### D40 SERIES

### 旋转缓冲器 ROTARY DAMPER





型号Model	扭矩Rated torque	无阻尼方向扭矩 Without direction of damping torque	力矩输出方向 Direction of Rotation
D40B0-R503	5.0N.m	1.5N.m	顺向Clockwise
D40B0-L503	50kgf.cm	15kgf.cm	逆向Counter-Clockwise
D40B0-R703	7.0N.m	2.014.111	顺向Clockwise
D40B0-L703	70kgf.cm		逆向Counter-Clockwise
D40B0-R903	9.0N.m	3.0N.m	顺向Clockwise
D40B0-L903	90kgf.cm	30kgf.cm	逆向Counter-Clockwise

- 注(1) 规格扭矩为温度23±2℃时的数据
- 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) torque specification for at 23 + 2 °C temperature data;
   (2) can provide special torque by changing the buffer oil viscosity of custom;

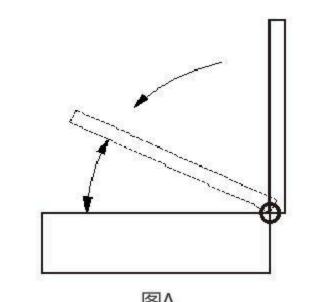
#### 产品描述Product Description

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最大使用角度:	120°	Using the Angle:	120°
最大使用温度范围:	0∼ 40°C	Operating temperature :	0~ 40°C
产品外壳及端盖的材质:	ZDC	Body & cap material:	ZDC
旋转轴材料:	ZDC	Rotating shaft material:	ZDC
使用油:	硅油	Oil type :	Silicone oil

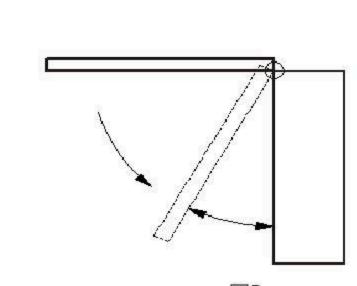
#### 使用说明Directions for use

D40系列旋转缓冲器在图A所示垂直位置开始下落至水平位置时,由于设计的扭矩在开始位置时最弱,随着缓冲器角度的旋转,扭矩逐渐增强,所以盖子的动作能在最后缓慢关上,图B所示当盖子从水平位置开始下落时,由于盖子重力产生的扭矩在竖直方向上时为零,而缓冲器在最后的位置扭力最大,所以盖子不能完全闭合;

D40 series rotary damper in the figure shown in A vertical position to horizontal position when they start, due to the design of the torque is the most weak, at the beginning of the position as the rotation of the damper Angle, torque enhanced gradually, so the action of the lid can be in finally slowly shut; As shown in figure B from horizontal position when the lid began to fall, the torque generated in the lid of gravity on the vertical direction is zero, and the position of the damper in the final torque is the largest, so the lid cannot be closed completely;



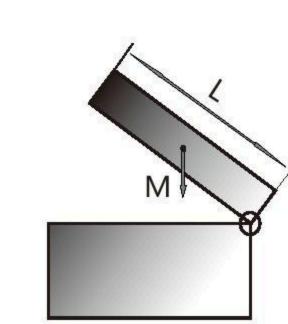
缓冲器扭矩渐强盖子可以缓慢闭合 Figure a. Damper torque gradually strong The lid can be slowly closed



缓冲器扭矩渐强盖子不能完全闭合 Figure B Damper torque gradually strong lid is not closed completely

图示的例子在使用旋转缓冲器的时候,请按下列计算方式算出需要的扭

Examples of graphic when using rotary buffer, please click the following calculation method to calculate the torque;



例: 盖的重量M=3.0kg 旋转轴离盖板边缘的长度L=0.4m 负载扭矩: T=3.0×9.8×0.4÷2 =5.88N•m

由上面的计算我们可选定缓冲器为D40B0-603
Example: the weight of the cover M= 3.0 kg
Axis from the edge of the plate length L= 0.4 m
The load torque:
T = 3.0 \* 9.8 \* 0.4 present 2

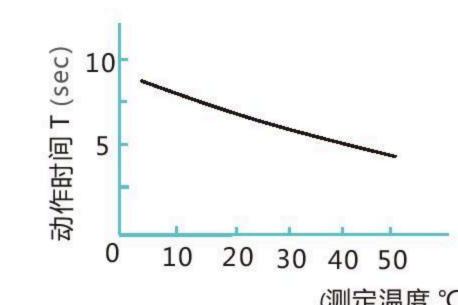
T = 3.0 \* 9.8 \* 0.4 present 2
T = 5.88 N•m
Calculated by the above, we selected damper is D40B0 - 603

回转轴和结合部件的间隙请尽量减小,如果有间隙存在,回转下落时盖板 速度会受到影响;

Gap of rotating shaft and combining parts please reduce as far as possible, if there is a gap, rotating flat speed down would be affected;

缓冲器根据使用环境温度的变化扭矩也会发生变化。其变化规律为环境温度升高时扭矩下降,动作时间加快,环境温度下降时扭矩升高,动作时间放慢,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;

Damper according to the use of the change of environmental temperature torque will change too. Its change rule is when the environment temperature torque, action time, environment temperature drops when the torque increases, the action time to slow down, this is because the environment temperature changes, viscous oil viscosity changes. But when the environment temperature back to normal temperature, the torque will restore to its original value:



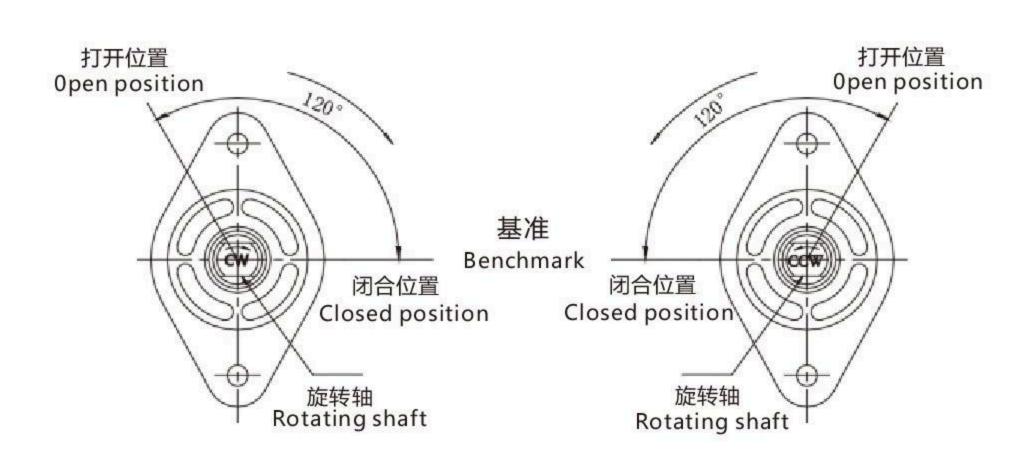
(Determination of the temperature °C)

D40系列旋转缓冲器的旋转角度为120度,超过120度回转时有损坏缓冲器的可能,请在外部安装停止机构;

D40 series rotary damper rotation Angle of 120 degrees, more than 120 degrees of rotation has the possibility of damage to damper, please install stop in external agencies;

#### 动作的角度以闭合位置为基准;

The Angle of the movement to close position as a benchmark;



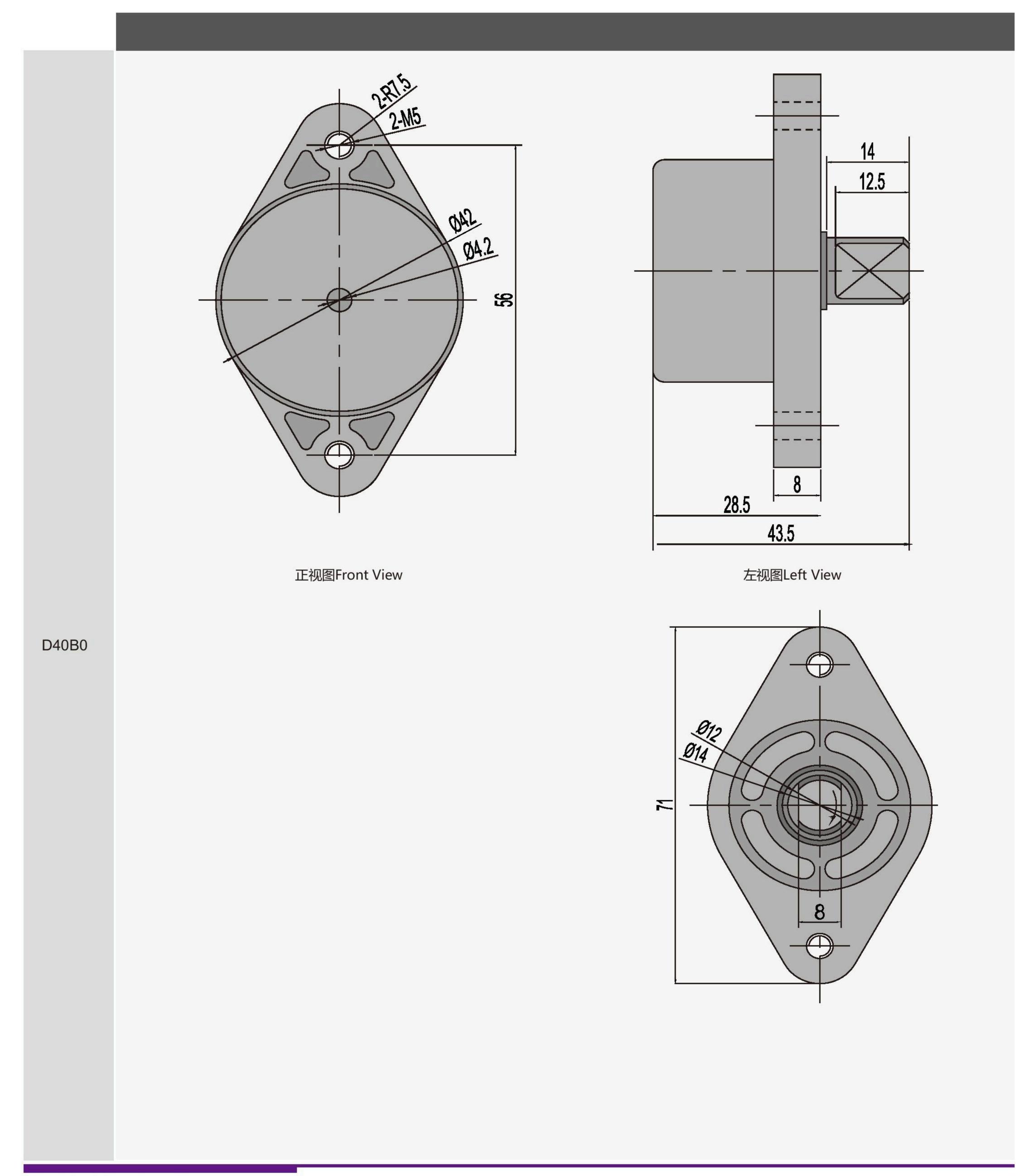
缓冲器的扭矩发生方向根据缓冲器结构不同而有所不同,请根据不同的使用方式选用合适的缓冲器。

Damper of torque direction according to several different damper, please choose the appropriate damper according to the different methods of trial.

旋转缓冲器 ROTARY DAMPER

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## 外形尺寸Outside Diagram



运用领域Using Field

目前广泛应用于翻盖的慢落缓冲,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 small flip slow down buffer, effectively reduce the impact and noise generated in the use of products, increasing the service life of the product.