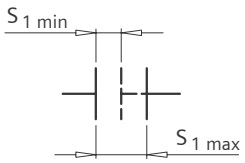
弹性联轴器 Flexible Couplings

对中误差 Alignment Tolerances

联轴器间隙 "S_1" 的调整
Adjustment of the coupling gap "S_1"



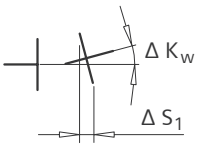
在联轴器部件之间的间隙尺寸在安装时应调整到尺寸 S_1 容许的偏差以内。

During assembly, the gap between the coupling parts is to be adjusted to dimension S_1 within the "permissible deviations".

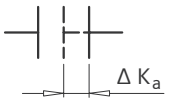
可能出现的对中偏差 / Possible misalignments

1) 径向对中偏差 Radial misalignment

2) 角对中偏差 Angular misalignment



3) 轴向对中偏差 Axial misalignment



在运行过程中绝对不准超过以下容许的最大对中偏差：
The following max. permissible misalignments MUST NOT be exceeded during operation:

1) 径向对中偏差 ΔK_r

2) 角对中偏差 ΔK_W 或 ΔS_1 作为间隙测量尺寸的最大差值。

3) 轴向对中偏差 ΔK_a 在运行过程中容许频率 10 Hz 以下的动态轴向对中偏差出现。

1) Radial misalignment ΔK_r

2) Angular misalignment ΔK_W or alternatively ΔS_1 as greatest difference between the measured gapdimensions.

3) Axial misalignment ΔK_a During operation, a dynamic axial misalignment with a max. frequencyof 10 Hz is permissible.

允许的径向、角以及轴向对中偏差可按下式计算：
The permissible radial, angular and axial misalignments can be calculated as follows:

$$\Delta K_r \text{ zul./perm.} = \Delta S_1 \text{ zul./perm.} = \Delta K_a \text{ zul./perm.} = \left(0.1 + \frac{d_a}{1000}\right) \times \frac{40}{\sqrt{n}}$$

注意！径向、角和轴向对中偏差允许同时出现。
Attention! Radial, angular and axial misalignment may occur at the same time.

n (min^{-1}) 联轴器的转速 / Coupling speed

d_a (mm) 联轴器的规格 / Coupling size

ΔK_r zul./perm. (mm) 允许的径向对中偏差 / Permissible radial misalignment

ΔS_1 zul./perm. (mm) 允许的角对中偏差 / Permissible angular misalignment

ΔK_a zul./perm. (mm) 允许的轴向对中偏差 / Permissible axial misalignment

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规格 Size d_a mm	在安装时间隙尺寸调整 Adjustment of gap during assembly $S_{1\,min}$ mm	$S_{1\,max}$ mm	在运行过程中允许的径向、角和轴向对中偏差值 Shaft displacements (rounded) for radial, angular and axial misalignments permissible during operation 转速 / Speed 500 min^{-1} mm 4)	度 5) Degree	转速 / Speed 1000 min^{-1} mm 4)	度 5) Degree	转速 / Speed 1500 min^{-1} mm 4)	度 5) Degree	转速 / Speed 3000 min^{-1} mm 4)	度 5) Degree
105	2	4	0.35	0.20	0.25	0.14	0.20	0.11	0.15	0.08
125	2	4	0.40	0.18	0.30	0.13	0.25	0.11	0.15	0.07
144	2	4	0.45	0.18	0.30	0.12	0.25	0.10	0.20	0.07
162	2	5	0.45	0.17	0.35	0.12	0.25	0.10	0.20	0.07
178	2	5	0.50	0.16	0.35	0.11	0.30	0.09	0.20	0.06
198	2	5	0.50	0.15	0.40	0.11	0.30	0.09	0.20	0.06
228	2	5	0.60	0.15	0.40	0.10	0.35	0.09	0.25	0.06
252	2	5	0.65	0.14	0.45	0.10	0.35	0.08	0.25	0.06
285	3	6	0.70	0.14	0.50	0.10	0.40	0.08	0.30	0.06
320	3	6	0.75	0.13	0.55	0.09	0.45	0.08	0.30	0.06
360	3	6	0.80	0.13	0.60	0.09	0.50	0.08	0.35	0.05
400	3	6	0.90	0.13	0.65	0.09	0.50	0.07		
450	4	7	1.00	0.12	0.70	0.09	0.55	0.07		
500	4	7	1.10	0.12	0.75	0.09	0.60	0.07		
560	4	8	1.20	0.12	0.85	0.08	0.70	0.07		
630	4	8	1.30	0.12	0.90	0.08	0.75	0.07		
710	5	9	1.45	0.12	1.00	0.08	0.85	0.07		
800	5	9	1.60	0.12	1.10	0.08				
900	5	10	1.80	0.11	1.30	0.08				
1 000	5	10	2.00	0.11	1.40	0.08				
1 120	6	11	2.20	0.11	1.50	0.08				
1 250	6	11	2.40	0.11						
1 400	6	12	2.70	0.11						
1 600	6	12	3.00	0.11						
1 800	8	16	3.40	0.11						
2 000	8	16	3.80	0.11						

4) ΔK_r 允许值 / perm.
ΔS_1 允许值 / perm.
ΔK_a 允许值 / perm.

5) ΔK_W 允许值 / perm.