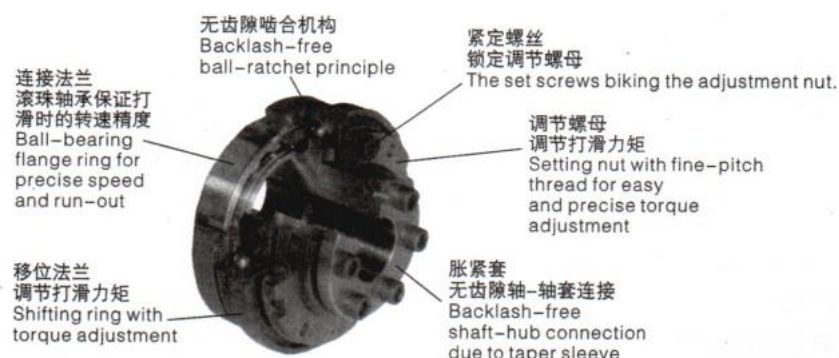


TLB 钢球式扭矩限制器



过载时，钢球离开了凹坑，使主动端部件和从动端部件之间产生打滑，从而避免了因过载而引起的损坏。移动环作 S 形的轴向移动，使安装的限位开关或接近开关发出信号，这个信号可用来控制或切断动力源。我们建议用一个绕过限位开关和传感器的旁路电路来快速重新启动动力设备。

过载消除后，钢球在保持架旋转过程中转动一个角度在下一个凹坑中自动复位，这样主动端和从动端部件在相互旋转一个角度后恢复正常转动。

BW-SC 型钢球式扭矩限制器以高精度、高动态和高安全性满足了现代电子驱动的要求，可以绝对无间隙的传递扭矩。

In case of overload the ratchet parts balls leave their indentations, and a relative motion between the driving and driven side is produced.

In this way damages due to overload are avoided. The shift ring makes an Axial motion to the shifting way "S" and activates the limit switch or proximity initiator. The signal can be used for control functions of for disconnection of the drive. For the restart we would recommend to electrically bypass the limit switch or proximity initiator for a short time.

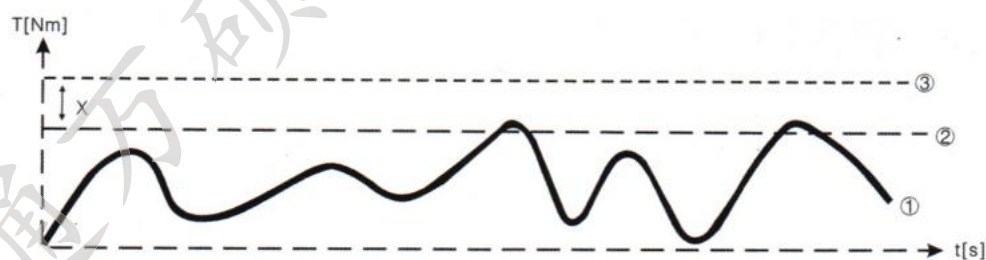
After the overload eliminated. The ball which was rotating in the keeping rotating veset automatically in the next in dentation on then the drive and drive side was nesuming normal rotation with an mutual rotating angle.

影响扭矩限制器造型的重要因素：

Important factors for the selection of torque limiters:

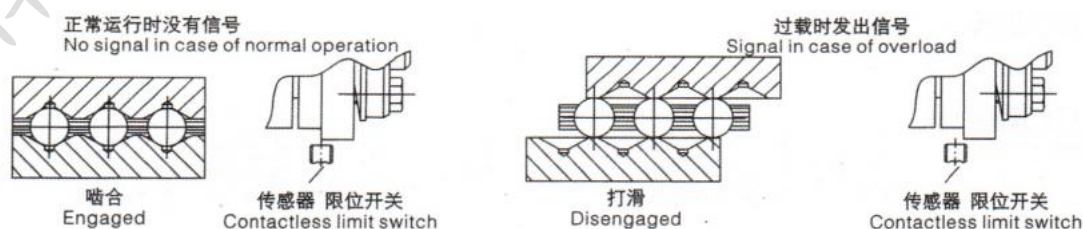
为保证设备的平衡运行，过载扭矩的设定值必须大于设备的最大工作力矩。（如图）

A smooth operation is only guaranteed if the overload torque set exceeds the maximum operating torque of the machine (see diagram below).



动作原理：

Act principle:



TLB 钢球式扭矩限制器

轴-法兰连接

Shaft-to-ring connection

TLB 型键槽连接

Design TLB key connection

TLB 型带胀紧套加长型连接

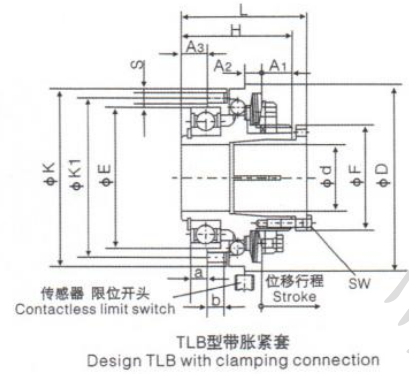
Design TLB with long type clamping connection

TLB 型带胀紧套连接

Design TLB with clamping connection

TLB 型钢球式扭矩限制器参数 Parameter of TLB Torque Limiter

TLB 型带胀紧套 Design TLB with clamping connection



TLB . 型号 Model	扭矩范围 Torque Range (Nm)				最高转速 MAX. speed unbalanced rpm	过载发生 止推位移 Thrust washer stroke on (yedoadd mm	转动惯量 Mass moments of inertial		锁紧螺栓 Od 及拧紧 扭矩 Clamping screws and tightening torques for *d		重量 Weight kg
	X 型 Type X	L 型 Type L	M 型 Type M	H 型 Type H			轴毂端 Hub-side Kgm2	法兰端 Flexible-side Kgm2	mm	Nm	
01	5-12.5	10-25	20-50	25-62.5	4000	1.2	0.000211	0.000093	4×M4	4	0.68
02	10-25	20-50	40-100	50-125	3000	1.5	0.000531	0.000234	6×M4	4	1.14
03	20-50	40-100	80-200	100-250	2500	1.8	0.001388	0.000643	8×M4	4	1.98
04	40-100	80-200	160-400	200-500	2000	2.0	0.002846	0.001306	8×M5	8	2.88
05	70-175	140-350	280-700	380-875	1200	2.2	0.003858	0.002649	8×M6	12	4.59
06	120-300	240-600	480-1200	600-1500	800	2.5	0.029432	0.006690	8×M8	15	10.63

OTLB 型钢球式扭矩限制器主要尺寸 Dimension of TLB Torque Limiter

TLB 型号 Model	dmin	dmax	D	F	E (h6)	K	K1	L	H	Ai	A2	A3	a	b	s	sw
01	10	20	70	38	47	65	56	47	40	12	7 •	8	5	6	8×M4	7
02	15	25	85	44	62	80	71	56	48	13.5	8	11	7	7	8×M5	7
03	22	35	100	56	75	95	85	67	59	16	9	14	9	9	8×M6	7
04	32	44	115	70	90	110	100	73	64	17	10	16	10	10	8×M6	8
05	35	55	135	84	100	130	116	86	75	20.5	12	18	12	10	8×M8	10
06	40	65	166	100	130	166	150	130	115	46	16	21	15	12	8×M10	13

- 1) 其他更大或更小扭矩范围产品请来电咨询;
- 2) 更大或更小的孔径请来电咨询;
- 3) 内孔公差适用 H8;

- 1) further sizes for smaller and larger torques available on request.
- 2) smaller bores for low torques available on request.
- 3) tolerance user-side H8.

◇订货描述示例:

Order form:

TLB-03	L	Φ22	Φ22 胀紧套联结 Φ22 clamping
规格与型号 size/type of joint	扭矩范围 Torque Range (Nm)	D 成品孔径 Finish bore (H8)	成品孔径 (H8) 按 JB/T7934-1999 标准 Finish bore (H8) to JB/T7934-1999