观和尺寸 Appearance and Dimension



PC4B-□N 安全限位开关 Safety Limit Switch

型号说明 Model Designations

PC4B - ④ ① ② ⑤ ③ N

| 项目 Item | 代号 Code | 说明 Description |
|--|--|----------------|
| ① 导管/连接器尺寸 Conduit / connector size | 1 Pg13.5 (1导管型) Pg13.5 (1 conduit type) 4 M20 (1导管型) M20 (1 conduit type) | |
| ② 内藏开关 Built-in switch | 1 1NC/1NO (速动型) 1NC/1NO (quick-action type) 5 1NC/1NO (慢动型) 1NC/1NO (slow-action type) A 2NC (慢动型) 2NC (slow-action type) | |
| ③ 头部及传动杆 Head and driving rod | 11 滚珠摆杆型 (树脂摆杆, 树脂滚珠) Roller lever (resin lever, resin ball) 12 可调滚珠摆杆, Form-Lock (不锈钢滚珠) Adjustable roller lever, Form-Lock (resin lever, resin ball) 15 滚珠摆杆型(不锈钢滚珠) Roller lever (resin lever, resin ball) 16 可调滚珠摆杆, Form-Lock (树脂滚珠) Adjustable roller lever, Form-Lock (resin ball) 17 可调棒式摆杆, Form-Lock (长条杆) Adjustable stick lever, Form-Lock (long lever) 18 可调滚珠摆杆, Form Lock (金属摆杆, 橡胶滚珠) Adjustable roller lever, Form Lock (metal lever, rubber ball) 70 顶滚珠柱塞型 Top ball plunger type 71 滚珠柱塞型 Ball plunger type 72 滚珠柱塞型 Ball plunger type 81 线圈弹簧型 Coil spring type 87 塑料棒型 Plastic stick type 86 金属棒型 Metal stick type | |

额定值 Rated Value

| 额定电压(V) Rated voltage (V) | 非感性负载(A) Non-inductive load (A) | | 感性负载(A) Inductive load (A) | | 电动机负载 Motor load | |
|------------------------------|---------------------------------|---------------|----------------------------|------------------|------------------|-----|
| | 阻性负载 Resistive load | 灯负载 Lamp load | 感性负载 Inductive load | 电动机负载 Motor load | NC | NO |
| AC | 125 | 10 | 3 | 1.5 | 10 | 5 |
| | 250 | 10 | 2 | 1 | 10 | 3 |
| | 400 | 10 | 1.5 | 0.8 | 3 | 1.5 |
| DC | 8 | 10 | 6 | 3 | 10 | 6 |
| | 14 | 10 | 6 | 3 | 10 | 6 |
| | 30 | 6 | 4 | 3 | 6 | 4 |
| | 125 | 0.8 | 0.2 | 0.2 | 0.8 | 0.2 |
| | 250 | 0.4 | 0.1 | 0.1 | 0.4 | 0.1 |

注1. 上述数值表示恒定电流。

注2. 所谓感性负载，是功率因数0.4以上(交流)、时间常数7ms以下(直流的负载)。

注3. 所谓灯负载就是有10倍浪涌电流的负载。

注4. 所谓电动机负载，就是有6倍浪涌电流的负载。

Note1. The above values represent constant current.

2. The so-called inductive load refers to the load with power factor of 0.4 or more (AC) and the time constant below 7ms (DC).

3. The so-called lamp load refers to the load with 10 times of surge current.

4. The so-called motor load is the load with 6 times of surge current.

特征 Features

- 强制断开动作装置(仅NC接点)，可以在发生像接点熔断等故障时断开接点。
- 摆杆设置的安全性确保了动作位置指示灯面板和摆杆之间采用齿轮齿合的装置。
- 强化了顶部密封结构，以提高密封性能。
- 内藏接点座具有速动型：1NC/1NO；慢动型：1NC/1NO、2NC
- Forced open action device (NC contacts only), it can disconnect the contact when the contact has fusing and other failures.
- The set safety of lever ensures that gear ratcheting device is used between the action position indicator panel and the lever.
- Strengthened top seal structure improves the sealing performance.
- Built-in contact holder has fast-action type: 1NC / 1NO; Slow-action: 1NC / 1NO and 2NC



PC4B-□N 安全限位开关 Safety Limit Switch

性能 Performance

| | | |
|--------------------------|---|--|
| 保护等级*1 | Protection level*1 | IP66 |
| 寿命*2 | 机械 Mechanical | 1,000万次以上 More than 10,000,000 times*5 |
| Life *2 | 电气 Electrical | 50万次以上(AC250V 10A、电阻负载) More than 500,000 times (AC250V 10A, resistive load) |
| 操作速度 | Operating speed | 1mm~0.5m/s |
| 操作频率 | 机械 Mechanical | 120次/min 120 times/min |
| Operating frequency | 电气 Electrical | 30次/min 30 times/min |
| 额定频率 | Rated frequency | 50/60Hz |
| 绝缘电阻 | Insulation resistance | 同极端子之间、及端子与不带电金属部之间100MΩ以上(DC500V兆欧表) 100MΩ or more (DC500V Megohm) between homopolars, and between terminals and uncharged metal parts |
| 接触电阻 | Contact resistance | 25mΩ以下(初期值) 5mΩ or less (initial value) |
| 耐电压 | Withstand voltage (EN60947-5-1) | 同极端子间: 2.5kV(速动型)/4kV(慢动型) Between homopolar terminals: 2.5kV (quick-action type)/4kV (slow-action type) 异极端子间: 4kV(慢动型) Between heteropolar terminals: 2.5kV (slow-action type) 带电金属部之间: 4kV Between charged metal parts: 4kV 各端子与不带电金属部之间: 6kV Between terminals and uncharged metal parts: 6kV |
| 额定绝缘电压(Ui) | Rated insulation voltage (Ui) | 600V(EN60947-5-1) |
| 开闭时逆电压 | Reverse voltage when on/off | 1500V max (EN60947-5-1) |
| 污染度(使用环境) | Pollution degree (environmental conditions) | 污染度3(EN60947-5-1) Pollution degree 3 (EN60947-5-1) |
| 防触电保护等级 | Electric shock proof protection grade | Class I (带接地端子) Class I (with ground terminal) |
| 振动 | 误动作 Malfunction | 10~55Hz 0.75mm单振幅 10~55Hz 0.75mm single amplitude |
| 冲击 Impact | 耐久 Duration | 1,000m/s ² |
| | 误动作 Malfunction | 300m/s ² |
| 环境温度 Ambient temperature | | -20~+80°C (无结冰、结露) -20~+80°C (No ice or dew) |
| 环境湿度 Ambient humidity | | 95%RH以下 Less than 95% RH |
| 质量 Weight | | 约250g About 250g |

注1. 上述值为初始值。

注2. 有些型号中可能与上述内容不同, 请另外垂询。

*1. 该保护结构基于标准(EN60947-5-1)规定的测试方法, 请根据使用环境、使用条件来事先确认密封性。

*2. 寿命的条件为环境温度5~35°C、环境湿度40~70%RH时的数值。

Note 1. The above are initial values.

Note 2. Values of some models may be different from the above, please contact us for details.

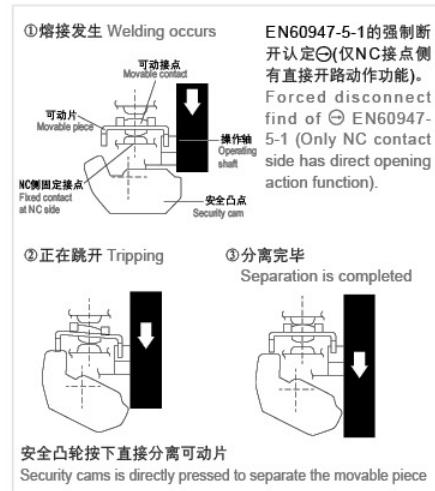
*1. The protection structure is tested based on method predetermined by standard (EN60947-5-1), please confirm the sealing in advance according to the operating environment and conditions.

*2. The conditions of life are the values under the ambient temperature of 5~35°C and humidity of 40 to 70% RH. For other detailed conditions, please contact us.

强制断开构造 Forced disconnect structure

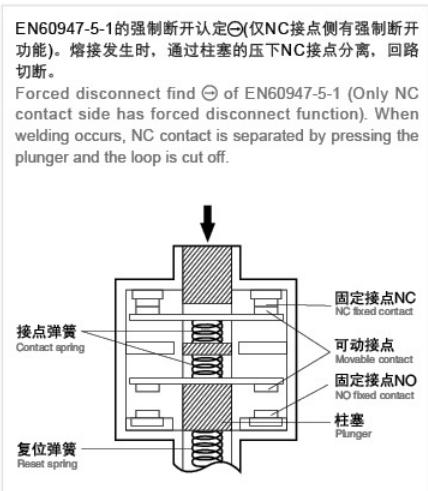
■ 1NC、1NO接点(速动型)

1NC and 1NO contacts (quick-action type)



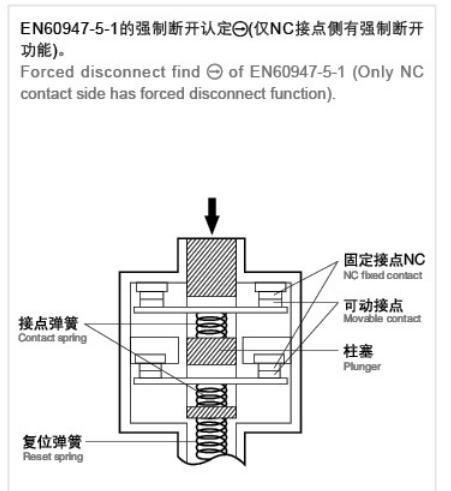
■ 1NC、1NO接点(慢动型)

1NC and 1NO contacts (slow-action type)



■ 2NC接点(慢动型)

2NC contacts (slow-action type)



PC4B-□N 安全限位开关 Safety Limit Switch

接点形式 Contact form

| 型号 Model | 接点 Contact | 接点形式 Contact form | 动作模式 Operation mode | 说明 Explanation |
|-----------|--|-------------------|---------------------|--|
| PC4B-□1□N | 1NC/1NO (速动型) 1NC/1NO (Quick-action type) | | 行程 Travel | 仅NC接点(11-12)带强制断开功能, 取得认证(端子No.11-12、13-14不可作异极使用) Only NC contact (11-12) has forced disconnect function and got the certification (terminal No.11-12,13-14 can not be used as different heteropoles) |
| PC4B-□5□N | 1NC/1NO (慢动型) 1NC/1NO (Slow-action type) | | 行程 Travel | 仅NC接点(11-12)带强制断开功能, 取得认证(端子No.11-12、13-14不可作异极使用) Only NC contact (11-12) has forced disconnect function and got the certification (terminal No.11-12,13-14 can not be used as different heteropoles) |
| PC4B-□A□N | 2NC (慢动型) 2NC (Slow-action type) | | 行程 Travel | 两个NC接点(11-12、21-22)带强制断开功能, 取得认证(端子No.11-12、21-22可以作异极使用) Two NC contacts (11-12, 21-22) have forced disconnect function and got the certification (terminal No.11-12,21-22 can be used as different heteropoles) |

动作特性 Action characteristics

| 型号 Model | | PC4B-□11N | PC4B-□15N | PC4B-□16N *1 | PC4B-□17N *2 | PC4B-□18N *2 | PC4B-□70N | PC4B-□71N | PC4B-□81N | PC4B-□86N | PC4B-□87N |
|-----------------------------|------------------------|--------------|-----------|--------------|--------------|--------------|-----------|-----------|-----------|-----------|-----------|
| 动作特性 | Action characteristics | | | | | | | | | | |
| 动作力 Action force | OF | 最大Max. | 9.41N | 9.41N | 9.41N | 2.12N | 9.41N | 18.63N | 18.63N | 1.47N | 1.47N |
| 回复力 Restore force | RF | 最小Min. | 1.47N | 1.47N | 1.47N | 0.29N | 1.47N | 1.96N | 1.96N | | |
| 预行程 Pretravel | PT | | 21°±3° | 21°±3° | 21°±3° | 21°±3° | 21°±3° | 2mm | 2mm | 15 | 15 |
| | PT | (2nd) *3 *5 | (45°) | (45°) | (45°) | (45°) | (45°) | (3mm) | (3mm) | | |
| 过行程 Overtravel | OT | 最小Min. | 50° | 50° | 50° | 50° | 50° | 5mm | 5mm | | |
| 响应差的行程 Poor response travel | MD | 最大Max. *4 | 12° | 12° | 12° | 12° | 12° | 1mm | 1mm | | |
| 强制断开预行程 | DOT | 最小Min. *3 *6 | 35° | 35° | 35° | 35° | 35° | 3.2mm | 3.2mm | | |
| | | *4*6 | 55° | 55° | 55° | 55° | 55° | | | | |
| 强制断开力 | DOF | 最小Min. *6 | 19.61N | 19.61N | 19.61N | 19.61N | 19.61N | 49.03N | 49.03N | | |
| 总行程 Total travel | TT | *5 | (75°) | (75°) | (75°) | (75°) | (75°) | (7mm) | (7mm) | | |
| 自由位置 Free position | FP | 最大Max. | | | | | | 38mm | 51mm | | |
| 动作位置 Action position | OP | | | | | | | 35±1mm | 48±1mm | | |

注 2NC接点ON/OFF动作的同时性有差异, 使用时请确认。

*1. 杆长为31.5mm时的特性值。

*2. 杆长为140mm时的特性值。

*3. 仅慢动型。

*4. 仅速动型。

*5. 参考值。

*6. 为了保证安全使用请务必加以确保。

Note The simultaneity of ON / OFF operation of 2NC contacts have difference, please make sure before using it.

*1. The property value when length of lever is 31.5mm.

*2. The property value when length of lever is 140mm.

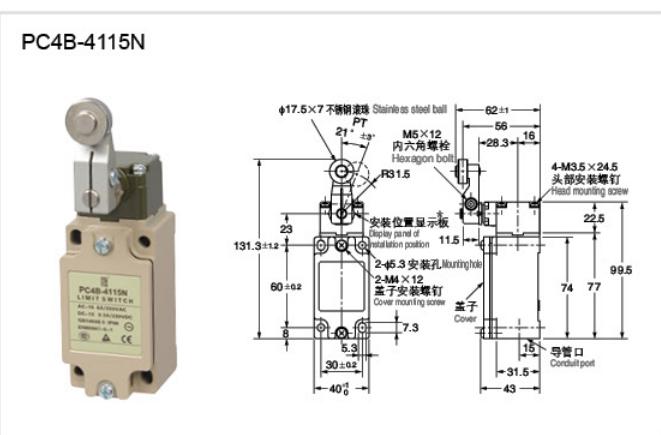
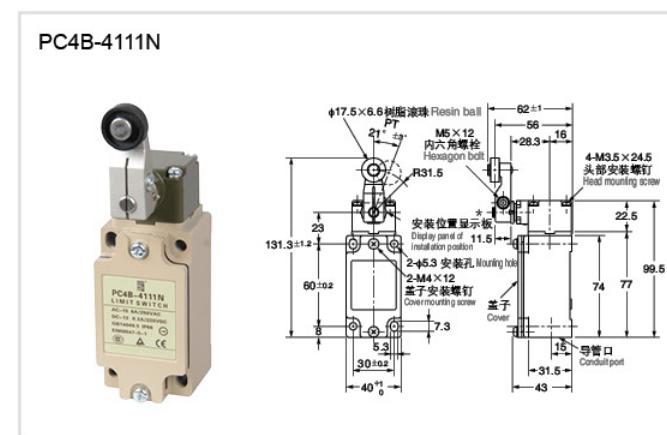
*3. Only for slow-action type.

*4. Only for quick-action type.

*5. Reference values.

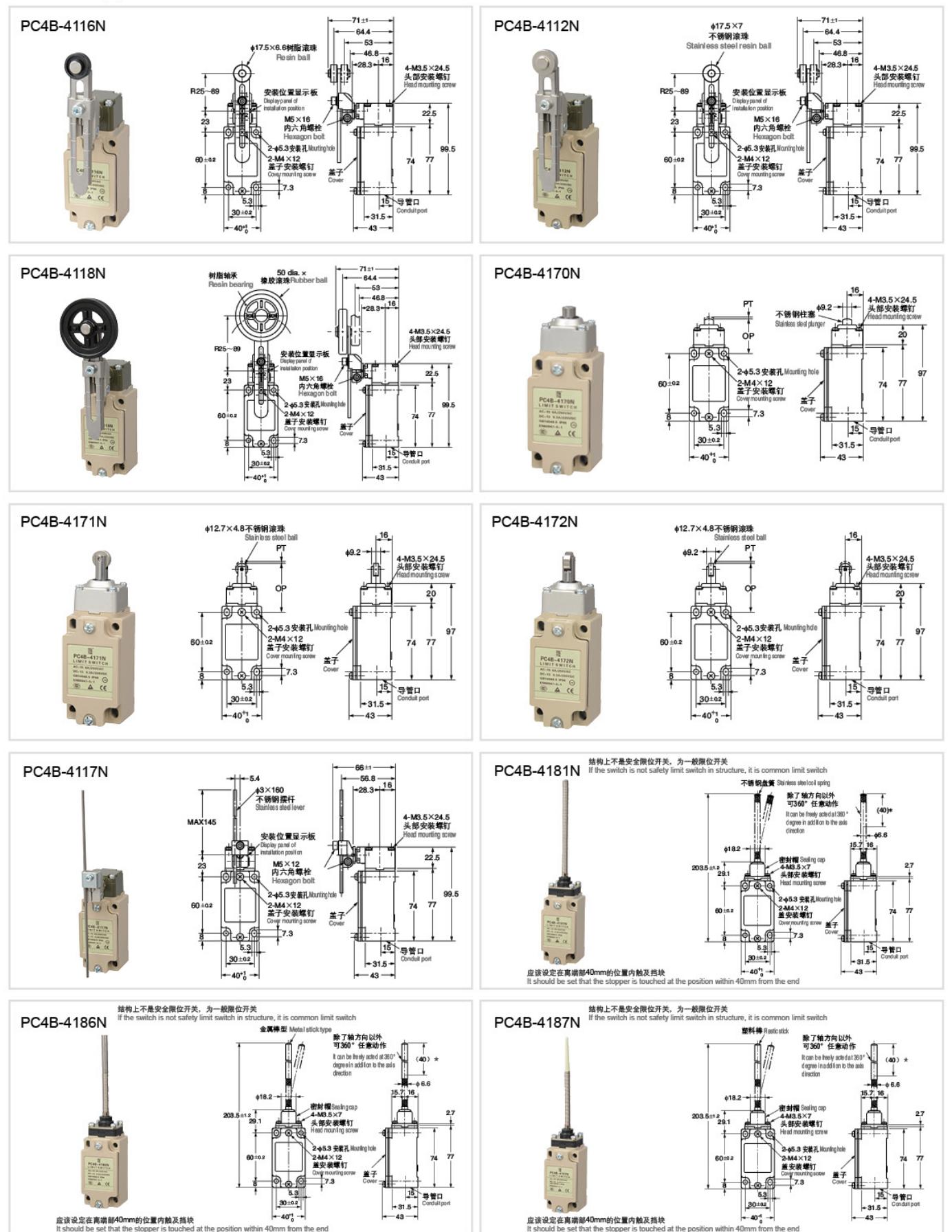
*6. Please make sure in order to ensure the safe use.

外观和尺寸 Appearance and Dimension



PC4B-□N 安全限位开关 Safety Limit Switch

外观和尺寸 Appearance and Dimension



PCM 微动开关 Micro Switch

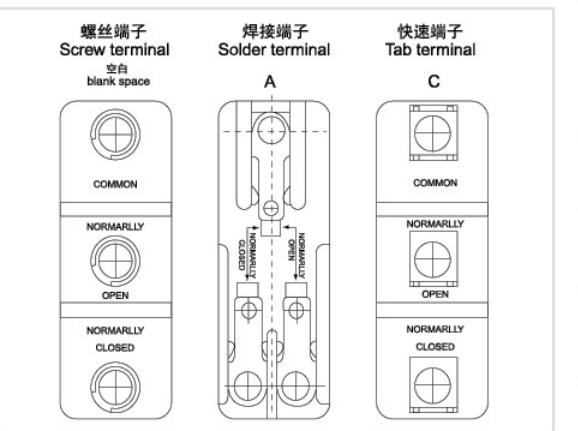
额定值 Ratings

| 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | 电感性负载 Inductive Load (A) | | 突入电流(A) Inrush Current | |
|-----------------------|---------------------------------|-------------------|-----------------------------|--------------------|---------------------------|--------------|
| | 电阻性负载 Resistance Load | 灯泡负载 Lamp Load | 电感性负载 Inductive Load | 马达负载 Motor Load | NC | NO |
| 125VAC | 15 | 3 | 1.5 | 15 | 5 | 2.5 |
| 250VAC | 15 | 2.5 | 1.25 | 15 | 3 | 1.5 |
| 500VAC | 3 | 1.5 | 0.75 | 2.5 | 1.5 | 0.75 |
| | | | | | 30 | 15以下 max. |
| 8VDC | 15 | 3 | 1.5 | 15 | 5 | 2.5 |
| 14VDC | 15 | 3 | 1.5 | 10 | 5 | 2.5 |
| 30VDC | 6(2) | 3 | 1.5 | 5 | 5 | 2.5 |
| 125VDC | 0.4 | 0.4 | 0.05 | 0.05 | 0.05 | 0.05 |
| 250VDC | 0.2 | 0.2 | 0.03 | 0.03 | 0.03 | 0.03 |

特性 Characteristics

| | |
|-------------------------------|--|
| 操作速度 Operation speed | 0.01mm至1m/sec(锁住塞型) 0.01mm-1m/sec |
| 动作频率 Operating frequency | 机械:240次/分 电气:20次/分 Mechanical: 240 operations/min. Electrical: 20 operations/min. |
| 接点电阻 Contact resistance | 15mΩ以下(初期) 15mΩ max. (initial value) |
| 绝缘电阻 Insulation resistance | 100mΩ以上(在500VDC以下) 100mΩ min. (at 500VDC) |
| | 非连续端子间1,000VAC, 50/60Hz持续1分钟 1000VAC, 50/60 Hz for 1 minute between terminals of the same polarity |
| 电介强度 Dielectric Strength | 载电流与无载电流零件间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts |
| | 端子和接地之间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between each terminal and ground |
| 振动 Vibration | (*10至20Hz): 1.5mm 变振幅误动作耐久: 10至55Hz 10-55Hz, 1.5mm double amplitude |
| 冲击 Shock | 机械耐久:1,000m/Sec ² (约100G'S) 误动作耐久:300m/Sec ² (约30G'S) Mechanical durable: 1,000m/Sec ² (about 100G'S) Malfunction: 300m/Sec ² (about 30G'S) |
| 周围温度 Ambient temperature | 泛用型: -10°C~+80°C(没有结冰) 密封型: -15°C~+80°C(没有结冰) General purpose type: -25°C to +80°C (With no icing), Sealed type: -15°C to +80°C (With no icing) |
| 湿度 Humidity | 泛用型: 85%RH以上 密封型: 95%RH General purpose type: 85% RH max., Sealed type: 95% RH max. |
| 使用寿命 Life | 机械:10,000,000次以上 电气:500,000次以上 Mechanical: 20,000,000 operations/min. Electrical: 500,000 operations/min. |
| 重量 Weight | 约22至58g About 22 to 58g |

接点构成 Terminal Type

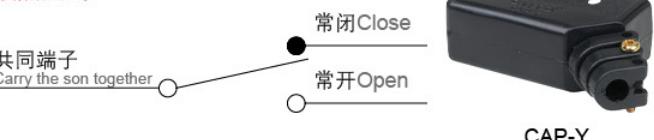


特征 Features

- 引动器种类广泛,且有动作位置可调整之设计 (如PCM1701)
- 高开闭容量(15A)
- 高精确度
- 广泛操作速度范围
- PCM系列每一型式具有焊接端子,螺丝端子与快速端子可供选择
- 型号后面加A则为焊接端子,加C则为快速端子,空白则为螺丝端子
- Various of actuators, action position is adjustable(such as PCM1701)
- High switch on and off capacity(15A)
- High accuracy
- Wide range of operation speed
- Each type of PCM series has solder terminal, screw terminal and tab terminal are selective
- Add A for solder terminal, add C for tab terminal, blank for screw terminal



接点型式 Contact Form

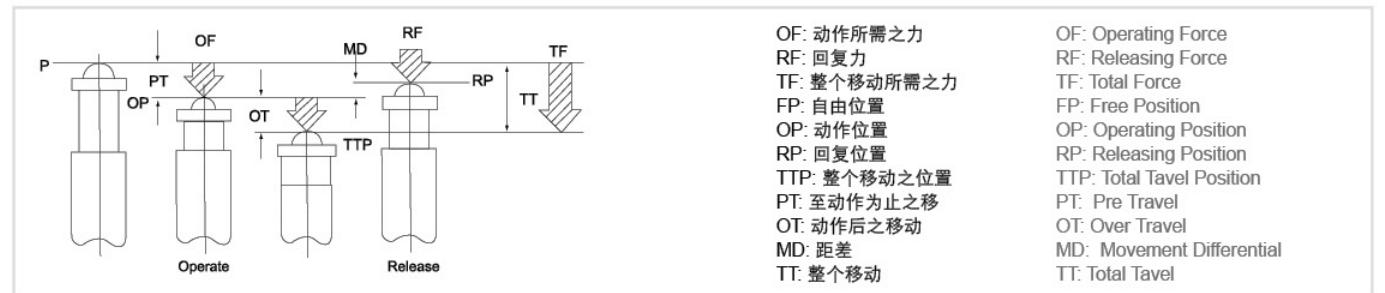


PCM 微动开关 Micro Switch

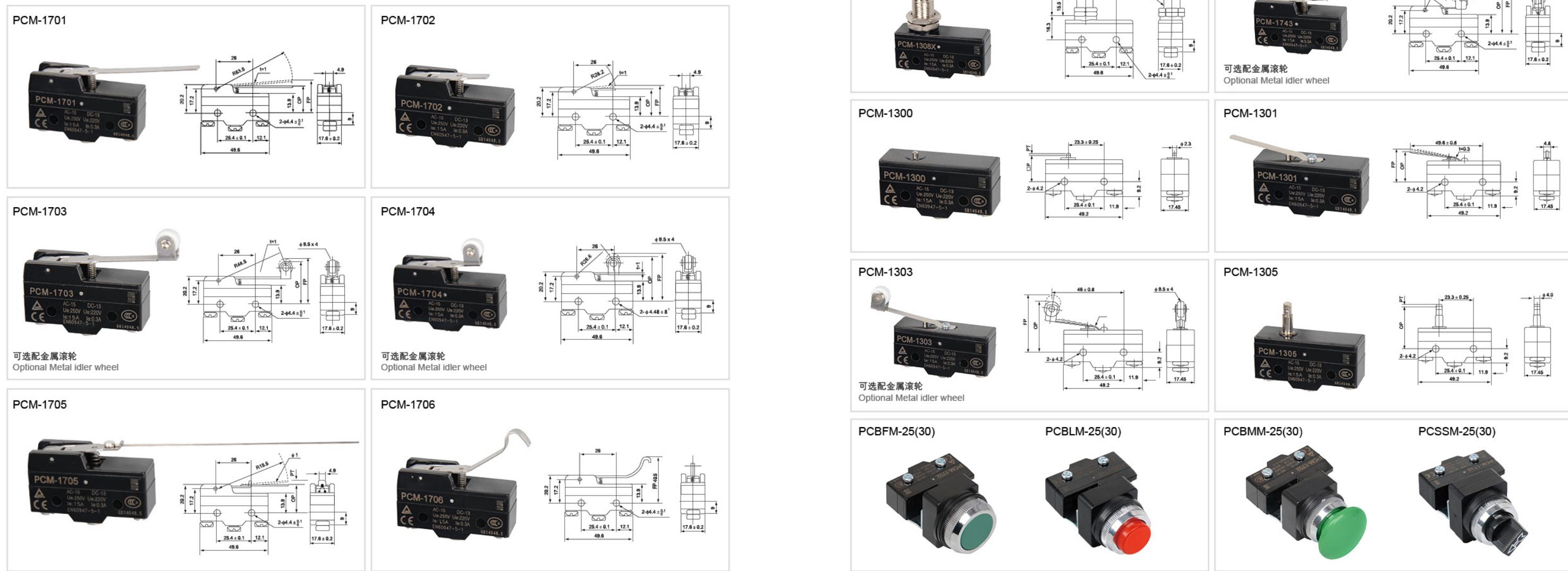
动作特性 Operating Characteristics

| 型式 Models | PCM1300 | PCM1301 | PCM1303 | PCM1305 | PCM1306 | PCM1307 | PCM1308 PCM1308X | PCM1309 | PCM1701 PCM1706 | PCM1702 | PCM1703 | PCM1704 | PCM1705 | PCM1743 |
|-------------|------------|------------|------------|------------|------------|----------|---------------------|------------|--------------------|----------|------------|------------|----------|------------|
| OF最大 (Max.) | 350g | 300g | 300g | 350g | 350g | 350g | 350g | 350g | 160g | 100g | 160g | 10g | 160g | |
| RF最小 (Min.) | 114g | 50g | 50g | 114g | 114g | 114g | 114g | 114g | 14g | 28g | 22g | 42g | 3g | 42g |
| PT最大 (Max.) | 0.4mm | 4mm | 4mm | 0.4mm | 0.4mm | 0.4mm | 0.4mm | 0.4mm | 10mm | 5mm | 7.1mm | 2.7mm | 20mm | 2.7mm |
| OT最小 (Min.) | 0.13mm | 1.6mm | 1.6mm | 1.6mm | 1.6mm | 5.5mm | 3.58mm | 3.58mm | 5.6mm | 2mm | 4mm | 2.4mm | 5.6mm | 2.4mm |
| MD最大 (Max.) | 0.05mm | 1.3mm | 1.3mm | 0.05mm | 0.05mm | 0.05mm | 0.05mm | 0.05mm | 1.27mm | 1mm | 1.02mm | 0.5mm | 3mm | 0.5mm |
| FP最大 (Max.) | | 20.6mm | 31.8mm | | | | | | 28.2mm | 24.8mm | 36.5mm | 32.5mm | | 43.6mm |
| OP(mm) | 15.9 ± 0.4 | 17.4 ± 0.8 | 28.6 ± 0.8 | 28.2 ± 0.5 | 21.5 ± 0.5 | 21.8 0.8 | 33.4 ± 1.2 | 33.4 ± 1.2 | 19 ± 0.8 | 19 ± 0.4 | 30.2 ± 0.8 | 30.2 ± 0.4 | 19 ± 0.8 | 43.1 ± 0.8 |

动作特性 Operating Characteristics



外观和尺寸 Appearance and Dimension



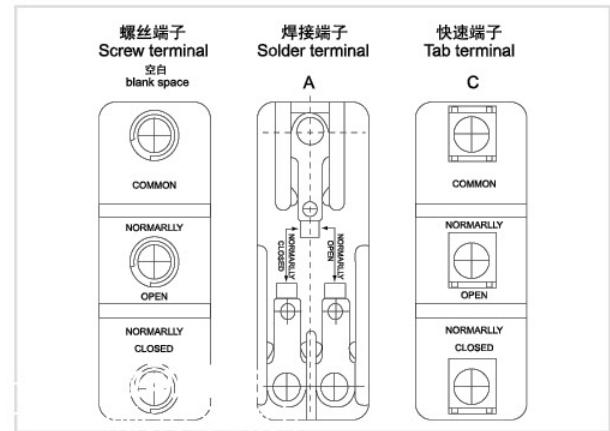


PCM-□N 微动开关 Micro Switch

额定值 Ratings

| 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | 电感性负载 Inductive Load (A) | | 突入电流(A) Inrush Current | |
|-----------------------|---------------------------------|-----|-----------------------------|-----|---------------------------|------|
| | 电阻性负载 Resistance Load | | 灯泡负载 Lamp Load | | | |
| | NC | NO | NC | NO | | |
| 125VAC | 15 | 3 | 1.5 | 15 | 5 | 2.5 |
| 250VAC | 15 | 2.5 | 1.25 | 15 | 3 | 1.5 |
| 500VAC | 3 | 1.5 | 0.75 | 2.5 | 1.5 | 0.75 |

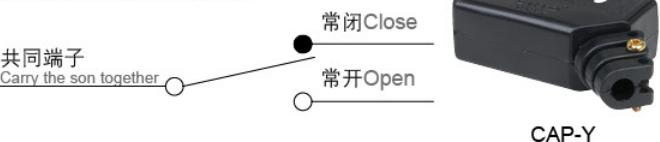
接点构成 Terminal Type



特征 Features

- 工程塑胶壳体，强度更高
- 引动器种类广泛,且有动作位置可调整之设计 (如PCM1701N)
- 高开闭容量(15A)
- 高精确度
- 广泛操作速度范围
- PCM系列每一型式具有焊接端子,螺丝端子与快速端子可供选择 型号后面加A则为焊接端子,加C则为快速端子,空白则为螺丝端子
- Various of actuators, action position is adjustable(such as PCM1701N)
- High switch on and off capacity(15A)
- High accuracy
- Wide range of operation speed
- Each type of PCM series has solder terminal, screw terminal and tab terminal are selective
- Add A for solder terminal, add C for tab terminal, blank for screw terminal

接点型式 Contact Form



PCM-□N 微动开关 Micro Switch

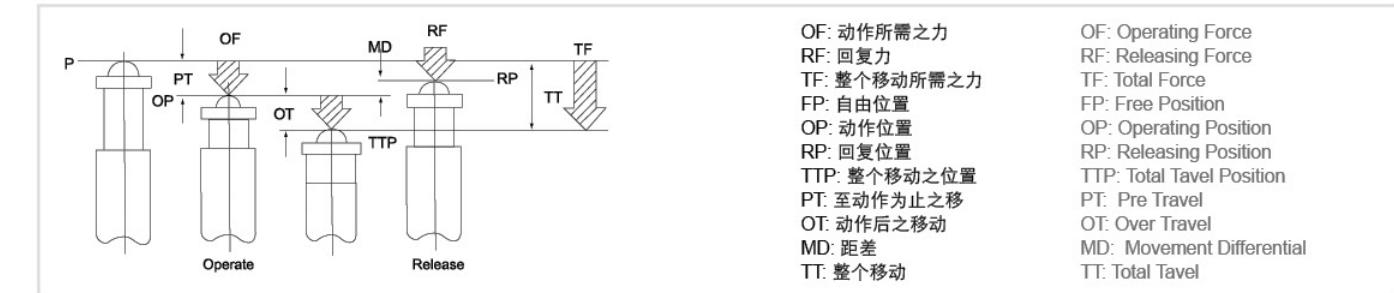
特性 Characteristics

| 操作速度 Operation speed | 0.01mm至1m/sec(锁住塞型) 0.01mm-1m/sec |
|-------------------------------|---|
| 动作频率 Operating frequency | 机械:240次/分 电气:20次/分 Mechanical: 240 operations/min. Electrical: 20 operations/min. |
| 接点电阻 Contact resistance | 15mΩ 以下(初期) 15mΩ max. (initial value) |
| 绝缘电阻 Insulation resistance | 100MΩ 以上(在500VDC以下) 100mΩ min. (at 500VDC) |
| | 非连续端子间1,000VAC, 50/60Hz持续1分钟 1000VAC, 50/60 Hz for 1 minute between terminals of the same polarity |
| | 载电流与无载电流零件间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts |
| | 端子和接地之间1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute between each terminal and ground |
| | (*10至20Hz): 1.5mm 变振幅误动作耐久: 10至55Hz 10-55Hz, 1.5mm double amplitude |
| | 冲击 Shock Mechanical durable: 1,000m/Sec ² (about 100G'S) Malfunction: 300m/Sec ² (about 30G'S) |
| | 周围温度 Ambient temperature 泛用型: -10°C ~ +80°C (没有结冰) 密封型: -15°C ~ +80°C (没有结冰) General purpose type: -25°C to +80°C (With no icing), Sealed type: -15°C to +80°C (With no icing) |
| | 湿度 Humidity General purpose type: 85% RH max., Sealed type: 95% RH max. |
| | 使用寿命 Life Mechanical: 10,000,000次以上 电气: 500,000次以上 Mechanical: 20,000,000 operations/min. Electrical: 500,000 operations/min. |
| | 重量 Weight 约22至58g About 22 to 58g |

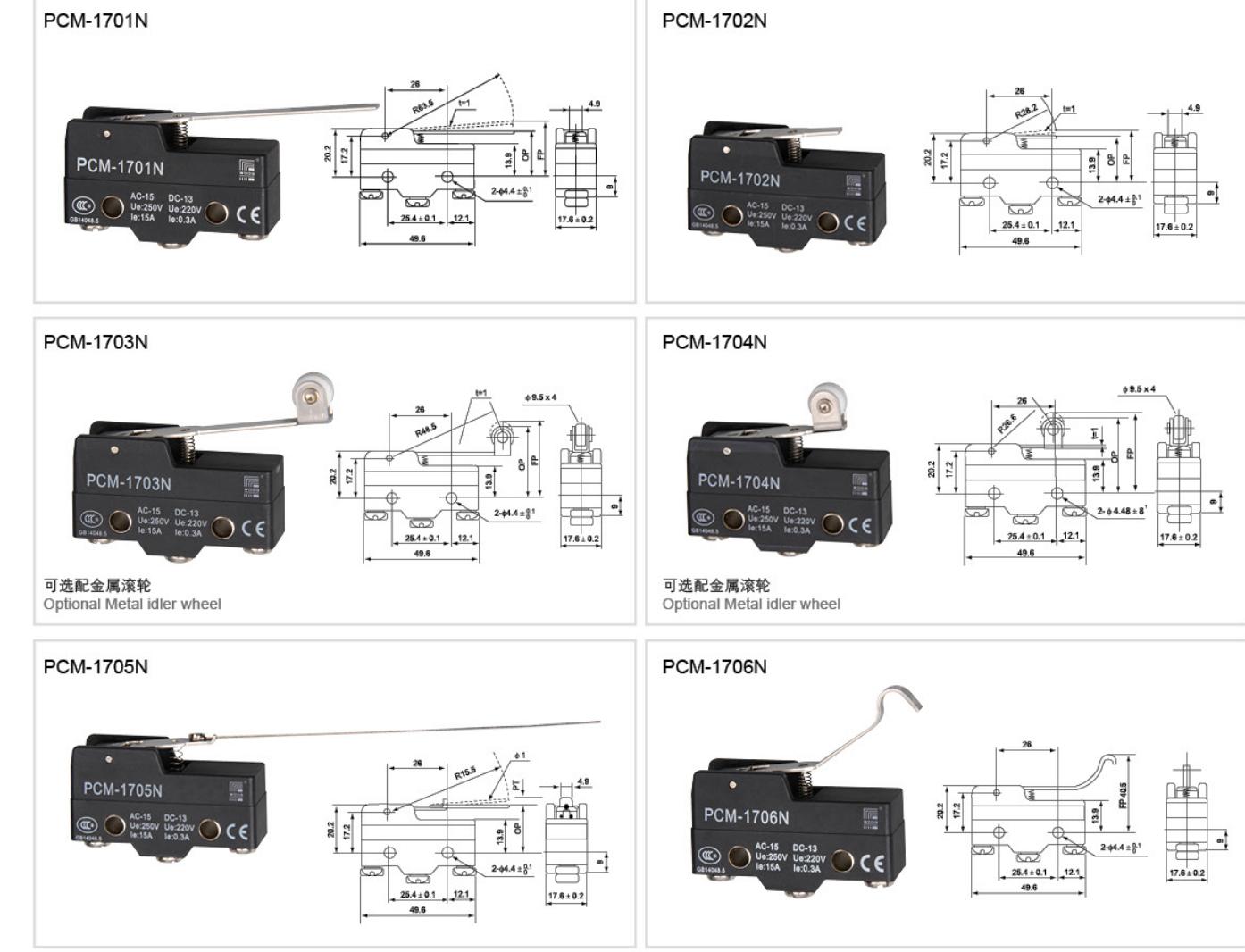
动作特性 Operating Characteristics

| 型式 Models | PCM1300N | PCM1301N | PCM1303N | PCM1305N | PCM1306N | PCM1307N | PCM1308N | PCM1308XN | PCM1309N | PCM1701N | PCM1706N | PCM1702N | PCM1703N | PCM1704N | PCM1705N | PCM1743N |
|-------------|------------|------------|------------|------------|------------|----------|----------|------------|------------|----------|----------|------------|------------|----------|------------|----------|
| OF最大 (Max.) | 350g | 300g | 300g | 350g | 350g | 350g | 350g | 350g | 350g | 160g | 100g | 160g | 10g | 160g | | |
| RF最小 (Min.) | 114g | 50g | 50g | 114g | 114g | 114g | 114g | 114g | 114g | 28g | 22g | 42g | 3g | 42g | | |
| PT最大 (Max.) | 0.4mm | 4mm | 4mm | 0.4mm | 0.4mm | 0.4mm | 0.4mm | 0.4mm | 0.4mm | 10mm | 5mm | 7.1mm | 2.7mm | 20mm | 2.7mm | |
| OT最小 (Min.) | 0.13mm | 1.6mm | 1.6mm | 1.6mm | 1.6mm | 5.5mm | 3.58mm | 3.58mm | 5.6mm | 2mm | 4mm | 2.4mm | 5.6mm | 2.4mm | | |
| MD最大 (Max.) | 0.05mm | 1.3mm | 1.3mm | 0.05mm | 0.05mm | 0.05mm | 0.05mm | 0.05mm | 0.05mm | 1.27mm | 1mm | 1.02mm | 0.5mm | 3mm | 0.5mm | |
| FP最大 (Max.) | | 20.6mm | 31.8mm | | | | | | | 28.2mm | 24.8mm | 36.5mm | 32.5mm | | 43.6mm | |
| OP(mm) | 15.9 ± 0.4 | 17.4 ± 0.8 | 28.6 ± 0.8 | 28.2 ± 0.5 | 21.5 ± 0.5 | 21.8 | 0.8 | 33.4 ± 1.2 | 33.4 ± 1.2 | 19 ± 0.8 | 19 ± 0.4 | 30.2 ± 0.8 | 30.2 ± 0.4 | 19 ± 0.8 | 43.1 ± 0.8 | |

动作特性 Operating Characteristics



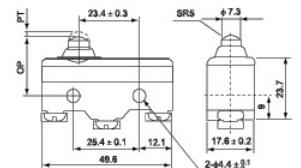
外观和尺寸 Appearance and Dimension



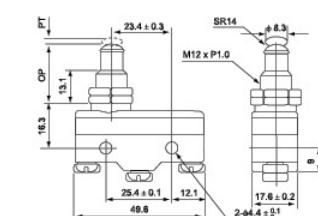
PCM-□N 微动开关 Micro Switch

外观和尺寸 Appearance and Dimension

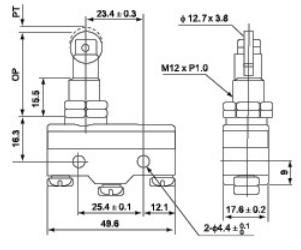
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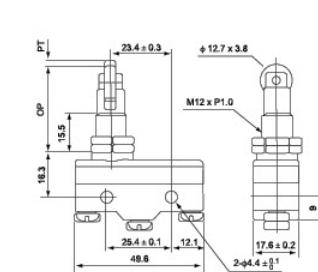
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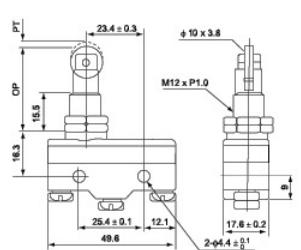
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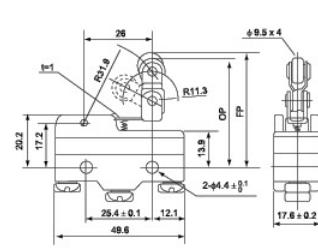
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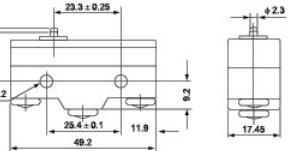
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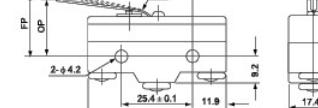
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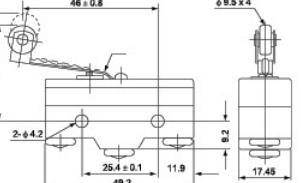
PCM-1300N



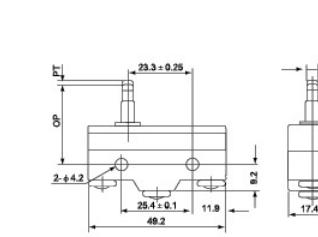
PCM-1301N



PCM-1303N



PCM-1305N



PCZ-7 微动开关 Micro Switch

额定值 Ratings

| 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | | | 电感性负载 Inductive Load (A) | | | |
|-----------------------|---------------------------------|-----|-------------------|------|-----------------------------|------|--------------------|----|
| | 电阻性负载 Resistance Load | | 灯泡负载 Lamp Load | | 电感性负载 Inductive Load | | 马达负载 Motor Load | |
| | NC | NO | NC | NO | NC | NO | NC | NO |
| 125VAC | 10 | 3 | 1.5 | 10 | 5 | 2.5 | | |
| 250VAC | 10 | 2.5 | 1.25 | 10 | 3 | 1.5 | | |
| 480VAC | 3 | 1.5 | 0.75 | 2.5 | 1.5 | 0.75 | | |
| 8VDC | 10 | 3 | 1.5 | 6 | 6 | 5 | | |
| 14VDC | 10 | 3 | 1.5 | 6 | 6 | 5 | | |
| 30VDC | 8 | 3 | 1.5 | 6 | 5 | 2.5 | | |
| 125VDC | 0.5 | 0.4 | 0.4 | 0.05 | 0.05 | 0.05 | | |
| 250VDC | 0.25 | 0.2 | 0.2 | 0.03 | 0.03 | 0.03 | | |

注:1. 电感性负载: 功率因素=0.4:时间常数=7msec。

2. 灯泡负载之突入电流为稳定状态电流之10倍。

3. 马达负载之突入电流为稳定状态电流之6倍。

3. 带弹簧系列产品, 操作体的使用范围为从弹簧的前端到弹簧全长的1/3以内。

NOTES: 1.Inductive load has a power factor of 0.4 min.(AC) and a time constant of 7 msec.max.(DC).

2.Lamp load has an inrush current of 10 times the steady-state current,while motor load has an inrush current of 6 times the steady-state current.

3.Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

动作特性 Operating characteristics

| 型式 Models | PCZ-7100 | PCZ-7110 | PCZ-7310 | PCZ-7311 | PCZ-7312 | PCZ-7120 | PCZ-7140 | PCZ-7121 | PCZ-7141 | PCZ-7124 | PCZ-7144 | PCZ-7166 |
|------------|------------|----------|------------|------------|------------|----------|----------|----------|----------|----------|----------|----------|
| OF最大(Max.) | 600g | 600g | 600g | 600g | 600g | 150g | 220g | 180g | 240g | 200g | 280g | 120g |
| RF最小(Min.) | 100g | 100g | 100g | 100g | 100g | 40g | 60g | 50g | 80g | 60g | 100g | |
| PT最大(Max.) | 2.0mm | 2.0mm | 2.0mm | 2.0mm | 2.0mm | 13.5mm | 8.5mm | 11.0mm | 6.5mm | 11mm | 6.5mm | 250mm |
| OT最小(Min.) | 0.8mm | 5.0mm | 6.0mm | 6.0mm | 6.0mm | 4.0mm | 2.5mm | 3.0mm | 2.0mm | 3.0mm | 2.0mm | 11mm |
| MD最大(Max.) | 0.8mm | 0.8mm | 0.8mm | 0.8mm | 0.8mm | 3.2mm | 2.0mm | 2.4mm | 1.5mm | 2.4mm | 1.5mm | |
| OP | 30.5±0.8mm | 44±1.2mm | 21.8±1.2mm | 33.3±1.2mm | 33.3±1.2mm | 25±1mm | 25±1mm | 40±1mm | 40±1mm | 50±1.2mm | 50±1.2mm | |
| FP | | | | | | 35mm | 32mm | 46mm | 46mm | 56mm | 56mm | |

特征 Features

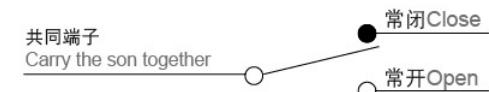
■ 引动器种类多,且有动作位置可调整之设计(如PCZ-7121)

■ 外壳包覆强化塑胶、防水、防油,较PCM型微动开关有更高的机械强度,耐冲击

■ Various of actuators, the operation position is adjustable (such as PCZ-7121)

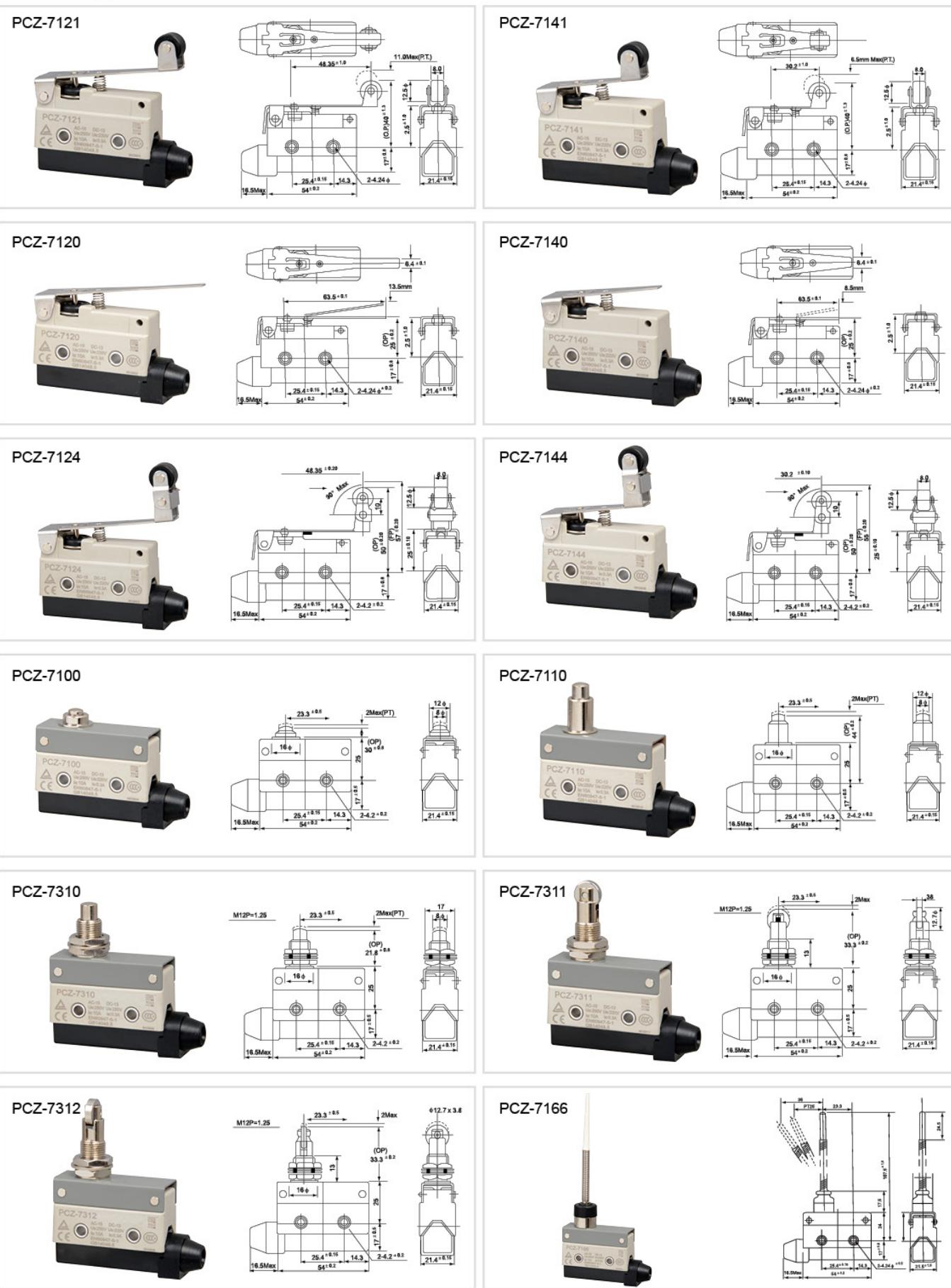
■ Outer shell covered with intensive plastic, water-proof and oil-proof. The mechanical strength is better than PCM type of micro switch, bear hitting

接点型式 Contact Form



PCM-□N 微动开关 Micro Switch

外观和尺寸 Appearance and Dimension



PCMV10 微动开关 Micro Switch

型号说明 Model Designations

PCMV ① ② ③

| 项目 Item | 代号 Code | 说明 Description |
|-----------------------------------|---------------------------------|---|
| ① 额定电流 Rated Current | 10 | 10A |
| ② 头部及传动杆 Head and driving rod | 0 1 2 3 4 5 6 | 按钮型 Button type 长柄型 Long handle type 短柄型 Short shank type 长滑轮型 Long pulley type 短滑轮型 Short pulley type 加长柄型 Longer handle type 曲柄型 Crank type |
| ③ 端子规格 Terminal specifications | C D | #250型端子 #250 terminal #187型端子 #187 terminal |

额定值 Ratings

| 项目 Item 规格 Spec. | 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | 电感性负载 Inductive Load (A) | | 突入电流(A) Inrush Current | | | |
|---------------------|---|---------------------------------|------|-----------------------------|------|---------------------------|----|----|----|
| | | 电阻性负载 Resistance Load | | 灯泡负载 Lamp Load | | | | | |
| | | NC | NO | NC | NO | NC | NO | NC | NO |
| 10A | 250VAC 8VDC 30VDC 125VDC 250VDC | 10 | 1.5 | 6 | 2 | | | | |
| | | 10 | 3 | 6 | 3 | | | | |
| | | 6 | 3 | 6 | 3 | | | | |
| | | 0.3 | 0.1 | 0.6 | 0.1 | | | | |
| | | 0.3 | 0.05 | 0.3 | 0.05 | | | | |

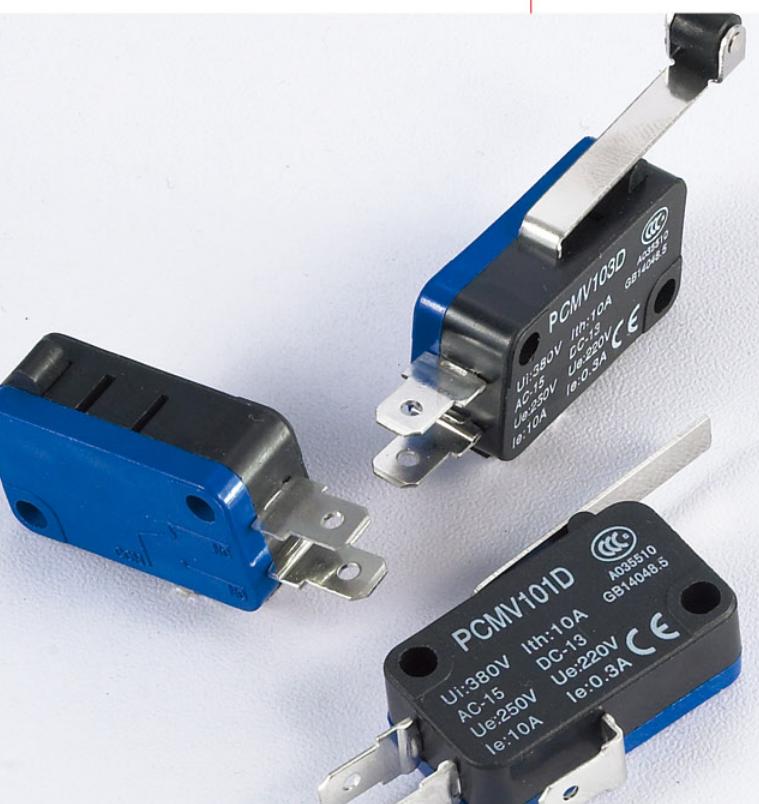
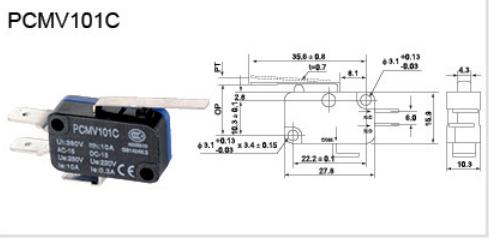
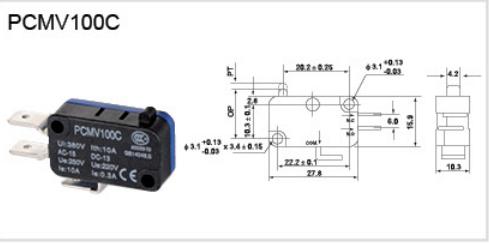
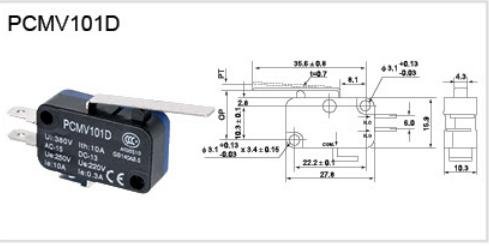
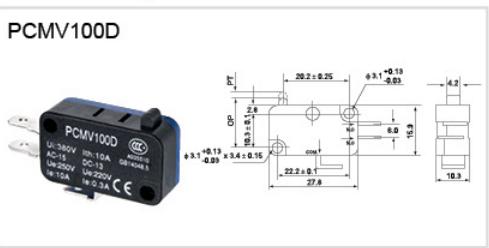
特性 Characteristics

| 项目 Item | 型式 Type | PCMV 10型 CMV 10 type |
|----------------------------|---|---|
| 操作速度 Operation speed | 0.1mm~1m/s(按钮型 Button type) | |
| 动作频率 Operating frequency | 机械 Mechanical: 240 operations/min 电气 Electrical: 20 operations/min | |
| 绝缘电阻 Insulation resistance | 100MΩ以上(在500VDC以下) 100mΩ above(at 500VDC) | |
| 接点电阻 Contact resistance | 15mΩ以下(初期) 15mΩ max. (initial value) | |
| | 非连续端子间 Non-continuous terminals | 1,000VAC, 50/60Hz持续1分钟 1000VAC, 50/60 Hz for 1 minute |
| 耐电压 Withstand voltage | 载电流和无载电流 零件间, 端子和接地之间 current-carrying and non-current-carrying metal parts, Between terminal and earthing | 1,500VAC, 50/60Hz持续1分钟 1500VAC, 50/60 Hz for 1 minute |
| 振动 Vibration | 误动作 Misoperation | 10至55Hz, 1.5mm双振幅 10 to 55Hz, 1.5mm pairs swing |
| 冲击 Shock | 耐久 Durable | 最大1,000m/S ² (约100G) Maximum 1000 m/S ² (100G) |
| | 误动作 Misoperation | 最大200m/S ² (约100G) Maximum 200 m/S ² (100G) |
| 寿命 Life | 机械的 Mechanical | 1000万次以上 More than 10 million times |
| | 电气的 Electrical | 30万次以上 More than 300000 times |
| 使用周围温度 Temperature | | -10~+70°C(但不结冰) With no icing |
| 使用周围湿度 Humidity | | 85%RH以下(+5~+35°C) Below 85% RH |

动作特性 Operating Characteristics

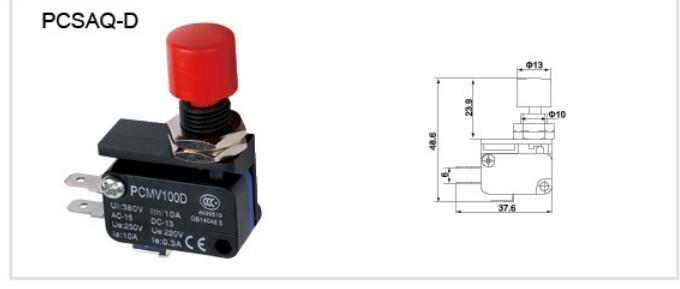
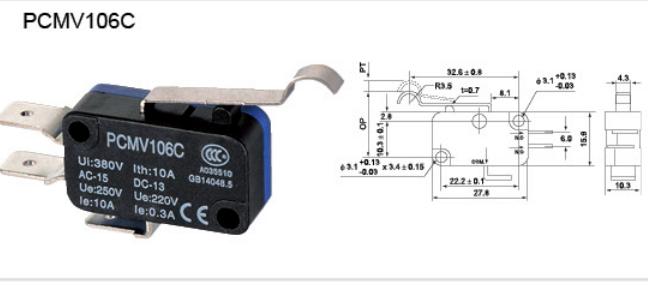
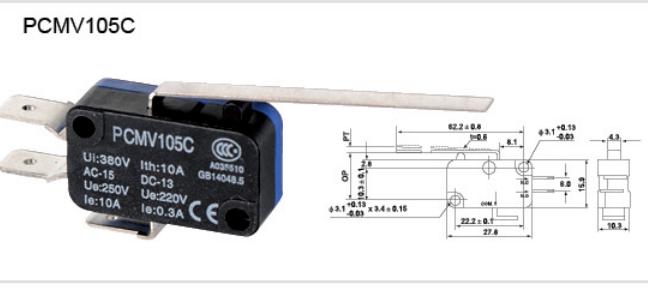
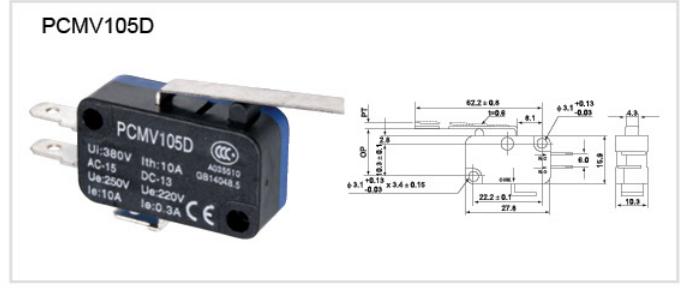
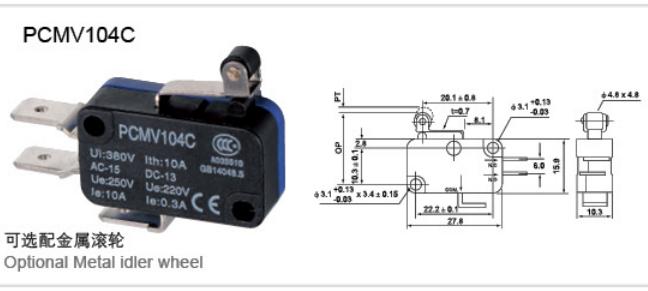
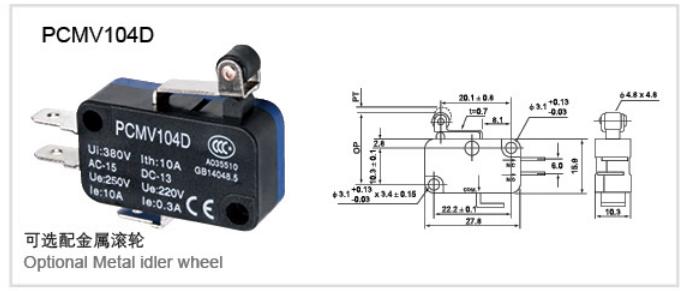
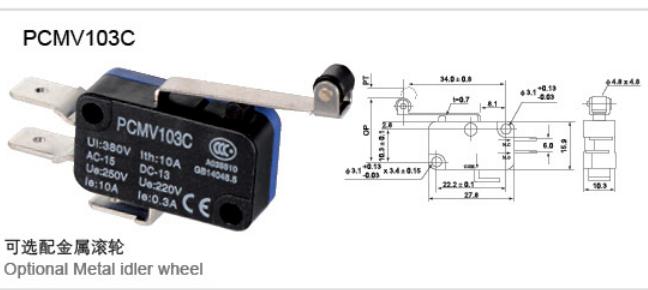
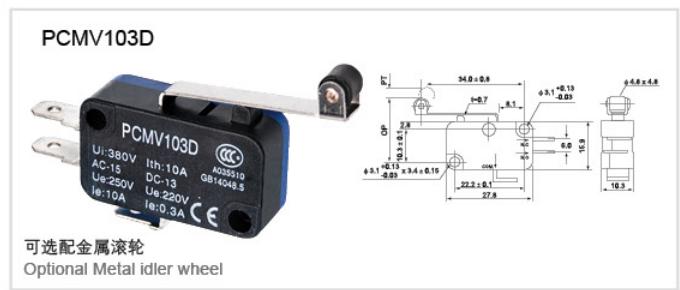
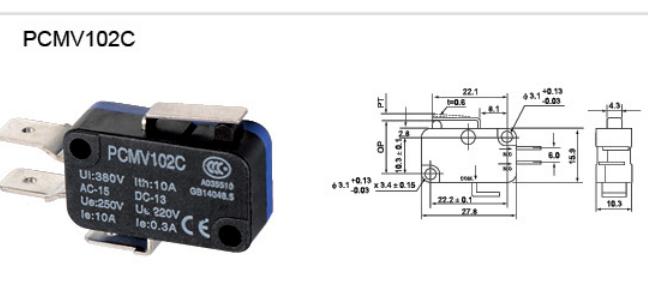
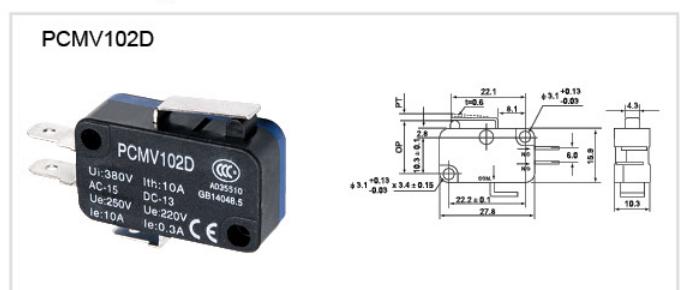
| 型式 Models | PCMV100D | PCMV101D | PCMV102D | PCMV103D | PCMV104D | PCMV105D | PCMV106D |
|------------|------------|------------|------------|------------|------------|----------|------------|
| OF最大(Max.) | 2.4N | 1.23N | 2.4N | 1.23N | 2.7N | 0.69N | 1.2N |
| RF最小(Min.) | 0.49N | 0.14N | 0.49N | 0.14N | 0.49N | 0.06N | 0.14N |
| PT最大(Max.) | 1.2mm | 4.0mm | 1.6mm | 4.0mm | 1.5mm | 9.0mm | 4.0mm |
| OT最小(Min.) | 1.0mm | 1.6mm | 0.8mm | 1.6mm | 0.8mm | 2.0mm | 1.5mm |
| MD最大(Max.) | 0.4mm | 1.5mm | 0.6mm | 1.5mm | 0.6mm | 2.8mm | 1.5mm |
| OP(mm.) | 14.7±0.4mm | 15.2±1.2mm | 15.2±0.5mm | 20.7±1.2mm | 20.7±0.6mm | 15.2±3mm | 18.7±1.2mm |

外观和尺寸 Appearance and Dimension



PCMV10 微动开关 Micro Switch

外观和尺寸 Appearance and Dimension

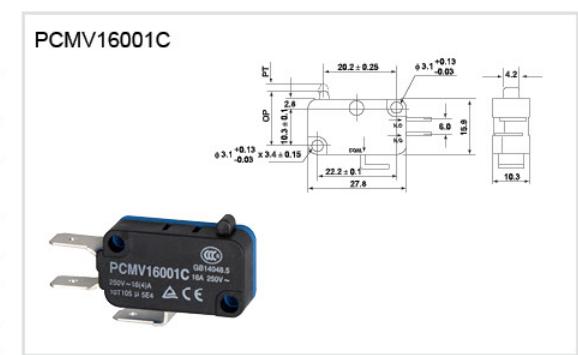
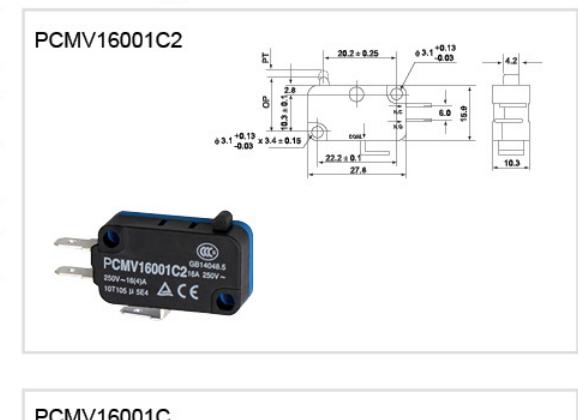


PCMV16 微动开关 Micro Switch

特性 Characteristics

| 项目 Item | PCM 16型 CMV 16 type |
|--|--|
| 操作速度 Operation speed | 0.1mm~1m/s (按钮型 Button type) |
| 动作频率 Operating frequency | 机械 Mechanical: 240 operations/min 电气 Electrical: 20 operations/min |
| 绝缘电阻 Insulation resistance | 100MΩ以上(在500VDC以下) 100mΩ above(at 500VDC) |
| 接点电阻 Contact resistance | 15mΩ以下(初期) 15mΩ max. (initial value) |
| 耐电压 Withstand voltage | 非连续端子间 Non-continuous terminals 1,000VAC, 50/60Hz持续1分钟 1000VAC, 50/60 Hz for 1 minute |
| 载电流和无载电流零件间, 端子和接地之间 current-carrying and non-current-carrying metal parts, Between terminal and earthing 2,000VAC, 50/60Hz持续1分钟 2000VAC, 50/60 Hz for 1 minute | |
| 振动 Vibration | 误动作 Misoperation 10至55Hz, 1.5mm双振幅 10 to 55Hz, 1.5mm pairs swing |
| 冲击 Shock | 耐久 Durable 最大1,000m/S ² (约100G) Maximum 1000 m/S ² (100G) |
| 寿命 Life | 最大200m/S ² (约100G) Maximum 200 m/S ² (100G) |
| 电气的 Electrical | 1000万次以上 More than 10 million times |
| 使用周围温度 Temperature | -10~+70°C (但不结冰) With no icing |
| 使用周围湿度 Humidity | 85%RH以下(+5~+35°C) Below 85% RH |

外观和尺寸 Appearance and Dimension



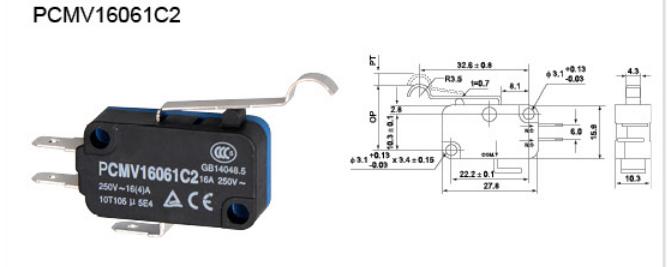
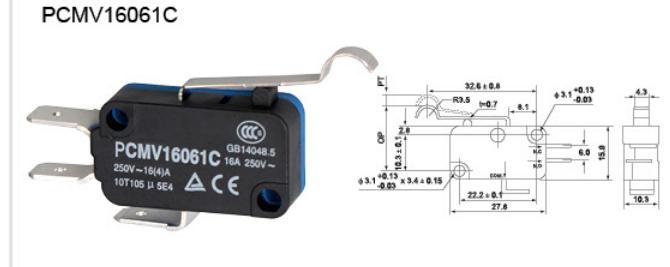
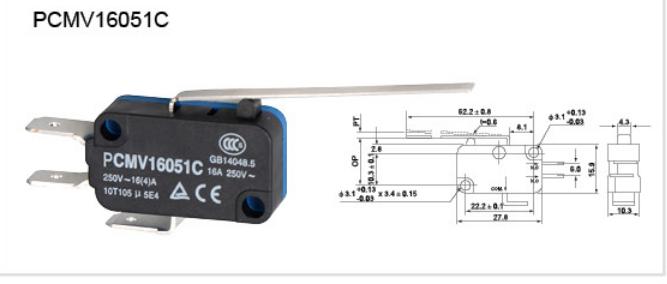
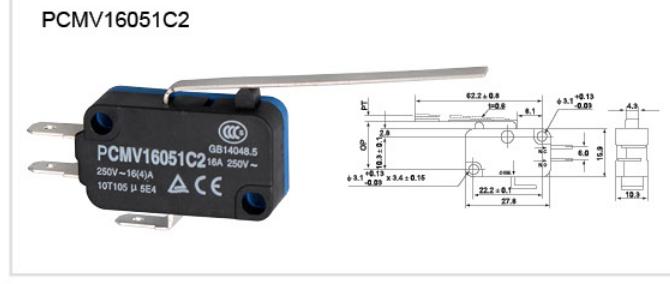
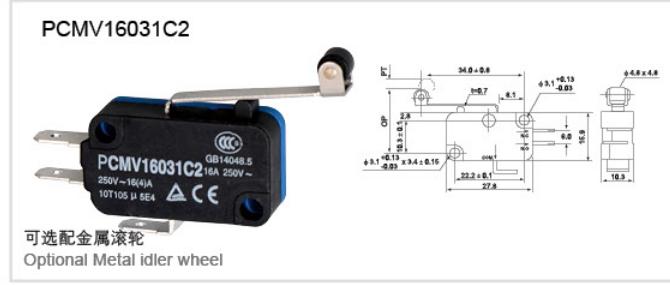
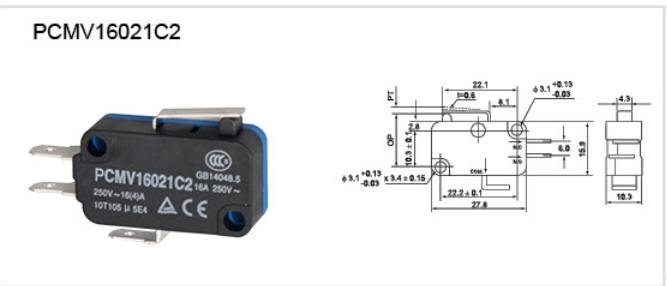
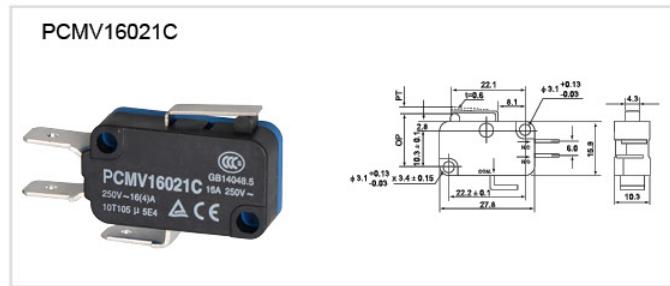
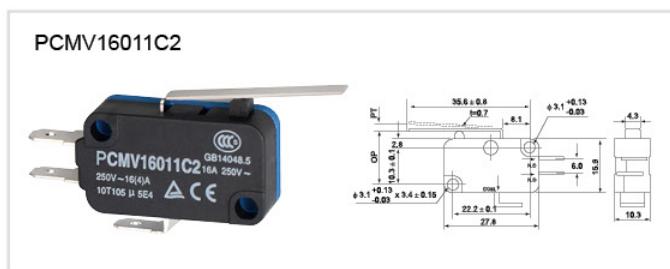
额定值 Ratings

| 项目 Item 规格 Spec. | 额定电压 Rated voltage | 非电感性负载 Noninductive Load (A) | | 电感性负载 Inductive Load (A) | | 突入电流(A) Inrush Current |
|---------------------|--------------------|------------------------------|----------------|--------------------------|-----------------|------------------------|
| | | 电阻性负载 Resistance Load | 灯泡负载 Lamp Load | 电感性负载 Inductive Load | 马达负载 Motor Load | |
| 16A | 250VAC | 16 | 2 | 10 | 3 | |
| | 8VDC | 16 | 4 | 10 | 6 | |
| | 30VDC | 10 | 4 | 10 | 4 | |
| | 125VDC | 0.6 | 0.1 | 0.6 | 0.1 | |
| | 250VDC | 0.3 | 0.05 | 0.3 | 0.05 | |



PCM16 微动开关 Micro Switch

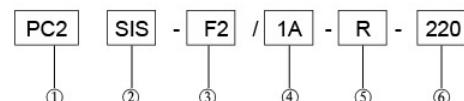
外观和尺寸 Appearance and Dimension



PC2、C3 微动开关 Micro Switch

特性 Characteristics

型号说明 Model Designations



- ① 固定孔径: C2=22 φ Round, C3=30 φ Round
 ② 型式:

SNS=短柄旋钮、SNL=长柄旋钮
 SNK=钥匙旋钮、PNF=平头按钮、PNH=凸头按钮
 PNM3=30mm大头按钮、PNM4=40mm大头按钮
 PNM6=60mm大头按钮、PNR3=30mm急停按钮
 PNR4=40mm大头按钮、PNR6=60mm急停按钮、
 PNKM4=急停钥匙旋钮 PND=双位带灯按钮
 PNP=拉伸开关、PIF=平头带灯按钮
 PIH=凸头带灯按钮、PIM4=大头带灯按钮
 PID=双位按钮、SIS=短柄带灯旋钮
 SIL=长柄带灯旋钮、LIF= 标准型指示灯
 LUF=圆型指示灯、MN=十字开关

- ③ 操作型式: 按钮开关 空白=自复位、D=自锁式
 旋钮开关、十字开关: F2=2向自锁、F3=3向自锁、
 F4=4向自锁、T2=2向复位、T3=3向复位、T4=4向复位

④ 接点:

1A=1NO, 1B=1NC, 1C=1A1B, 1D=1A+1B

2A=2NO, 2B=2NC, 2C=1A1B+1A1B

⑤ 头部颜色:

R=红、G=绿、Y=黄、W=白、B=黑、BL=蓝

⑥ 带灯电压:

12=12VDC, 24=24VDC, 36=36VDC, 48=48VDC

110=110VAC, 220=220VAC, 380=380VAC

- ① Fixed hole diameter: C2=22 φ Round, C3=30 φ Round

- ② Types:

SNS=Short handle knob、SNL=Long handle knob
 SNK=key knob, PNF=flat head、PNH=convex head
 PNM3=30mm big head , PNM4=40mm big head
 PNM6=60mm big head , PNR3=30mm Emergency stop head
 PNR4=40mm big head, PNR6=60mm Emergency stop head.
 PNKM4=Emergency stop knob, PND=Doulbe with lamp button
 PNP=Tensile switch, PIF=Flat ribbon lamp button
 PIH=Convex head with lamp button, PIM4=big head with lamp button
 PID=Double button, SIS=Short shank with lamp knob
 SIL=Long handle with lamp knob, LIF=Standard type indicating lamp
 LUF=circular type indicating lamp, MN=Monolever Switch

③ Operation type: Pushbutton Switch: Blank=Self-resetting、D=Self-locking

Knob Switch, Monolever Switch: F2=2 to the self-locking, F3=3 to the self-locking,

F4=4 to the self-locking, T2=2 to reset, T3=3 to reset, T4=4 to reset

④ Contact: 1A=1NO, 1B=1NC, 1C=1A1B, 1D=1A+1B

2A=2NO, 2B=2NC, 2C=1A1B+1A1B

⑤ Head color: R=red, G=green, Y=yellow, W=white, B=black, BL=blue

⑥ With lamp voltage: 12=12VDC, 24=24VDC, 36=36VDC, 48=48VDC

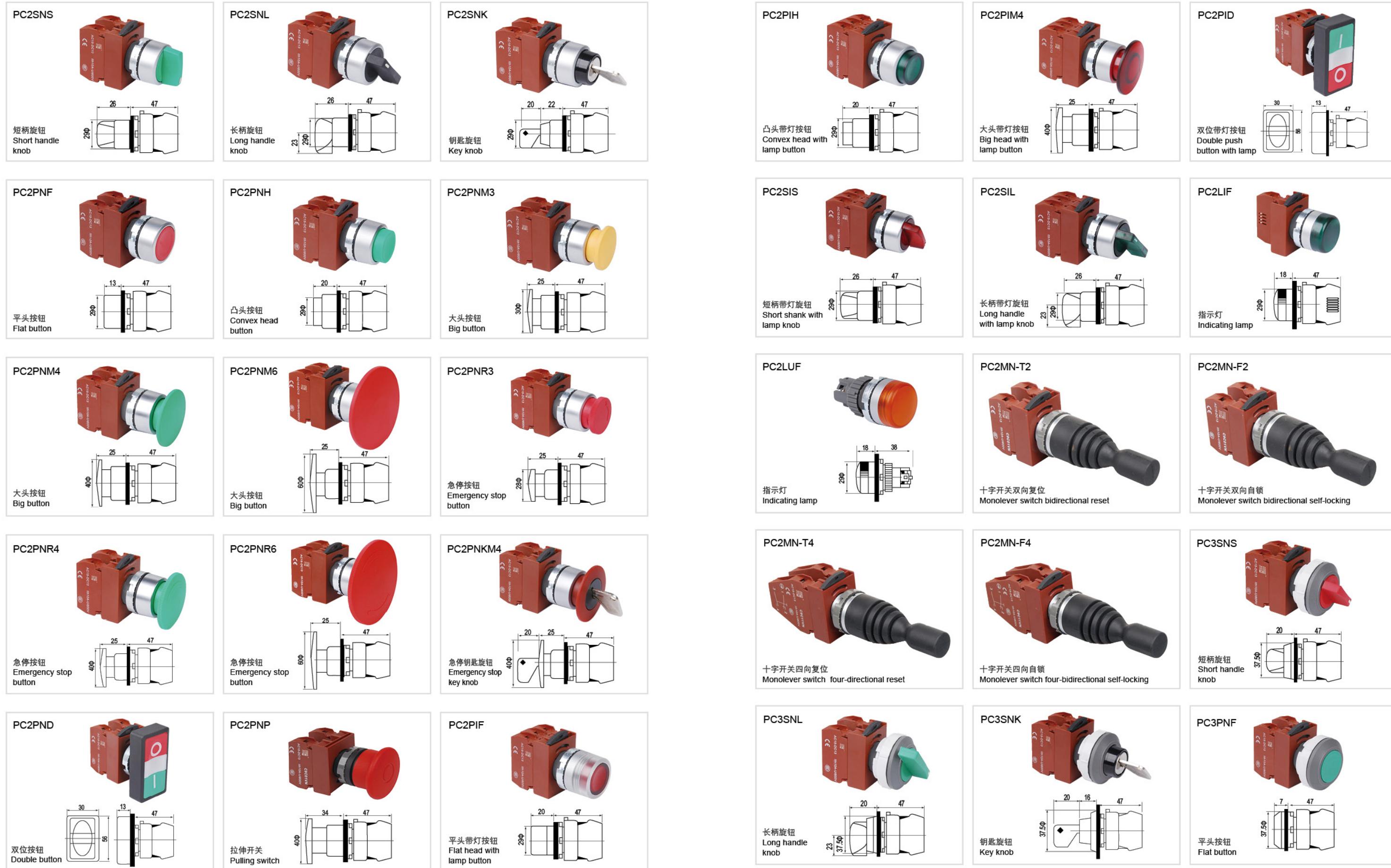
110=110VAC, 220=220VAC, 380=380VAC

注: 定制产品在以上选型不能解释清楚的, 定货时请另外注明。
 Note: Custom products over the selection can not explain clearly, please also specify when ordering.

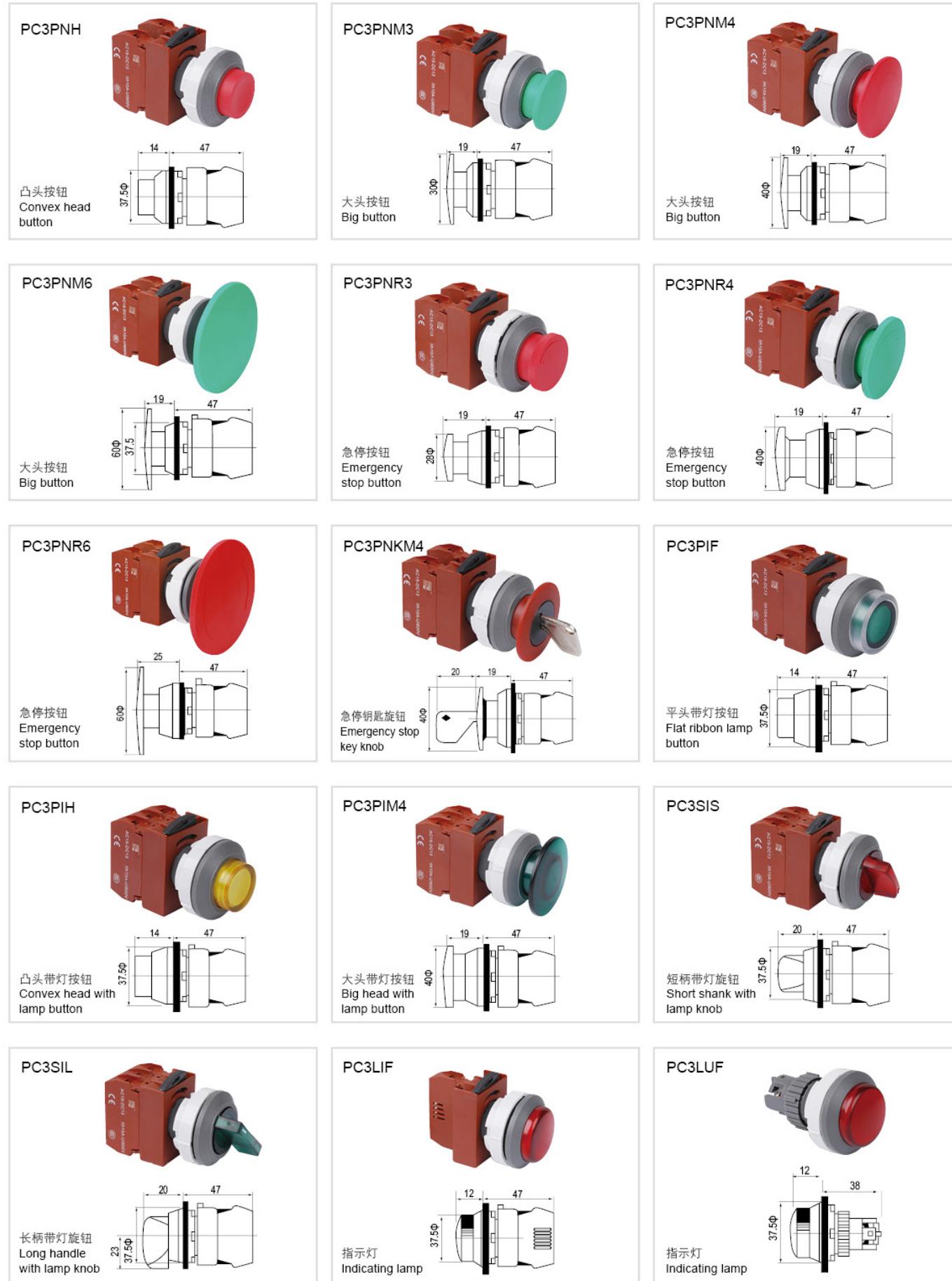
| | |
|----------------------------|--|
| 安规标准 Standard | 通过3C认证及CE、EN60947-5-1, 标准 3C, CE approved standard |
| 电气容量 Electrical capacitor | 最大绝缘电压600VAC, 最大热电流10A Max insulation voltage600VAC, Max thermal current10A |
| 操作类别 Operation | AC15类: 250VAC/6A, DC13类: 250VDC/0.6A AC15 Type: 250VAC/16A, DC13 Type: 250VDC/0.6A |
| 触点导阻 Contact resistance | 最大50MΩ Max 50MΩ |
| 绝缘强度 Insulation strength | 2500VAC 50Hz, 1分钟 2500VAC 50Hz, 1 minute |
| 绝缘阻抗 Insulation resistance | 500VDC下, 大于100MΩ 500VDC below, 100MΩ above |
| 耐震阻值 Vibration resistance | 10g @40-500Hz |
| 用灯寿命 Life | 白炽灯 1,000小时, LED灯 100,000小时 Lamp 1,000hour, LED 1,000hour |
| 机械寿命 Mechanical life | 按钮开关: 瞬间>3,000,000 维持>500,000 Pushbutton switch: momentary>3,000,000 lasting>5,000,000 选择开关: 瞬间> 500,000 维持> 500,000 Selector switch: momentary>3,000,000 lasting>5,000,000 钥匙开关: 瞬间>500,000 维持>500,000 Key switch: momentary>3,000,000 lasting>5,000,000 紧急开关: >300,000 Emergency switch: >3,000,000 |
| 电气寿命 Electrical life | 开关片AC15 250VAC/6A >1, 000, 000 Contact block AC15 250VAC/6A >1, 000, 000 DC13 250VAC/0.6A >1, 000, 000 DC13 250VAC/0.6A >1, 000, 000 |
| 储存温度 Storage temperature | -20~+80℃(但不结冰)With no icing |
| 操作室温 Operation temperature | -10~+70℃(但不结冰)With no icing |



PC2、C3 微动开关 Micro Switch

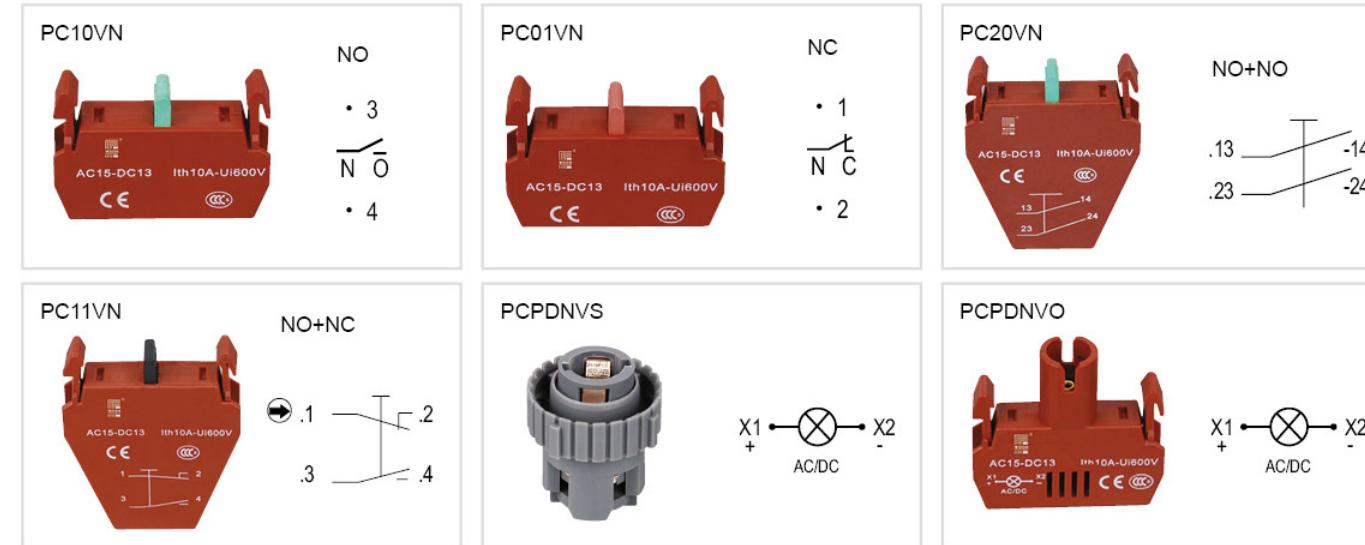


PC2、C3 微动开关 Micro Switch



PC2、C3 微动开关 Micro Switch

接点组 Contact Blocks

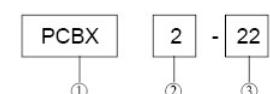


按钮附件 Push Button Accessories



22Φ 控制盒 Control Box

型号说明 Model Designations



- ① 型式: 按钮盒
- ② 1=1孔、2=2孔、3=3孔、4=4孔、5=5孔
- ③ 22=22Φ 口径、30=30Φ 口径
- ④ Type: Button box
- ⑤ 1=1Holes, 2=2Holes, 3=3Holes, 4=4Holes, 5=5Holes,
- ⑥ 22=22Φ Caliber, 30=30Φ Caliber

外形尺寸 Appearance and Dimension

| 型号 Model | 安装尺寸 Mounting Dimensions | 外观尺寸 External Dimension |
|----------|--------------------------|-------------------------|
| | | |
| PCBX1 | 53 x 38 mm | 70 x 65 x 63 mm |
| PCBX2 | 88 x 38 mm | 100 x 65 x 63 mm |
| PCBX3 | 128 x 38 mm | 140 x 65 x 63 mm |
| PCBX4 | 167 x 38 mm | 180 x 65 x 63 mm |
| PCBX5 | 206 x 38 mm | 220 x 65 x 63 mm |





PC6 按钮开关 Pushbutton Switch

触点容量 Contact Capacity

| | | | | |
|---------------------------------------|---------------|--------------------------|--|--------------|
| 额定绝缘电压 Rated insulation voltage | | | 250V | |
| 额定通电电流 Rated electrify current | | | 3A | |
| 额定使用电压(AC/DC) Rated voltage(AC/DC) | | | 12V | 24V |
| | | | 110V | 220V |
| 额定 使用 电流 Rated current | AC 50/60Hz | 电阻性负载 Resistance load | - | 1.0A 0.5A |
| | DC | 电感性负载 Inductive load | - | 0.7A 0.5A |
| 触点材料 Contact material | | | 包金银触点 Plated with gold silver contact | |

最小适用负载(参考值)=5V AC/DC 1mA(可使用范围取决于使用条件和负载种类)
Minimum applicable load(reference value)=5V AC/DC 1mA

型号说明 Model Designations

| PC6 | □ | □ | - | □ | □ | □ | □ |
|---------|--------------|-------------------|-----------------|-------------|-----------------|---|---|
| 型号 | 头部形状 Head | 操作类型 Operation | 触点形式 Contact | 颜色 Color | 带灯电压 Voltage | | |
| B 不带灯 | M 圆形 | P 指示灯 | 11 1NO1NC | R 红色 | 5V | | |
| L 带灯 | Q 正方 | M 自复按钮 | 22 2NO2NC | G 绿色 | 6.3V | | |
| S 选择 | H 长方 | A 自锁按钮 | | Y 黄色 | 12V | | |
| MM 圆形大头 | V 急停按钮 | | | A 橙色 | 24V | | |
| QM 正方大头 | Y 选择按钮 (旋钮) | | | BL 蓝色 | 110V | | |
| HM 长方大头 | KT 钥匙选择按钮 | | | W 乳白色 | 220V | | |
| | | | | B 黑色 | | | |
| | | | | JW 纯白色 | | | |



特点 Features

- 元器件均具备明确的轻触觉反馈，可广泛地运用于民用、工业至办公设备方面。
- LED照明元器件LED灯泡内置限流电阻和保护二极管。
- 保护等级: 封闭型。
- 接点采用24K镀金工艺。
- 获得CCC、CE认证。
- Light touched of components and parts which can be widely used in household, industry and office equipments etc.
- LED illuminated components and parts and LED lamp cap are equipped with built-in current limiting resistance and protecting diode
- Degree of protection
- Wide variety of actuators, easily use
- CCC,CE approved

PC6 按钮开关 Pushbutton Switch

内置LED灯泡 Built in LED

| 型号 Model | PLATD-5* | PLATD-12* | PLATD-24* |
|---------------------------|--|-----------------------------------|---|
| 使用灯头 With head | C6系列专用 special for C6 | | |
| 使用电压 Using voltage | 5V DC ± 5% | 12V AC/DC ± 10% | 24V AC/DC ± 10% |
| 额定电压 Rated voltage | 5V DC | 12V AC/DC | 24V AC/DC |
| 颜色 Color | R, G, Y, A, W, BL, JW | R, G, Y, A, W, BL, JW | R, G, Y, A, W, BL, JW |
| 消耗电流 DC额定值 Rating Current | 8mA | 8mA | 8mA |
| AC额定值 Rating | - | 9mA | 9mA |
| 颜色编码 Color code | R(红色)、G(绿色)、Y(黄色)、A(琥珀色)、W(乳白色)、BL(蓝色)、JW(纯白色) | 与照明颜色相同 Same as illuminated color | |
| 灯头树脂颜色 | | 标印在灯头上 labeled on the lamp cap | |
| 电压表示 voltage indication | | 灯泡使用寿命(参考值) LED life | 约50,000小时(在完全DC亮灯时, 亮度减弱至初始值的50%时) |
| 内部电路 Inner circuit | | | Around 50000 hours (the illumination will reduce to 50% of initial value when DC is fully lighting) |

