

 **Defond**



## VISION ■ 愿景

Powering You Up For SUCCESS  
携手打造成功

## MISSION ■ 使命

- 1 Work with all stakeholders to create solutions and values  
与所有权益者共创有效方案及价值
- 2 Invest in our business and people to become the market leader  
持续投资于业务及人力资源，确占市场领导地位
- 3 Provide superior quality on cost effective products and services with a focus on innovation and continuous improvement  
致力于技术创新和持续改善，提供优质性价比的产品及服务

- In a challenging and dynamic environment, Defond has grown to be a great switch manufacturer in Hong Kong. Defond has become a reputed supplier of components for home appliances and various industrial applications since 1978.

Defond possesses the unique combination of electronic, electrical and mechanical expertise. Vertically integrated manufacturing technologies are applied in plastic molding, metal forming and plating, coil winding, through-hole and surface mount electronics assemblies. The company is committed to providing customers with a total solution from the initial design stages through to manufacturing, delivering outstanding product quality, fast turnaround time and competitive pricing.

在一个极具挑战但又充满活力的市场环境下，目前，德丰已成为香港最大的开关制造集团。从1978年开始，德丰为市场提供家用电器开关及多种工业配件而享有盛誉。

德丰拥有独特的电子元件、电器与机械上的专业技术。纵向整合制造技术广泛应用于塑胶模具、金属模型、电镀、线圈、通孔插装及表面贴装电子组装。德丰从专业设计到生产高质量产品、具有最快的周转期和价格优势，忠诚地为客户提供全方位解决方案。



# Facilities 设施

Total Site Area : 300,000m<sup>2</sup>

Production Floor Space : 150,000m<sup>2</sup>

Accreditation : ISO 9001:2008  
ISO 13485:2007  
ISO 14001  
ISO 17025  
TS 16949  
FDA-registered manufacturing site

Major Businesses : Switches (Mechanical and Electro-mechanical)  
Power Tools Controls  
Automotive Components  
Electronic Manufacturing Services (EMS)  
Fluid Control Components

Stamping Shop : 100 Presses  
High Speed Precision Press  
Multi-Slide Forming Machines  
CNC Integrated Stamping/ Welding Station  
Hydrocarbon de-oil cleaning line

Molding Shop : Injection Machines  
Electrical Molding Machine  
Vertical Molding Machine  
Central Material Drying and Feeding System  
Coordination Measuring Machine



Tool Shop : CNC High Speed Machining Centers  
CNC High Speed Graphite Center  
CNC Wire Cut Machines  
CNC EDM  
CNC Lathes (4-1/2 axis)  
CNC High Precision Optical Profile Grinders  
CNC High precision Surface Grinder  
CNC High Precision Jig Grinder  
CNC Precision Cylindrical Grinder  
CAD/ CAM/ CAD System  
Coordination Measuring Machine

Electronics Assembly : SMT Lines  
Lead Free Wave Solder Lines  
AOI, X-ray, ICT

Metrology Lab : CMM  
X-Ray Scanners  
Optical Measuring Systems  
1000 x Optical Microscope  
Goniophotometer  
Spectroradiometer  
Digital Hardness Meter (Portable type)

Test Lab : Safety Standard Approval Test Lab  
- UL and DEMKO Certified  
Electrical & Mechanical Test - Endurance Test  
Environmental Test  
EMC Lab (Pre-Compliance)  
Photometric Lab

Assembly : Automatic, Semi Automatic, Manual Production Lines and  
Cell Lines



# History 发展历程

- 恒生泛珠三角环保大奖 **2014** • Hang Seng Pan Pearl River Delta Environmental Awards
- 广东制造业500强 (广东省制造业协会/社会科学院评选) **2013** • Top 500 Manufacturing Companies in Guangdong (Accredited by Guangdong Manufacturers Association / Academy of Social Sciences)
- UL亚太第一家UL61058 CTDTP认可实验室 **2011** • First Company acquired UL 61058 CTDTP in Asia Pacific Regions
- 成立新厂房于东莞长安，扩展电子产品生产服务 **2011** • Set up EMS Factory in Chang An, Dongguan
- 全国质量活动优秀企业奖 (中国机械工业质量管理协会/机冶建材工会全国委员会/中国机械产业文化协会评选) **2008** • Excellent Enterprise Quality Award in China (China Machine Building Quality Management Association / Metallurgical and Building Materials Workers' Union / China Association of Machinery Industry Culture)
- 首次得到UL61058认证电动开关 **2007** • First UL61058 approved power tool switches
- 取得 ISO 13485证书 **2007** • ISO 13485 certified
- 取得TS16949证书 **2006** • TS16949 certified
- 收购BJ Automotive GmbH **2006** • Acquisition of BJ Automotive GmbH
- 取得 ISO14001证书 **2005** • ISO 14001 certified
- 收购意大利ODE有限公司 **2004** • Acquisition of ODE, S.r.l., Italy
- 取得 ISO17025证书 **2004** • ISO 17025 certified
- 收购德国Kautt & Bux公司 **2000** • Acquisition of Kautt & Bux, Germany
- 取得 ISO9000证书 **1996** • ISO 9000 certified
- 开始PCBA为第三业务 **1996** • Start PCBA (printed circuit board assembly) as third product area
- 推出电子产品生产服务 **1995** • Started EMS (Electronics Manufacturing Service)
- 开始于中国东莞市洪梅镇成立首间厂房 **1984** • Started first factory in Hongmei, Dongguan
- 首次获得UL认证开关 **1980** • First UL approved switches
- 公司创始 **1978** • Company established

# How to Select ? 如何选择开关?



## What are your considerations?

To select an appropriate switch for a particular application, many different factors should be considered:

- 1) Switch type:**  
Which type of the switch you prefer? Slide or Rocker switch? In general, there are 7 types of switch: Slide, Rocker, Rotary, Micro, Push button, Keyboard and Toggle Switch. It is depended on the activating way of the appliance you chosen.
- 2) Safety Mark:**  
Choose UL, IEC or CQC marking? You should consider which market you sell to. See detail in "Safety Mark".
- 3) Current:**  
Low current or high current? You can choose the suitable current to match the Circuit / Current of your product. **Generally, there are 2 Kind of current control levels: Signal Level (below 100mA) and Power Level (equal or above 100mA).** For Signal Level current, some special designs of Contacts are the solution of this low current rating. A high rating switch maybe not suitable for a rating which is less than 100mA of circuit. Please contact us for detail.
- 4) Endurance:**  
How long of the appliance life? Basic 6000 (UL), 10000 (IEC) or longer cycles? You can choose the suitable endurance according to the product. See detail in "Meaning of Rating on the Switch".
- 5) Temperature:**  
Will the switch work at -25 to 55°C or more special temperature environment? You can choose the suitable temperature according to the rating. See detail in "Meaning of Rating on the Switch".
- 6) Dust and Water proof:**  
Will the switch contact water or will work at dusty area? You can choose the suitable dust and water proof level according to the IP mark. See detail in "Meaning of Rating on the Switch" and "Table A". \* IP mark for ENEC or CQC only.
- 7) Glow Wire Test:**  
Do the plastic material of the switch require to pass GWT requirement? See detail in "Glow Wire Test".

## 你有什么考虑因素?

为特定的应用要求而去选择适合的开关需要考虑许多不同因素:

- 1) 开关类型:**  
您喜欢哪一种开关类型? 滑动开关或翘板开关? 在一般情况下, 有7种开关: 滑动、翘板、旋转、微动、按钮、琴键和拨动开关。这是取决于您选择的产品启动的方法。
- 2) 认证标志:**  
选择UL、IEC或CQC标志? 你应该考虑计划的销售市场。参见“认证标志”的细节。
- 3) 电流:**  
低电流或大电流? 你可取决于产品的实际电路/电流。**一般来说有两个电流级别: 信号级别(低于100mA)和功率级别(等于或超过100mA的)。**在信号级别下, 一些特殊设计的“触点”可以适合这些低额定的电流。一些较大规格也许并不适合开关规格是低于100mA的电路。详情请与我们联系。
- 4) 寿命:**  
产品的使用寿命要多长? 基本6000(UL)、10000(IEC)或更长周期? 你可以根据产品而选择合适的开关寿命。参见“认识开关的规格”的细节。
- 5) 温度:**  
开关将会工作在-25至55°C, 或更特别温度环境吗? 你根据开关规格可以选择合适的温度。参见“认识开关的规格”的细节。
- 6) 防尘和防水:**  
开关接触水或将工作在尘土飞扬的地方? 你根据IP标记标记可以选择合适的防尘和防水等级。参见“认识开关的规格”和“Table A”的细节。\* IP标记只适用于ENEC或CQC。
- 7) 灼热丝试验**  
开关塑料需要GWT的要求? 参见“灼热丝试验”的细节。

# How to Select ? 如何选择开关?

## Meaning of Rating on the Switch :

### ► In IEC (ENEC) rating **10(6)A 250V~ 5E4 T125/55 $\mu$ IP30 APM-2116**

10(6) : The rated current for resistive load = 10A. The rated current for motor = 6A. The inrush current = 6 x the rated current for motor.

5E4 : The rated operating cycles = 50,000 cycles; If operating cycle rating is absent on the switch, default operating cycles = 1E4, 10,000 cycles.

T125/55 : T125 means the rated ambient temperature for the switch body is 125 °C, 55 means the rated ambient temperature for the actuating member.  
\* For T85 only, it means the rated ambient temperature is from 0 °C up to 85 °C.

#### \* Optional mark :

$\mu$  : The mark is for micro-disconnection of switches. There should be “ $\mu$ ” mark on switch when the clearance and dielectric strength of disconnection can't comply with the requirement of basic insulation

IP30 : IP index. It complies protection against ingress of solid foreign objects and water (See Table A).

APM-2116 : Model Type No. on the IEC certificate.

\* CQC rating refers to IEC rating.

### ► In UL rating **20A 125VAC, 10A 250VAC 1/2HP 125-250VAC T85**

1/2HP : For circuits for North American horsepower load (hp), the fractional hp value designation is followed by the symbol “hp”. 1/2HP means 1/2 Horsepower load. Please see Table B of the full load and overload-test current for a.c. and d.c. horsepower.

T85 : The rated ambient temperature is from 0 °C up to 85 °C. If T mark is not given, for mechanical switches and electronic switches, the implied ambient temperature range is from 0 °C up to 55 °C.

Endurance cycle : If endurance cycle mark is not given, the implied endurance cycles is 6,000 cycles.

UL Catalogue No.: According to UL1054 standard, is not necessary to be marked it on the switch when it is impractical to mark.

## 认识开关的规格 :

### ► IEC (ENEC)认证的规格 **10(6)A 250V~ 5E4 T125/55 $\mu$ IP30 APM-2116**

10(6) : 括号前的10A值指的是开关能承受的额定电流，括号里的6A值是指开关能承受的马达负载的稳态电流，冲击电流为6倍稳态电流。

5E4 : 开关的使用寿命为50,000次，当没有注明寿命次数，默认为1E4，即10,000次。

T125/55 : T125是指开关装置于产品的内部所承受之基本温度上限。55是指开关装置于产品外露所承受之基本温度上限。

\* 有些只展示T85即表示整个开关所承受的基本温度由0度至85度。

#### \* 附加标签 :

$\mu$  : “微断开”标志，当开关断开电气间隙及高压在不能满足一个基本绝缘的要求时，就必须带有“微断开”标志。

IP30 : 防尘防水标志 (详见表A)。

APM-2116 : IEC认证的认证编号。

\* CQC 认证规格参考 IEC 认证。

### ► UL认证的规格 **20A 125VAC, 10A 250VAC 1/2HP 125-250VAC T85**

1/2HP : 表示开关能过1/2HP的马力负载，具体马力负载的稳态电流及冲击电流对应关系见附表B。

T85 : 温度标志，表示开关能在0度至85度的环境中使用，但UL marking不一定会标出温度标志。当没有注明时，默认为0度至55度。

操作寿命 : UL无寿命次数标志时，默认为6,000次。

UL的认证编号 : UL的认证编号不一定要标出。





**Table A: Degree of protection against solid foreign objects and water:**

Degree of protection against solid foreign objects		防尘标志
<b>IP0X</b>	Non-protected against solid foreign objects	不防尘
<b>IP1X</b>	Protected against solid foreign objects of 50 mm diameter and greater	防直径不小于50mm固体异物
<b>IP2X</b>	Protected against solid foreign objects of 12.5 mm diameter and greater	防直径不小于12.5mm固体异物
<b>IP3X</b>	Protected against solid foreign objects of 2.5 mm diameter and greater	防直径不小于2.5mm固体异物
<b>IP4X</b>	Protected against solid foreign objects of 1.0 mm diameter and greater	防直径不小于1.0mm固体异物
<b>IP5X</b>	Dust-protected	防尘的
<b>IP6X</b>	Dust-tight	尘密的
Degree of protection against ingress of water		防水标志
<b>IPX0</b>	Non-protected against ingress of water	不防水
<b>IPX1</b>	Protected against vertically falling water drops	防垂直滴水
<b>IPX2</b>	Protected against vertically falling water drops when enclosure tilted up to 15°	防外壳 15° 内倾侧·铅垂滴水
<b>IPX3</b>	Protected against spraying water	防淋
<b>IPX4</b>	Protected against splashing water	防溅
<b>IPX5</b>	Protected against water jets	防喷
<b>IPX6</b>	Protected against powerful water jets	防强烈喷水
<b>IPX7</b>	Protected against the effects of temporary immersion in water	防短时浸水

**Table B: The Table of the Full Load and Overload Test Current for a.c. and d.c Horsepower:**  
马力负载的稳态电流及冲击电流对应关系

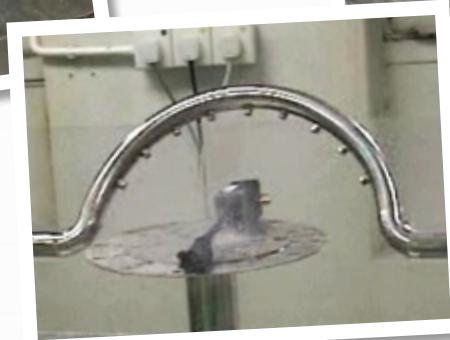
	AC 交流				DC 直流			
	Full-load(A) 满负载(安培)		Overload(A) 过载(安培)		Full-load(A) 满负载(安培)		Overload(A) 过载(安培)	
	125V	250V	125V	250V	125V	250V	125V	250V
1/4 HP	5.8	2.9	34.8	17.4	3	1.5	30	15
1/3 HP	7.2	3.6	43.2	21.6	3.8	1.8	38	19
1/2 HP	9.8	4.9	58.8	29.4	5.4	2.7	54	27
3/4 HP	13.8	6.9	82.8	41.4	7.4	3.7	74	37
1 HP	16	8	96	48	9.6	4.8	96	48

**Safety Mark:**

Generally, each country recognized their national safety mark only (For example, UL mark for US, ENEC mark for most Europe countries, and CQC for China) as their safety requirements. Unless your end product/appliance is planning to use a non-approval switch for specific market/application, the safety mark on Defond switch is able to help you to fulfill the national safety requirements for your end product/appliance.

**认证标志：**

基本上，每一个国家只会认可其国家的安全标志来满足其国家的安全要求，如去美国的选UL，去欧洲的选IEC，国内用CQC标志。除非你计划用非认证的开关用于特定市场//家电的产品外，德丰开关上的安全标志能够帮助你实现你的产品/家电的国家安全要求。



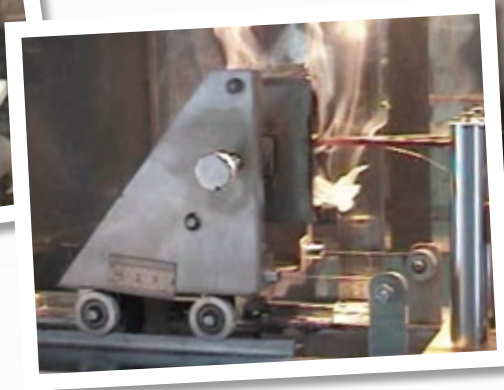
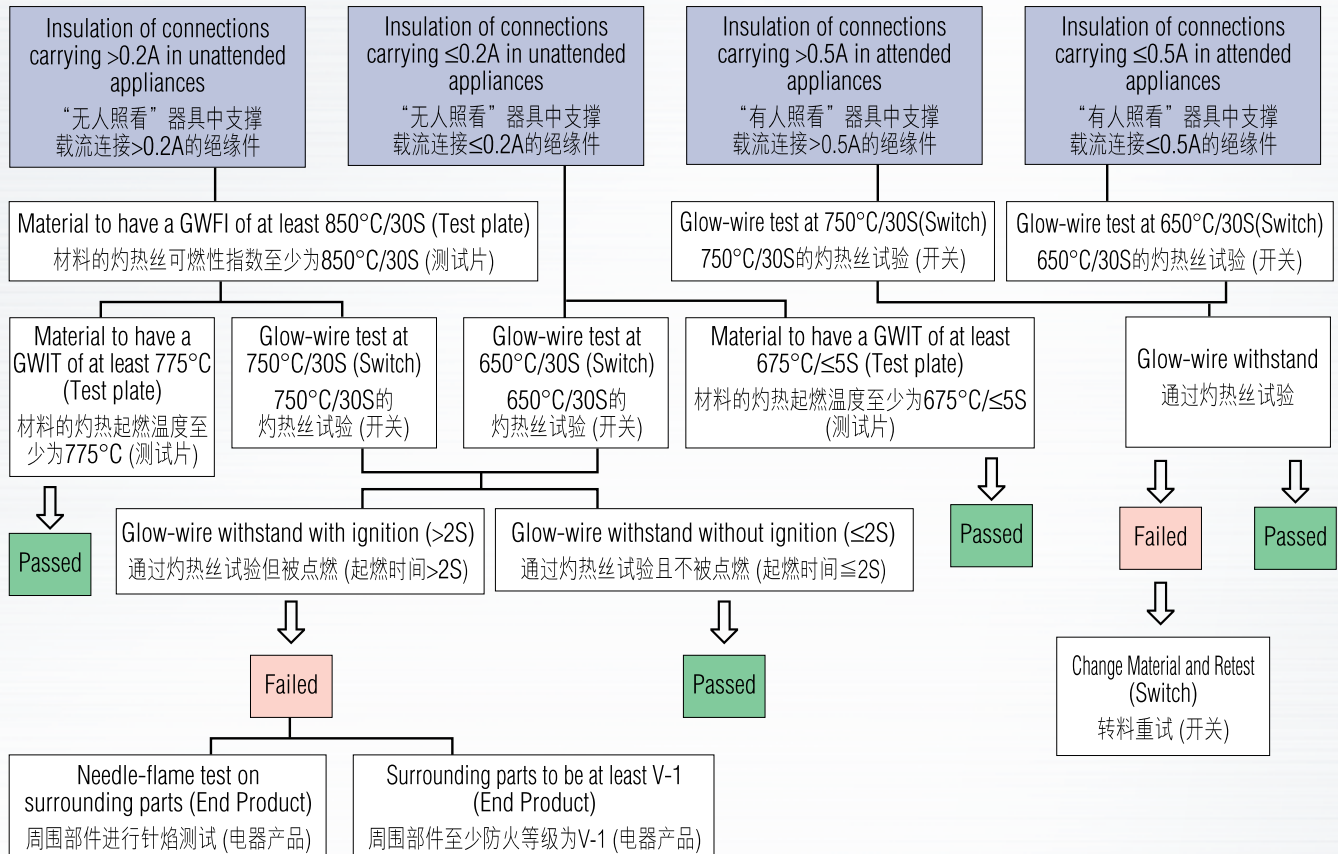
# How to Select ? 如何选择开关?

## Glow Wire Test(GWT):

The requirement of GWT should be selected reasonably for plastics. According to the below requirement from IEC60335-1, only for unattended appliances which carrying a current exceeding 0.2 A is required to withstand the GWT 750°C without ignition( $\leq 2S$ ). Other appliances such as handheld hairdryer is just required to withstand the GWT 750/30S .

## 灼热丝测试：

要合理选择对塑胶材料GWT的要求。从以下IEC60335-1对塑胶材料的要求可知，只有无人照看且大于0.2A的器具才需要750°C/ $\leq 2S$ ，其余像手持式风筒等只需要过750°C/30S灼热丝测试即可。



# Safety Marking 安全标识



All safety marking of European countries are harmonized into one ENEC marking

 AENOR (Spain)	 VDE (Germany)	 MEEI (Hungary)
 SGS Belgium - Division SGS CEBEC (Belgium)	 OVE (Austria)	 ITCL (Intertek) (United Kingdom)
 IMQ (Italy)	 BSI (United Kingdom)	 EZÚ (Czech republic)
 CERTIF (Portugal)	 Electrosuisse (Switzerland)	 SIQ (Slovenia)
 KEMA (Netherlands)	 Intertek Semko (Sweden)	 TSE (Turkey)
 SNCH (Luxembourg)	 UL International Demko (Denmark)	 TRLP (TUV) (Germany)
 LCIE (NF mark) (France)	 SGS Fimko (Finland)	 TÜV SÜD PS (TUV) (Germany)
 ELOT (Greece)	 NEMKO (Norway)	 PREDOM-OBR (Poland)



UL Recognized Component for both the United States and Canada



UL Recognized Component for Canada



UL Recognized Component for the United States



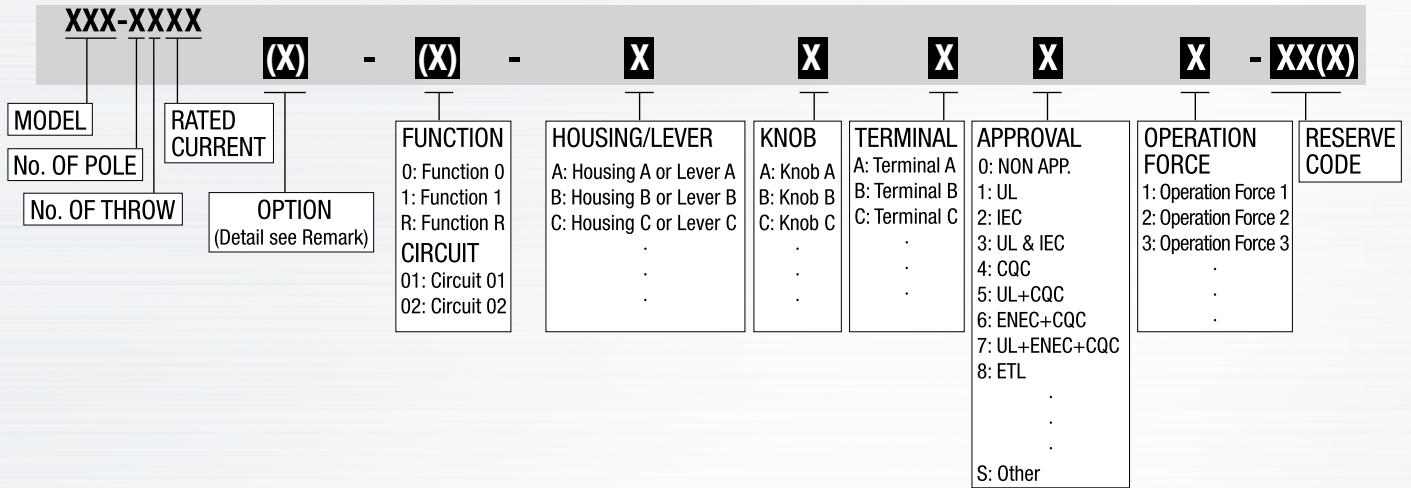
CQC Recognized Component and Product Mark for China

## UL61058 status @ Defond

- The standard of UL1054 for Special Use Switches will be withdrawn on June 23, 2015. After that, only UL61058 will be used for the evaluation of switches.
- Existing certifications to UL 1054 will be allowed to continue to be certified and not be withdrawn after June 23, 2015
- Over 40 series of switch have been qualified UL61058 since 2007 that cover Home Appliances and Power Tool segments.
- Defond is the 1st company in Asia Pacific regions obtained the CTDTP (Client Test Data Program) for Switch for Appliances - UL61058. That means UL will take Defond test report directly and Defond has the comparative advantage in obtaining new approval.
- 特殊用途开关标准UL1054将于2015年6月23日被撤销。之后，UL将只会用UL61058开关标准作评估。
- 现有已取得的UL1054认证将会继续容许被使用，同时不会在2015年6月23日被撤销。
- 自2007年以来，德丰已经有四十多种系列，涵盖家电和电动工具领域的开关，获得UL61058认证。
- 此外，德丰是亚太地区的第一家公司获得的UL61058 CTDTP（客户测试数据计划）。这意味着，UL将直接采取德丰测试报告，而德丰因此更具优势获得新的认证批准。



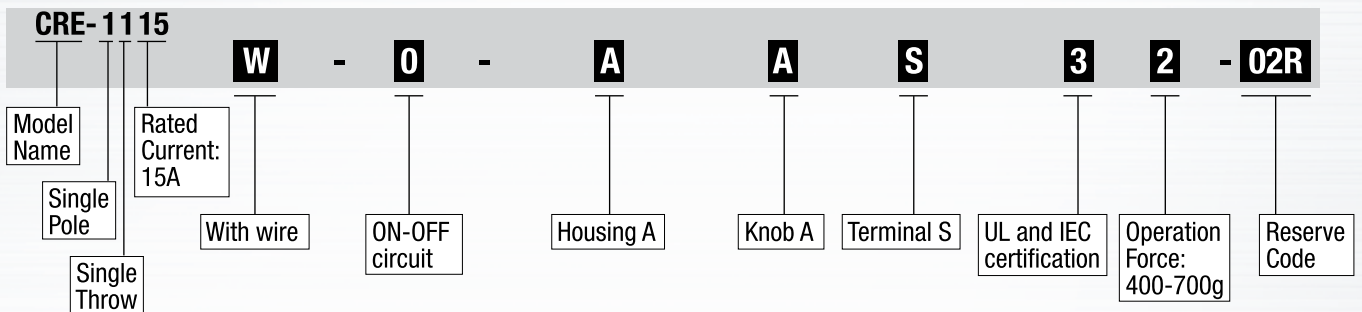
# Standard Model Index 标准索引



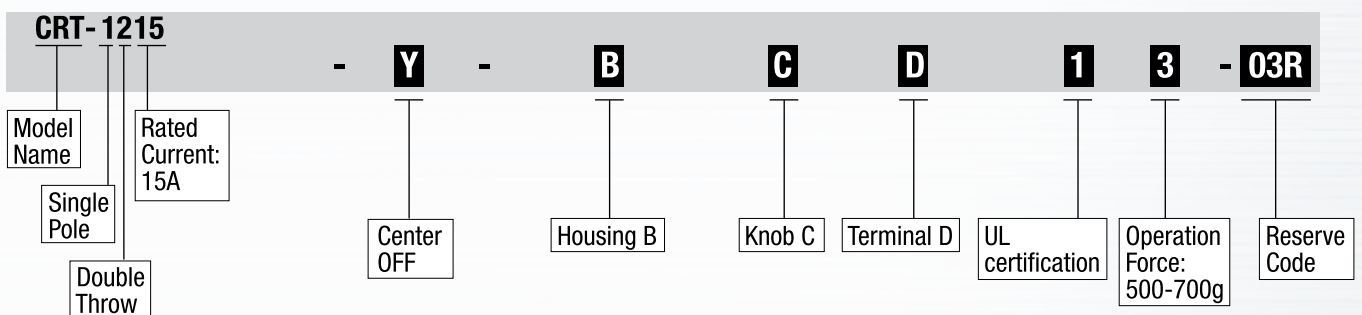
**Remark:**

1. Item with bracket is optional
2. The first bracket indicates option of wire, disconnection type, proofed water or temperature etc.

## Example A CRE - 1115W - 0 - AAS32 - 02R :



## Example B CRT - 1215 - Y - BCD13 - 03R :



**Slide Switch 滑动开关**



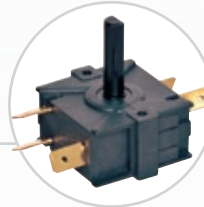
2-13

**Rocker Switch 翘板开关**



14-29

**Rotary Switch 旋转开关**



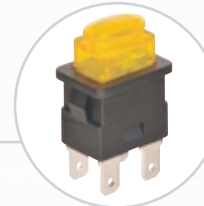
30-37

**Micro Switch 微动开关**



38-45

**Push Button Switch 按钮开关**



46-55

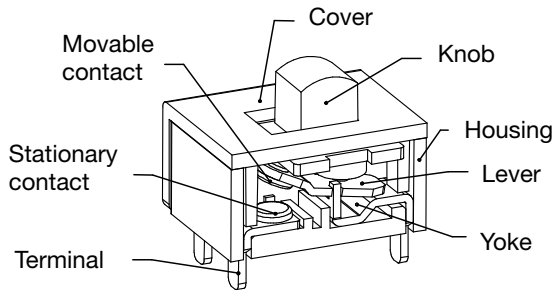
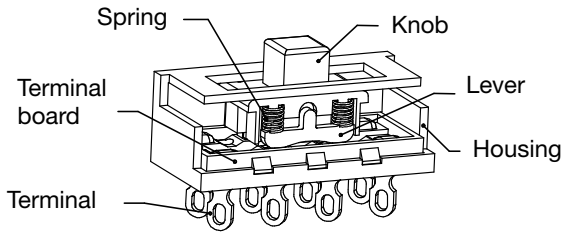
**Keyboard Switch 琴键开关**



56-60

# SLIDE SWITCH

## 滑动开关

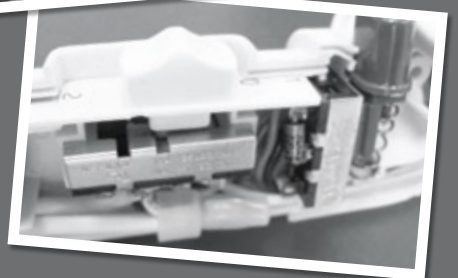


### Switch Features 特征

1. Three kinds of contact type of Slide Switch: sledge type, lever type and spring arm type  
滑动开关触点接触方式分为雪撬式、翘板式和弹片式
2. Since the contacts of Sledge type switch are directly wiped each other, the life of Sledge type is relatively low (normally below 10,000 times) comparing with spring and lever type switch  
雪撬式滑动开关触点之间直接摩擦，寿命一般为10,000次以下，而弹片式、翘板式所过电流及寿命较雪撬式好
3. A variety of circuit options  
可以有较多电路供选择
4. Momentary options  
可在两端档位做成回弹式功能

### Tips 提示

1. Sledge type with high rating is not suitable for the current lower than 100mA.  
大额定电流的雪撬式滑动开关不能用于小电流 (小于100毫安) 的电路。
2. Spring arm type is not suitable for vibration working area.  
弹片式的滑动开关不能用于较大震动的电器产品。
3. Generally, a high rating switch maybe not suitable for a rating less than 100mA of circuit. Some special designs of contacts are the solution of a low current rating. Please contact us for detail.  
大额定电流的开关不能用于小电流 (小于100毫安) 的电路，微小电流的触点应做特殊处理。如有类似的问题请联系我们。
4. The duration and temperature of welding and wave soldering are critical. Generally, the wattage of the soldering iron is 50~70W, the duration of welding is within 3 second, the duration of wave soldering is 3 ~ 4 second and the chamber temperature is below 260°C.  
焊线或过波峰炉时必须注意温度及时间。焊线选用50~70瓦的恒温烙铁，上锡时间控制在3秒以内，过波峰炉时间控制在3~4秒，炉温控制在260度以下。



## Plastic Case 塑胶外壳

ASH



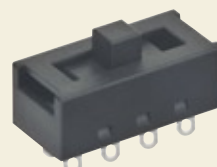
4

CSJ



6

DSE



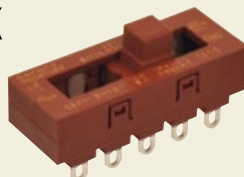
8

ASQ



4

CSK



6

DSN



9

ASR



5

CSQ



7

SSW



9

BSB



5

CSR



7

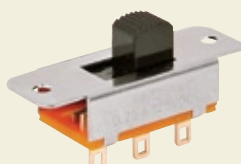
SSZ



10

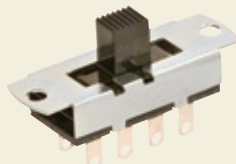
## Metal Case 金属外壳

DSA



11

DSG



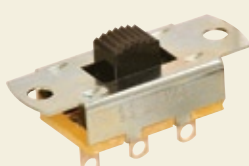
12

DSQ



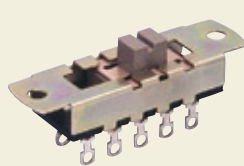
13

DSB



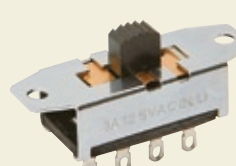
11

DSH



12

DSU



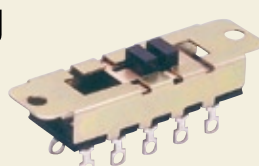
13

DSC



11

DSJ



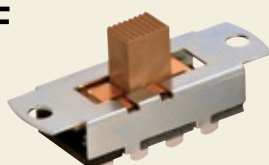
12

SSE



13

DSF



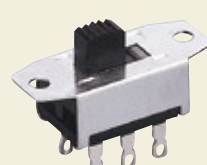
11

DSM



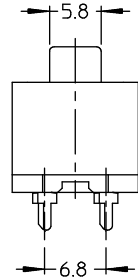
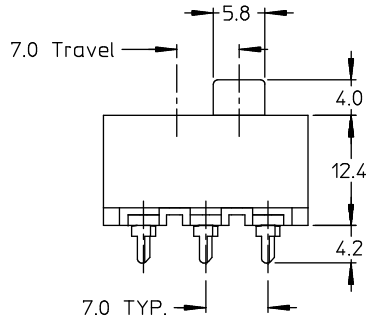
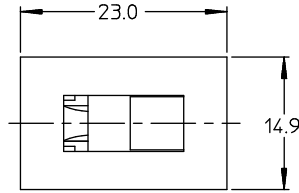
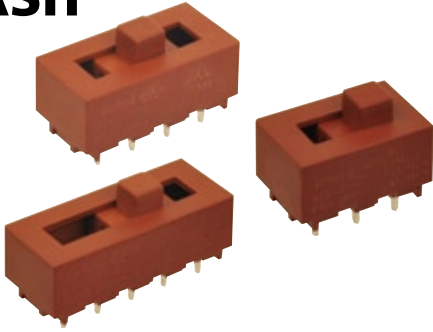
12

SSM



13

# ASH



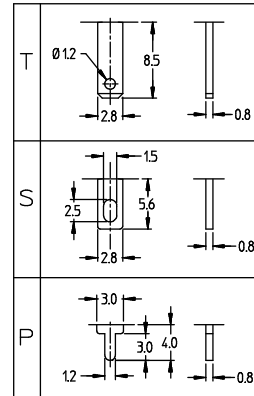
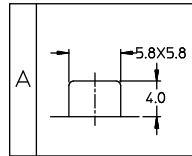
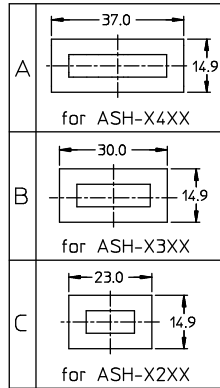
- single / double pole, 2/3/4 position
- ratings
  - 16A 125VAC, 8A 250VAC
  - 10(2)A 220/250VAC 1E4 T85
  - 10A 220/250VAC 1E4 T85
  - 8(3)A 220/250VAC 1E4 T125



## ASH-XXXX

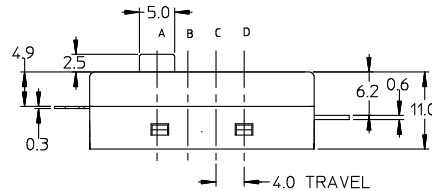
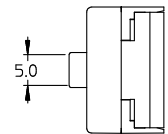
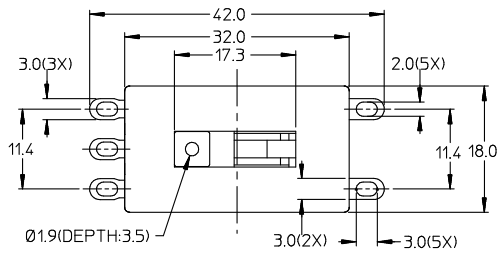
- **X** - **X** **X** **X** **X** **X** - **XXX**

	Single pole	Double pole
04	 ASH-12XX	 ASH-22XX
34	 ASH-13XX	 ASH-23XX
65	 ASH-14XX	 ASH-24XX



1 500±250g

# ASQ



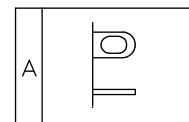
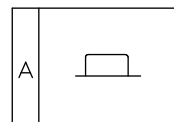
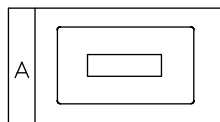
- double pole, multi-position
- ratings
  - 16A 125VAC, 8A 250VAC
  - 13A 125VAC, 6.5A 250VAC



## ASQ-XXXX

- **X** **X** **X** **X** - **XXX**

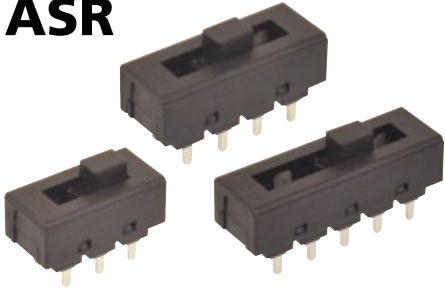
POSITION	ELECTRIC CIRCUIT		
	1-C1	2-C1	3-C2
A	OFF	OFF	OFF
B	OFF	ON	ON
C	ON	OFF	ON
D	ON	ON	ON



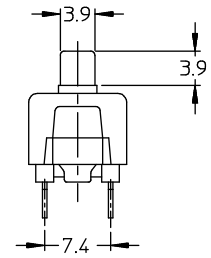
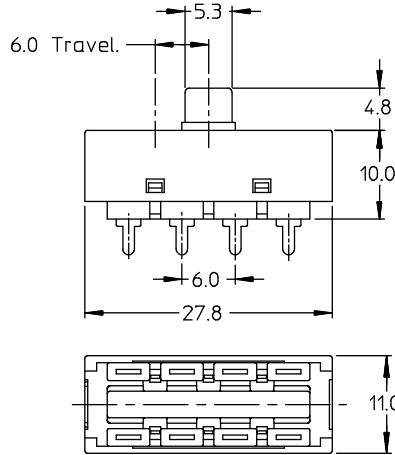
1 350~850gf



# ASR



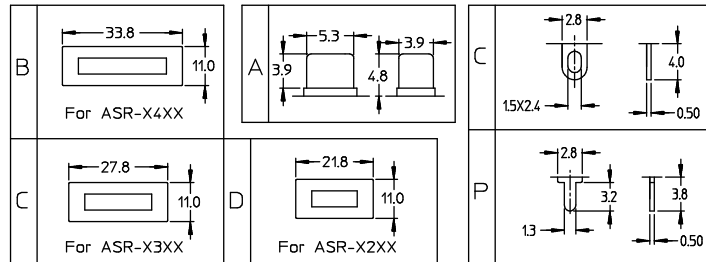
- single / double pole, 2/3/4 position
- ratings
  - 16A 125VAC, 9A 250VAC
  - 13A 125VAC, 6.5A 250VAC
  - 9(1)A 220/250VAC T85
  - 6(2.5)A 220/250VAC



## ASR-XXXX

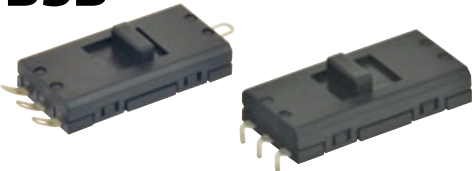
- **X** **X** **X** X **X** - XXX

Single pole	Double pole
ASR-12XX	ASR-22XX
ASR-13XX	ASR-23XX
ASR-14XX	ASR-24XX

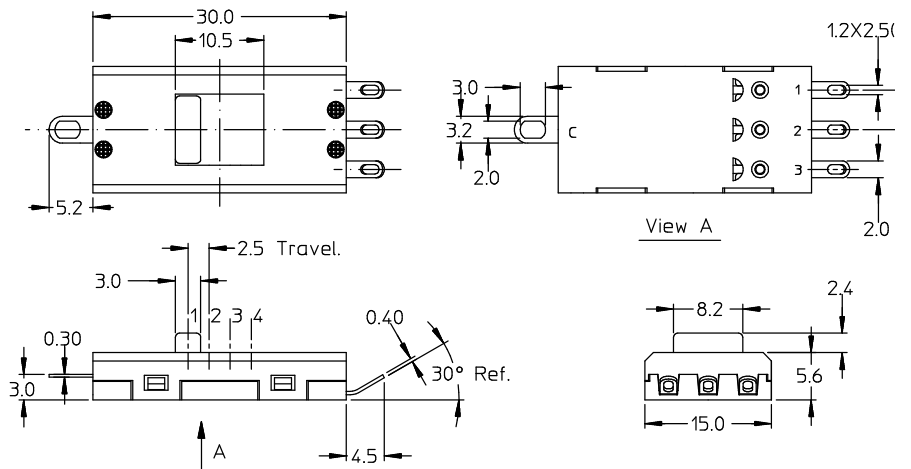


1 400~1000gf

# BSB



- single pole, multi-position
- ratings
  - 13A 125VAC, 6.5A 250VAC T125
  - 13A 125VAC, 6.5A 250VAC
  - 6A 125VAC, 3A 250VAC T125
  - 8(2)A 250VAC  $\mu$  T85

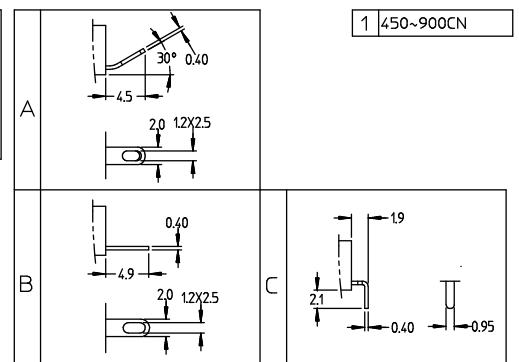


View A

## BSB-XXXX

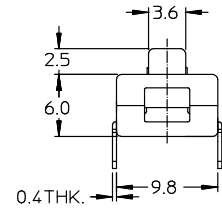
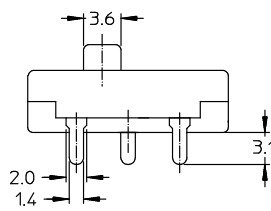
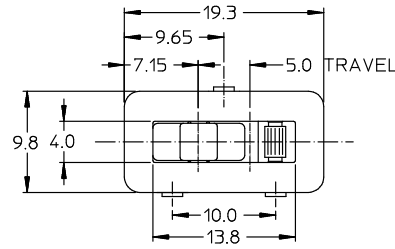
- **X** - X X **X** X **X** - XXX

01	<table border="1"> <tr><td>1</td><td>OFF</td></tr> <tr><td>2</td><td>OFF</td></tr> <tr><td>3</td><td>C+2</td></tr> <tr><td>4</td><td>C+1+2</td></tr> </table> for BSB-13XX	1	OFF	2	OFF	3	C+2	4	C+1+2	02	<table border="1"> <tr><td>1</td><td>OFF</td></tr> <tr><td>2</td><td>C+2</td></tr> <tr><td>3</td><td>C+1+2+3</td></tr> <tr><td>4</td><td>C+1</td></tr> </table> for BSB-13XX	1	OFF	2	C+2	3	C+1+2+3	4	C+1	06	<table border="1"> <tr><td>1</td><td>OFF</td></tr> <tr><td>2</td><td>C+1</td></tr> <tr><td>3</td><td>C+1+2</td></tr> <tr><td>4</td><td>C+1+2+3</td></tr> </table> for BSB-13XX	1	OFF	2	C+1	3	C+1+2	4	C+1+2+3	07	<table border="1"> <tr><td>1</td><td>OFF</td></tr> <tr><td>2</td><td>C+1</td></tr> <tr><td>3</td><td>C+2+3</td></tr> <tr><td>4</td><td>C+3</td></tr> </table> for BSB-13XX	1	OFF	2	C+1	3	C+2+3	4	C+3
1	OFF																																						
2	OFF																																						
3	C+2																																						
4	C+1+2																																						
1	OFF																																						
2	C+2																																						
3	C+1+2+3																																						
4	C+1																																						
1	OFF																																						
2	C+1																																						
3	C+1+2																																						
4	C+1+2+3																																						
1	OFF																																						
2	C+1																																						
3	C+2+3																																						
4	C+3																																						
013	<table border="1"> <tr><td>1</td><td>C+1</td></tr> <tr><td>2</td><td>C+1+2+3</td></tr> <tr><td>3</td><td>C+1+2</td></tr> <tr><td>4</td><td>OFF</td></tr> </table> for BSB-13XX	1	C+1	2	C+1+2+3	3	C+1+2	4	OFF	014	<table border="1"> <tr><td>1</td><td>C+1</td></tr> <tr><td>2</td><td>C+1+2+3</td></tr> <tr><td>3</td><td>C+2</td></tr> <tr><td>4</td><td>OFF</td></tr> </table> for BSB-13XX	1	C+1	2	C+1+2+3	3	C+2	4	OFF	021	<table border="1"> <tr><td>1</td><td>C+1+2+3</td></tr> <tr><td>2</td><td>C+1+2</td></tr> <tr><td>3</td><td>C+1</td></tr> <tr><td>4</td><td>OFF</td></tr> </table> for BSB-13XX	1	C+1+2+3	2	C+1+2	3	C+1	4	OFF										
1	C+1																																						
2	C+1+2+3																																						
3	C+1+2																																						
4	OFF																																						
1	C+1																																						
2	C+1+2+3																																						
3	C+2																																						
4	OFF																																						
1	C+1+2+3																																						
2	C+1+2																																						
3	C+1																																						
4	OFF																																						



1 450~900CN

CSJ



• single pole, 2/3 position

• ratings

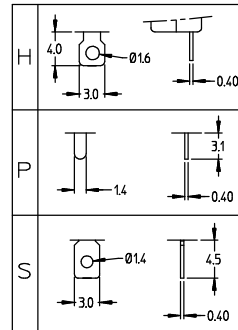
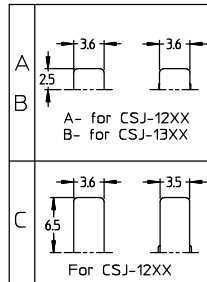
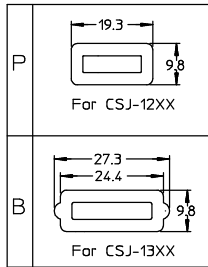
- 8A 125VAC, 4A 250VAC  
6A 125VAC, 3A 250VAC
- 4A 250VAC T85 for CSJ-13AA  
3(1)A 250V 5E4 T85 for CSJ-12AA



CSJ-XXXX

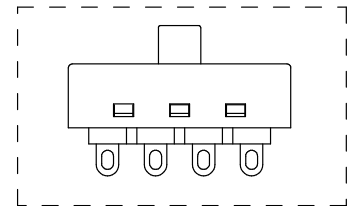
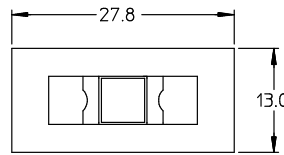
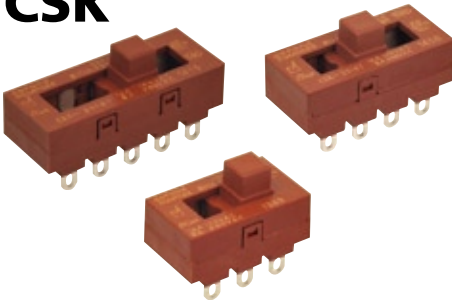


- XXX

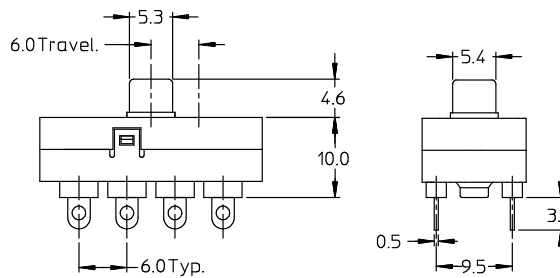


1	250~500g
2	250~550g

CSK



Another Housing PROFILE



• single / double pole, 2/3/4 position

• ratings

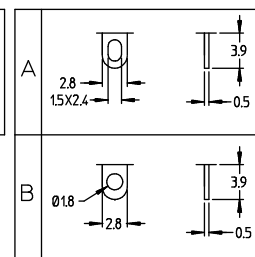
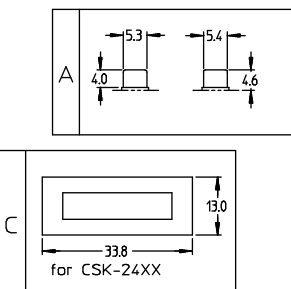
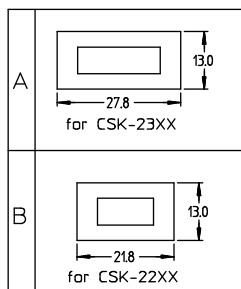
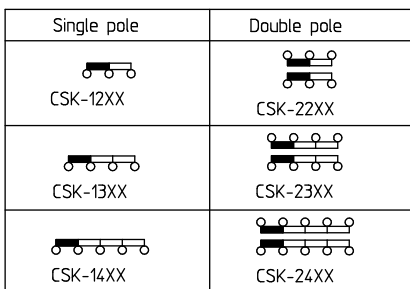
- 16A 125VAC, 8A 250VAC T85  
13A 125VAC, 6.5A 250VAC T85
- 10(1)A 230/250VAC T85  
9.1(1)A 230/250VAC T85  
8(1)A 230/250VAC T85  
6(1)A 230/250VAC T85



CSK-XXXX



- XXX

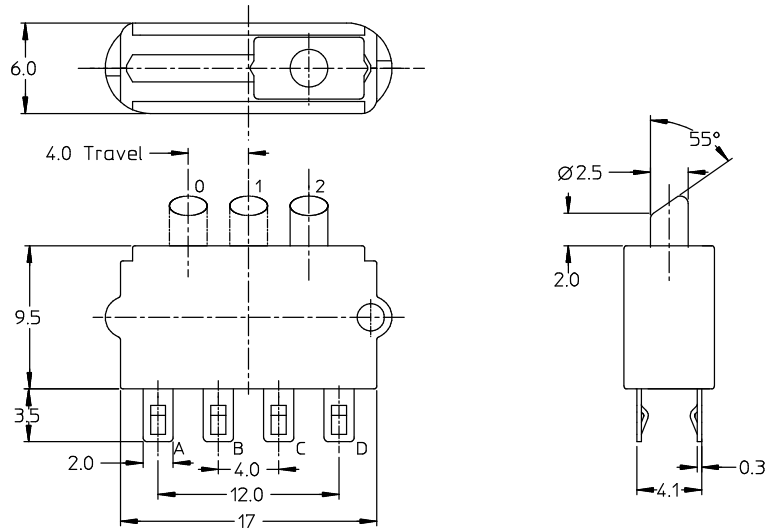


1	300~650g
2	600~1200g
3	650~200g

# CSQ



- single pole, multi-position
- rating  
- 2A 250VAC



## CSQ-XXXX

-

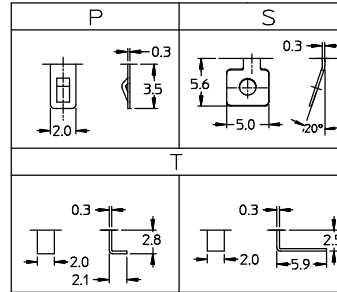
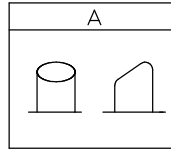
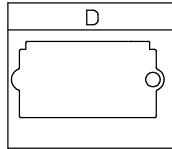
X

X

X

X X - XXX

position	2	1	0
1104			
1204			
1204			
1304			

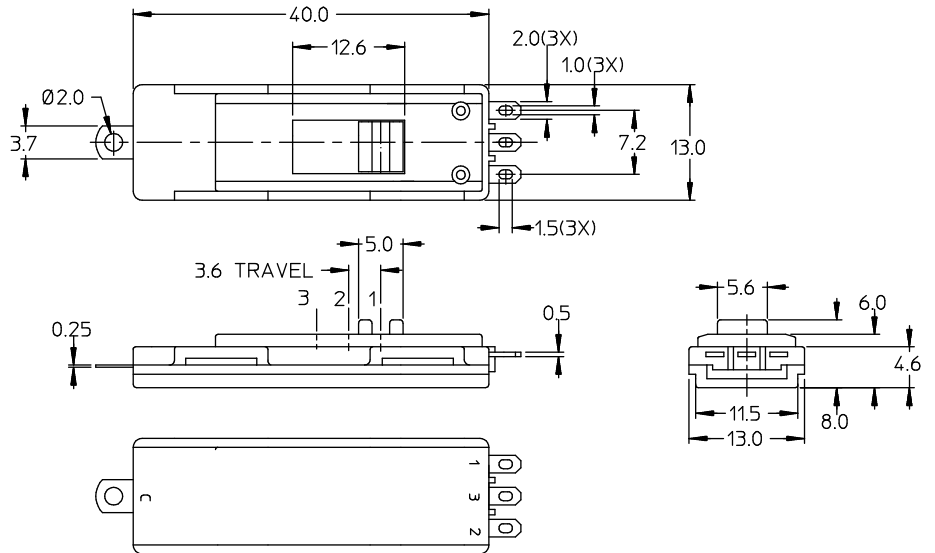


200~550gf

# CSR



- single pole, multi-position
- ratings
  - 10.1A 125VAC T65
  - 8A 125VAC T65
  - 7A 125VAC, 3.5A 250VAC T65
  - 8A 125VAC T65 (C-2)
  - 7A 125VAC T65 (C-1, C-3)
  - 5.5(5.5)A 250VAC  $\mu$  T85
  - 4.6A 250VAC  $\mu$  T85
  - 3A 250VAC  $\mu$  T85



## CSR-XXXX

-

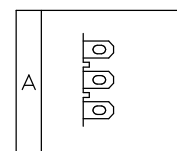
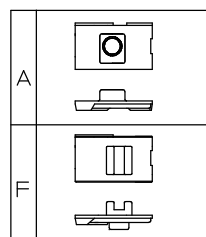
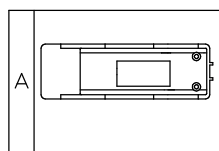
X

X

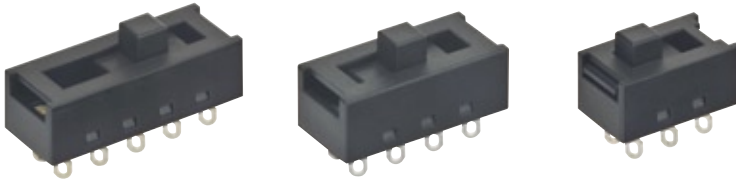
X

X X - XXX

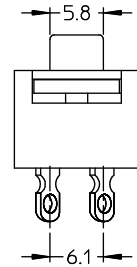
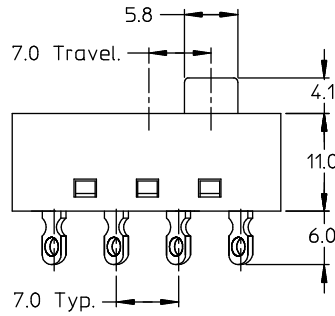
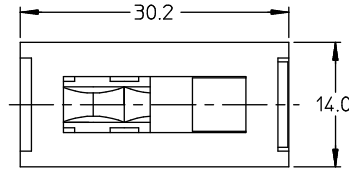
POSITION	1	2	3	4
1208/1306	OFF	C-1	C-1-2	
1406/1407/1408	OFF	C-1-3	C-1-2-3	C-1
1408	OFF	C-1	C-1-3	C-1-2
1408/1410	OFF	C-3	C-1-2	C-1



# DSE



- single / double pole, 2/3/4/5 position
- ratings
  - 16A 125VAC, 8A 250VAC
  - 13A 125VAC, 6.5A 250VAC
  - 5A 125VAC, 2.5A 250VAC
  - 3A 125VAC, 1.5A 250VAC
  - 8(3)A 220/250VAC T125
  - 10(2)A 220/250VAC T85
  - 10A 220/250VAC T85
  - 3(2)A 220/250VAC T85
  - 3A 220/250VAC T85
  - 2.5(2.5)A 250VAC T85 5E4



## DSE -XXXX

X

X

X

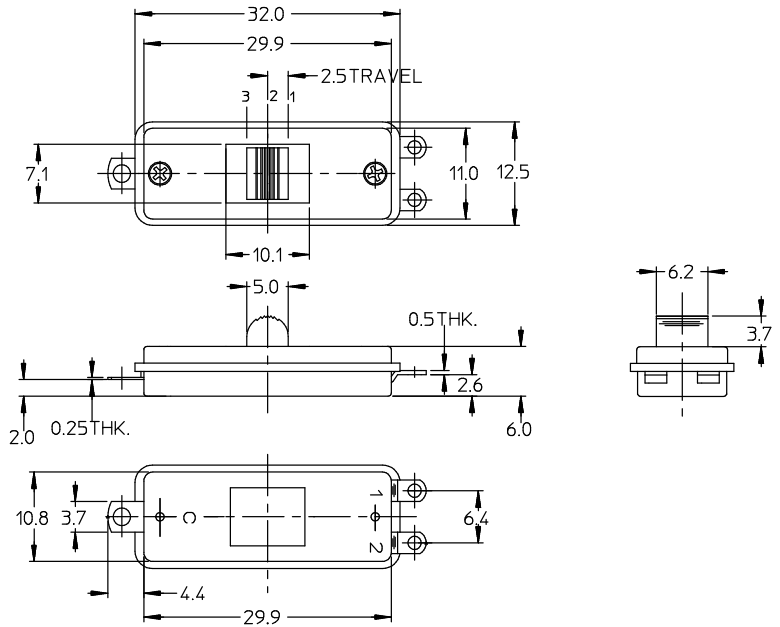
X X - XXX

Single pole	Double pole	<p>A-for DSE-X2XX</p>	<p>D</p>	<p>P</p>	<p>1 650±250g</p>				
DSE-12XX	DSE-22XX					<p>C</p>	<p>R</p>		
DSE-13XX	DSE-23XX							<p>B</p>	<p>S</p>
DSE-14XX	DSE-24XX								
DSE-15XX	DSE-25XX	<p>E-for DSE-X2XX</p>	<p>F</p>	<p>K</p>					
					<p>J</p>				

# DSN

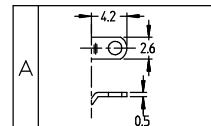
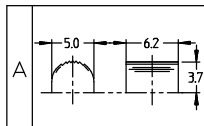
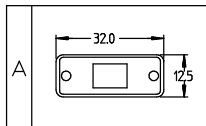


- single pole, multi-circuit
- ratings
  - 8A 125VAC, 4A 250VAC T75
  - 7A 125VAC, 4A 250VAC T75



## DSN-XXXX

POSITION	CIRCUIT
1	OFF
2	C-1
3	C-1-2

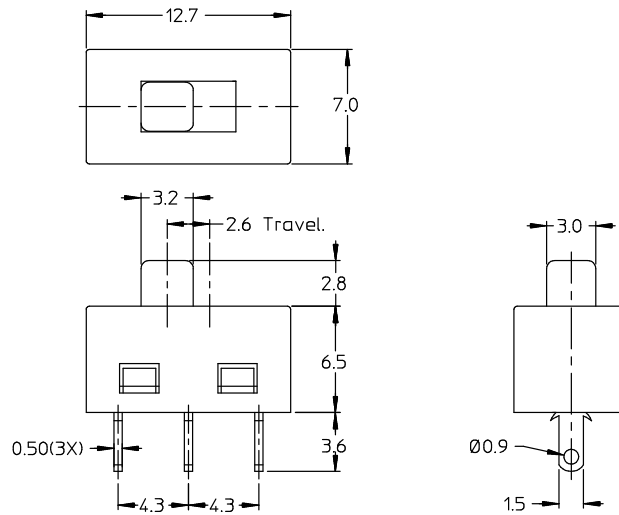


1 0.20~0.70kgf

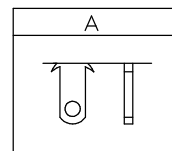
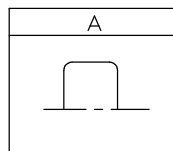
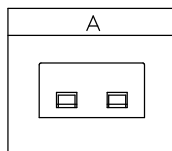
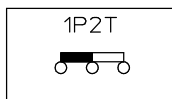
# SSW



- single pole, double throw
- ratings
  - 4A 125VAC, 2A 250VAC T85
  - 2A 220/250VAC 1E4 T85



## SSW-XXXX

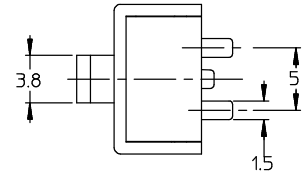
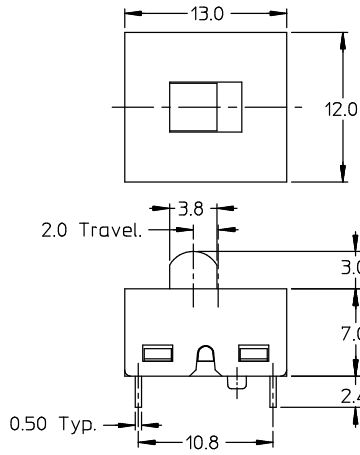


200~400gf

# SSZ

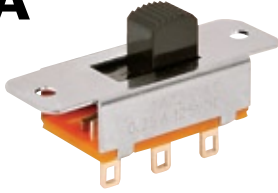


- double pole, single throw
- ratings
  - 12A 125VAC, 6A 250VAC
  - 8A 220/250VAC  $\mu$  T85
  - 6A 220/250VAC  $\mu$  T85

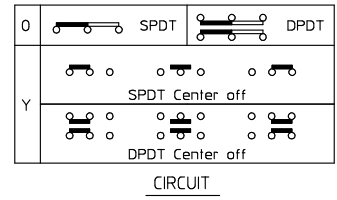
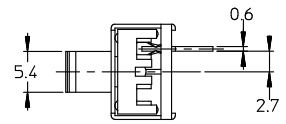
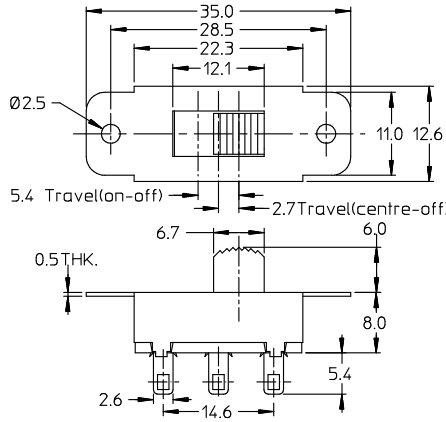


SSZ-XXXX					
-	X	X	X	X	X - XXX

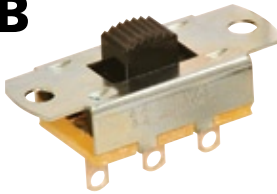
# DSA



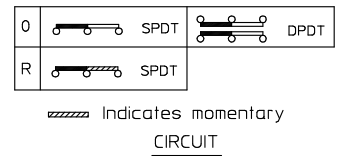
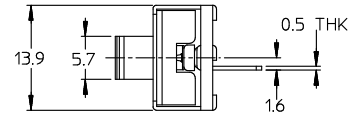
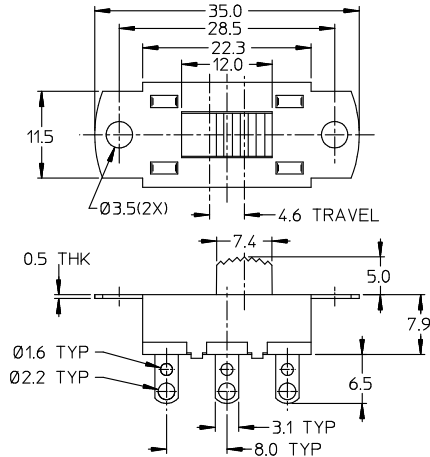
- single / double pole, single / double throw centre-off/on-off
- rating
  - 1A 125VAC, 0.25A 125VAC T65



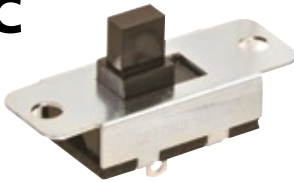
# DSB



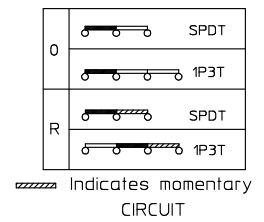
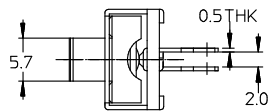
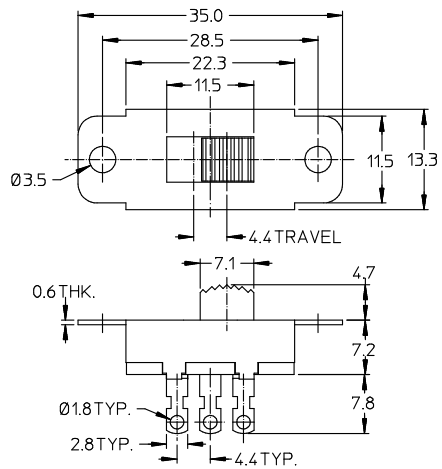
- single / double pole, single / double throw
- ratings
  - 16A 125VAC, 8A 250VAC T105
  - 13A 125VAC, 6A 250VAC T125
  - 11A 125VAC, 5A 250VAC T105
  - 6A 125VAC, 3A 250VAC T105



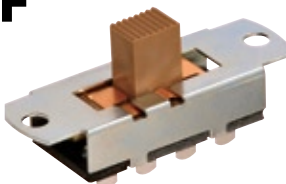
# DSC



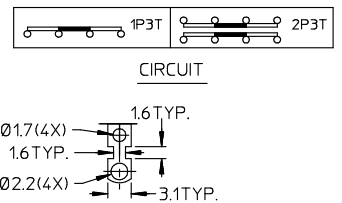
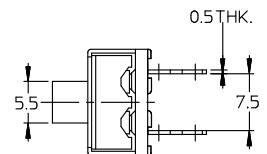
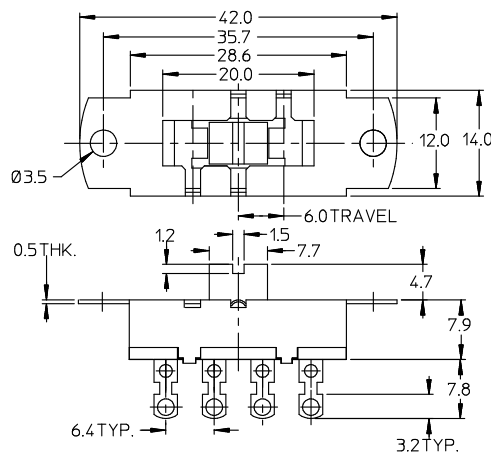
- single pole, single / double / three throw
- ratings
  - 13A 125VAC, 6A 250VAC T125
  - 11A 125VAC, 5A 250VAC T105
  - 6A 125VAC, 3A 250VAC T105



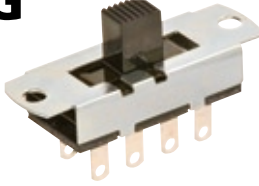
# DSF



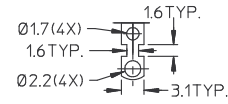
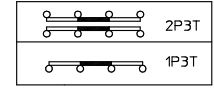
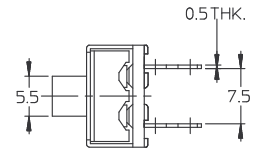
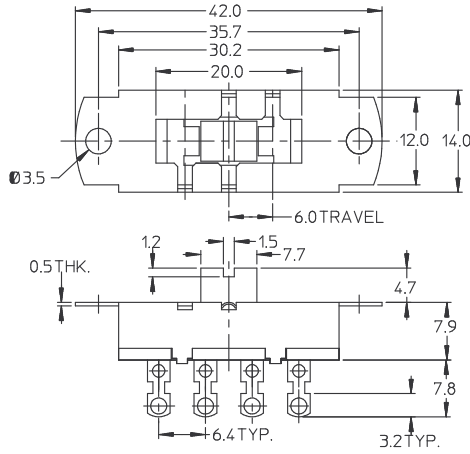
- single / double pole, 3 throw
- ratings
  - 11A 125VAC(N.I.), 5.5A 250VAC(N.I.) T105/T65
  - 0.5A 125VDC T105/T65
  - 6A 125VAC(N.I.), 0.5A 125VDC T65
  - 13A 125VAC(N.I.), 6.5A 250VAC(N.I.) T65
  - 16A 125VAC(N.I.), 8A 250VAC(N.I.) T65



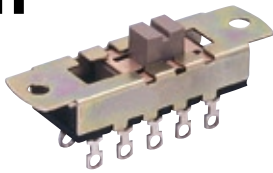
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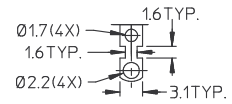
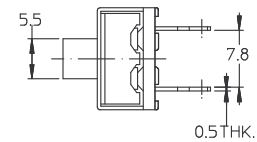
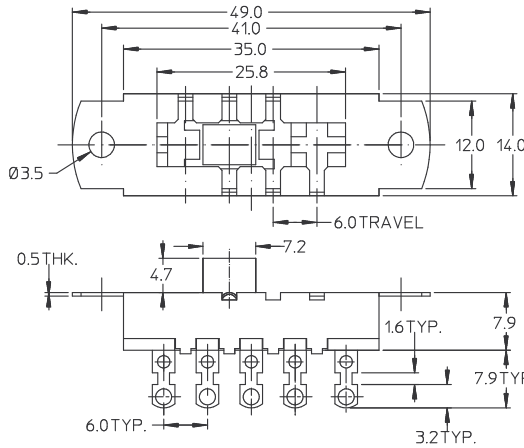
- single / double pole, 3 throw
- ratings
  - 11A 125VAC(N.I.), 5.5A 250VAC(N.I.)
  - 0.5A 125VDC T105/T65
  - 6A 125VAC(N.I.), 0.5A 125VDC T65
  - 13A 125VAC(N.I.), 6.5A 250VAC(N.I.) T65
  - 16A 125VAC(N.I.), 8A 250VAC(N.I.) T65



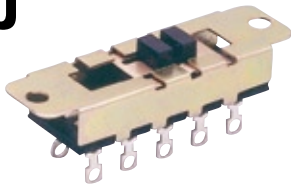
# DSH



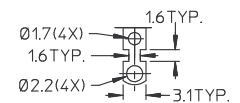
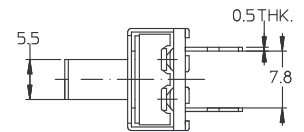
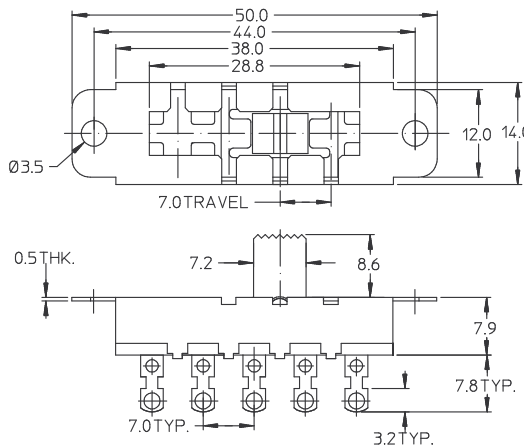
- single / double pole, 4 throw
- ratings
  - 11A 125VAC(N.I.), 5.5A 250VAC(N.I.)
  - 0.5A 125VDC T105/T65
  - 6A 125VAC(N.I.), 0.5A 125VDC T65
  - 13A 125VAC(N.I.), 6.5A 250VAC(N.I.) T65
  - 16A 125VAC(N.I.), 8A 250VAC(N.I.) T65



# DSJ



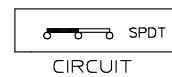
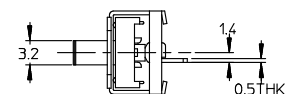
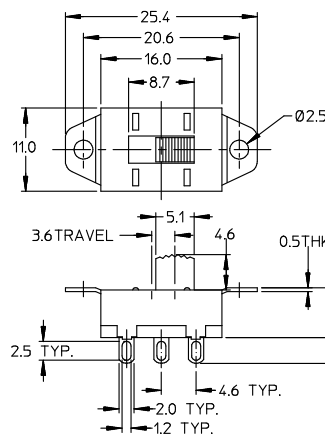
- single / double pole, 4 throw
- ratings
  - 11A 125VAC(N.I.), 5.5A 250VAC(N.I.)
  - 0.5A 125VDC T105/T65
  - 6A 125VAC(N.I.), 0.5A 125VDC T65
  - 13A 125VAC(N.I.), 6.5A 250VAC(N.I.) T65
  - 16A 125VAC(N.I.), 8A 250VAC(N.I.) T65



# DSM



- single pole, single / double throw
- rating
  - 3A 125VAC T105/T65

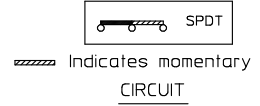
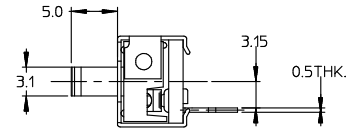
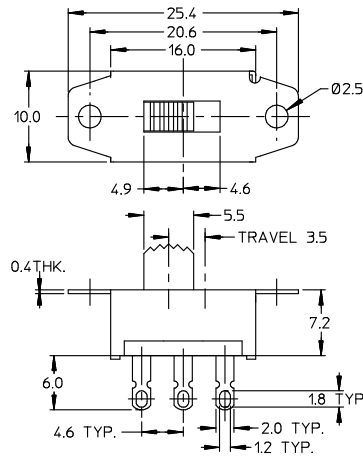




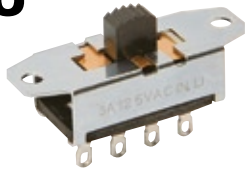
# DSQ



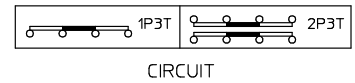
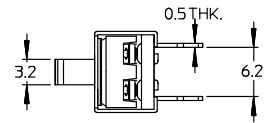
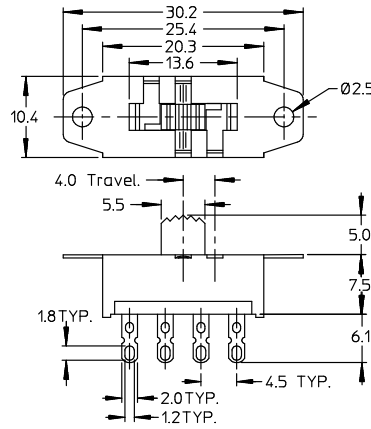
- single pole, double throw
- rating
  - 3A 125VAC, 0.5A 125VDC T80



# DSU



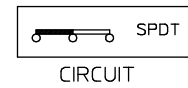
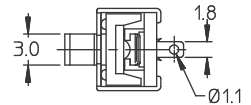
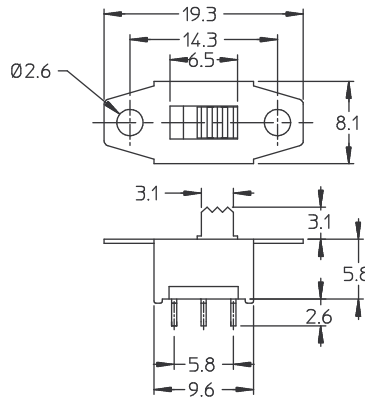
- single / double pole, 3 position
- ratings
  - 9A 125VAC(N.I.), 4.5A 250VAC(N.I.)
  - 0.5A 125VDC
  - 3A 125VAC(N.I.)



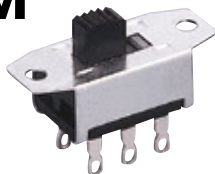
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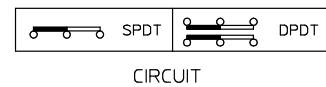
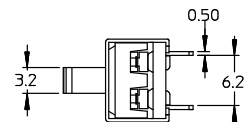
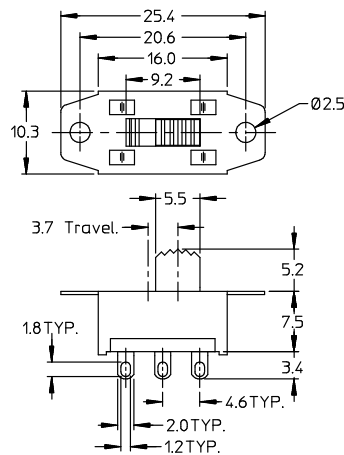
- single pole, double throw
- ratings
  - 2A 125VAC, 1A 250VAC T105
  - 1A 125VAC T105



# SSM

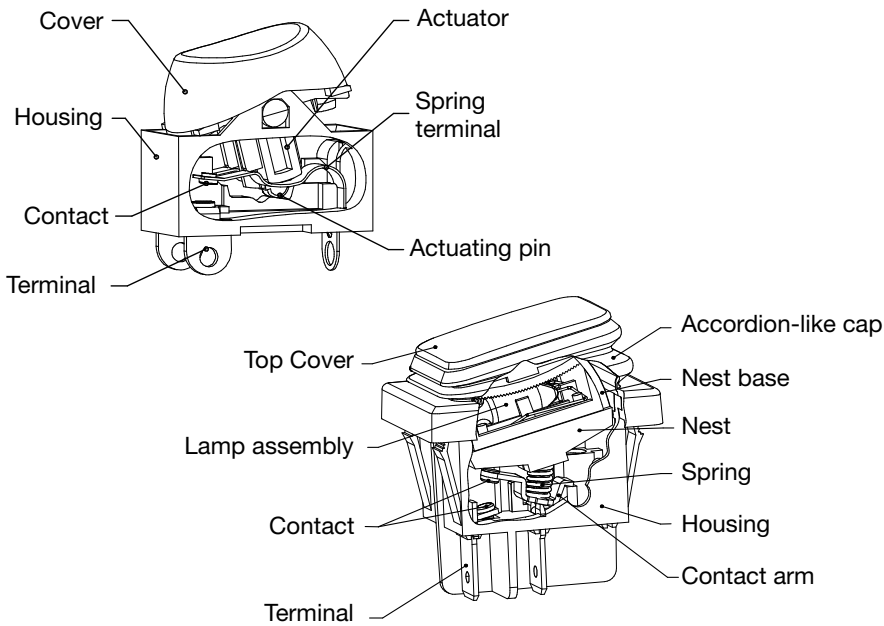


- single / double pole, double throw
- ratings
  - 6A 125VAC, 3A 250VAC
  - 0.5A 125VDC
  - 3A 125VAC, 1.5A 250VAC
  - 0.5A 125VDC
  - 0.5A 125VAC, 0.5A 125VDC



# ROCKER SWITCH

## 翘板开关



### Switch Features 特征

1. High current and long life cycle features which are good as main switch of circuit  
翘板开关可分断较大电流及提供较长的操作寿命，可做主开关
2. Neon Lighting and LED lighting available  
翘板开关可带氖灯或LED灯
3. Different color and shape options for knobs; different markings on knob available  
操作按钮的形式、颜色可多样，可印指示字唛
4. Protection cover for dust and water proof available  
可加防护外罩，达到防尘防水功能

### Tips 提示

1. It is not recommended violating the suggested Panel Cutout and Nominal Thickness. Otherwise, it may not work properly.  
遵照对带翼仔的开关的安装口厚度及尺寸规定，否则会影响安装。
2. During the installation of switch, please apply force to the part of housing and flange not directly to the knob.  
安装翘板开关时，应向外壳及凸缘部分施力，不可以直接对操作按钮施力。
3. Generally, a high rating switch maybe not suitable for a rating less than 100mA of circuit. Some special designs of contacts are the solution of a low current rating. Please contact us for detail.  
大额定电流的开关不能用在小电流 (小于100毫安) 的电路，微小电流的触点应做特殊处理。如有类似的问题请联系我们。
4. The duration and temperature of welding and wave soldering are critical. Generally, the wattage of the soldering iron is 50~70W, the duration of welding is within 3 seconds, the duration of wave soldering is 3~4 second and the chamber temperature is below 260°C.  
焊线或过波峰炉时必需注意温度及时间。焊线选用50~70瓦的恒温烙铁，上锡时间控制在3秒以内，过波峰炉时间控制在3~4秒，炉温控制在260度以下。



**ARC**



16

**CRD**



21

**DRH-single rocker**



26

**ARD**



16

**CRE**



22

**DRH-1X15 / 2X15**



27

**ARG**



17

**CRP**



23

**DRX**



28

**BRB**



18

**CRT**



24

**ERA**



29

**BRF**



19

**DRB**



25

**ERB**



29

**BRQ**



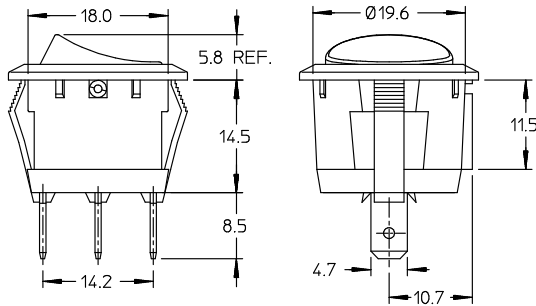
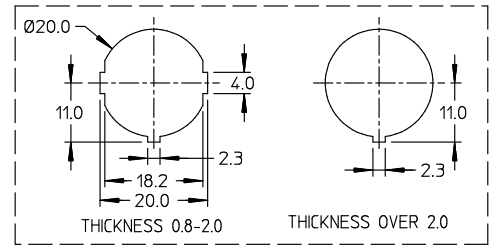
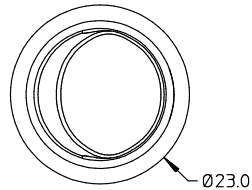
20

**DRD**



25

# ARC



PANEL CUTOUT

- single pole, single throw
- ratings
  - 15A 125VAC, 7.5A 250VAC
  - 15A 125VAC, 6A 250VAC
  - 12A 125VAC, 6A 250VAC
  - 12A 250VAC T85
  - 10A 250VAC T85
  - 6A 250VAC T85



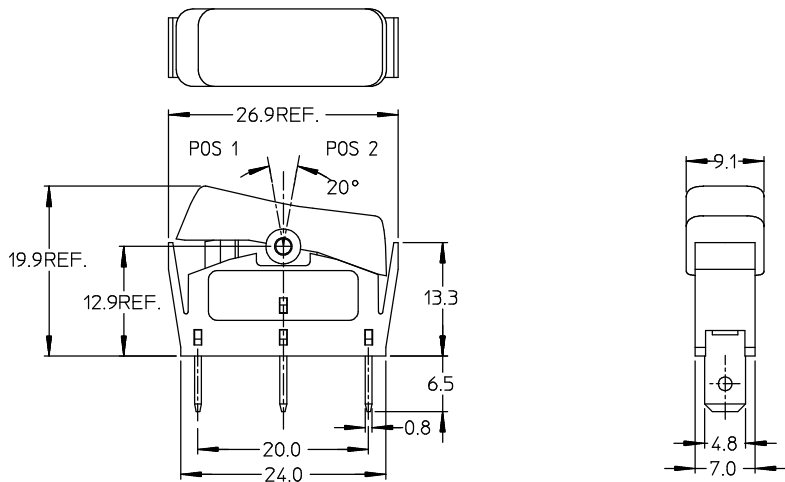
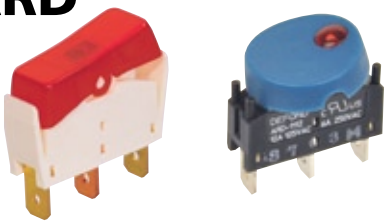
Rocker Switch

## ARC-XXXX

(X) - X - X X X X X - XXX

H	T105 for UL	<table border="1"> <tr> <td>O</td> <td>ON-OFF 1 2</td> </tr> <tr> <td>N</td> <td>ON-OFF W/LAMP 1 2 3</td> </tr> </table>	O	ON-OFF 1 2	N	ON-OFF W/LAMP 1 2 3	C	F	L	1	330-570 gf
O	ON-OFF 1 2										
N	ON-OFF W/LAMP 1 2 3										

# ARD



- single pole, single throw
- ratings
  - 12A 125VAC, 6A 250VAC
  - 6(2)A 250VAC T100



## ARD-XXXX

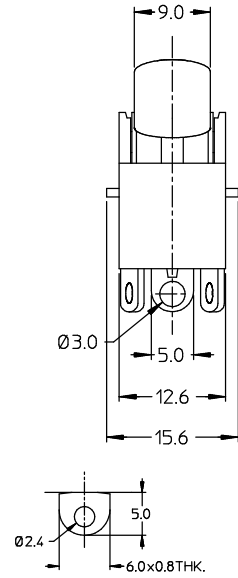
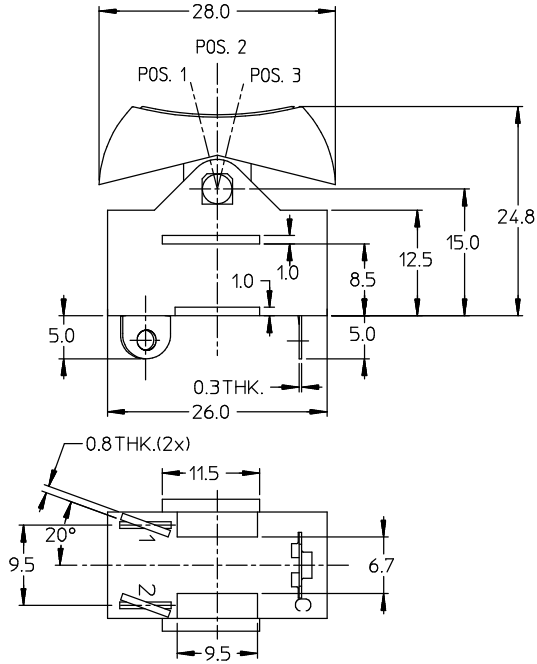
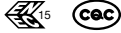
- X - X X X X X - XXX

<table border="1"> <tr> <td>O</td> <td>ON-OFF 2 3</td> </tr> <tr> <td>N</td> <td>ON-OFF W/LAMP 1 2 3</td> </tr> </table>	O	ON-OFF 2 3	N	ON-OFF W/LAMP 1 2 3	<table border="1"> <tr> <td>A</td> <td></td> </tr> <tr> <td>D</td> <td></td> </tr> </table>	A		D		<table border="1"> <tr> <td>A</td> <td></td> </tr> <tr> <td>D</td> <td></td> </tr> </table> <p>For D Housing</p>	A		D		L	1	200 ± 100gf For knob A
O	ON-OFF 2 3																
N	ON-OFF W/LAMP 1 2 3																
A																	
D																	
A																	
D																	
				3	480±200gf For knob D												

# ARG



- single pole, three position multi-circuit, momentary
- ratings
  - 15A 125VAC, 7.5A 250VAC T85/T65
  - 10A 250VAC  $\mu$  T85 5E4



翘板开关

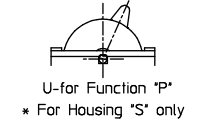
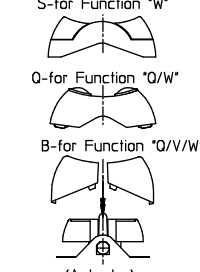
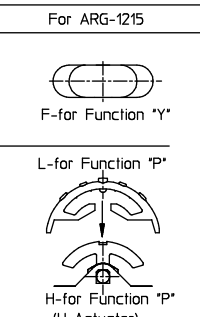
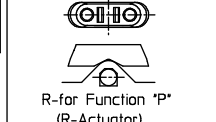
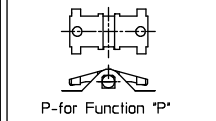
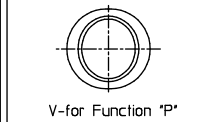
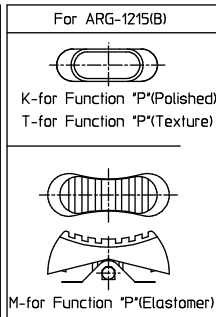
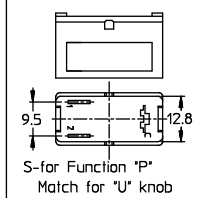
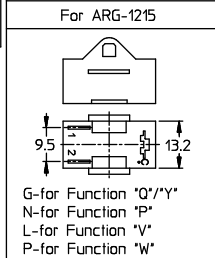
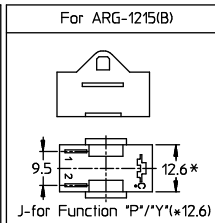
## ARG-XXXX

(X) - X - X X X X X - XXX

B	HOUSING WIDTH: 12.6mm
	HOUSING WIDTH: 13.2mm

	POS. 1	POS. 2	POS. 3
P	OFF	C-1	C-1-2
Q	C-2	C-1	C-1-2
V	* (OFF)	C-1	C-1-2
W	* (C-2)	C-1	* (C-1-2)
Y	C-1	OFF	C-1-2

(\*) Momentary function

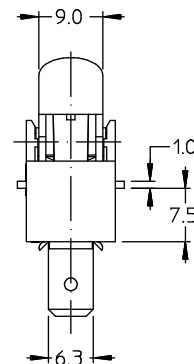
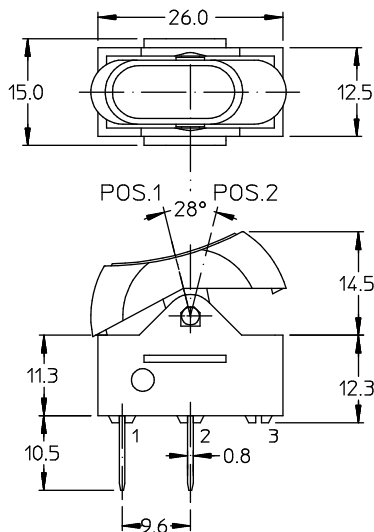


1	350~1350gf Base on P function, depend on K knob
---	---

# BRB



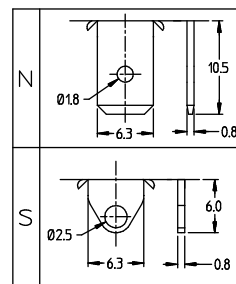
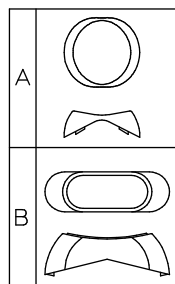
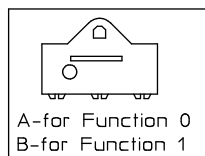
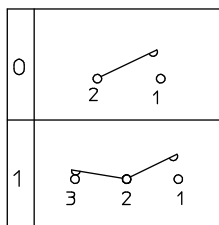
- single pole, single / double throw
- ratings
  - 16A 125VAC, 8A 250VAC T85
  - 13A 250VAC T125



## BRB-XXXX

(X) - X - X X X X X X - XXX

T	UL_T85
---	--------



1	550±250g
2	430±120g

# BRF



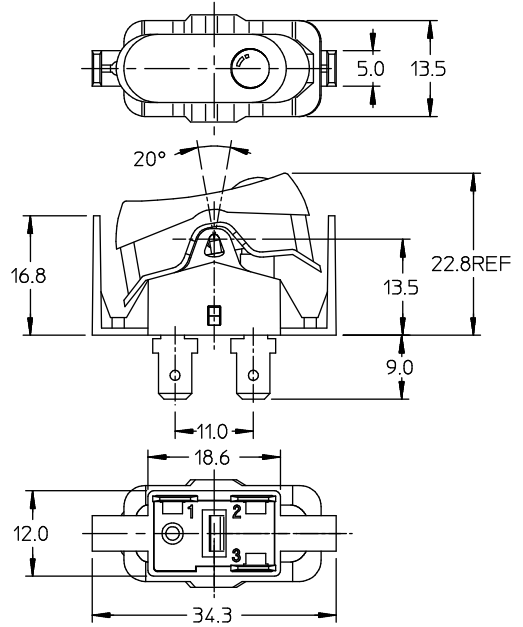
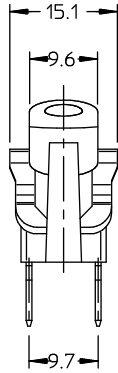
• single pole, single throw

• ratings

- 15A 125VAC, 7.5A 250VAC T105  
12A 125VAC, 6A 250VAC T105



- 16(4)A 250VAC T125/55  
16A 250VAC T125/55  
10A 250VAC T125/55  
6(2)A 250VAC T125/55



## BRF-XXXX

- **X** - **X** **X** **X** **X** **X** **X** - **XXX**

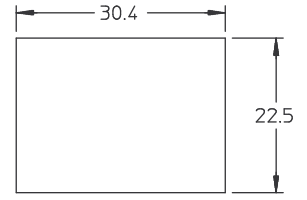
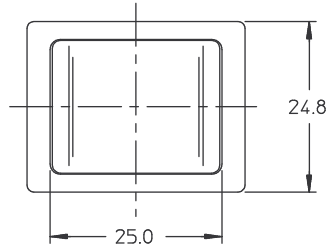
O	ON-OFF(NO LIGHTED) 	A		A		1 150~450g	
N	ON-OFF(WITH LIGHTED) 	B		B			
DM	MOMENTARY ON WITH LED 	C		C			
NM	MOMENTARY ON WITH LIGHTED 	D		D			
				F		H	

# BRQ



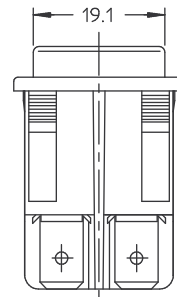
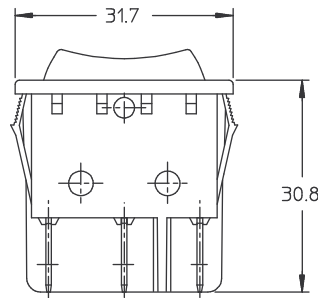
Rocker Switch

- single / double pole, single / double throw centre-off, momentary on, momentary off
- ratings
  - 10A 250VAC, 20A 125VAC 3/4HP 125/250VAC
  - 16(8)A 250VAC T125



PANEL CUTOUT

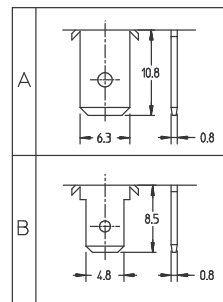
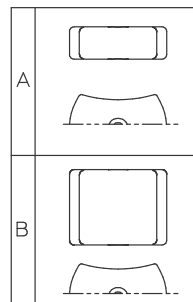
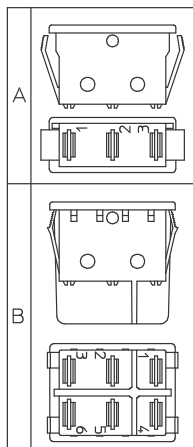
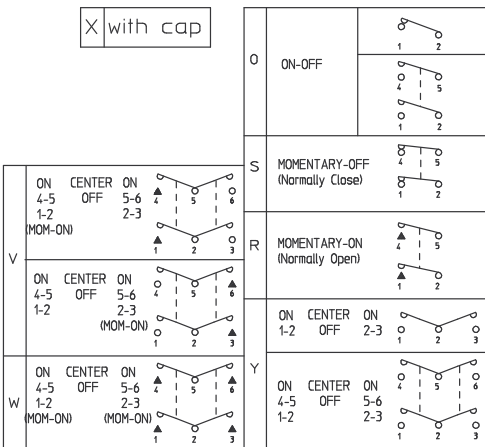
NOMINAL THICKNESS 2.0mm



## BRQ-XXXX

(X) - X - X X X X X X - XXX

X with cap



1	1.0kg+/-0.4kg
2	1.5kg+/-0.5kg
3	Mom. ON: 1.5kg+/-0.5kg
4	0.9kg+/-0.3kg
5	1.2kg+/-0.4kg
6	0.55kg+/-0.2kg
7	0.4kg+/-0.25kg
8	0.8kg+/-0.4kg



# CRD



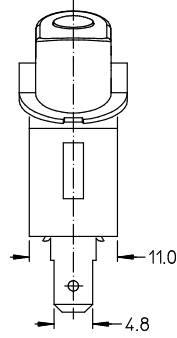
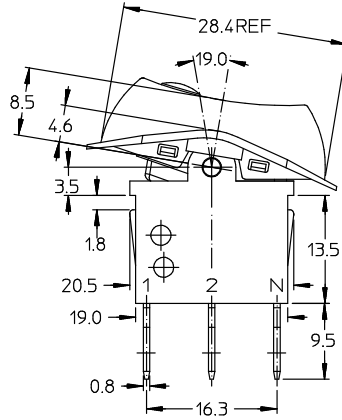
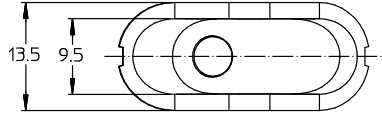
• single pole, single throw

• ratings

- 15A 125VAC, 7.5A 250VAC  
T100/T85



- 10A 250VAC T100  
8A 250VAC T100  
6A 250VAC T100



## CRD-XXXX

(X)

- X

- X

X

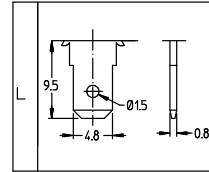
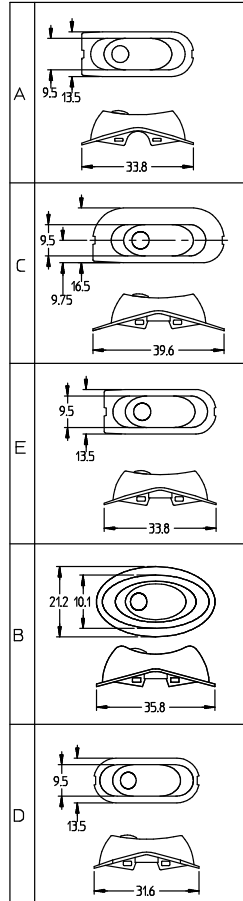
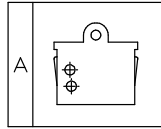
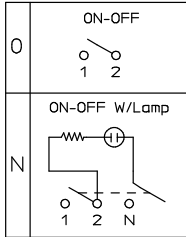
X

X

X

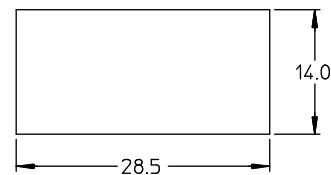
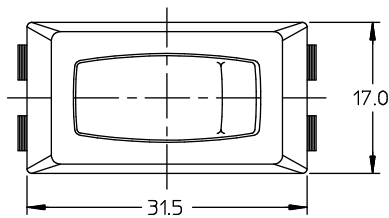
- XXX

H T100 for UL



1 300~600gf

# CRE

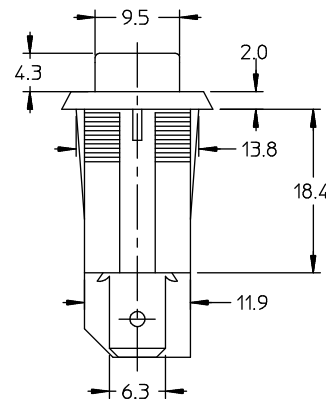
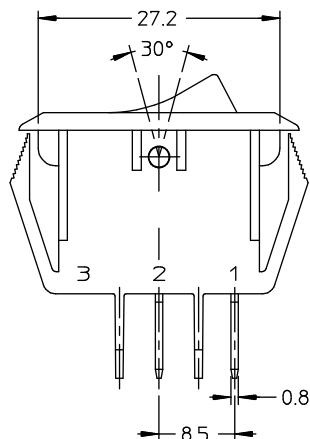


PANEL CUTOUT  
NOMINAL THICKNESS 2.0mm

- single pole, single / double throw centre-off, momentary on, momentary off

• ratings

- 16A 125VAC, 8A 250VAC
- 3/4HP 125/250VAC
- 16A 125VAC, 8A 250VAC
- 10(4)A 250VAC, T85 with  $\mu$  or not

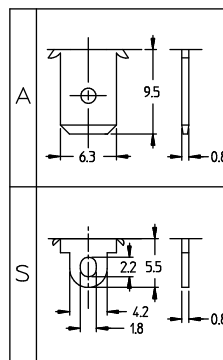
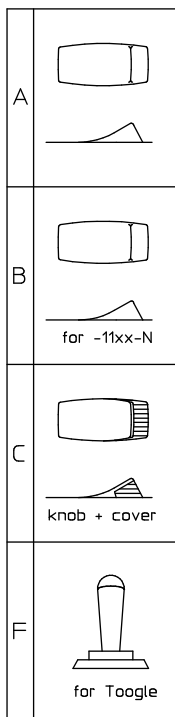
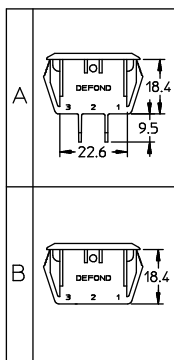


## CRE-XXXX

(X) - X - X X X X X X - XXX

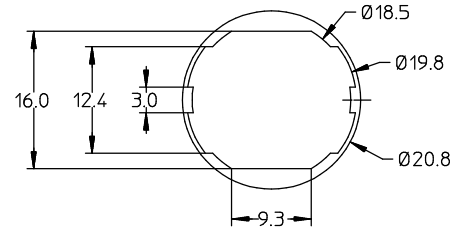
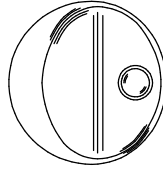
P	HP Rating
S	Dustproof
T	Toggle type

0	ON-OFF 
1	ON-ON 
N	Lighted ON-OFF 
R	MOMENTARY ON 
Y	CENTER OFF 



1	400~900g
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# CRP



PANEL CUTOUT

NOMINAL THICKNESS 1.0 to 2.5mm

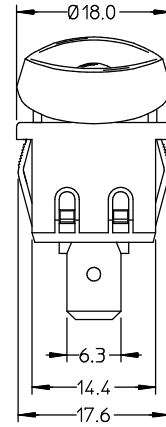
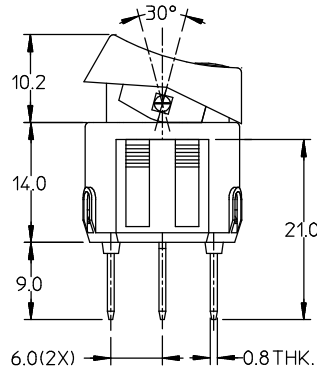
- single pole, single throw

- ratings

- 12A 125VAC, 6A 250VAC T105

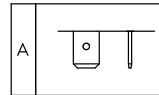
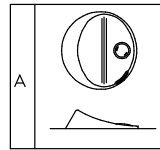
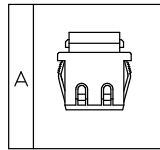
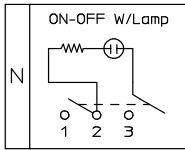


- 10(4)A 250VAC T85



## CRP-XXXX

- **X** - **X** **X** **X** X **X** - XXX



1 150~450gf

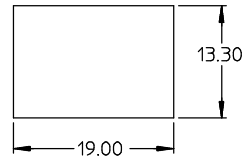
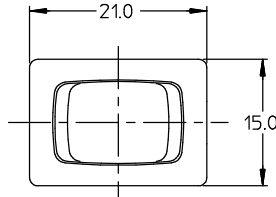
# CRT



- single pole, single / double throw, centre-off, momentary on, momentary off

• ratings

- UL 1054:
  - 15A 125VAC, 7.5A 250VAC
  - 3/4HP 125VAC/250VAC
  - 6A 125VAC, 3A 250VAC
  - T85/65

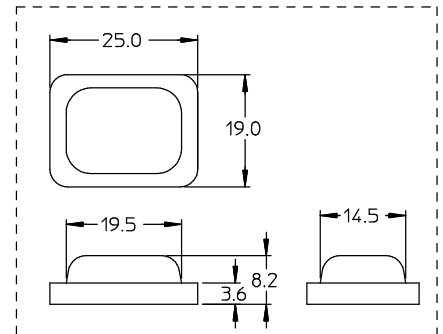
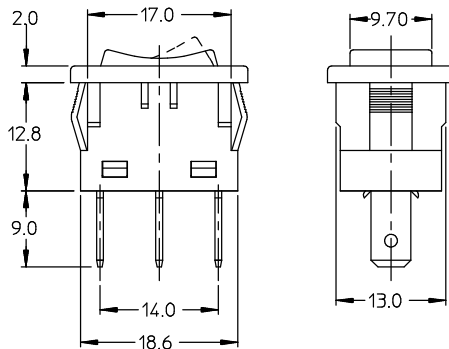
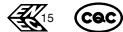


PANEL CUTOUT  
NOMINAL THICKNESS 1.2 to 3.0mm

- UL 61058:
  - 16GP max. 125V~ 10.1GP max. 250V~
  - 16RA max. 125V~ 10.1RA max. 250V~
  - 6E3/1E4 T65/T85 with  $\mu$  or not

- UL 61058:
  - 6(6)A 125V~ 6E3/5E4 for CRT-11XX-0

- 10(4)A 250VAC 1E4
- 6(4)A 250VAC 5E4
- T85 with  $\mu$  or not



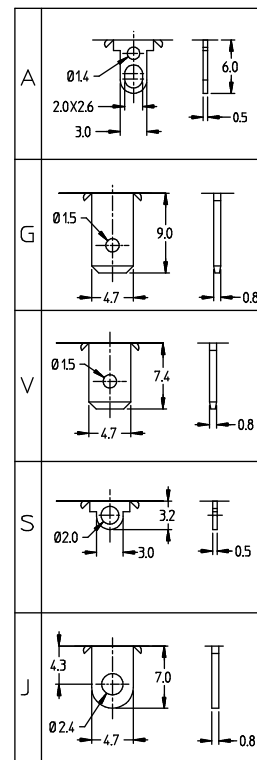
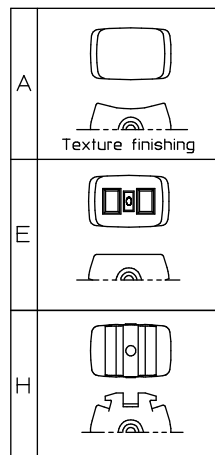
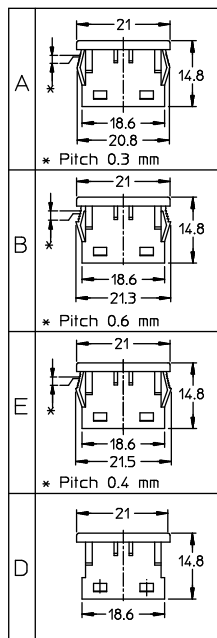
PVC CAP OPTION

## CRT-XXXX

(X) - X - X X X X X X - XXX

A	without $\mu$
B	cap + $\mu$
C	without $\mu$
	+ cap
H	T125(IEC)
X	with wire

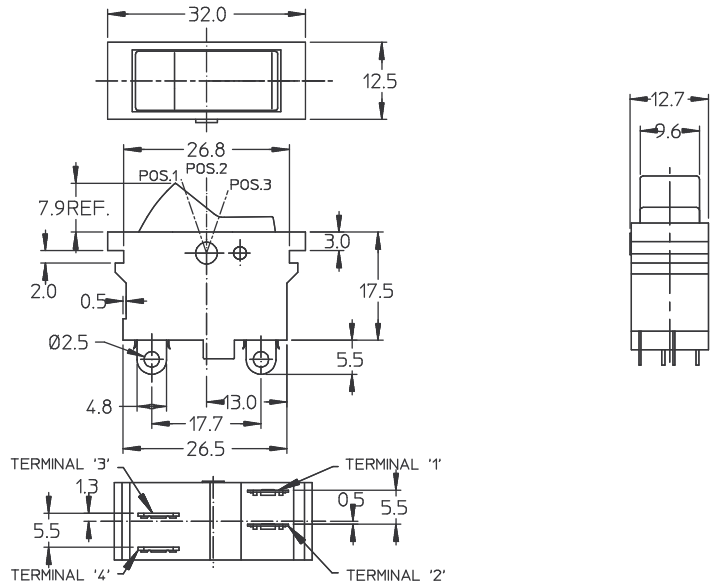
O	ON-OFF For CRT-11XX 
R	ON-ON For CRT-12XX 
S	MOMENTARY ON For CRT-11XX 
Y	MOMENTARY OFF For CRT-11XX 
	CENTER OFF For CRT-12XX 



# DRB



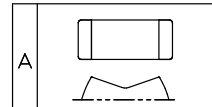
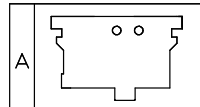
- double pole, single / double throw
- ratings
  - 13A 125VAC, 6.5A 250VAC
  - 10A 250VAC T85
  - 6A 250VAC T85



## DRB-XXXX

- **X** - **X** **X** **X** **X** - **XXX**

P	position	1	2	3
	CIRCUIT	OFF	1-3	1-3 2-4

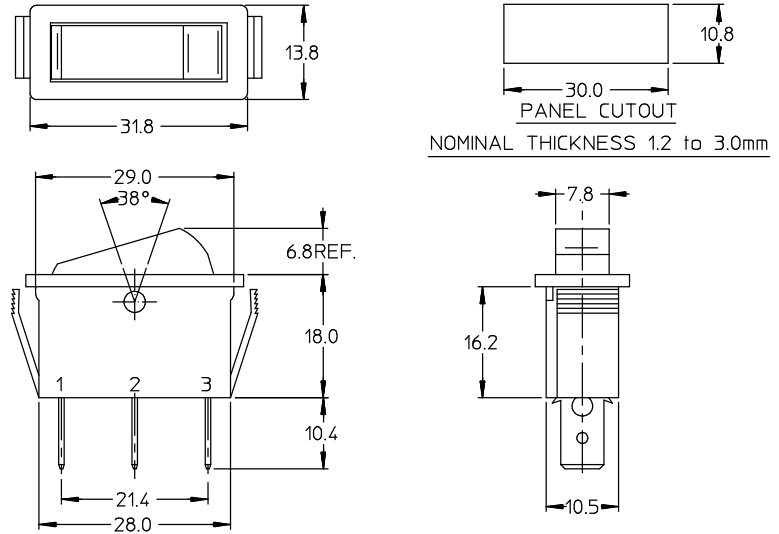


1 | 600~2100gf

# DRD



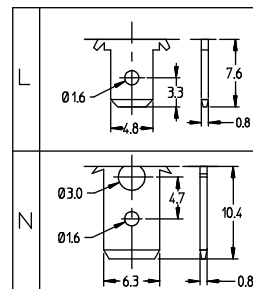
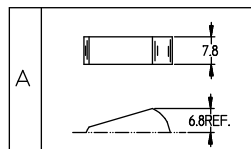
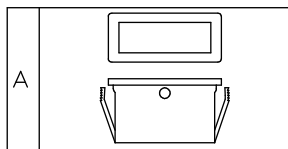
- single pole, single throw
- ratings
  - 12A 125VAC T105
  - 15(3)A 250VAC T85
  - 12(3)A 250VAC T85



## DRD-XXXX

- **X** - **X** **X** **X** **X** - **XXX**

O	ON-OFF 
N	ON-OFF WITH LAMP 



1 | 550+200 gf

# DRH-single rocker



Rocker Switch

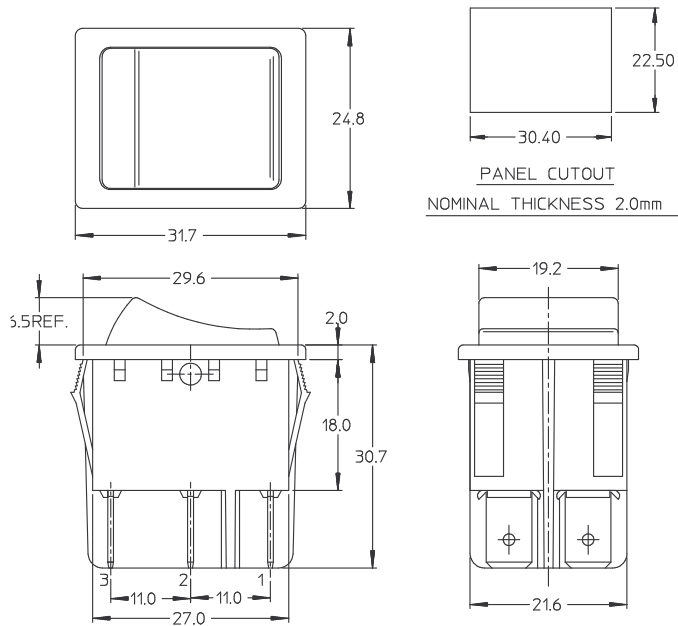
- single / double pole, single / double throw momentary on, momentary off lighted & un-lighted version

• ratings

- 20A 125VAC, 10A 250VAC
- 3/4HP 125-250VAC
- 20A 125VAC, 3/4HP 125VAC
- 16A 250VAC
- 15A 125VAC
- T105/T65



- 16(8)A 250VAC T125/55 1E4 or 5E4
- 16(6)A 250VAC T125/55 1E4 or 5E4

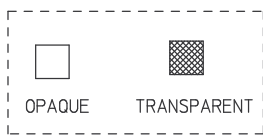


PANEL CUTOUT  
NOMINAL THICKNESS 2.0mm

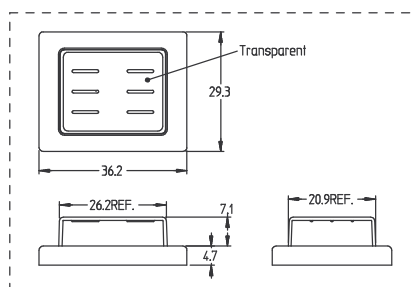
## DRH-XXXX

- **X** - **X** **X** **X** X **X** - XXX

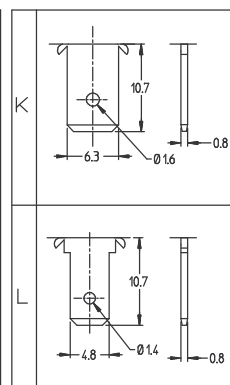
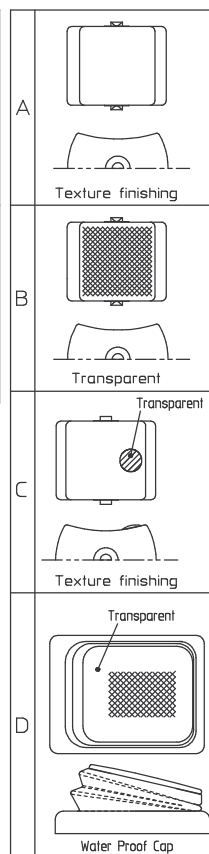
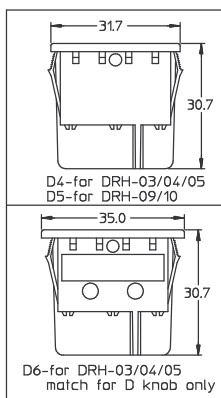
CIRCUIT	FUNCTION		CIRCUIT DIAGRAM	LENS
	POS. 1	POS. 2		
03	ON 1-2 4-5	OFF		
04	ON 1-2 4-5	OFF		
05	ON 1-2 4-5	OFF		
09	ON 1-2 4-5	ON 2-3 5-6		
10	ON 1-2 4-5	ON 2-3 5-6		



ROCKER OPTIONS



PVC CAP OPTION(For D4/D5 housing)



1	200-500g for 1P
2	300-900g for 2P

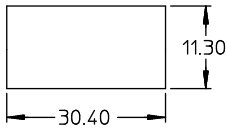
# DRH-1X15 / 2X15



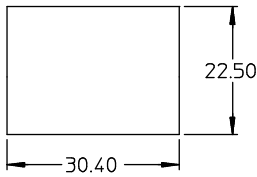
- single / double pole, single / double throw lighted & un-lighted version

• ratings

- 20A 125VAC, 3/4HP 125-250VAC
- 15A 125VAC, 7.5A 250VAC
- 3/4HP 125-250VAC
- T105/T65
- 15A 125VAC T105/T65
- 16(8)A 250VAC T125/55 1E4 or 5E4
- 16(6)A 250VAC T125/55 1E4 or 5E4



For DRH-1X15

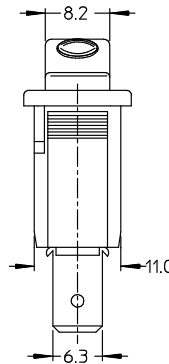
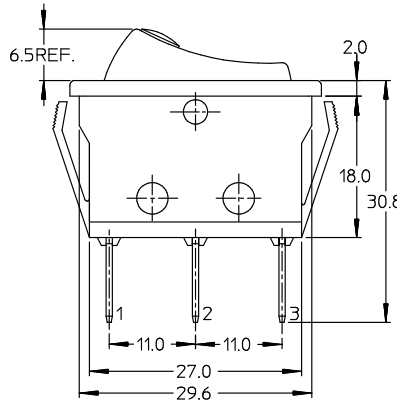
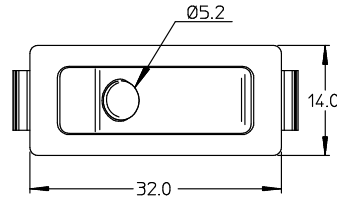


For DRH-2X15

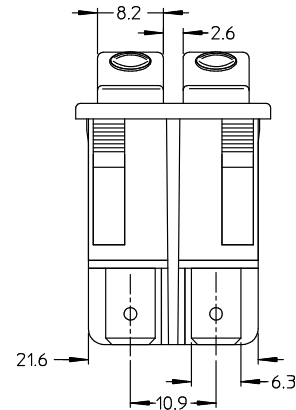
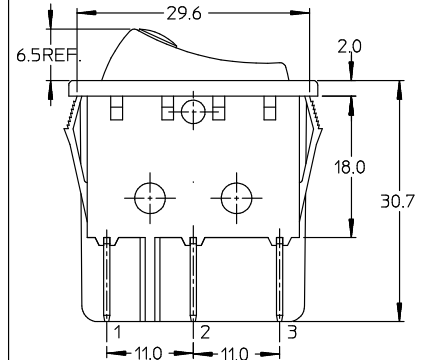
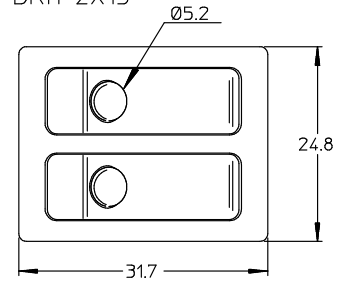
PANEL CUTOUT

NOMINAL THICKNESS 2.0mm

DRH-1X15



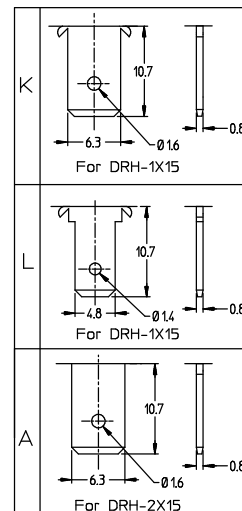
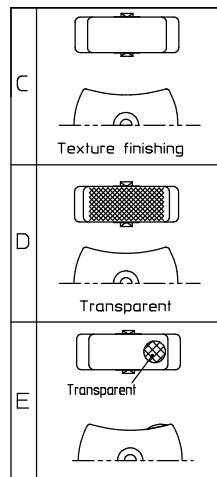
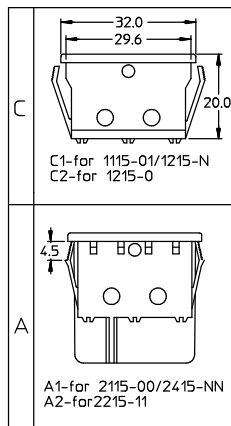
DRH-2X15



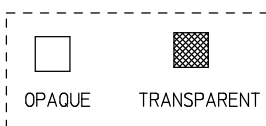
## DRH-XXXX

- **X** - **X** **X** - **XXX**

NAME	FUNCTION		CIRCUIT DIAGRAM	LENS (OPTIONS)
	POS. 1	POS. 2		
DRH-1115-01	ON 1-2	OFF		
DRH-1215-N	ON 1-2	OFF		
DRH-1215-0	ON 1-2	ON 2-3		
DRH-2115-00	ON 1-2 4-5	OFF		
DRH-2215-11	ON 1-2 4-5	ON 2-3 5-6		
DRH-2415-NN	ON 1-2 4-5	OFF		

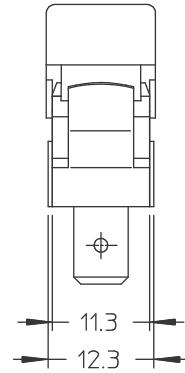
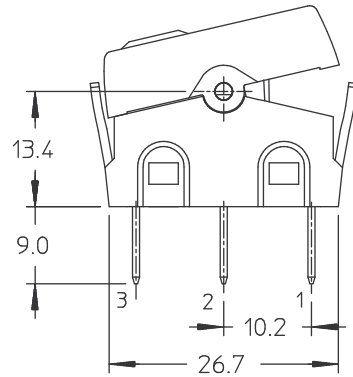
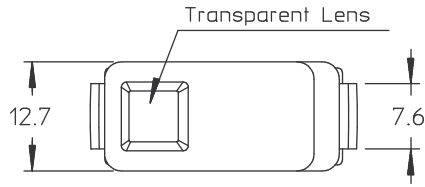


1 200~650g



ROCKER OPTIONS

# DRX



- single pole, single throw lighted & un-lighted version

• ratings

- 15A 125VAC, 7.5A 250VAC T105
- 12A 125VAC, 6A 250VAC T105

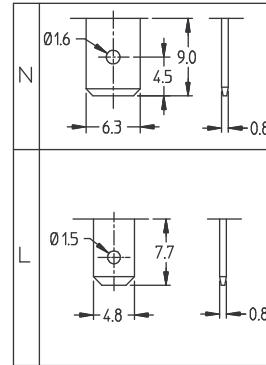
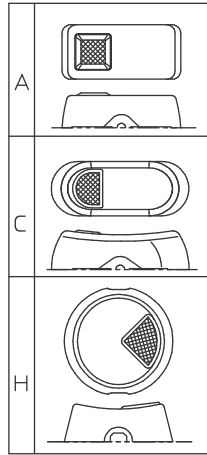
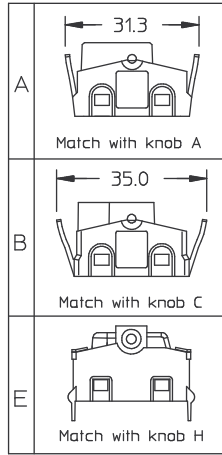
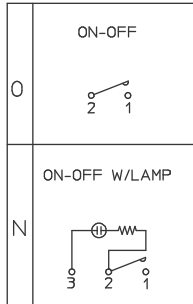


- 13A 250VAC 10(4)A 250VAC 8A 250VAC 6(2)A 250VAC 5E4 T100 or T100/55



## DRX-XXXX

- **X** - **X** **X** **X** X **X** - XXX



2	200~400g for A, C knob
3	300~950g for H knob



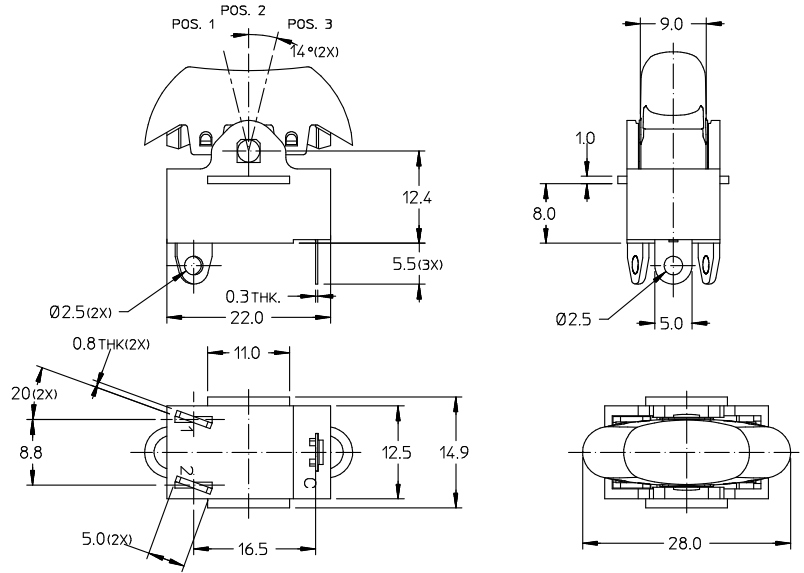
# ERA



• single pole, three position

• ratings

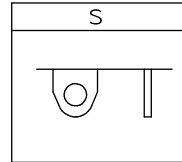
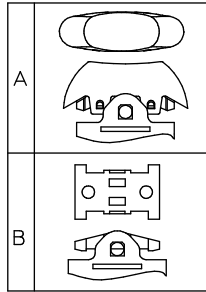
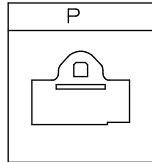
- 15.1A 125VAC, 7.5A 250VAC T85
- 10A 250VAC 1E4 or 5E4 T85  $\mu$
- 6A 250VAC 1E4 or 5E4 T85  $\mu$



## ERA-XXXX

- **X** - **X** **X** **X** X **X** - XXX

P		
POS. 1	POS. 2	POS. 3
OFF	C-1	C-1-2



1	700~1800gf
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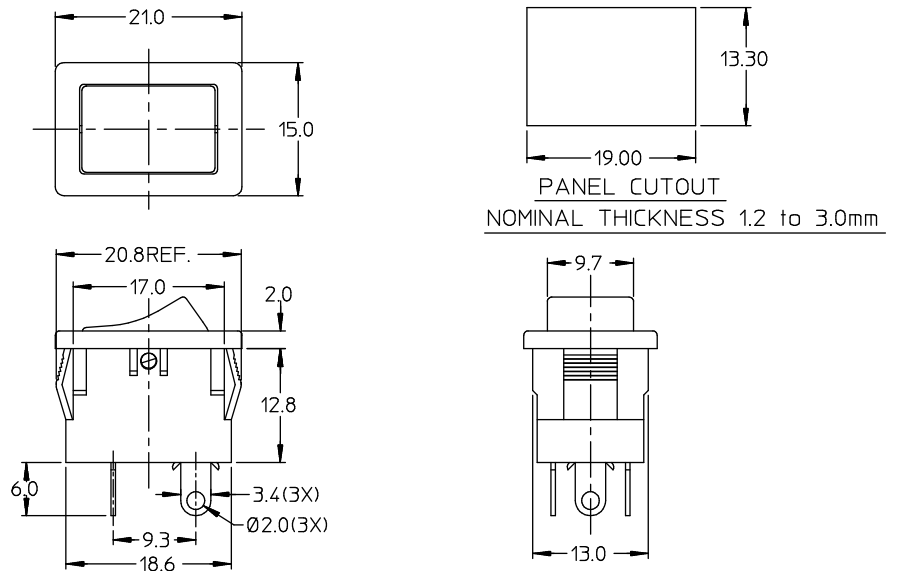
# ERB



• single pole, three position multi-circuit, momentary

• ratings

- 15A 125VAC, 7.5A 250VAC T85
- 10A 250VAC  $\mu$  T85
- 15A 125VAC  $\mu$  T85

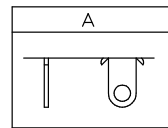
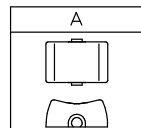
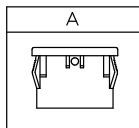


## ERB-XXXX

- **X** - **X** **X** **X** X **X** - XXX

POS. 1			POS. 2			POS. 3		
0	OFF	C-1	OFF	C-1	C-1-2	OFF	C-1	C-1-2
R	*(OFF)	C-1	*(OFF)	C-1	C-1-2	*(OFF)	C-1	C-1-2

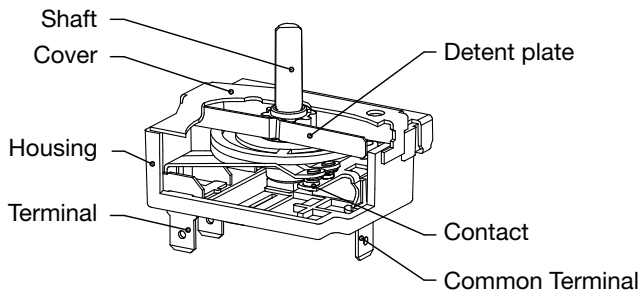
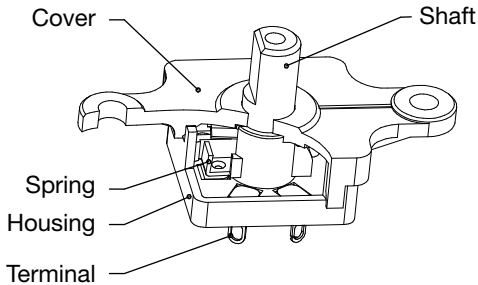
(\*)Momentary function



1	500~2100gf
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# ROTARY SWITCH

## 旋转开关

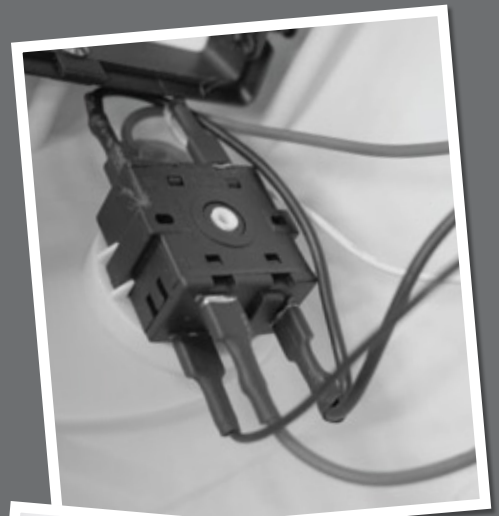


### Switch Features 特征

1. A variety of circuits and settings available  
旋转开关可提供较多操作档位及多样化电路
2. A large range of operating force and rotation angles available  
较大范围的操作力及转动角度的变化
3. Momentary function at one or both side available  
可在两端档位做成回弹式功能

### Tips 提示

1. Generally, it is not suitable for the end product required over 10,000 life cycles.  
旋转开关一般不能用于超过10,000次操作寿命的器具。
2. The operating force of the spring type is not recommended over 1kg.  
弹片式旋转开关的操作力一般只能做到1千克力左右，不能太大。
3. The duration and temperature of welding and wave soldering are critical. Generally, the wattage of the soldering iron is 50~70W, the duration of welding is within 3 second, the duration of wave soldering is 3~4 second and the chamber temperature is below 260°C.  
焊线或过波峰炉时必须注意温度及时间。焊线选用50~70瓦的恒温烙铁，上锡时间控制在3秒以内，过波峰炉时间控制在3~4秒，炉温控制在260度以下。



**AYA**



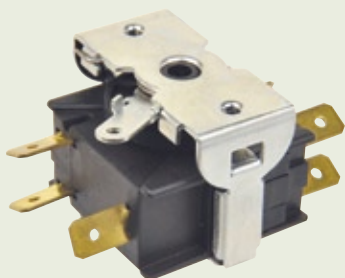
32

**CYJ**



35

**AYA-2813**



33

**CYK**



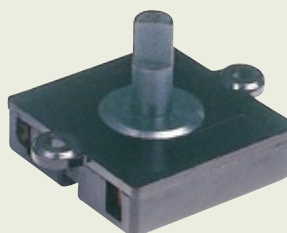
35

**CYB**



34

**DYK**



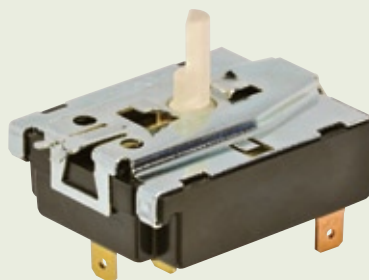
36

**CYE**



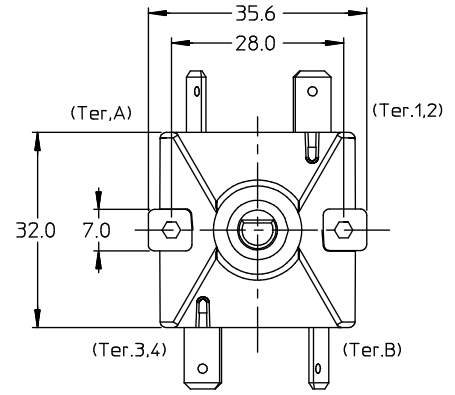
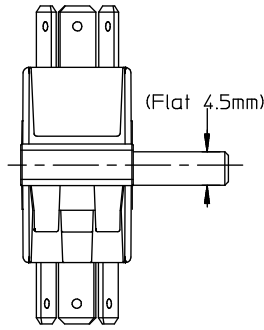
34

**DYU**



37

# AYA



• single / double pole, multi-throw

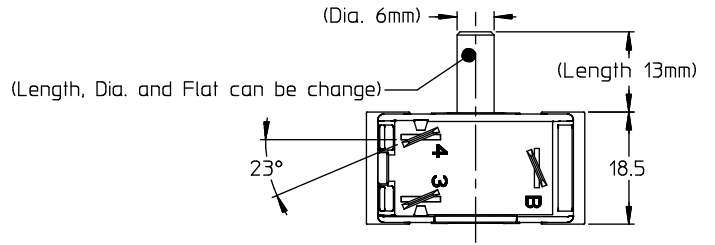
• ratings

- 15.1A 125VAC T85/T65 Max for terminal A/B

11.1A 125VAC T85/T65 Max for terminal 1/2/3/4



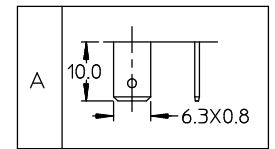
- 13(3)A 250VAC T125



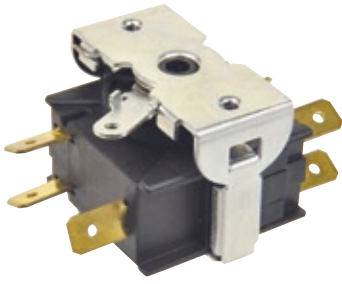
## AYA-XXXX

- **X** - X X **X** **X** X X - XXX

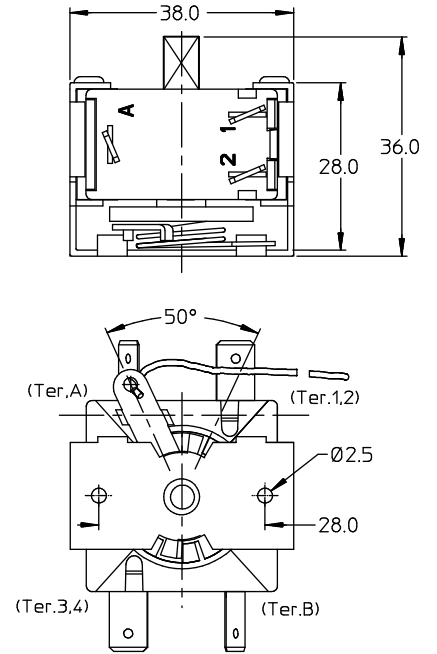
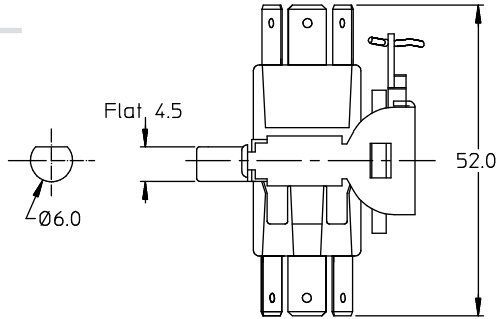
A1		E3		22X	
B3		EX		30	
D1		M1Y		32	
D7		36		35	



# AYA-2813

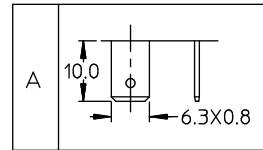
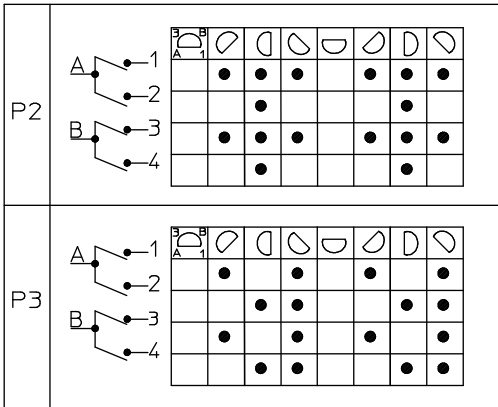


- double pole, multi-throw
- rating  
- 13(3)A 250VAC T125

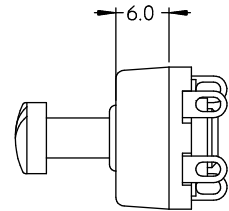
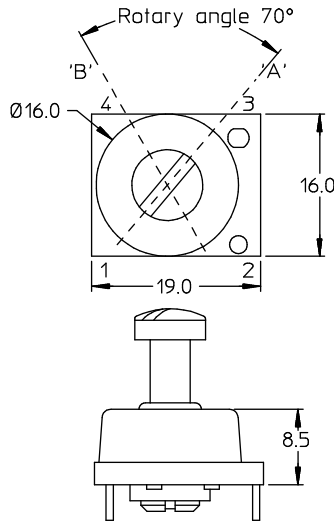


旋转开关

AYA-XXXX - **X** - X X **X** X X - XXX



# CYB



• double pole, double throw

• ratings

- 15.2A 125VAC, 7.6A 250VAC
- 10.1A 125VAC(N.I.), 5A 250VAC(N.I.)



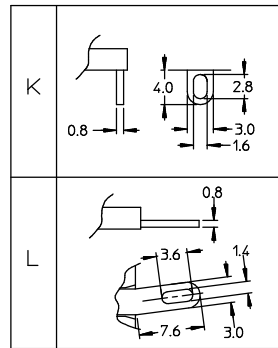
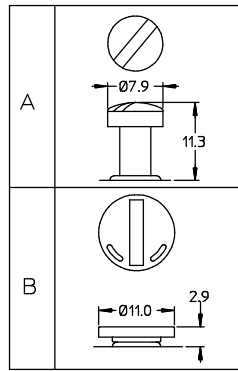
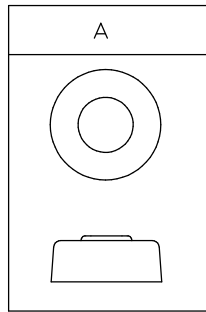
- 8A 250VAC, 16A 125VAC 4E2
- 5A 250VAC, 10A 125VAC 3E2
- T85



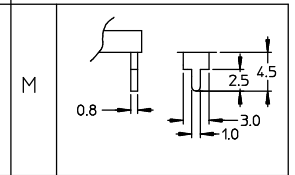
## CYB-XXXX

- **X** **X** **X** **X** - **X** **X** - **XXX**

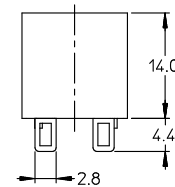
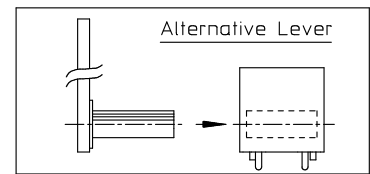
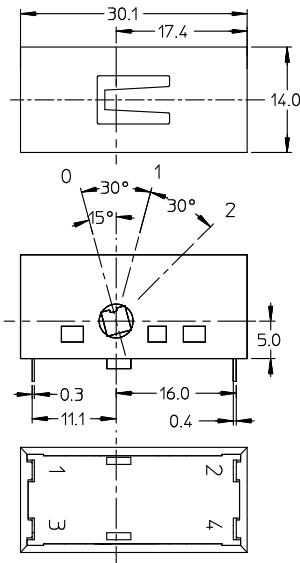
Position	Electric Circuit	
A	1-2	3-4
B	2-3	



1	0.6~2.5 kgf.cm. (for Button A)
2	0.4~1.2 kgf.cm. (for Button B)



# CYE



• double pole, double throw

• ratings

- 10.1A 125VAC, 8A 250VAC T100
- 6(2)A 250VAC T100
- 10A 250VAC T100

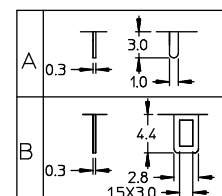
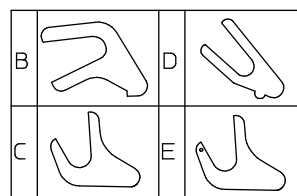
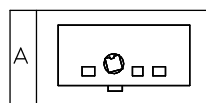


## CYE-XXXX

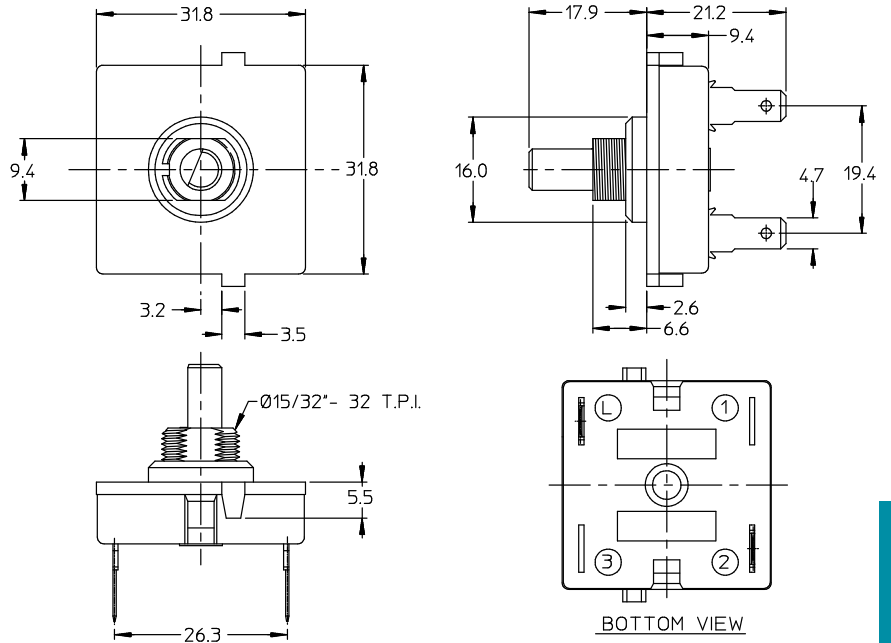
- **X** - **X** **X** **X** - **X** **X** - **XXX**

A	1-2	3-4	Position
	●	●	1
B	○	○	0
	1-2	3-4	Position
B	●	●	2
	○	○	1
B	○	○	0

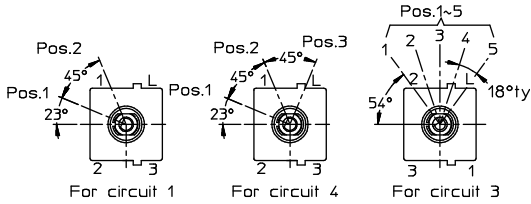
● = Closed ○ = Open



# CYJ



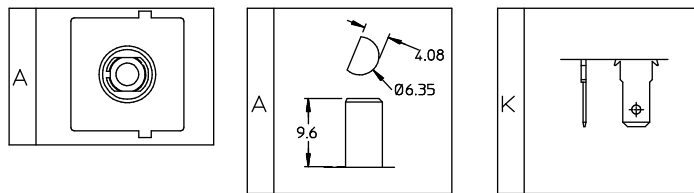
- single pole, multi throw
- ratings
  - 6A 125VAC, 3A 250VAC
  - 6(3)A 250VAC  $\mu$  T85



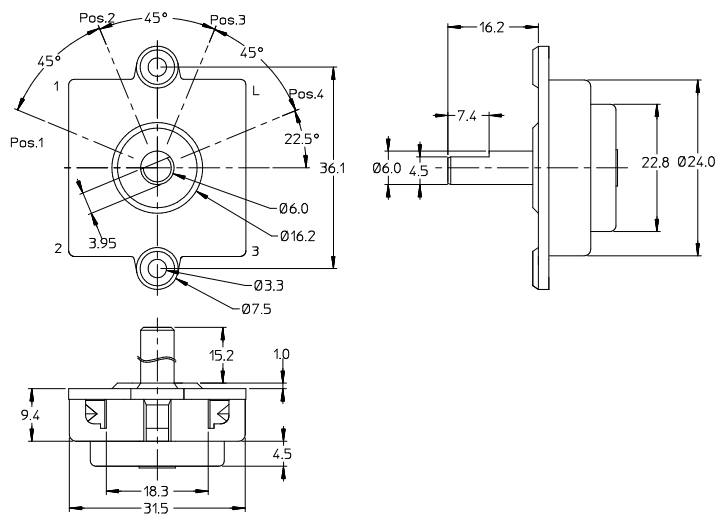
## CYJ-XXXX

- **X** - **X** **X** **X** - XXX

POSITION	1	2	3	4	5
Circuit 1	OFF	(HI) L-2			
Circuit 4	OFF	L-1	L-1-2		
Circuit 3	OFF	(LO) L-1	(MED) L-2	(HI) L-3	OFF



# CYK



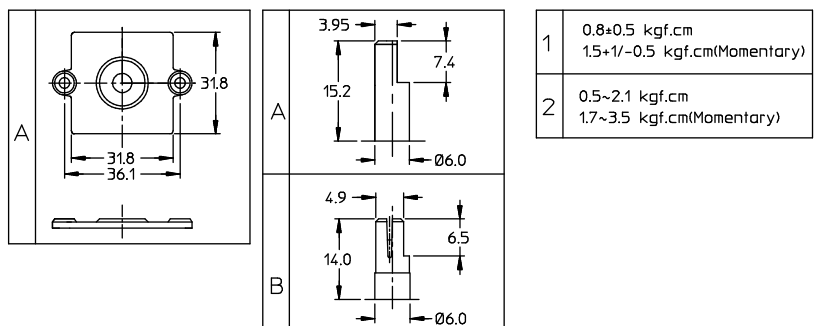
- single pole, multi-position
- ratings
  - 6A 120VAC, 3A 240VAC
  - 6(3)A 250VAC  $\mu$  T85



## CYK-XXXX

**(X)** - **X** - **X** **X** **X** - XXX

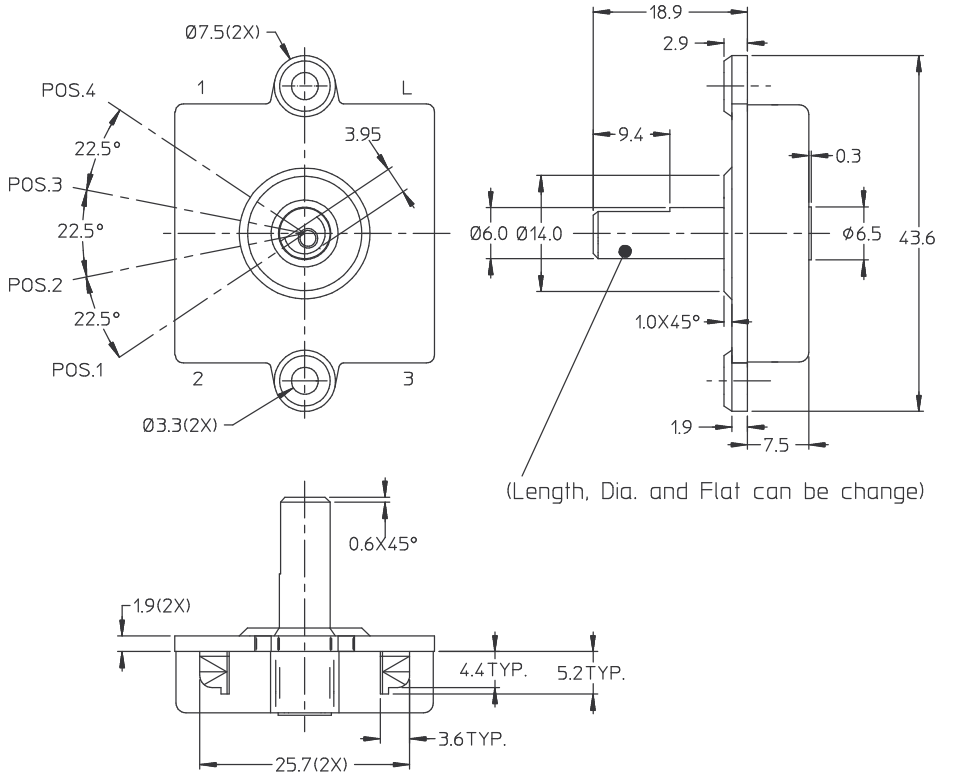
X	with wire	R	L-1	OFF (1-2)	L-3 (Momentary-ON)
1		1	L-1 (Momentary-ON)	OFF (1-2)	L-3 L-1



DYK



- single pole, multi-position
- ratings
  - 6A 120VAC, 3A 240VAC
  - 6(3)A 250VAC  $\mu$  T85



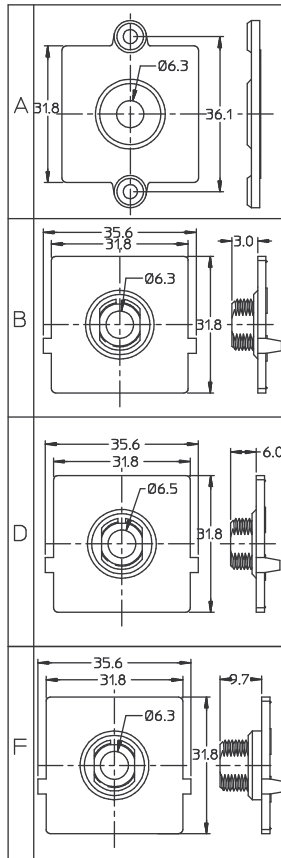
Rotary Switch

DYK-XXXX

(X) - X - X X X X - XXX

X with diode

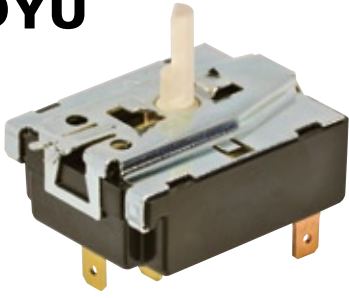
1	L-1, L-2, L-3 (45°)
2	OFF, L-1, L-2, L-3 (45°)
3	OFF, L-1, L-2, L-3 (22.5°)
4	OFF(1-2-3), L-1-3 L-1-2, L-2-3 (45°)
5	OFF(1-2), L-3-DIODE METALIC INSERT-1(1-2), L-1(1-2), OFF(1-2) (45°)
6	OFF L-1, L-2, L-3, OFF (18°)



1	0.8-0.5kgf.cm.
2	0.4-1.3kgf.cm.
3	0.6-1.7kgf.cm.
4	1-2kgf.cm.



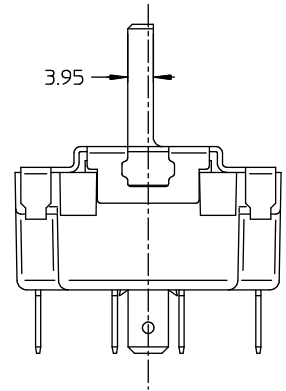
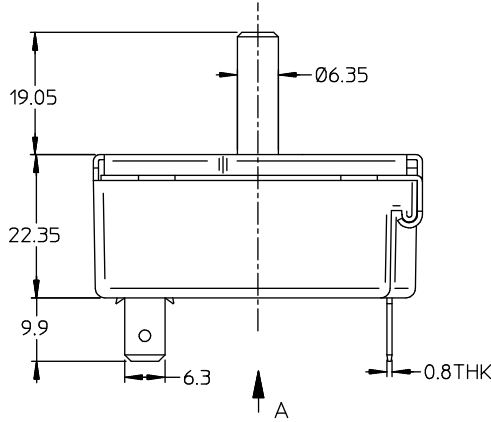
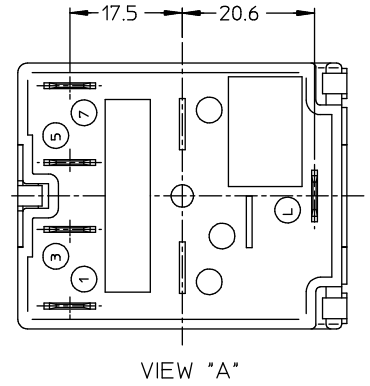
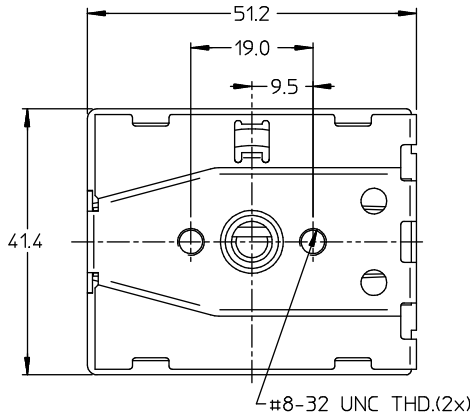
# DYU



• single / double pole, multi-position

• ratings

- 30A 1HP 120VAC, 2HP 240VAC (L)
- 25A 1HP 120VAC, 2HP 240VAC (2)
- 8A 1/3HP 120-240VAC (1.3) T75 for DYU-3/4/5/8/13
- 8A 1/3HP 120-240VAC T65 for DYU-W-05 DYU-29/30/31/34
- 20A 120-240VAC 1HP 120VAC, 2HP 240VAC T65 for DYU-W-06 DYU-20/21/38
- 8A 120-240VAC T65 for DYU-22
- 21A 120-240VAC T65 for DYU-23/26/35
- 16A 120-240VAC 1HP 120VAC, 2HP 240VAC T65 for DYU-24/25/33
- 1A 250VAC T65 for DYU-27
- 1A 120-240VAC (4-3, 4-5)
- 21A 120-240VAC (1-2) T65 for DYU-36
- 25A 120-240VAC 1HP 120VAC, 2HP 240VAC T65 for DYU-39
- 8(8)A 250VAC 25E3  $\mu$



旋转开关

## DYU-XXXX

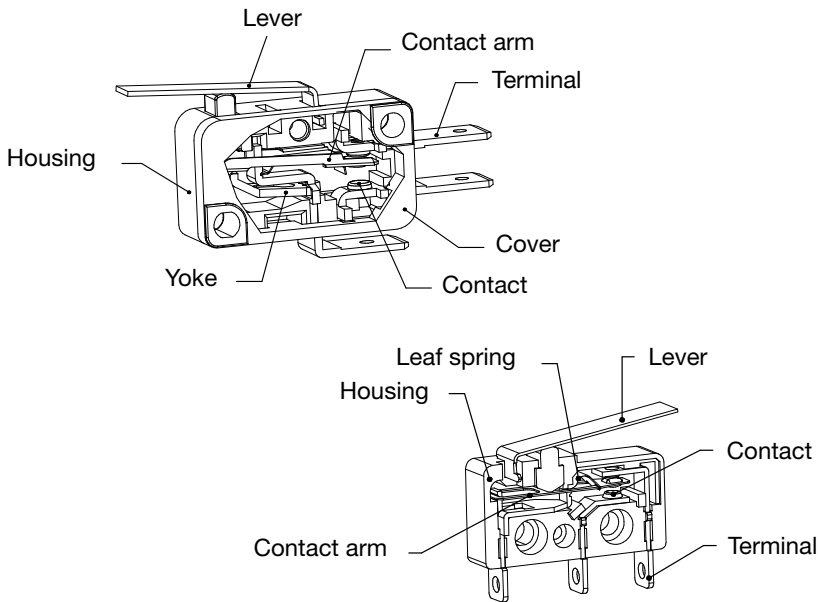
- **X** - X X X X X X X **X** - XXX

4	<table border="1"> <thead> <tr> <th>POS.</th> <th>CIRCUIT</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>OFF</td> </tr> <tr> <td>B</td> <td>L-3</td> </tr> <tr> <td>C</td> <td>L-2</td> </tr> <tr> <td>D</td> <td>L-1</td> </tr> </tbody> </table>	POS.	CIRCUIT	A	OFF	B	L-3	C	L-2	D	L-1	13	<table border="1"> <thead> <tr> <th>POS.</th> <th>FUNCTION</th> <th>ELECTRIC CIRCUIT</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>OFF</td> <td></td> </tr> <tr> <td>B</td> <td>HI SPEED</td> <td>L-1-7</td> </tr> <tr> <td>C</td> <td>ME SPEED</td> <td>L-3-7</td> </tr> <tr> <td>D</td> <td>LO SPEED</td> <td>L-5-7</td> </tr> </tbody> </table>	POS.	FUNCTION	ELECTRIC CIRCUIT	A	OFF		B	HI SPEED	L-1-7	C	ME SPEED	L-3-7	D	LO SPEED	L-5-7	38	<table border="1"> <thead> <tr> <th>POS.</th> <th>CIRCUIT</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>OFF</td> </tr> <tr> <td>B</td> <td>L1-2</td> </tr> <tr> <td>C</td> <td>L1-1</td> </tr> <tr> <td>D</td> <td>L1-5</td> </tr> <tr> <td>E</td> <td>L1-3</td> </tr> <tr> <td>F</td> <td>L1-4</td> </tr> </tbody> </table>	POS.	CIRCUIT	A	OFF	B	L1-2	C	L1-1	D	L1-5	E	L1-3	F	L1-4			
POS.	CIRCUIT																																														
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39	<table border="1"> <thead> <tr> <th>POS.</th> <th>CIRCUIT</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>OFF</td> </tr> <tr> <td>B</td> <td>L1-4</td> </tr> <tr> <td>C</td> <td>L1-1</td> </tr> <tr> <td>D</td> <td>L1-3</td> </tr> <tr> <td>E</td> <td>L1-2</td> </tr> <tr> <td>F</td> <td>L1-2</td> </tr> </tbody> </table>	POS.	CIRCUIT	A	OFF	B	L1-4	C	L1-1	D	L1-3	E	L1-2	F	L1-2	W05	<table border="1"> <thead> <tr> <th>POS.</th> <th>ELECTRIC CIRCUIT</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>OFF</td> </tr> <tr> <td>B</td> <td>L-1 F-2</td> </tr> <tr> <td>C</td> <td>L-2 F-3</td> </tr> <tr> <td>D</td> <td>L-3 F-4</td> </tr> <tr> <td>E</td> <td>L-4 F-5</td> </tr> </tbody> </table>	POS.	ELECTRIC CIRCUIT	A	OFF	B	L-1 F-2	C	L-2 F-3	D	L-3 F-4	E	L-4 F-5	W06	<table border="1"> <thead> <tr> <th>POS.</th> <th>CIRCUIT</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>OFF</td> </tr> <tr> <td>B</td> <td>L-1</td> </tr> <tr> <td>C</td> <td>L-2</td> </tr> <tr> <td>D</td> <td>L-3</td> </tr> <tr> <td>E</td> <td>L-4</td> </tr> <tr> <td>F</td> <td>L-5</td> </tr> <tr> <td>G</td> <td>L-6</td> </tr> </tbody> </table>	POS.	CIRCUIT	A	OFF	B	L-1	C	L-2	D	L-3	E	L-4	F	L-5	G	L-6
POS.	CIRCUIT																																														
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E	L-4																																														
F	L-5																																														
G	L-6																																														

1	15~3.6kgf.cm
2	15~4.0kgf.cm
3	15~4.3kgf.cm

# MICRO SWITCH

## 微动开关

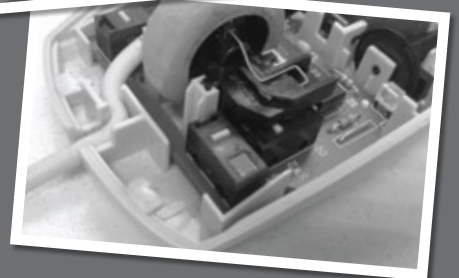
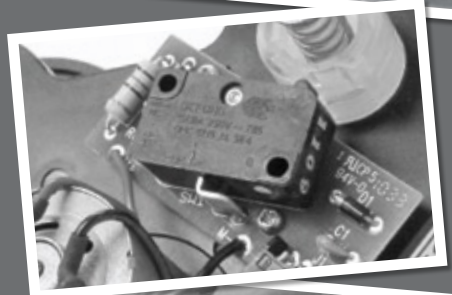
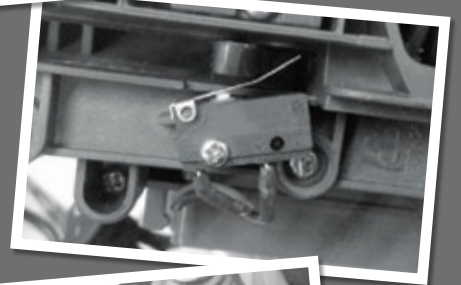


### Switch Features 特征

1. A snap action switch with a very short contact time  
微动开关触点间距小，是一种快速动作开关
2. Short travel distance; small operation force  
微动开关行程小，操作力较小
3. To set the operating force and travel distance by installing different levers  
可装配杠杆来调节操作力和行程

### Tips 提示

1. Please strictly follow the operating force, travel distance and other parameters, e.g. FP, OP and RP.  
必需按规定的行程及操作力来使用微动开关，在选用微动开关时要注意自由位置、动作位置释放位置等参数。
2. Generally, a high rating switch maybe not suitable for a rating less than 100mA of circuit. Some special designs of contacts are the solution of a low current rating. Please contact us for detail.  
大额定电流的开关不能用在小电流(小于100毫安)的电路，微小电流的触点应做特殊处理。如有类似的问题请联系我们。
3. The duration and temperature of welding and wave soldering are critical. Generally, the wattage of the soldering iron is 50~70W, the duration of welding is within 3 second, the duration of wave soldering is 3~4 second and the chamber temperature is below 260°C.  
焊线或过波峰炉时必需注意温度及时间。焊线选用50~70瓦的恒温烙铁，上锡时间控制在3秒以内，过波峰炉时间控制在3~4秒，炉温控制在260度以下。

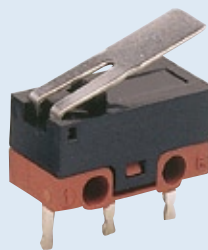


**CME**



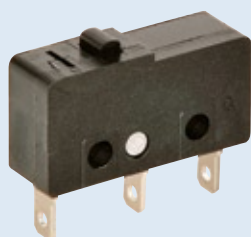
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**DMG**



44

**DMB**



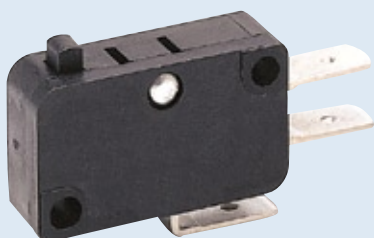
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**DMU**



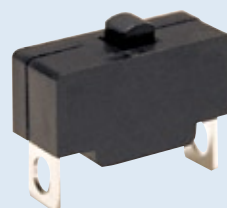
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**DMC**



42

**DMY**



45

**DME**



44

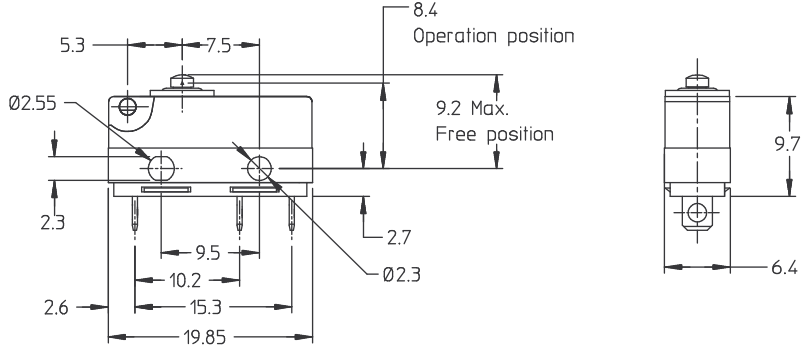
# CME



• single pole, single / double throw  
IP50 for terminal types

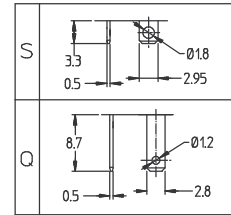
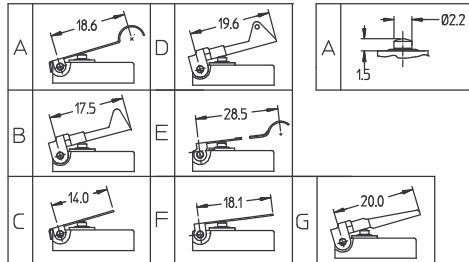
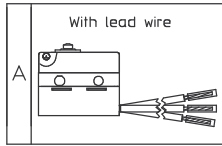
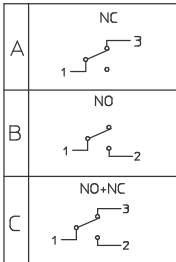
• ratings

- UL 1054: 5A 125/250VAC
- UL 61058: 5RA 125/250V~T85  $\mu$   
1E4 for 12XX, 5E4 for 11xx
- UL 61058: 3(3)A 220/250V~T85  $\mu$   
5E4 for 11XX / 12xx
- UL 61058: 3(3)A 125V~T85  $\mu$   
6E3/5E4 for 11XX  
5E4 for 12XX
- 5A 250VAC 1E4 T85  $\mu$
- 3(3)A 250VAC 5E4 T85  $\mu$



## CME-XXXX

- **X** - **(X)** - **X** **X** **X** - **XXX**



1 250g Max.

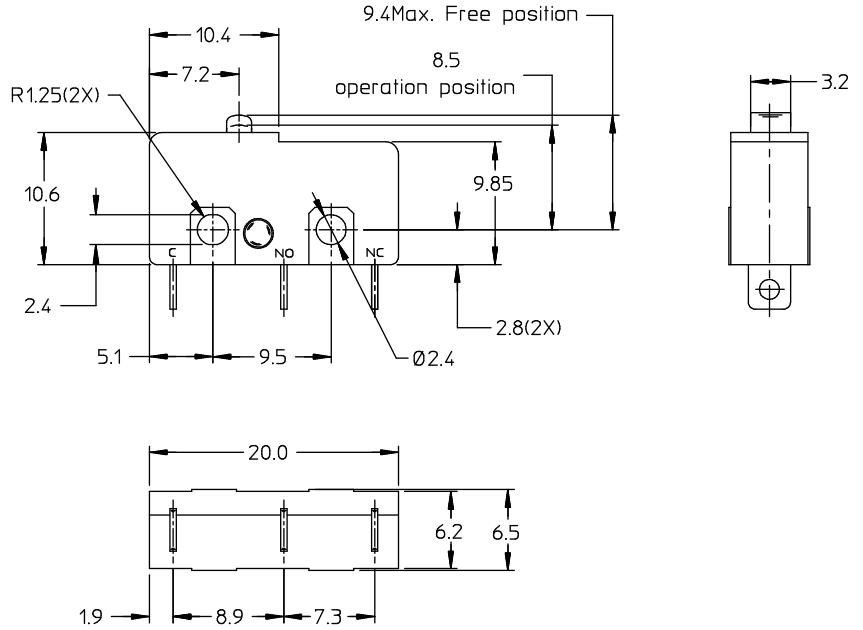
# DMB



• single pole, single / double throw

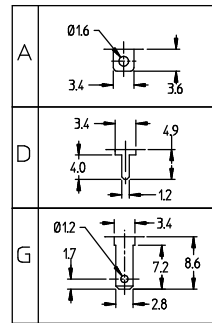
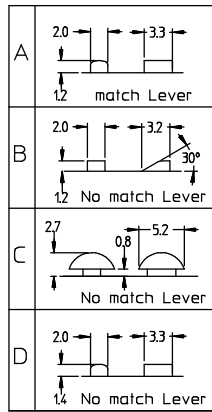
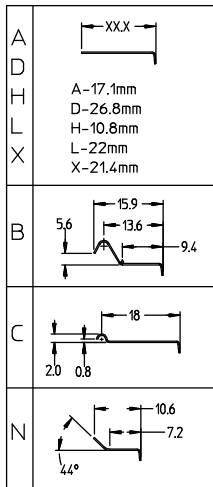
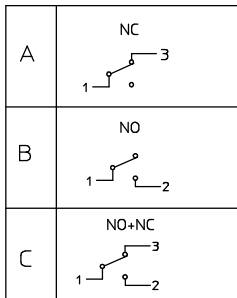
• ratings

- 10.1A 125VAC, 5A 250VAC  
0.1A 30VDC 50KC  
4A 24VDC 100KC
- 6A 125VAC, 3A 250VAC  
1/3HP 250VAC
- 8(2)A 250VAC  $\mu$  T125/T85  
3(3)A 250VAC  $\mu$  T125/T85  
3A 250VAC  $\mu$  T125/T85 5E4



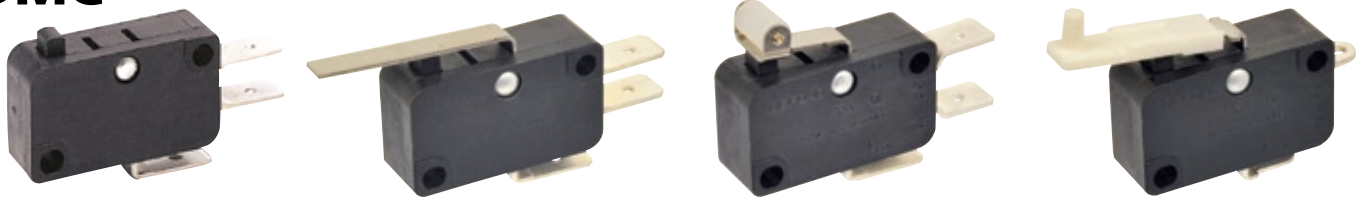
## DMB-XXXX

- **X** - **X** **X** **X** **X** - **X** - XXX

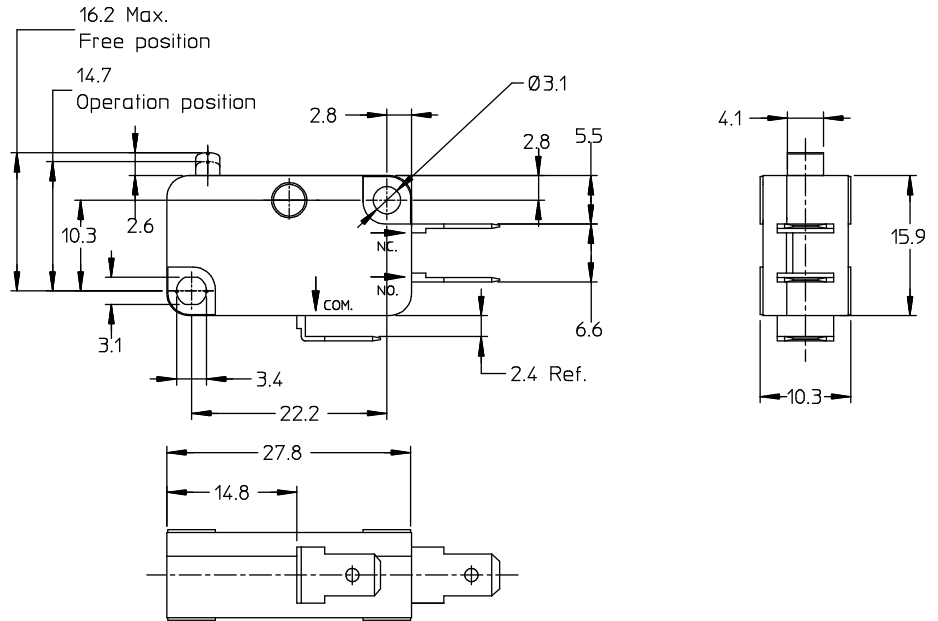


1 180gf. Max.

# DMC



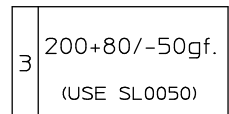
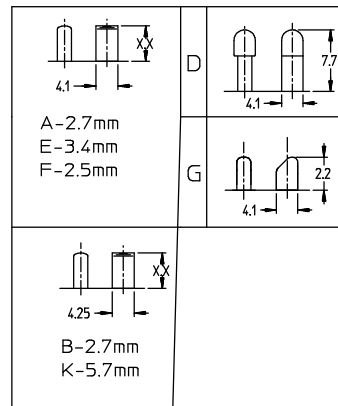
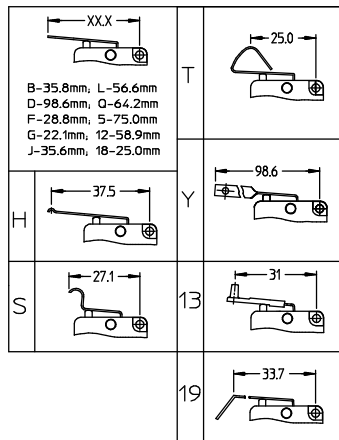
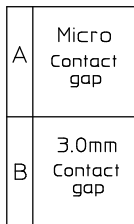
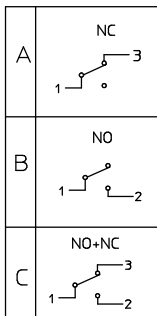
- single pole, single / double throw
- rating  
- see below



Micro Switch

## DMC-XXXX

- **X**      **X**      -      **X**      **X**      **XX**      **X** - **XXX**



### DMC RATING OPTIONS:

"UL" rating option us

- 15.1A 125/250VAC T105	- 20.2A 125VAC, 10.1A 250VAC, 1/2HP 125-250VAC T105	- 10A 24VDC T105
- 15.1A 125/250VAC, 0.5A 125VDC, 1/2HP 125-250VAC T105	- 20.2A 125VAC, 10.1A 250VAC, 1/2HP 125-250VAC	- 10A 24VDC
- 15.1A 125/250VAC, 5A 125VDC, 1/2HP 125-250VAC T75	- 6A 125/250/277VAC, 1/8HP 125/250/277VAC	- 10.1A 125/250VAC, 1/2HP 125/250VAC T150
- 12A 12VDC T105	- 5A 125/250/277VAC, 1/8HP 125/250/277VAC T125	- 10.1A 125/250VAC, 1/2HP 125/250VAC 0.05A 28VDC T150
- 15.1A 125Vac 3/4HP 125Vac for DMC-11XX		- 15A 30VDC
		- 15.1A 125/250VAC T105
		- 15.1A 125/250VAC T30

"CQC" rating option

- 15(6)A 250VAC T85  $\mu$  1E4
- 15(3)A,6(6)A 250VAC T85  $\mu$  5E4
- 15(3)A,6(6)A 250VAC T125  $\mu$  5E4
- 15A,4(3)A 250VAC T85  $\mu$  5E4
- 15A 250VAC T125  $\mu$  1E4

"ENEC" rating option

- 15(3)A,6(6)A or 6(2)A 250VAC 5E4/1E4  $\mu$  T85
- 15(3)A,6(6)A or 6(2)A 250VAC 5E4/1E4  $\mu$  T125
- 15(6)A 250VAC 1E4  $\mu$  T85
- 15A 250VAC 5E4/1E4 T85, 4(3)A 250VAC 5E4/1E4 T85
- 15A 250VAC 1E4 T125, 4(3)A 250VAC 1E4 T125

**DMC TERMINAL OPTIONS:**

	COM.	NC. / NO. (Micro gap)	NC. / NO. (3mm gap)
A	TM0378 	TM0063 	
B	TM0196 	TM0115 	
C	TM0197 	TM0084 	TM1605 
D	TM0272 	TM0645 	
E	TM0468 	TM0469 	
F	TM1187 	TM1188 	TM1891 
H	TM1013 	TM1014 	TM0784+TM0785 

	COM.	NC. / NO. (Micro gap)	NC. / NO. (3mm gap)
M	TM1493 	TM1494 	
R	TM1840 	TM1841 	
S	TM1866 	TM1865 	
V	TM0826 	TM0827 	TM1121 
5	TM0119 		





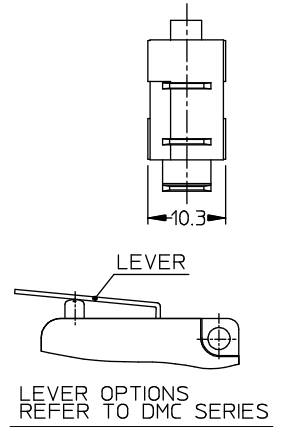
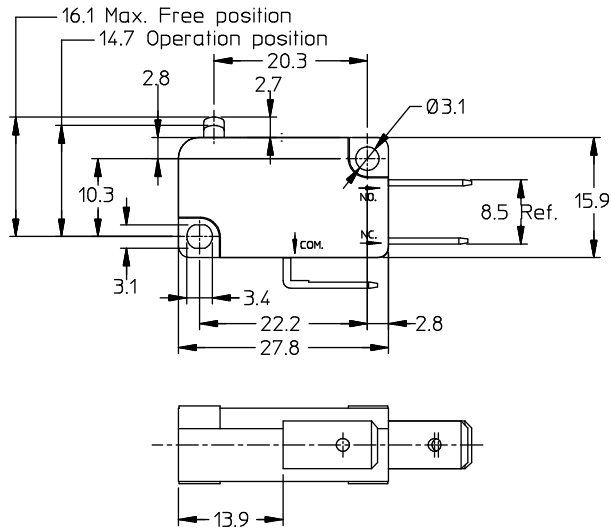
# DMU



• single pole, single / double throw

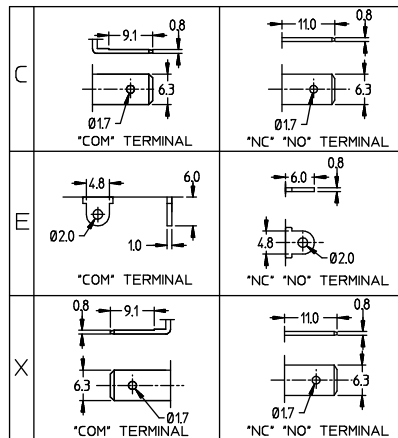
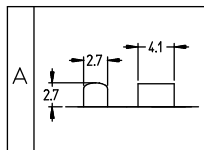
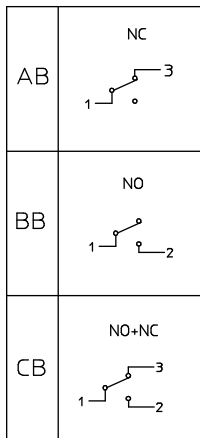
• ratings

- UL1054:  
15A 125VAC, 7.5A 250VAC  
1/2HP 125-250VAC  
T120/ T65
- UL61058:  
12(12)A 127VAC, 7(7)A 250VAC  
14(14)A 127VAC, 8(8)A 250VAC  
16(16)A 127VAC, 10(10)A 250VAC
- 12(12)A / 10(10)A / 10(8)A / 8(8)A  
250VAC 5E4 T125 / T100 / T85



## DMU-XXXX

- **X** - **X** **X** **X** **X** **X** - **XXX**



1 350+/-150gf.

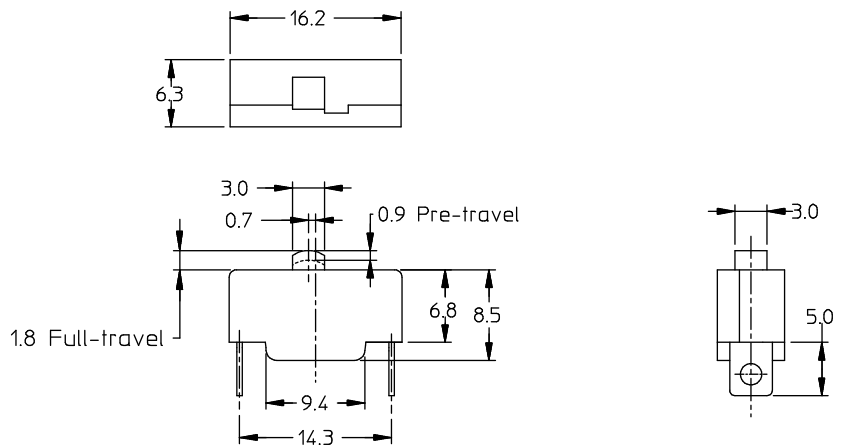
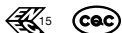
# DMY



• single pole, single throw  
normal close, momentary-off type

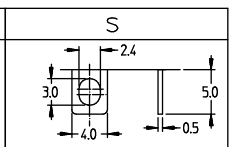
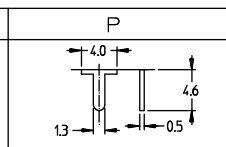
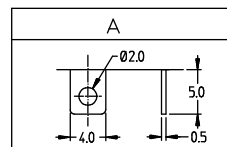
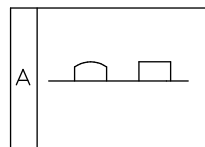
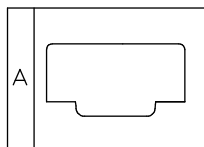
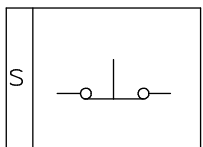
• ratings

- 15A 125VAC(N.I.), 10A 250VAC(N.I.) T105
- 10A 250VAC  $\mu$  T85



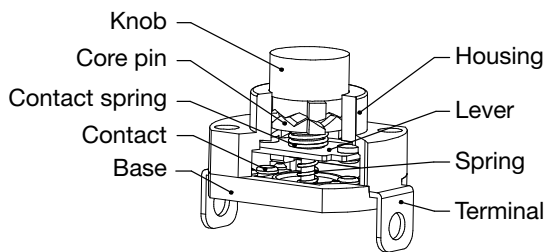
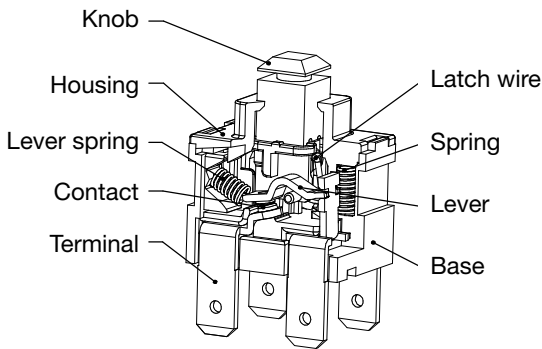
## DMY-XXXX

- **X** - **X** **X** **X** **X** **X** - **XXX**



# PUSH BUTTON SWITCH

## 按钮开关

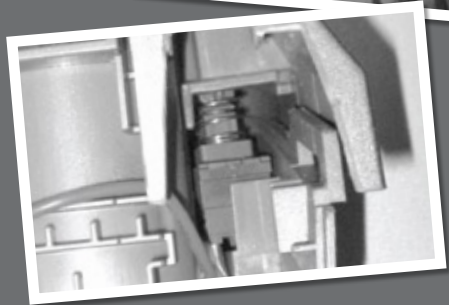


### Switch Features 特征

1. Self lock and non self lock function available  
按钮开关按结构可分为自锁与非自锁两种形式
2. A higher travel distance of Push Button Switch than that of Micro Switch  
相对微动开关，按钮开关的行程较大
3. Neon and LED lamp available  
按钮开关可带氖灯或LED灯
4. Simple circuit available (mainly for ON/OFF, ON/ON, OFF/ON/ON)  
电路变化简单，主要为ON/OFF、ON/ON、OFF/ON/ON
5. Protection cover for dust and water proof available  
可加防护外罩，达到防尘防水功能

### Tips 提示

1. Please pay attention of the operating travel distance and position of self lock.  
必需注意按钮开关操作行程及自锁开关的过档位置。
2. Normal Close Push Button Switch is not suitable for a high vibration working area.  
常闭式按钮开关不适合用于较大震动的电器产品。
3. The duration and temperature of welding and wave soldering are critical. Generally, the wattage of the soldering iron is 50~70W, the duration of welding is within 3 second, the duration of wave soldering is 3~4 second and the chamber temperature is below 260°C.  
焊线或过波峰炉时必需注意温度及时间。焊线选用50~70瓦的恒温铬铁，上锡时间控制在3秒以内，过波峰炉时间控制在3~4秒，炉温控制在260度以下。



**APG**



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**CPN**



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**CPY**



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**APJ**



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**CPU**



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**DPC**



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**APM**



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**CPV**



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**DPN**



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**BPT**



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**CPX**

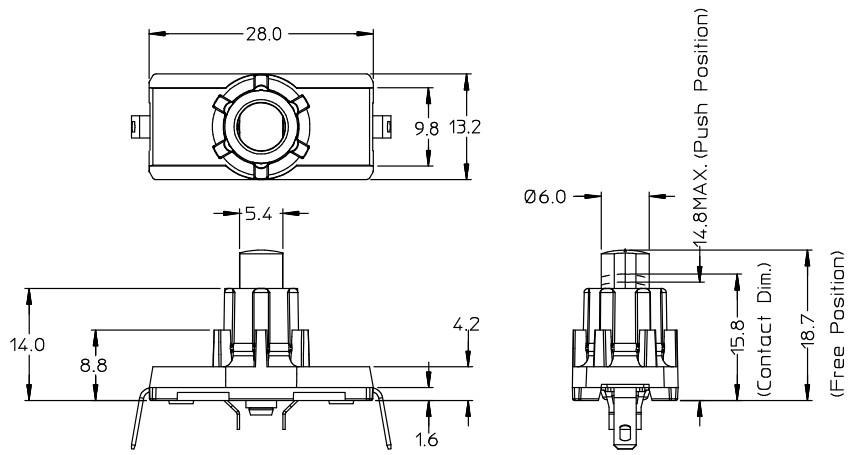


53

# APG

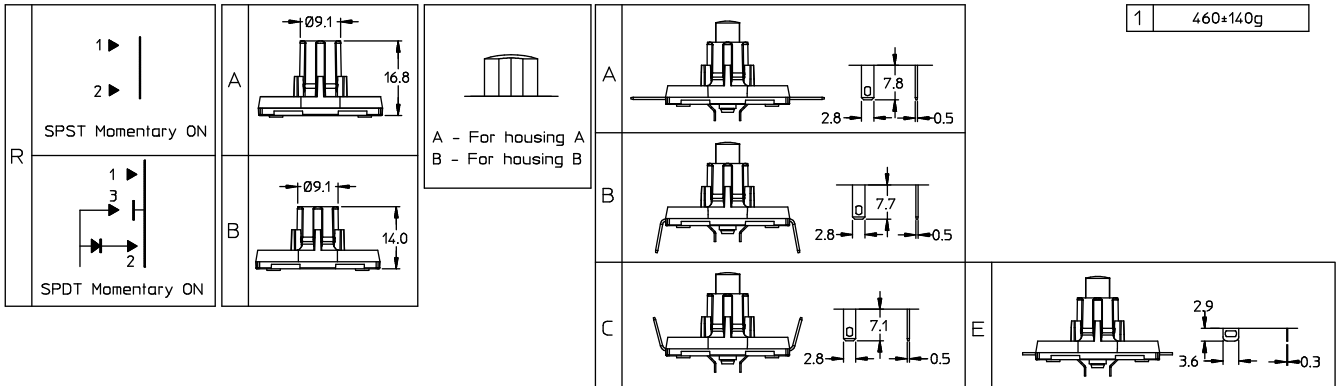


- single pole, single / double throw, momentary on
- ratings
  - 2.5A 125/250VAC
  - 2(2)A 250VAC T85



## APG-XXXX

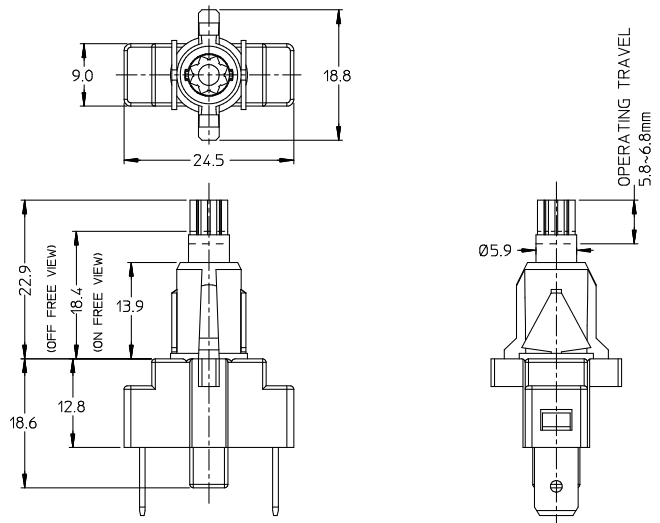
- **X** - **X** **X** **X** X **X** - XXX



# APJ

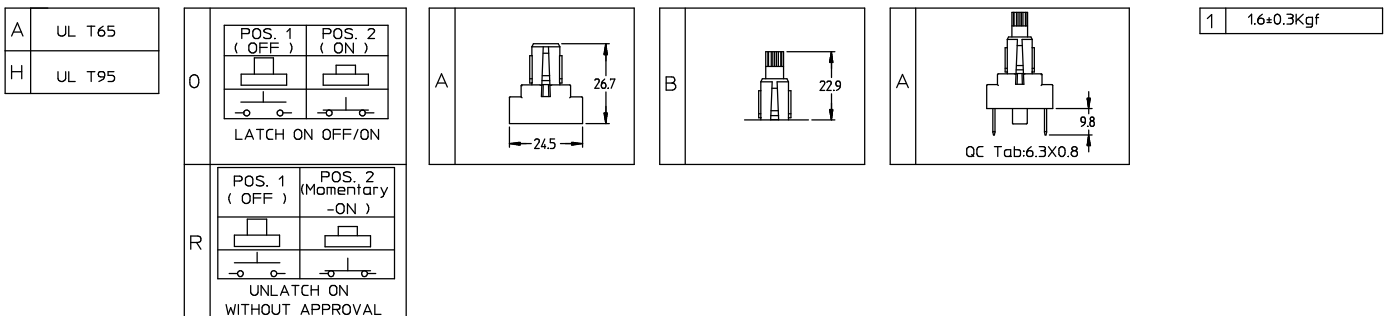


- single pole, single throw, with self-locking or momentary-on, normal open
- ratings
  - 1/2HP 16A 125VAC
  - 1/2HP 16A 125VAC T95
  - 16(4)A 250VAC 1E4 T150
  - 10(8)A 250VAC 1E4 T150
  - 6(2)A 250VAC 5E4 T150

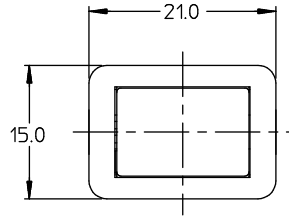


## APJ-XXXX

**X** - **X** - **X** **X** **X** X **X** - XXX



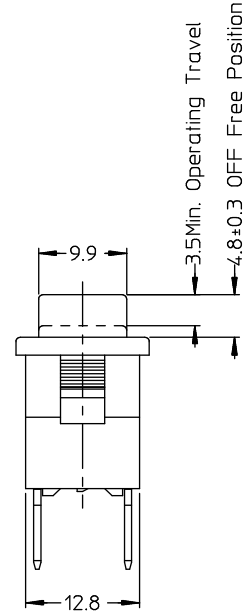
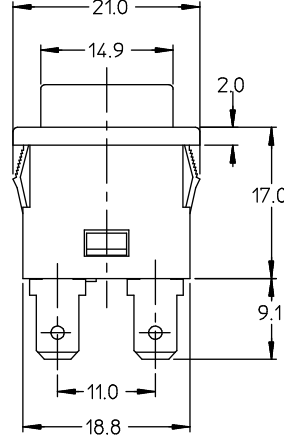
# APM



- single / double pole, single throw, lighted or unlighted version with self-locking or momentary on

• ratings

- 16A 125VAC T105
- 16(4)A 250VAC 1E4
- 10(6)A 250VAC 5E4
- 12(8)A 250VAC 1E4
- T125/55
- IP65 option



## APM-XXXX

(X)

- X -

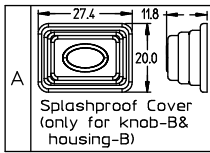
X

X

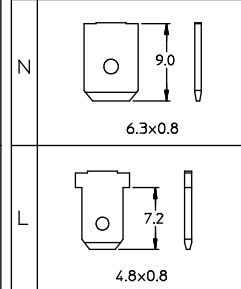
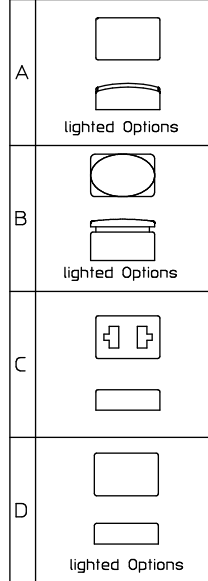
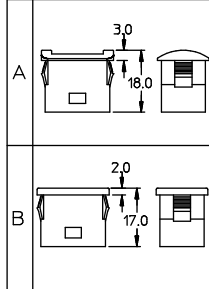
X

X

X - XXX

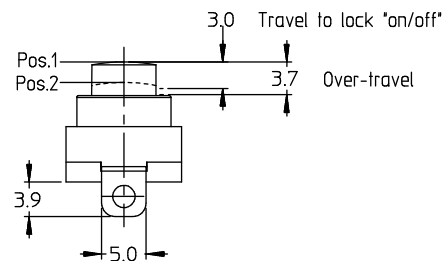
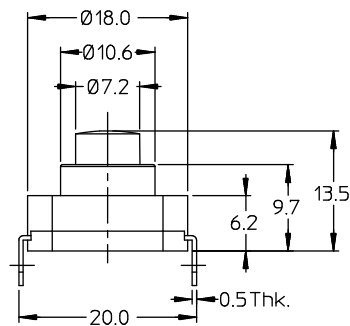


N		DPST Lighted On-off
OO		DPST Unlighted On-off
F		DPST Lighted Momentary ON
RR		DPST Unlighted Momentary ON
O		SPST Unlighted On-off
R		SPST Unlighted Momentary ON



1	1050±200g(DPST)
	800±200g(SPST)

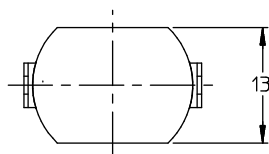
# BPT



- single pole, single throw with self-locking, normal open

• ratings

- 15A 125VAC, 7.5A 250VAC
- 13A 125VAC, 6.5A 250VAC
- T65 for BPT-11XX
- 15A 125VAC, 7.5A 250VAC
- 13A 125VAC, 6.5A 250VAC
- 1E4 T85 for BPT-11XXT
- 10(3)A 250VAC 1E4 T85  $\mu$
- 8(3)A 250VAC 1E4 T85  $\mu$
- 6(3)A 250VAC 5E4  $\mu$

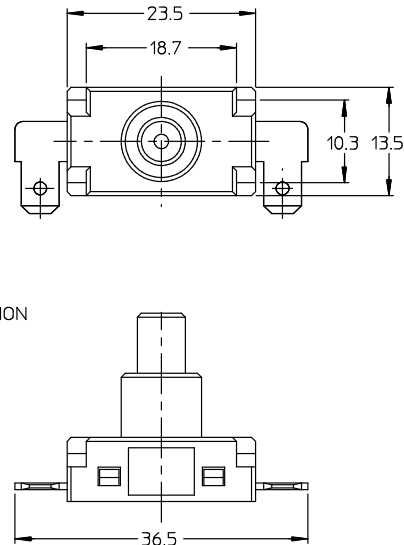
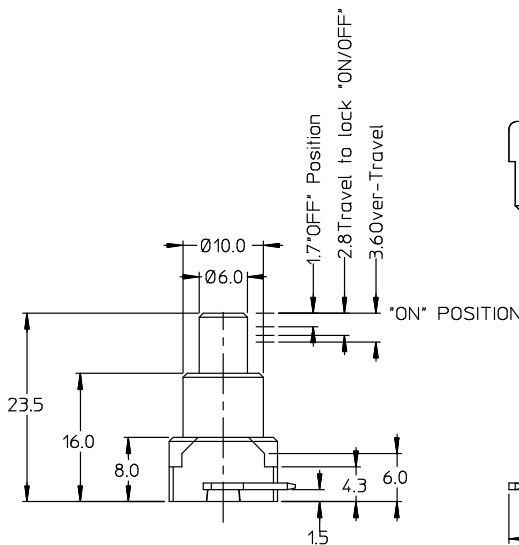


## BPT-XXXX

- **X** - **X** **X** **X** - XXX

Remark	POS. 1	POS. 2				1 650~1300 gf
LATCH ON KNOB CAN NOT RETURN			A			
LATCH ON KNOB RETURN						

# CPN



- single pole, single throw with self-locking, normal close

• ratings

- 16A 125VAC, 8A 250VAC
- 7(7)A 250VAC T85
- 13A 250VAC T85



## CPN-XXXX

- **X** - X **X** **X** - XXX

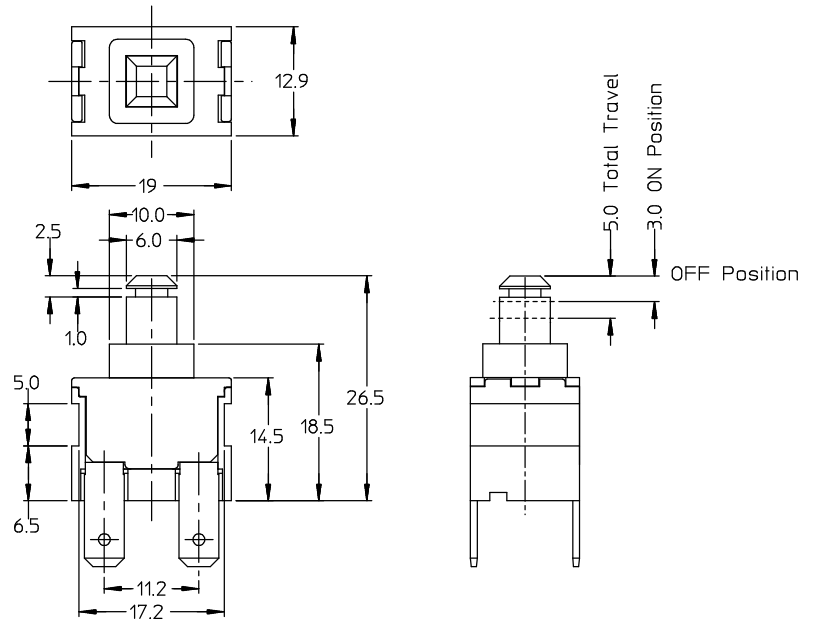
POS. 1 (ON)	POS. 2 (OFF)				1 840±160g
		A		S	
LATCH ON		B		L	

Push Button Switch

# CPU

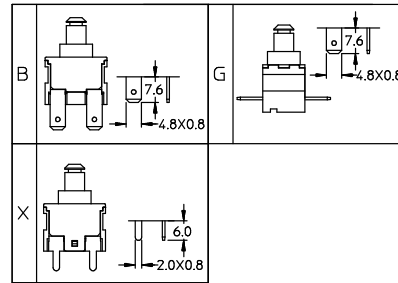
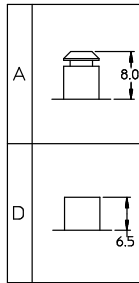
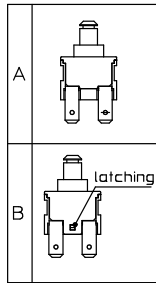
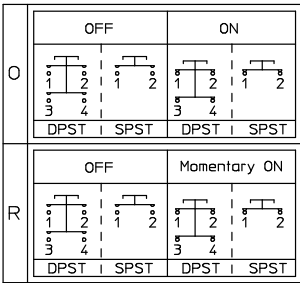


- single / double pole, single throw latching or momentary-on
- ratings
  - 13A 125VAC, 6.5A 250VAC T105/T65
  - 12(10)A 250VAC 1E4 T105
  - 6(6)A 250VAC 5E4 T105 for CPU-1113
  - 10(2)A 250VAC 1E4 T105 for CPU-2113



## CPU-XXXX

- **X** - **X** **X** **X** **X** - **X** **X** - **XXX**

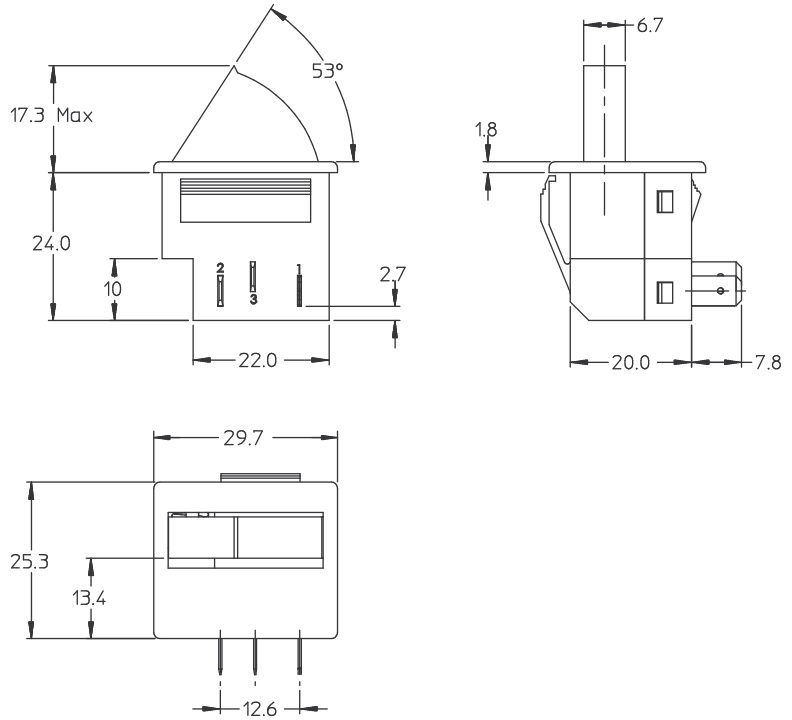


1	1.25±0.35Kgf
2	0.6±0.25Kgf For SPST only

# CPV

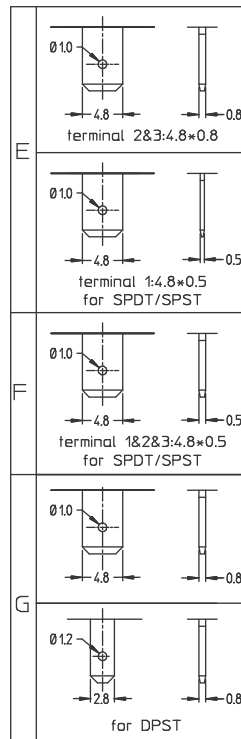
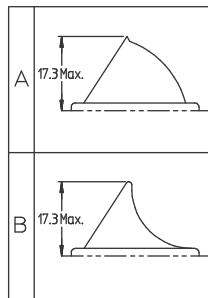
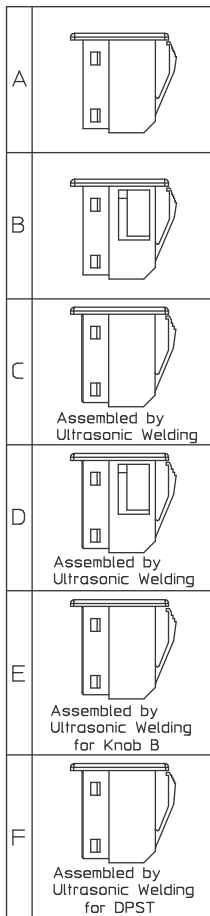
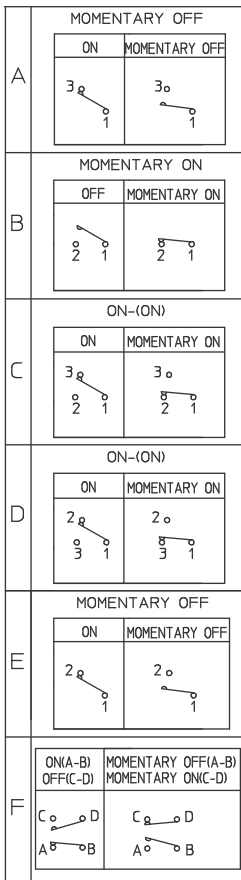


- single/ double pole, single/ double throw
- ratings
  - 6A 125VAC T65
  - 6A 250VAC  $\mu$  5E4/1E4
  - 6A 250VAC  $\mu$  5E4/1E4



## CPV-XXXX

- **X** - **X** **X** **X** X **X** - XXX



1	2.5±1N
2	4N±1.5N only for DPST



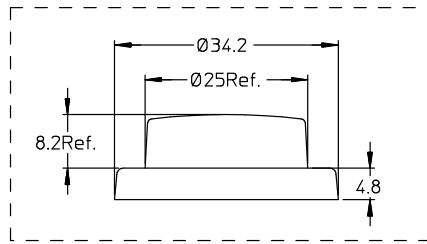
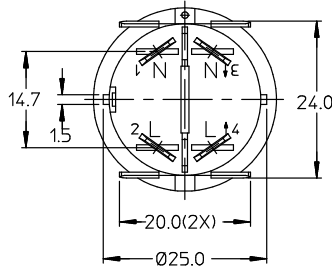
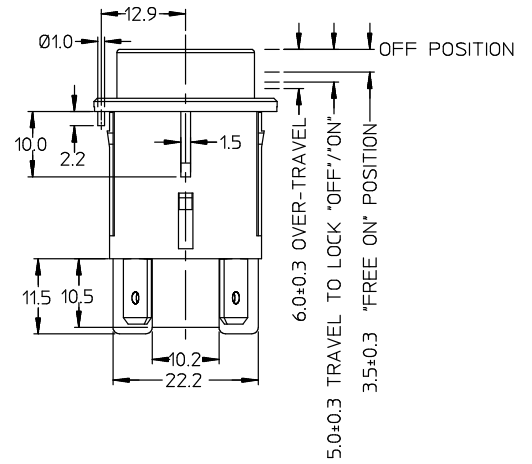
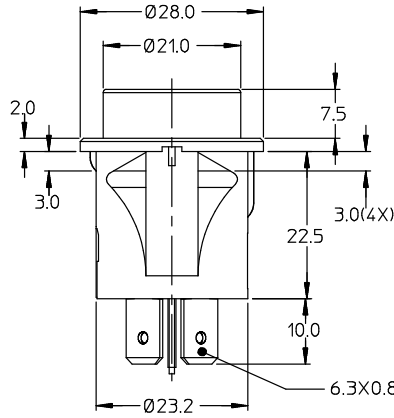
# CPX



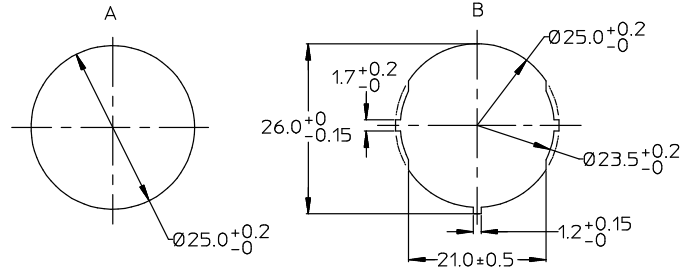
- single / double pole, single throw  
lighted or unlighted version  
with self-locking or momentary on

• ratings

- 16A 125-250VAC  
1/2HP 250VAC  
1/4HP 125VAC T95
- 10(4)A 250VAC 5E4  
10(4)A 400VAC 1E4  
16(6)A 250VAC 1E4  
T120/55  
IP65 option



Splashproof Cover Option



PANEL THICKNESS = 0.7 to 4.5mm (HOUSING A)  
0.7 to 2.5mm (HOUSING C)

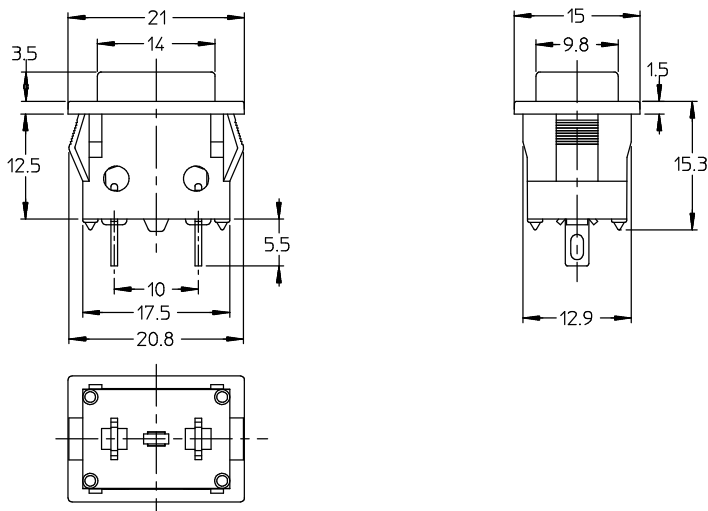
PANEL CUTOUT

## CPX-XXXX

- (X) - X - X X - XXX

NA	OFF	ON	O	OFF	ON	A	A	A	1 13*5N(DPST)
MA	OFF	MOMENTARY ON	R	OFF	MOMENTARY ON	C	A	A	3 10*5N(SPST)
N	OFF	ON	N	OFF	ON	N	N	N	N
M	OFF	MOMENTARY ON	M	OFF	MOMENTARY ON	M	M	M	M

# CPY



• single pole, single throw, momentary on

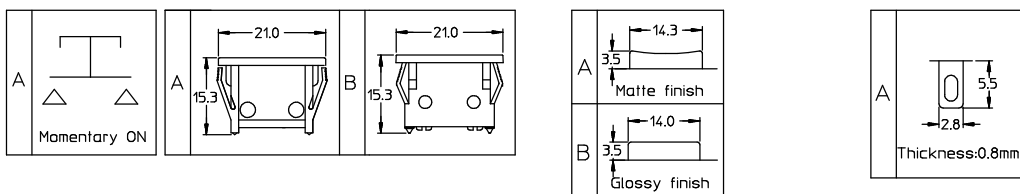
• ratings

- 6A 125-250VAC
- 1/6HP 250VAC, 1/8HP 125VAC
- 10(4)A 250VAC T125



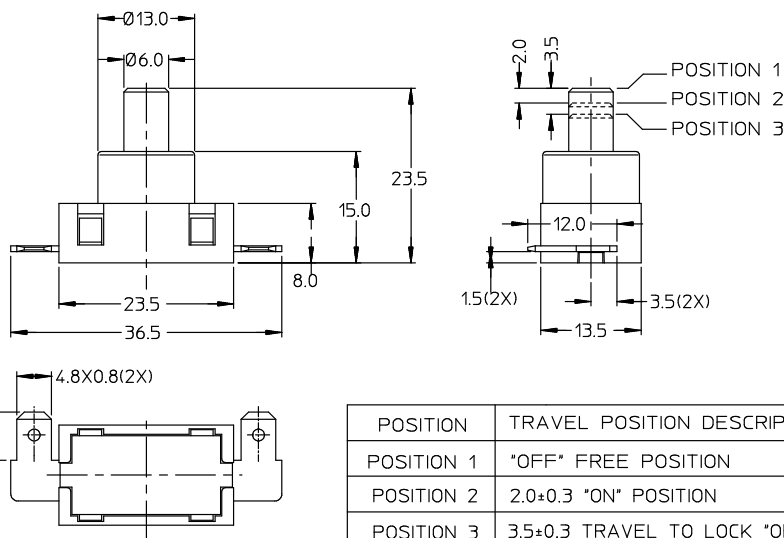
## CPY-XXXX

- **X** - **X** **X** **X** X **X** - XXX



1	280±100g
3	560±100g

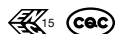
# DPC



• single pole, single throw with self-locking or momentary on normal open

• ratings

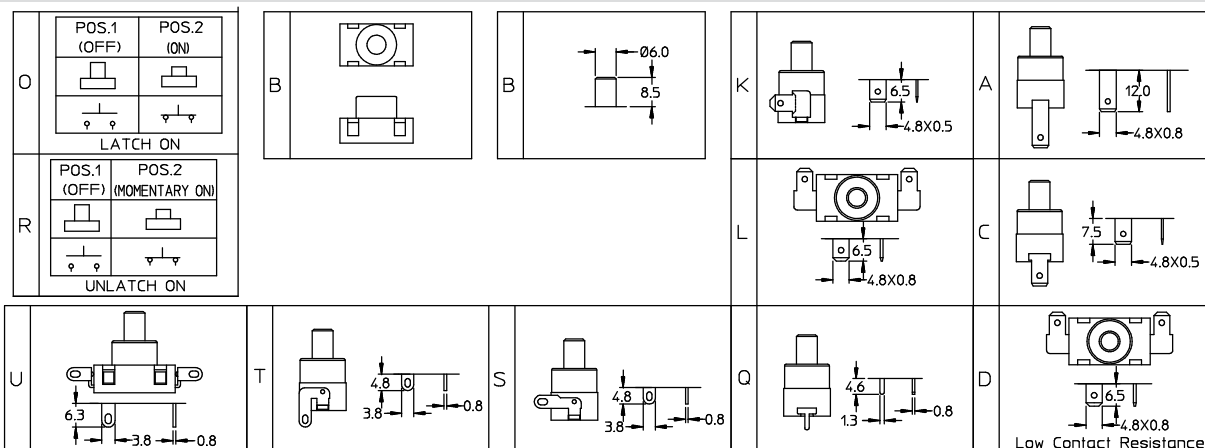
- 11A 125VAC, 5.5A 250VAC
- 13A 125VAC, 6A 250VAC
- 15.2A 125VAC, 7.6A 250VAC
- 7(7)A 250VAC T85 for DPC-11AA-0
- 7.5A 250VAC T85 for DPC-11AA-R



POSITION	TRAVEL POSITION DESCRIPTION
POSITION 1	"OFF" FREE POSITION
POSITION 2	2.0±0.3 "ON" POSITION
POSITION 3	3.5±0.3 TRAVEL TO LOCK "OFF"/"ON"

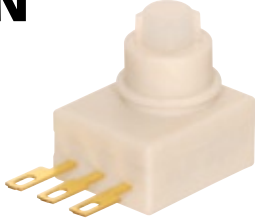
## DPC-XXXX

- **X** - **X** **X** **X** X **X** - XXX

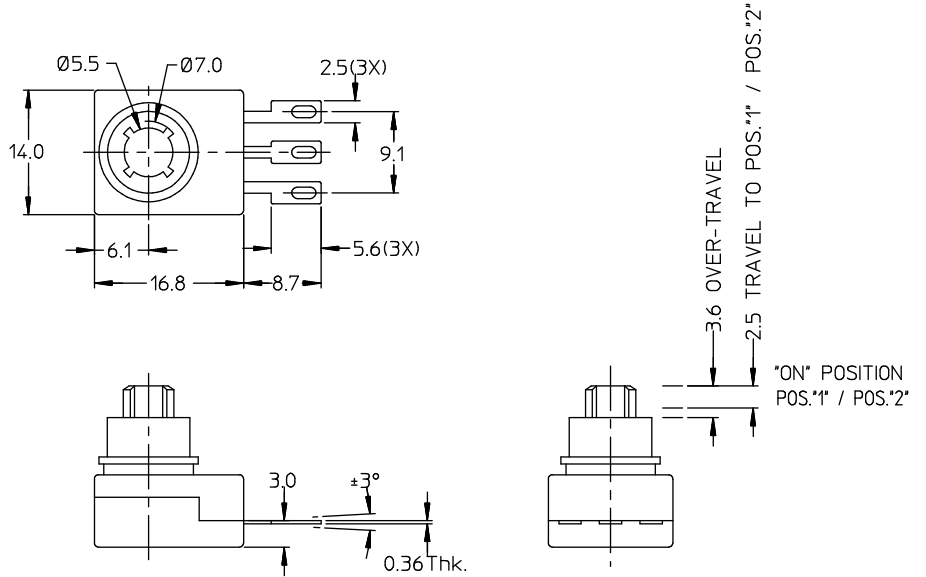


1	715±150g
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# DPN



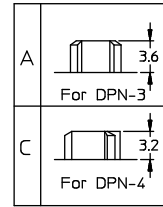
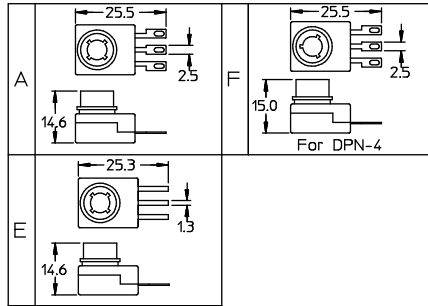
- single pole, multi-circuit
- ratings
  - 3A 14VDC for DPN-4 only
  - 5A 14VDC for DPN series



## DPN

- **X** - **X** **X** **X** **X** - XXX

3	<table border="1"> <tr> <td>POS. 1 ( ON )</td> <td>POS. 2 ( ON )</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td>2 C 1</td> <td>2 C 1</td> </tr> </table>	POS. 1 ( ON )	POS. 2 ( ON )			2 C 1	2 C 1			
	POS. 1 ( ON )	POS. 2 ( ON )								
2 C 1	2 C 1									
4	<table border="1"> <tr> <td>POS. 1 ( OFF )</td> <td>POS. 2 ( ON )</td> <td>POS. 3 ( ON )</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>2 C 1</td> <td>2 C 1</td> <td>2 C 1</td> </tr> </table>	POS. 1 ( OFF )	POS. 2 ( ON )	POS. 3 ( ON )				2 C 1	2 C 1	2 C 1
POS. 1 ( OFF )	POS. 2 ( ON )	POS. 3 ( ON )								
2 C 1	2 C 1	2 C 1								

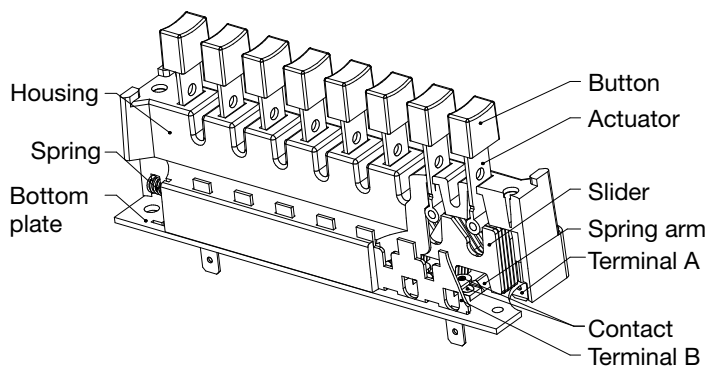
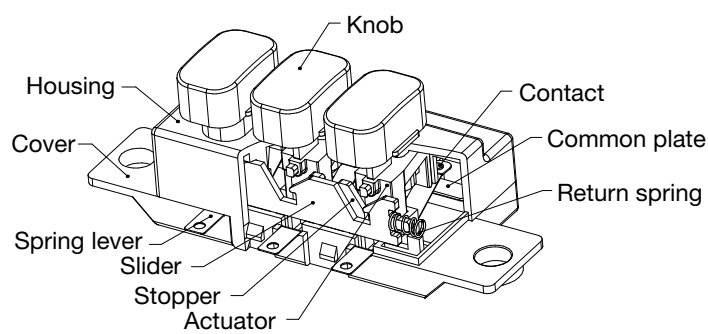


1	4~6N
2	2~6N
3	5.5~9.5N
4	4~8N

\* Housing with Terminal type.

# KEYBOARD SWITCH

## 琴键开关



### Switch Features 特征

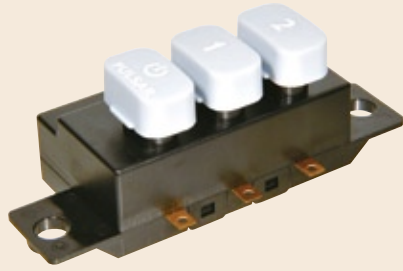
1. A variety of circuits and settings available  
多操作位置及多电路变化
2. Self lock of button available  
按键可自锁

### Tips 提示

1. Not suitable for a high current and long life cycle application.  
不适合用于高电流及高寿命的场合。
2. The duration and temperature of welding and wave soldering are critical. Generally, the wattage of the soldering iron is 50~70W, the duration of welding is within 3 second, the duration of wave soldering is 3~4 second and the chamber temperature is below 260°C.  
焊线或过波峰炉时必须注意温度及时间。焊线选用50~70瓦的恒温烙铁，上锡时间控制在3秒以内，过波峰炉时间控制在3~4秒，炉温控制在260度以下。

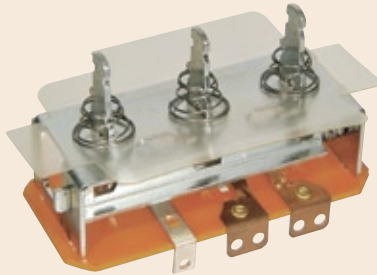


**AKB**



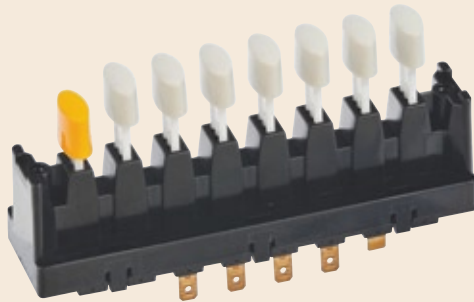
58

**DKC**



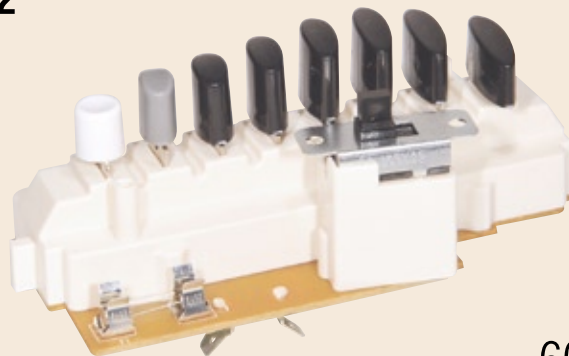
58

**DKH**



59

**L32**

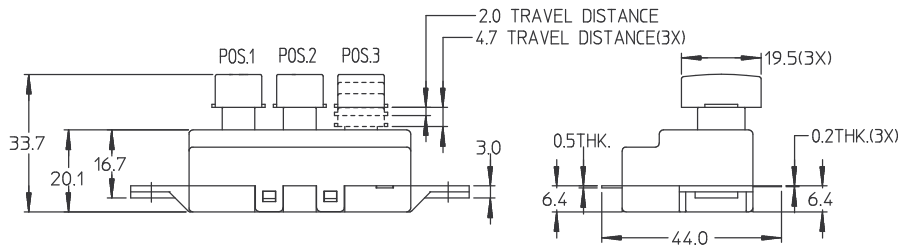
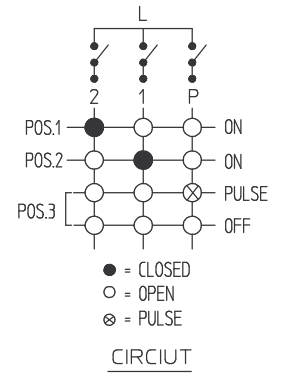
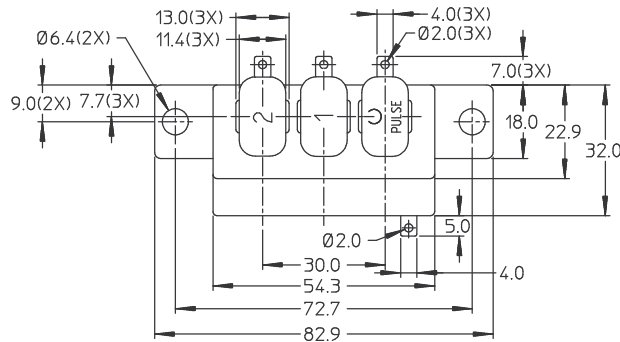


60

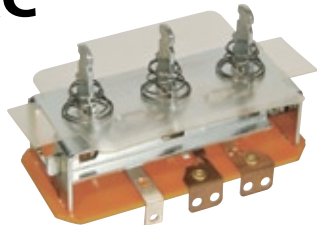
# AKB



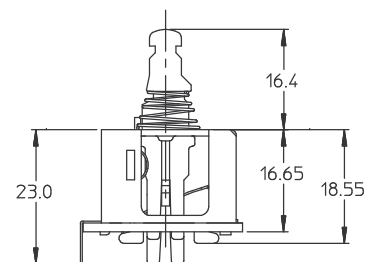
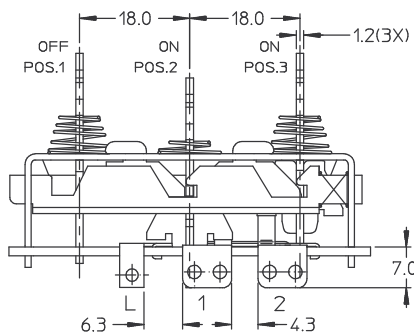
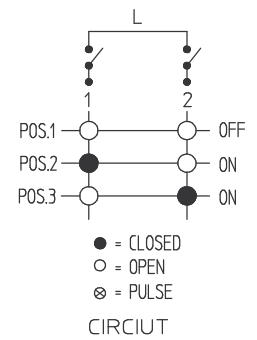
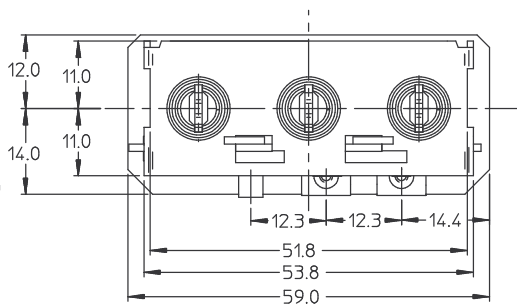
- 3 position keyboard switch
- rating
  - 6(1)A 125VAC
  - 3(1)A 250VAC



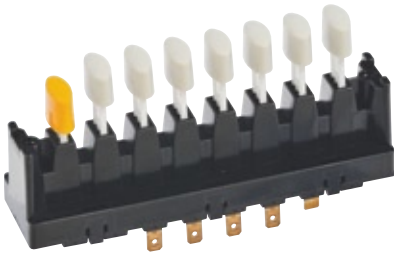
# DKC



- 3 position keyboard switch  
off, L-1(on), L-2(on)
- ratings
  - 6A 125VAC, 3A 250VAC
  - 5A 125VAC, 3A 250VAC



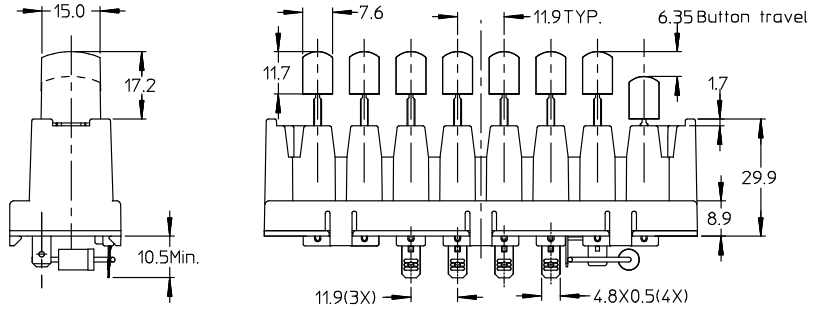
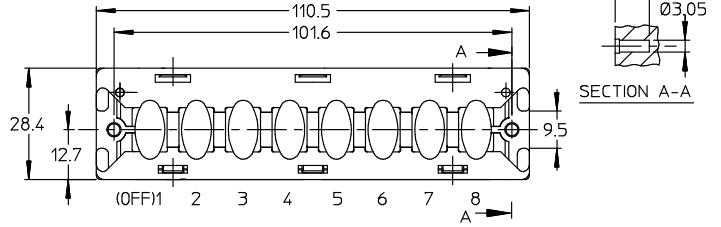
# DKH



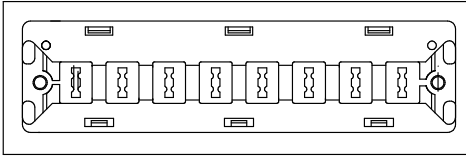
• 8 position keyboard switch

• rating (UL61058):

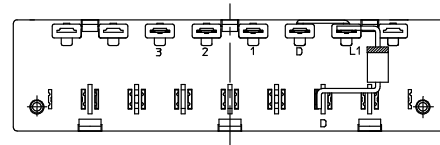
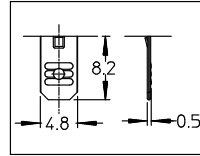
- 6GP 120VAC 4GP 240VAC
- 6RA 120VAC 4RA 240VAC
- 1/4HP 120-240VAC
- 6E3 or 1E4 T75



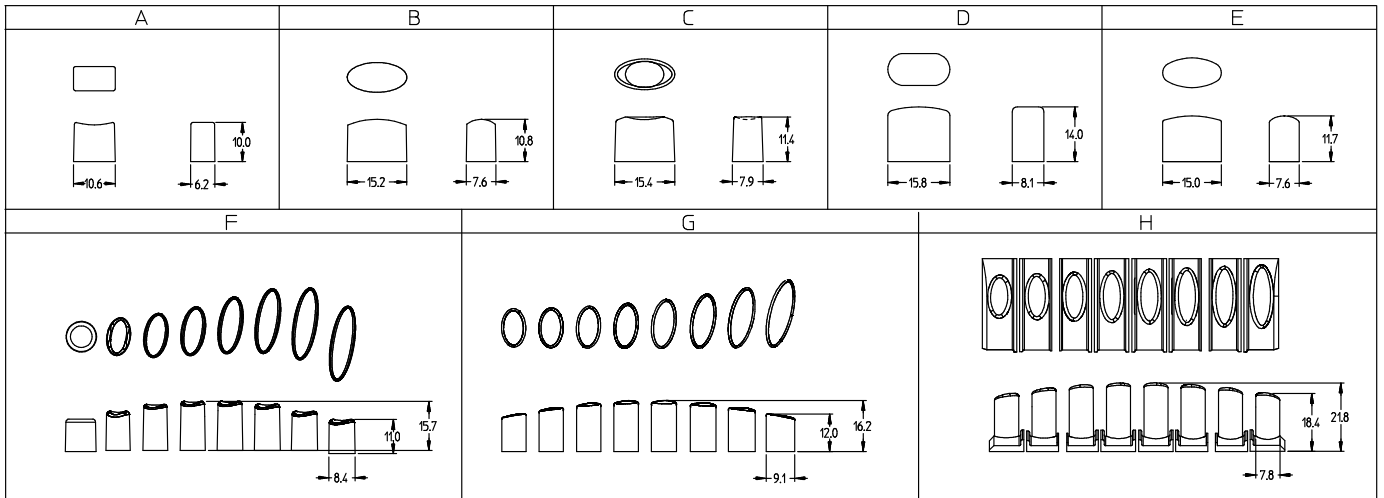
HOSING OPTIONS:



TERMINAL OPTIONS:

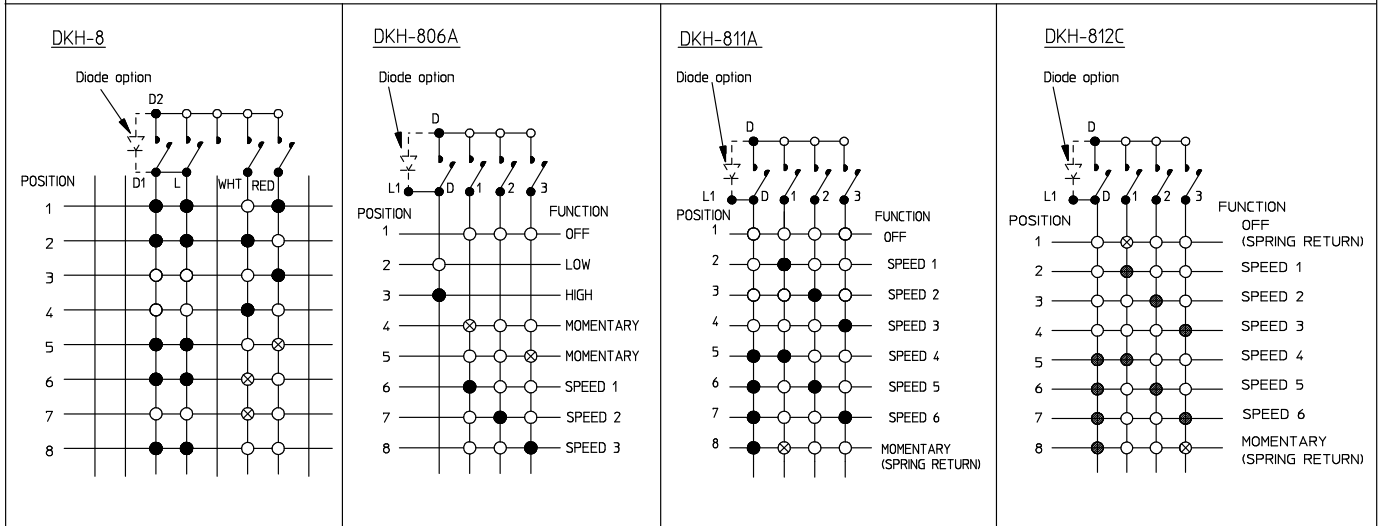


KNOB OPTIONS:

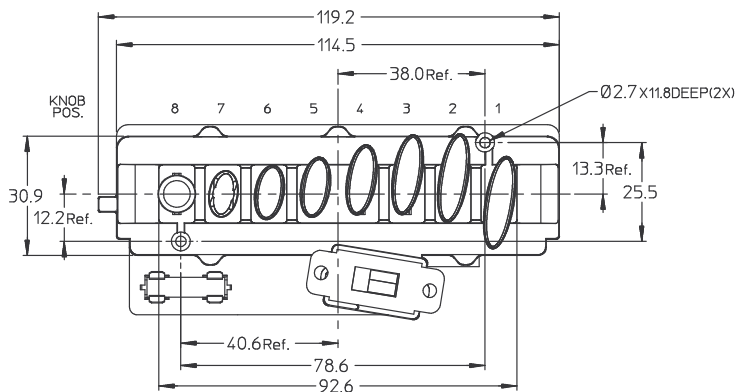
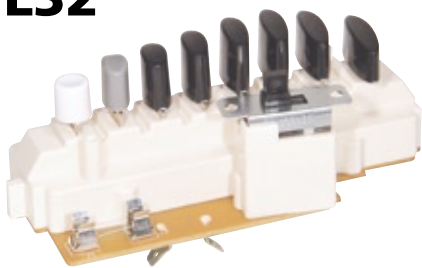


CIRCUIT OPTIONS:

⊗ = Momentary (Spring return)   ● = Closed   ○ = Open

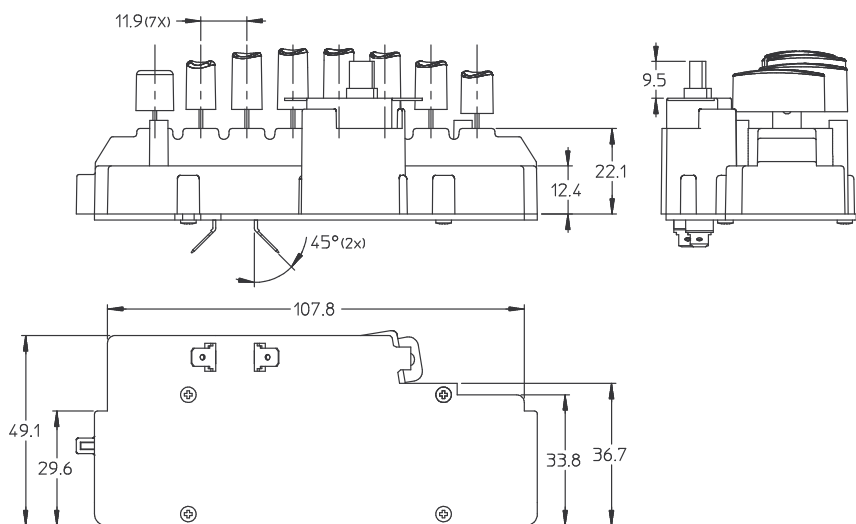


# L32

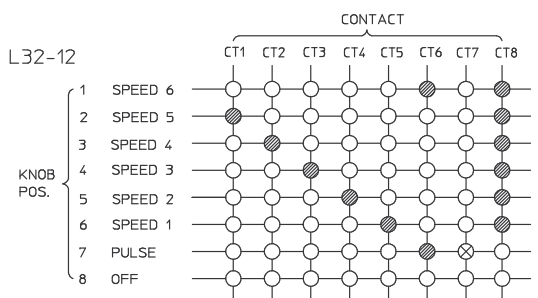
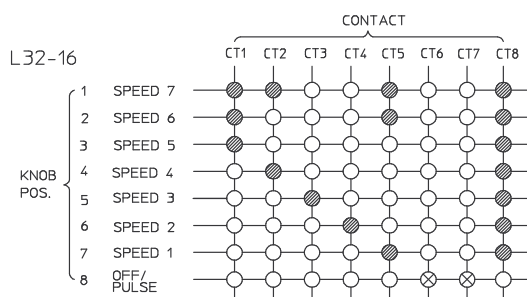
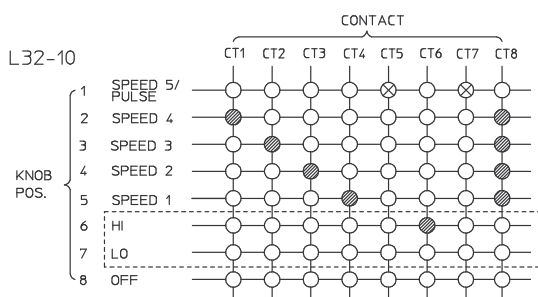
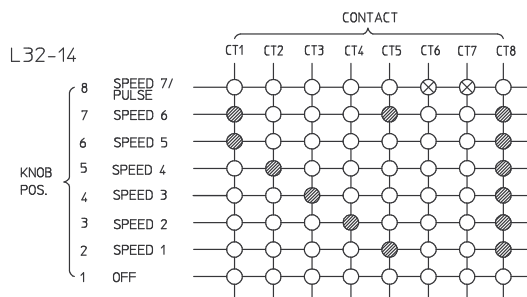
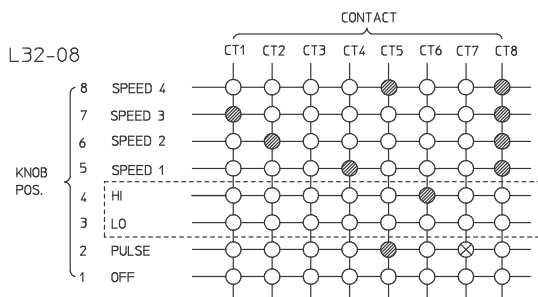


• 8 (10, 12, 14, 16) speed keyboard switch

• rating  
- 5A 120VAC



CIRCUIT OPTIONS:



⊗ = MOMENTARY  
● = CLOSED  
○ = OPEN



## Hong Kong (Headquarter)

5/F, Chaiwan Industrial Centre  
20 Lee Chung Street  
Chaiwan, Hong Kong.  
Tel: +852 2897-5603  
Fax: +852 2897-2025 / +852 2889-7792  
www.grpdfond.com  
Email: info@grpdfond.com

## 香港 (总部)

香港柴湾利众街二十号  
柴湾中心工业大厦五字楼  
电话：+852-2897 5603  
传真：+852-2897 2025 / +852-2889 7792

## Overseas Distributors

### DNA Group Inc.

2841 Plaza Place, Suite 200  
Raleigh, NC USA 27612  
Tel: +1-919-881-0889  
www.dnagroup.com  
Email: info@dnagroup.com

### NBE International Pte., Ltd.

23 New Industrial Road,  
Century Ind. Bldg., #04-06  
Singapore 536209  
Tel: +65-6383-3680  
Email: nbeint@gmail.com

### Blink S.r.l.

Via Barnaba Oriani,  
44-20156 Milano, Italy  
Tel: +39-02-308-8583  
www.blinkgroup.com  
Email: info@blinkgroup.com

## 大中华分销

### 达昌实业有限公司

华南办事处：  
东莞市常平镇常平广场  
平安阁26楼  
电话：+0769-8391 3879

华东办事处：  
浙江宁波海曙区苍松路229弄22号  
柳汀星座303室  
电话：+0574-8713 8330  
Email: dachang@dachangorg.com

### 佛山市顺德区德厚电子有限公司

华南办事处：  
顺德大良国泰南路2号保利中环广场一期4座701  
电话：+0757-2232 2245 / 139 2566 0087  
传真：+0757-2232 2145

华东办事处：  
余姚市四明西路南华大厦1幢3015室  
电话：+0574-6279 1263 / 131 4573 4090 /  
135 6794 0635  
传真：+020-3998 6400  
Email: tom.tang@dehau.cn

### 钛和企业有限公司

台中市40450北区进化路642巷12-2号  
电话：+04-022 314 272  
Email: switch.ykwang@msa.hinet.net

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The dimensions specified in catalogue are for reference only.

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