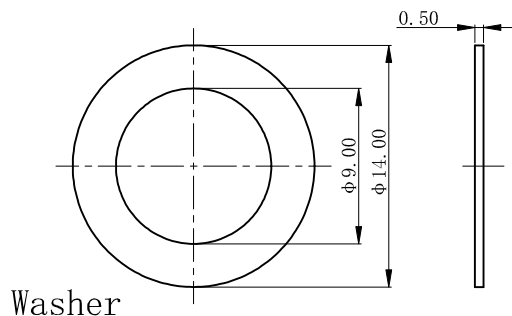
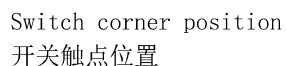


P. C. B MOUNTING HOLE DETAIL

第 1 页



## XZKG-S17系列规格书

### XZKG-S17 SERIES SPECIFICATION

#### 1. 一般事项General

##### 1-1. 适用规格Scope

本规格书适用于DWQS17型开关。

This specification applies to DWQS17mm size switch

##### 1-2. 标准状态Standard atmospheric conditions

除另有规定外，测量应在以下状态下进行：

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and test is as following limits:

温度 Ambient temperature : 15°C to 35°C

相对湿度 Relative humidity : 25% to 85%

气压 Air pressure : 86kpa to 106kpa

如果对在上述所提到的条件中所做的实测值有疑问的话，应使用以下条件进行测量：

If doubt arises on the decision based on the measured values under the above-mentioned Conditions, the following conditions shall be employed:

温度 Ambient temperature : 20±1°C

相对湿度 Relative humidity : 63% to 67%

气压 Air pressure : 86kpa to 106kpa

##### 1-3. 使用温度范围

Operating temperature range : -21°C to +70°C

##### 1-4. 保存温度范围

Storage temperature range : -30°C to +80°C

#### 2. 构造Construction

##### 2-1. 尺寸Dimensions

见所附成品图Refer to attached drawing

#### 3. 额定值Rating

##### 3-1. 额定电压

Rated voltage :DC 16V

##### 3-2. 最大额定电流（阻抗负载）

Maximum operating current (resistive load) 0.3A

#### 4. 电气性能Electrical Characteristics

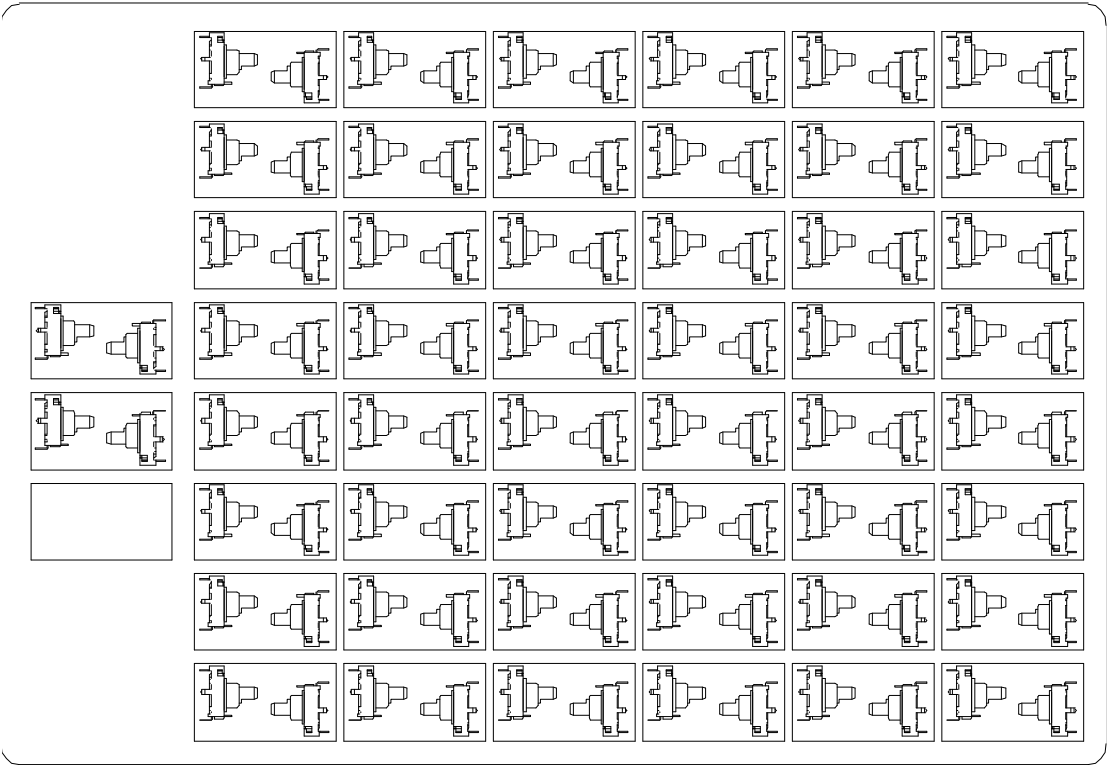
项目ITEM	条件CONDITIONS	规格SPECIFICATIONS	
4-1. 开关电路接入点数 Switch circuit and Number of pulse	详见所附成品图 Refer to attached drawing	极数Poles	段数Sections
		1	3
4-2. 绝缘阻抗 Insulation resistance	在端子和支架间施加电压500V DC 1分钟。 Measurement shall be made under the condition which a voltage of 500V DC 1 min is applied between individual terminals and frame	100MΩ 以上 100MΩ Min	
4-3. 耐电压 Dielectric strength	在端子和支架间施加电压AC1300V 电压1分钟 A voltage of 1300V AC shall be applied for 1 minute between individual terminals and frame	不得有绝缘破坏 Without arcing or breakdown	

4-4. 端子间接触阻抗 Contact resistance	出力信号处于ON时安定状态条件下测定 Measurement shall be stable condition which a Output signal is ON	寿命前: 100mΩ 以下 寿命后: 1Ω 以下
5. 机械性能 Mechanical Characteristics		
5-1. 转换角度 Changeover angle		30°
5-2. 旋转力矩 Rotational torque		(100-800gf. cm)
5-3. 轴的推拉强度 Push-pull Strength of shaft	在轴端, 沿轴向施加10Kg的静负荷力推和拉各10秒钟(产品焊锡固定在PCB上.) Push and pull static load of 10Kg shall be applied to the shaft in the axial direction for 10s. (After soldering of the PCB board)	轴向虚位间隙0.4以内 Shaft play in axial direction 0.4 Max
5-4. 端子强度 Terminal strength	在端子的先端施加5N(500gf)的力1分钟. A static load 5N(500gf) be applied to the tip of terminals for 1 minute in any direction.	端子无损坏, 无过度的松度, 允许变形. Without damage or excessive looseness of terminals. Terminal bend is permitted.
5-5. 轴套螺纹紧固强度 Bushing Nut Tighten Strength		7.0Kgf. cm 以下 7.0Kgf. cm Max
5-6. 止动强度 End stop strength	顺时针方向或逆时针方向旋转到底, 所承受的力度. The force endured by rotating clockwise or counterclockwise to the end.	6.0Kgf. cm 以下 6.0Kgf. cm Max
5-7. 轴向间隙 Shaft play in axial direction		0.4mm以下 0.4mm Max
5-8. 轴摆动 Shaft wobble	在距离轴顶端5MM处, 沿径向瞬间施加50mN. m(500gf. cm)的力测试 A momentary load of 500gf. cm should be applied at the point 5mm from the tip of the shaft in a direction perpendicular to the axis of shaft.	0.7*L/30mm p-p以下(L:指安装平面到轴的柄端的距离.) 0.7*L/30mm p-p Max L :Distance between mounting surface and measuring point on the shaft
5-9. 轴的回转方向摆动 Shaft play in rotational wobble	用角度板测定. Testing by angle board.	5° 以下 5° Max
6. 耐久性能Endurance Characteristics		
项目 ITEM	条件 CONDITIONS	规格 SPECIFICATIONS

6-1. 回转寿命 Rotational life	<p>在无负荷条件下轴以600~800周/小时速度回转, 24小时连续5000~8000次.</p> <p>The shaft of switch shall be rotated at speed of 600~1000 cycles /H without electrical load, after with measurements shall be made (5000 to 8000 continuous cycles for 24 hours.)</p>	<p>10,000±200周 10,000±200 cycles per below 尚余有轻微定位感. 端子间接触阻抗1Ω以下 Detent feeling has to remains Contact resistance 1Ω Max</p>
6-2. 耐湿性 Damp heat	<p>温度40±2℃, 湿度90~95%的恒温恒湿槽中放置 96±4小时后, 在常温、常湿中放置1.5小时后测试.</p> <p>The switch shall be stored at temperature of 40±2℃ with relative humidity of 90~95% for 96±4 in a thermostatic chamber. And the switch shall be subjected to standard atmospheric conditions for 1.5H, After which measurements shall be made.</p>	<p>所有项应满足初期规格 Specifications in clause All items is shall be satisfied</p>
6-3. 耐热性 Dry heat	<p>温度80±3℃, 的恒温箱中放置96±4小时, 常温、常湿放置1.5小时后测试.</p> <p>The switch shall be stored at a temperature of 80±3℃ for 96±4H in a thermostatic chamber, And then the switch . Shall be subjected to standard atmospheric conditions for 1.5H, After which measurements shall be made.</p>	<p>所有项应满足初期规格. Specifications in clause all items is shall be satisfied</p>
6-4. 低温特性 Cold	<p>温度-40±3℃的恒温箱中放置96±4小时, 常温、常湿放置1.5小时后测试.</p> <p>The switch shall be stored at a temperature of -40±3℃ for 96±4H in a thermostatic chamber, And then the switch . Shall be subjected to standard atmospheric conditions for 1.5H, After which measurements shall be made.</p>	<p>所有项应满足初期规格. Specifications in clause all items is shall be satisfied</p>

6-5. 焊锡耐热性 Resistance to soldering heat	槽焊Dip soldering . 使用基板:t=1.6mm的单面覆铜板. Printed wiring board :single-sided copper clad laminate board with thickness of 1.6mm. 预热:基板表面温度100℃以下,时间1分 钟以内. Preheating:1.Surface temperature of board:100℃ or less 2.Preheating time :within 1 minute 焊接:温度260±5℃或以下,时间3秒以 内. Soldering :solder temperature: 260±5℃ or less Immersion time :within 3S 手焊 Manual soldering 温度350℃以下,时间3秒以内. Bit temperature of soldering iron:350℃ less than Application time of soldering iron :within 3S	不得有绝缘体的破损、变形、 接触无异常 Electrical characteristics shall be satisfied No mechanical abnormality
6-6. 盐雾试验 Salt mist	无明显锈迹,无变色 No apparent rust and discoloration	在温度为35±2℃,浓度(重量比)为5±1% 的条件下,进行8小时连续喷雾后取出水 洗. Test should be made with temperature of 35±2℃ and concentration of 5±1% (by weight) for 8 h. Then clean with wate
6-6. 焊锡性 Solderability	端子在260℃±5℃的温度的焊锡槽内浸 锡3秒±0.5秒. The terminals shall be immersed into solder bath at 260℃ for 3S±0.5S.	浸渍面须有75%以上焊锡附着 A new uniform coating of solder shall cover 75% minimum of the surface being immersed
7. 包装部分 Packing Portion		
项目 ITEM	条件 CONDITIONS	规格 SPECIFICATIONS
7-1. 包装方式 Packing	使用吸塑盒和纸箱包装Use plastic box and carton packaging.	每盒100PCS,每箱10盒 共计:1000PCS/箱 Put 100PCS products into foamed plastic plate, then pack 10plates into a carton, total 1000PCS/carton

图示

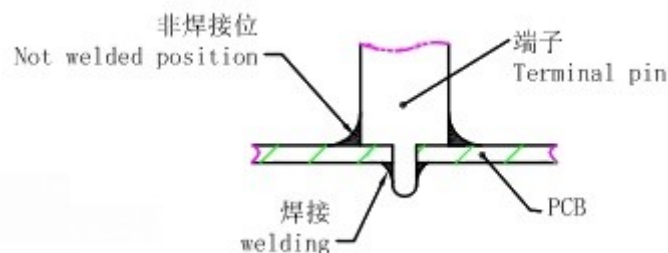


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YTL-XZKG-S17				

# 产品使用注意事项

## Product usage precautions

1. 因绝缘型轴上取用了聚碳酸酯等合成树脂, 请避免在氨、胺类、硷溶液、芳香族炭化氢、丙酮类、酯类、卤化炭化氢等的环境, 特别是强气体环境使用。Due to the use of synthetic resins such as polycarbonate on insulated shafts, please avoid using them in environments with ammonia, amines, alkaline solutions, aromatic hydrocarbons, acetone, esters, halogenated hydrocarbons, etc., especially in strong gas environments.
2. 避免结露: 产品表面应避免结露或有水滴存在, 以避免绝缘劣化或造成短路。Avoid condensation: The surface of the product should avoid condensation or the presence of water droplets to prevent insulation degradation or short circuits.
3. 关于焊接的条件设定, 请依据本公司规格书焊锡耐热性指标进行, 若有特别要求请与本公司联络; Regarding the setting of welding conditions, please refer to our company's specifications for solder heat resistance indicators. If there are any special requirements, please contact our company;
4. 拧紧安装螺母类或组装套钮时, 需在规定的强度要求(详见规格书中的机械性能指标), 且螺纹安装面需紧贴机壳或支承物, 否则, 可能会造成锁紧固定机构被破坏。When tightening installation nuts or assembling knobs, it is necessary to meet the specified strength requirements (see mechanical performance indicators in the specifications), and the threaded installation surface should be tightly attached to the casing or support, otherwise it may cause damage to the locking and fixing mechanism.
5. 安装时, 请将产品本体插入至规定的安装面为止, 并使其达到水平状态, 否则, 将可能会导致性能不良; When installing, please insert the product body into the designated installation surface and make it level, otherwise it may cause poor performance.
6. 上锡法如右图, 应尽量避免在PCB板上面非焊接位焊接, 否则加焊时易将焊锡流至产品 塑胶位造成松动或接触不良, As shown in the figure on the right, it is advisable to avoid soldering on non soldering positions on the PCB board as much as possible. Otherwise, during soldering, the solder may flow to the plastic position of the product, causing looseness or poor contact.



### 7. 保存方法 Save method

- ①. 产品以交货时的状态在常温、常湿, 不受阳光直射照射, 不产生腐蚀性气体的场所保管, 自交货起6个月内使用为佳: The product should be stored in a place where it is delivered at room temperature, humidity, not exposed to direct sunlight, and does not produce corrosive gases. It is recommended to use it within 6 months from the date of delivery
- ②. 包装被打开后未使用完的产品使用聚乙烯袋与空气隔断, 最好放置干燥剂(例如: 使用密封袋将其密封)请在①环境下保管与尽快使用 For products that have not been fully used after opening the packaging, use polyethylene bags to isolate them from the air. It is best to place desiccants (such as using sealed bags to seal them). Please store them in the environment and use them as soon as possible.