

## Q 型系列圆形电连接器

## Q series connector Q 系列连接器



Q 型系列圆形电连接器体积小，重量轻，卡口快速连接，操作使用简单方便，插针、插孔引线采用焊接式。产品结构先进，电连接性能优良，价格低廉，性价比高，被广泛用于各种电子仪器、电气设备间的电连接中。产品按电子工业部标准SJ1744制造。产品针、孔可以根据你的要求互换。

Q series of circular electrical connector, which owns the small volume and light weight. The bayonet would be coupled quickly. The pins and the sockets of jack are adopted welding style. The operation is simple and convenient. The advanced structure and the excellent electrical connection capability of the commodity, with the low price, which is reasonable. It was widely used in series of electronic apparatus and electronic equipment. All the articles are manufactured according to the electronic industry standard called SJ1744. All the pins and jacks would be exchanged as your requirement.

### (1) 使用环境条件

环境温度：-55~+85℃  
大气压力：达1KPa  
碰撞：加速度达500m/s<sup>2</sup>  
相对湿度：达98%，温度为+40℃

振动：振频10~2000HZ，加速度150m/s<sup>2</sup>  
机械寿命：500次

### Service environmental condition

Ambient temperature: -55~+85℃  
Atmospheric pressure: 达1KPa  
Collision: Acceleration 500m/s<sup>2</sup>  
Relative humidity: Temperature is 40degrees Centigrade reach 98%  
Vibration: Frequency 10~2000HZ, acceleration 150m/s<sup>2</sup>  
Mechanical life: 500 times

### (2) 工作电压、电流、电阻 Main technical parameters

接触件直径 Diameter of contact (mm)	接触电阻 Contact resistance (Ω)	工作电流 Working current (A)	电压Voltage (≤400HZ)	
			接触中心距 Contact centre distance (mm)	
			≥3.5	2.8
0.8	0.01	2	500	400
1	0.05	3	500	400
1.5	0.0025	10	500	400
2.5	0.001	25	500	400

注：根据连接器接触对数量，其每一接触对的额定电流规定如下：

接触对数目：1-20，为额定工作电流的100%

接触对数目：21-32，为额定工作电流的80%

接触对数目：33-55，为额定工作电流的70%

Attention according to connectors of the contact amount, the rated current of each contact are following:

The amount of contact 1-20, the rated current is 100%

The amount of contact 21-32, the rated current is 80%

The amount of contact 33-55, the rated current is 70%

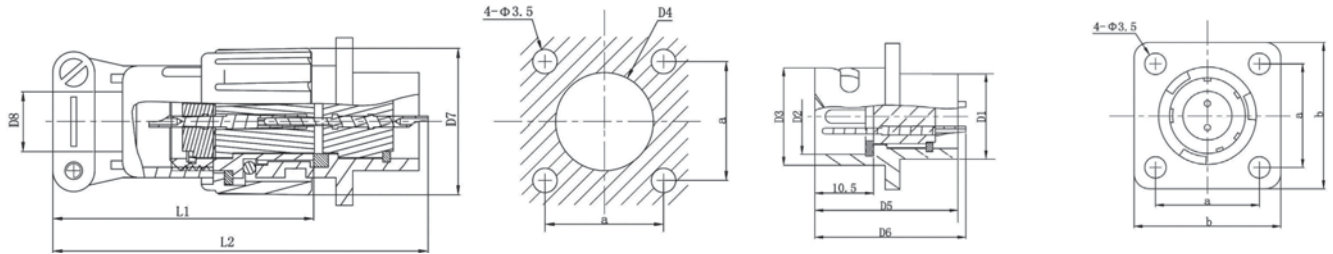
### (3) 试验电压 (50HZ) Experimental voltage (50HZ)

接触对中心距 Contact centre distance (mm)	正常条件下 Normal (V)	潮湿试验后 Moisture test (V)
≥3.5	1500	1000
2.8	1200	800

### (4) 低气压条件下的试验电压 (50HZ) Experimental voltage under low pressure (50HZ)

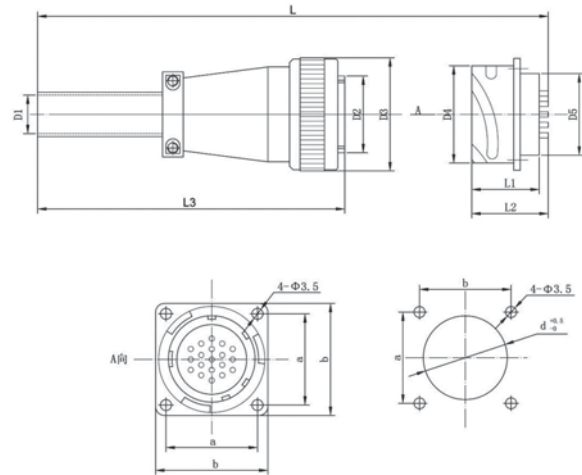
大气压力 Atmosphere (kPa)	接触对中心距 Contact centre distance (mm)	
	≥3.5	≥2.8
46.7	1000V	730V
8.5	500V	400V
4.4	400V	300V

## Q 系列连接器 Q series connector



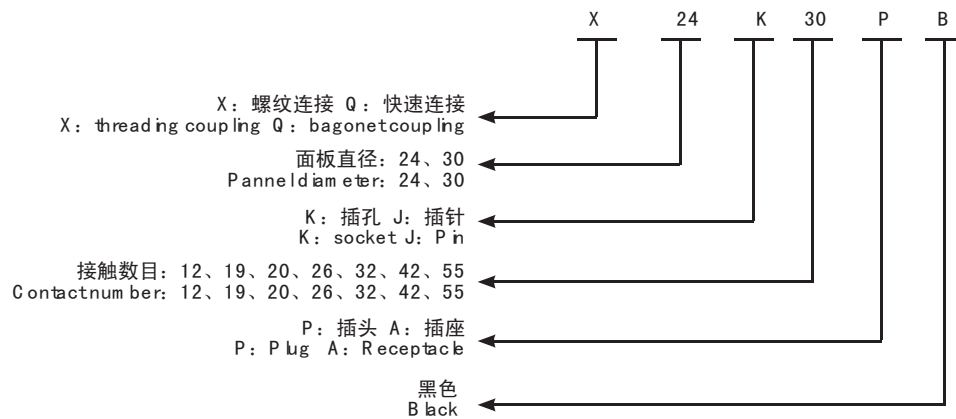
类型 Type	安装及外型尺寸 Fixing and exterior dimension											
	a	b	D1	D2	D3	D4	D5	D6	D7	D8	L1	L2
Q 14	17±0.20	24±0.20	φ14	φ12.4	φ16.8±0.20	φ14 <sup>+0.50</sup> <sub>-0</sub>	23	27	21	φ8	40	59
Q 18	20±0.20	27±0.20	φ18	φ16.6	φ21.2	φ18 <sup>+0.50</sup> <sub>-0</sub>	21.5	24.5	27	φ12	40.5	56.5

X24 或 Q 24  
X24 or Q 24



类型 Type	安装及外型尺寸 Fixing and exterior dimension											
	a	b	D1	D2	D3	D4	D5	d	l	L1	L2	L3
Q 24	26±0.20	33±0.20	φ11	φ22.2	φ32.5	φ27	φ24	φ24	103	21.5	23.5	87.5
Q 30	31±0.20	38±0.20	φ14	φ28.3	φ38.5	φ33	φ30	φ30	116.5	21.5	23.5	103

## 命名 How to order



## (5) 绝缘电阻 Insulation resistance

正常条件下 Normal	高温条件下 High temperature	潮湿试验后 Moisture test
$\geq 500M \Omega$	$\geq 500M \Omega$	$\geq 100M \Omega$

## (1) 使用条件

面板直径: 24mm, 30mm  
 电流: 3A-5A  
 针数: 12、12、20、26、32、42、55  
 连接方式: 螺纹连接/快速连接

## Service environmental condition

Panel diameter: 24mm, 30mm  
 working current: 3A-5A  
 contact number: 12、19、20、26  
 Coupling method: threading coupling or bagonet coupling

## (6) 标志方法及标志示例 Denotation approach and demonstration

序号 Number	分类特征 Classification character	分类内容 Classification content	标志 Sign
1	插头座类型 Type of socket	卡口小圆形插座 Bayonet sockets small circular plug	Q
2	插头座面板配合直径 Assorted diameter of socket and panel	14、18	标出数字 Sign No.
3	接触性种类 Sort of contacts	插针 Pin	J
		插孔 Jack	K
4	接触性数目 Number of contacts	2、3、4、5、7、12	标出数字 Sign No.
5	插头或插座 Plug or receptacle	插头 Plug	P
		插座 Receptacle	A

