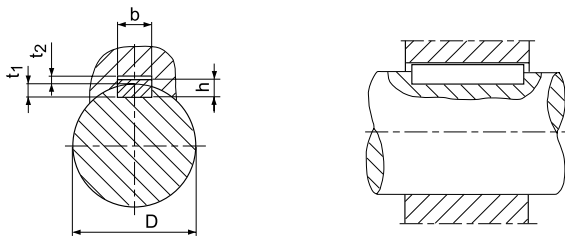


## MOUNTING INSTRUCTIONS: SO THAT IT FITS.

### KEY ASSEMBLIES

For all freewheel inner races connected to shaft by a key, our standard bore tolerance is H7, with keyway to JS10. If no other indication we recommend a shaft tolerance of h6 or j6. For maximum indexing accuracy, adjusted keys should be machined to give no clearance.



Bore size	DIN 6885*   Sheet 1				DIN 6885*   Sheet 3			
	b <sup>JS10</sup>	h	t <sub>1</sub>	t <sub>2</sub>	b <sup>JS10</sup>	h	t <sub>1</sub>	t <sub>2</sub>
> 6-8	2 ± 0.020	2	1.2 + 0.1	1 + 0.3				
> 8-10	3 ± 0.020	3	1.8 + 0.1	1.4 + 0.3				
> 10-12	4 ± 0.024	4	2.5 + 0.1	1.8 + 0.3				
> 12-17	5 ± 0.024	5	3 + 0.1	2.3 + 0.3	5 ± 0.024	3	1.9 + 0.1	1.2 + 0.3
> 17-22	6 ± 0.024	6	3.5 + 0.1	2.8 + 0.3	6 ± 0.024	4	2.5 + 0.1	1.6 + 0.3
> 22-30	8 ± 0.029	7	4 + 0.2	3.3 + 0.4	8 ± 0.029	5	3.1 + 0.1	2 + 0.3
> 30-38	10 ± 0.029	8	5 + 0.2	3.3 + 0.4	10 ± 0.029	6	3.7 + 0.2	2.4 + 0.3
> 38-44	12 ± 0.035	8	5 + 0.2	3.3 + 0.4	12 ± 0.035	6	3.9 + 0.2	2.2 + 0.3
> 44-50	14 ± 0.035	9	5.5 + 0.2	3.8 + 0.4	14 ± 0.035	6	4 + 0.2	2.1 + 0.3
> 50-58	16 ± 0.035	10	6 + 0.2	4.3 + 0.4	16 ± 0.035	7	4.7 + 0.2	2.4 + 0.3
> 58-65	18 ± 0.035	11	7 + 0.2	4.4 + 0.4	18 ± 0.035	7	4.8 + 0.2	2.3 + 0.3
> 65-75	20 ± 0.042	12	7.5 + 0.2	4.9 + 0.4	20 ± 0.042	8	5.4 + 0.2	2.7 + 0.3
> 75-85	22 ± 0.042	14	9 + 0.2	5.4 + 0.4	22 ± 0.042	9	6 + 0.2	3.1 + 0.4
> 85-95	25 ± 0.042	14	9 + 0.2	5.4 + 0.4	25 ± 0.042	9	6.2 + 0.2	2.9 + 0.4
> 95-110	28 ± 0.042	16	10 + 0.2	6.4 + 0.4	28 ± 0.042	10	6.9 + 0.2	3.2 + 0.4
> 110-130	32 ± 0.050	18	11 + 0.3	7.4 + 0.4	32 ± 0.050	11	7.6 + 0.2	3.5 + 0.4
> 130-150	36 ± 0.050	20	12 + 0.3	8.4 + 0.4	36 ± 0.050	12	8.3 + 0.2	3.8 + 0.4
> 150-170	40 ± 0.050	22	13 + 0.3	9.4 + 0.4				
> 170-200	45 ± 0.050	25	15 + 0.3	10.4 + 0.4				
> 200-230	50 ± 0.050	28	17 + 0.3	11.4 + 0.4				
> 230-260	56 ± 0.060	32	20 + 0.3	12.4 + 0.4				
> 260-290	63 ± 0.060	32	20 + 0.3	12.4 + 0.4				
> 290-330	70 ± 0.060	36	22 + 0.3	14.4 + 0.4				

\* Keyway tolerances for hardened parts are not given in DIN6885.

### BOLT ASSEMBLIES

In freewheel technology torque is often transmitted through bolts. Experience has shown that it is a practical and reliable way since freewheels transmit torque in only one direction.

Bolt quality and tightening torques to use are as follows:

Thread	Strength standard			
	8.8		10.9	
	Type	[Nm]	Type	[Nm]
M5		6		8
M6		10	AA	14
M8		25	AL	34
M10		48	FSO	68
M12	RSCI	84	GFR	118
M16		206	HPI	290
M20		402	HPI	550
M24		696	RIZ	950
M30		1420		1900

### RUN-OUT

Permitted run-out tolerances for the mounting of non self supported roller freewheels AA, AE, AS, ASNU, KI and NF (see table on the bottom right).

In order to maintain these limits, ball bearings with standard clearance must be installed adjacent to the freewheel. The permitted run-out for sprag type freewheels DC, RSCI and S200 are given in their respective tables.

Bores-diameter [mm]	AA, AE, AS, ASNU, KI, NF	
	Runout TIR	Squareness TIR
4-8	0.020	0.02
10-17	0.035	0.03
20-50	0.060	0.03
55-100	0.100	0.03
110-150	0.160	0.03

### PRESS FIT ASSEMBLIES

Shaft and bore tolerances are specified on the pages for each type where press fitting is appropriate.

As with standard bearings, suitable tooling must be used for press fitting such that no axial load is transmitted through the inner part of the freewheel during assembly.