



产品描述 Product Description

最大使用旋转速度： 50转/分钟（1方向旋转）
 最大使用频率： 10回/分钟（1回为正360°反360°）
 最大使用温度范围： -5 ~ 50°C
 产品外壳和端盖的材质： 铁金属材料(SPFC)
 旋转轴材料： PC塑料
 使用油： 硅油
 Max. rotation speed： 50r/pm
 Max. cycle rate： 10cycle/min
 Operating temperature： -5 ~ 60°C
 Body & cap material： Iron metal materials (SPFC)
 Rotating shaft material： PC
 Oil type： Silicone oil

使用说明 Directions for use

- 此缓冲器没有轴向支撑设计，所以安装时必须考虑另外轴向支撑问题。
- 轴插入 Q47A0-R/L 缓冲器时，请沿缓冲器空载方向边转动边插入。（请注意：如果硬性插入可能会引起缓冲器的破坏）
- 缓冲器使用时请用指定公差方轴。安装时尽量保持轴孔间的最小间隙，如果有间隙存在盖子的落下缓冲效果会受影响。
- the damper without axial support design, so it is important to consider when installation and axial support issues.
- shaft is inserted into the damper, please no-load rotational direction side along the damper insertion. (please note: if the rigid insertion may cause the destruction of the shock absorber)
- damper please use when using the specified tolerance of the shaft. Try to maintain the minimum clearance between the shaft hole when installation, if there is a gap the lid down damper effect will be affected.

Q47A0-R/L 缓冲器配合使用轴请参考以下推荐尺寸,使用推荐尺寸外的轴有可能引起轴的滑动。

Q47A0-R/L of damper used in conjunction with axis refer to the following recommended size, the recommended size of the outer shaft may cause the slide shaft.

推荐轴径 Recommended Shaft	$\varnothing 8_{-0.03}^0$
表面硬度 Surface hardness	HRC55以上 (above)
淬火深度 Hardening depth	0.5mm以上 (above)
表面粗糙度 Surface roughness	1.0Z以下 (below)
端部倒角 End-beveling	$C0.2-C0.3$ (OR R0.2-R0.3)

型号 Model	扭矩 Rated Torque	力矩输出方向 Direction of Rotation
Q47A0-B103	1.0±0.2N·m 10±2 Kgf·cm	双向 Both Direction
Q47A0-R103		顺向 Clockwise
Q47A0-L103		逆向 Counter-Clockwise
Q47A0-B153	1.5±0.3N·m 15±3 Kgf·cm	双向 Both Direction
Q47A0-R153		顺向 Clockwise
Q47A0-L153		逆向 Counter-Clockwise
Q47A0-B203	2.0±0.4N·m 20±4 Kgf·cm	双向 Both Direction
Q47A0-R203		顺向 Clockwise
Q47A0-L203		逆向 Counter-Clockwise
Q47A0-B253	2.5±0.5N·m 25±5 Kgf·cm	双向 Both Direction
Q47A0-R253		顺向 Clockwise
Q47A0-L253		逆向 Counter-Clockwise

注(1) 规格扭矩为每分钟20转，温度23±2°C测定的数据；
 注(2) 可以通过更换缓冲器粘性油的粘度提供特殊扭矩定制。

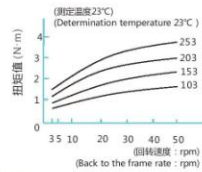
(1) with torque 20 rotations per minute (RPM), 23 ± 2 °C temperature measurement data;
 (2) by oil viscosity change damper providing customized special torque;

缓冲器特性 Damper Characteristics

1 速度特性 Speed Characteristics

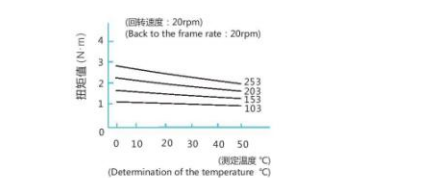
盘型旋转缓冲器根据回转速度的变化，扭矩也发生变化。其变化规律可参考下图所示，速度提高扭矩也提高，速度放慢扭矩也随之下降。说明书的扭矩为20rpm回转时的扭矩，在盖子由垂直向水平方向回转落下的使用场合，由于开始落下时回转速度慢，扭矩会比标定数值小。

Disk type rotary buffer according to the change of rotating speed, torque is also changing. Its change law can reference, as shown in the upper speed torque increases, slowing down of the torque. Instructions for 20 RPM rotation torque, torque in the lid from vertical to horizontal rotary use occasions, due to start turning speed slow falling, the torque will be smaller than calibration values.

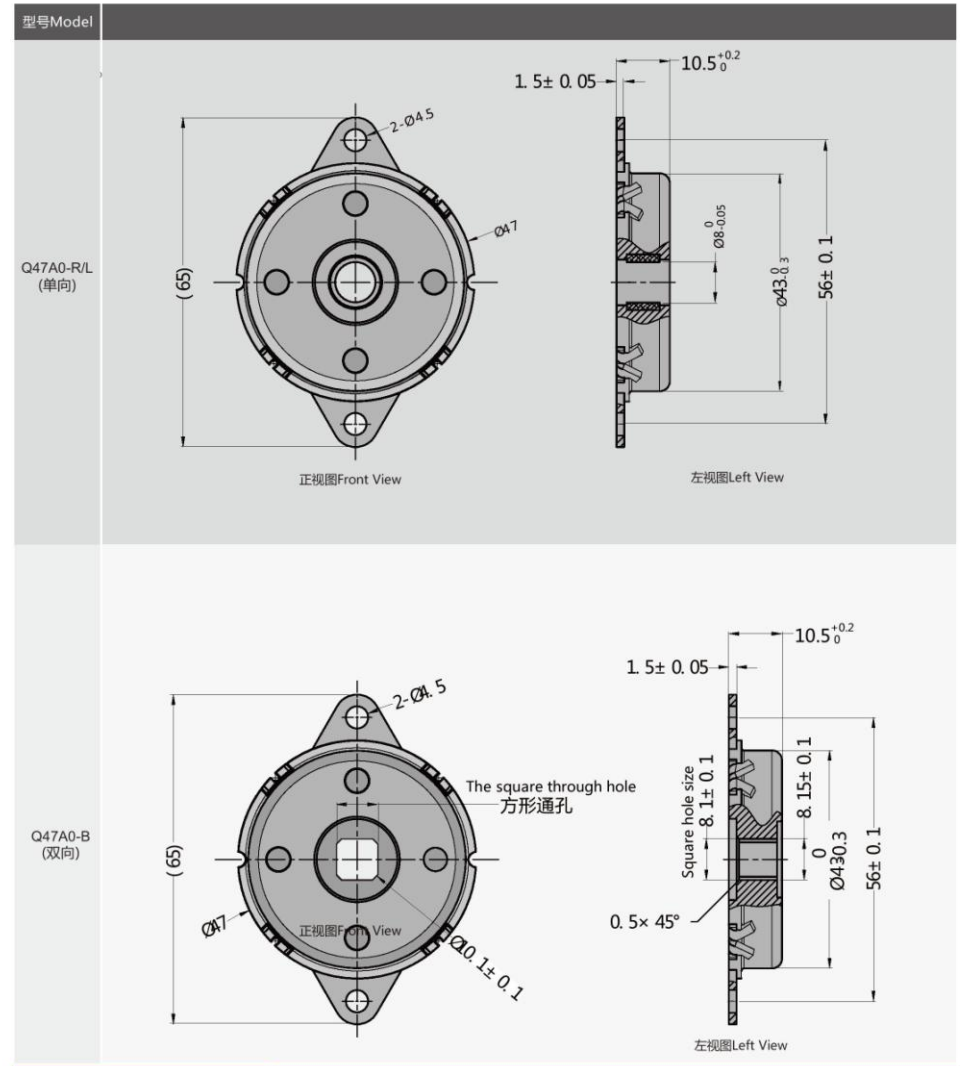


2 温度特性 Temperature characteristic:

盘型旋转缓冲器根据使用环境温度的变化扭矩也发生变化。其变化规律可参考下图所示，环境温度提高时扭矩下降，环境温度下降时扭矩提高。这是因为环境温度变化时粘性油的粘度也随之变化的缘故。但是当环境温度恢复到常温时，扭矩也会恢复到原来的数值。



外形尺寸 Outside Diagram



运用领域 Using Field

目前广泛应用于剧场座椅，翻盖配合弹簧缓冲，能有效降低产品使用中产生的撞击和噪音，提高产品使用寿命。
 At present, widely used in the theater seats, flip with a damper spring, can effectively reduce the impact and noise generated in the use of products, increasing the service life of the product.



产品描述 Product Description

最大使用旋转速度：	50转/分钟 (1方向旋转)
最大使用频率：	10回/分钟 (1回为正360°反360°)
最大使用温度范围：	-5 ~ 60°C
产品外壳和端盖的材质：	铁金属材料(SPFC)
旋转轴材料：	PC塑料
使用油：	硅油
Max. rotation speed :	50r/pm
Max. cycle rate :	10cycle/min
Operating temperature :	-5 ~ 60°C
Body & cap material:	Iron metal materials (SPFC)
Rotating shaft material:	PC
Oil type :	Silicone oil

使用说明 Directions for use

- 此缓冲器没有轴向支撑设计，所以安装时务必考虑另外轴向支撑问题。
- 轴插入 Q57A0-R/L 缓冲器时，请沿缓冲器空载方向转动边插入。(请注意：如果硬性插入可能会引起缓冲器的破坏)
- 缓冲器使用时请用指定公差方轴。安装时尽量保持轴孔间的最小间隙，如果有间隙存在盖子的落下缓冲效果会受影响。
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- shaft is inserted into the damper, please no-load rotational direction side along the damper insertion. (please note: if the rigid insertion may cause the destruction of the shock absorber)
- damper please use when using the specified tolerance of the shaft. Try to maintain the minimum clearance between the shaft hole when installation, if there is a gap the lid down damper effect will be affected.

Q57A0-R/L 缓冲器配合使用轴请参考以下推荐尺寸,使用推荐尺寸外的轴有可能引起轴的滑动。

Q57A0-R/L of damper used in conjunction with axis refer to the following recommended size, the recommended size of the outer shaft may cause the slide shaft.

推荐轴径: Recommended Shaft	$\phi 10_{-0.03}^0$
表面硬度 Surface hardness	HRC55以上 (above)
淬火深度 Hardening depth	0.5mm以上 (above)
表面粗糙度 Surface roughness	1.0Z以下 (below)
端部倒角 End-beveling	$C0.2-C0.3$ (DR R0.2-R0.3)

型号 Model	扭矩 Rated Torque	力矩输出方向 Direction of Rotation
Q57A0-B303	3.0±0.6N·m 30±6 Kgf·cm	双向 Both Direction
Q57A0-R303		顺向 Clockwise
Q57A0-L303		逆向 Counter-Clockwise
Q57A0-B403	4.0±0.8N·m 40±8 Kgf·cm	双向 Both Direction
Q57A0-R403		顺向 Clockwise
Q57A0-L403		逆向 Counter-Clockwise
Q57A0-B503	5.0±1.0N·m 50±1 Kgf·cm	双向 Both Direction
Q57A0-R503		顺向 Clockwise
Q57A0-L503		逆向 Counter-Clockwise

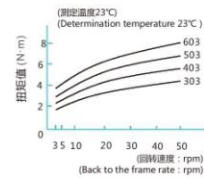
注(1) 规格扭矩为每分钟20转, 温度23±2°C测定的数据;
注(2) 可以通过更换缓冲器粘性油的粘度提供特殊扭矩定制。
(1) with torque 20 rotations per minute (RPM), 23 ± 2 °C temperature measurement data;
(2) by oil viscosity change damper providing customized special torque;

缓冲器特性 Damper Characteristics

1 速度特性 Speed Characteristics

盘型旋转缓冲器根据回转速度的变化, 扭矩也发生变化。其变化规律可参考下图所示, 速度提高扭矩也提高, 速度放慢扭矩也随之下降。说明书的扭矩为20rpm回转时的扭矩, 在盖子由垂直向水平方向回转过落下的使用场合, 由于开始落下时回转速度慢, 扭矩会比标定数值小。

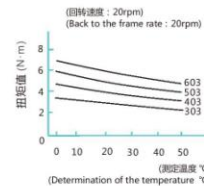
Plate type rotary buffer according to the change of rotating speed, torque is also changing. Its change law can reference, as shown in the upper speed torque increases, slowing down of the torque. Instructions for 20 RPM rotation torque, torque in the lid from vertical to horizontal rotary use occasions, due to start turning speed slow falling, the torque will be smaller than calibration values.



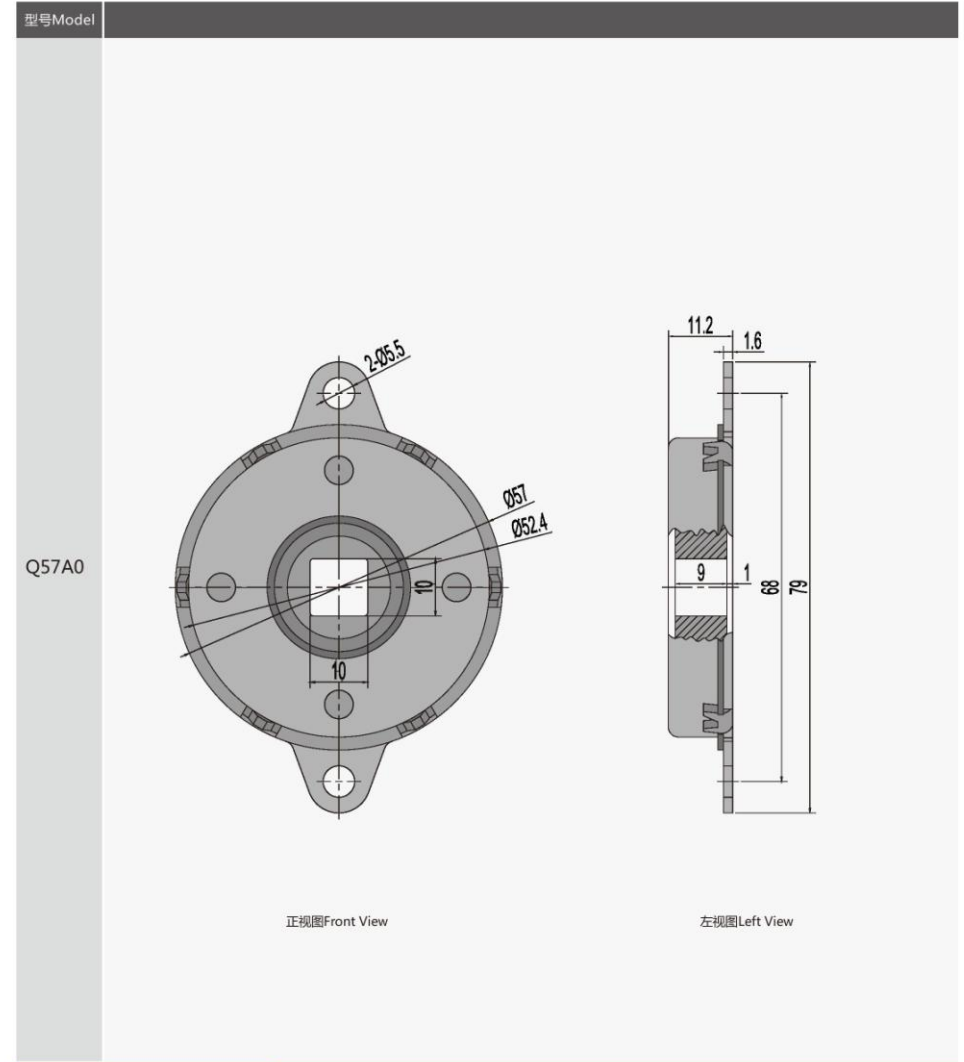
2 温度特性 Temperature characteristic:

盘型旋转缓冲器根据使用环境温度的变化扭矩也发生变化。其变化规律可参考下图所示, 环境温度提高时扭矩下降, 环境温度下降时扭矩提高。这是因为环境温度变化时粘性油的粘度也随之变化的缘故。但是当环境温度恢复到常温时, 扭矩也会恢复到原来的数值。

Disk type rotary buffer according to the change of environmental temperature torque also changes. Its change law can reference, as shown in the upper environment temperature increase the torque, torque increase when the temperature drops. This is because the environment temperature changes because of viscous oil viscosity changes. But when the environment temperature back to normal temperature, the torque will restore to its original value.



外形尺寸 Outside Diagram



运用领域 Using Field

目前广泛应用于剧场座椅, 翻盖配合弹簧缓冲, 能有效降低产品使用中产生的撞击和噪音, 提高产品使用寿命。

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