

Mounting Requirements

Press fit assemblies

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

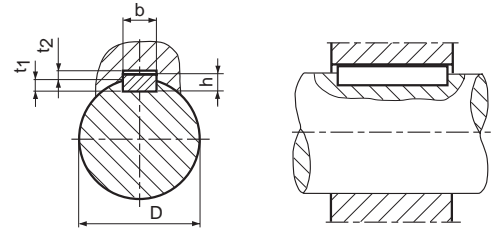
As with standard bearings, suitable tooling must be used for press fitting such that no axial load is transmitted through the inner part of the clutch during assembly.

Metric Key assemblies

For all overrunning clutch inner races connected to shaft by a key, our standard bore tolerance is H7, with keyway to JS10.

We recommend a shaft tolerance of h6 or j6. For maximum indexing accuracy, adjusted keys should be machined to give no clearance.

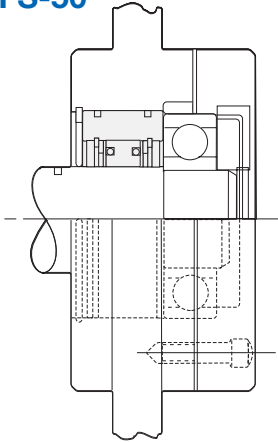
(Metric keyseat dimensions listed on page 123.)



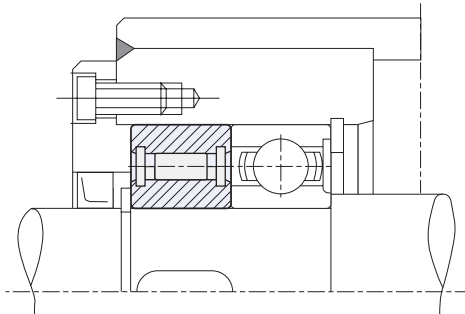
Mounting Examples

Non-supported models

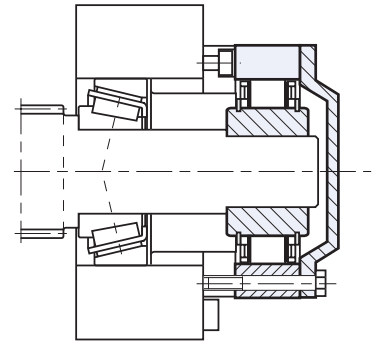
FS-50



AS

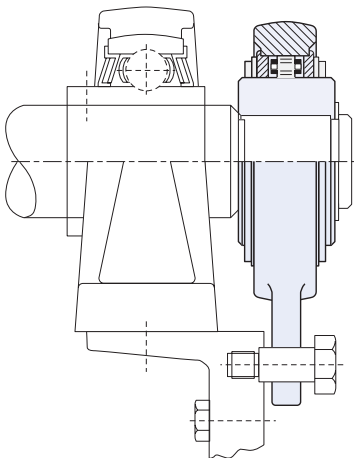


RSCI

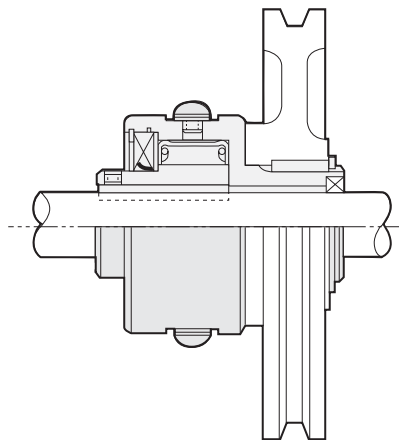


Bearing supported models

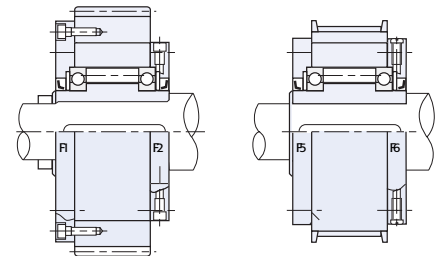
RSBW



FSR

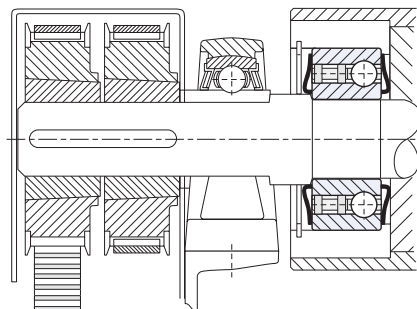


GFR

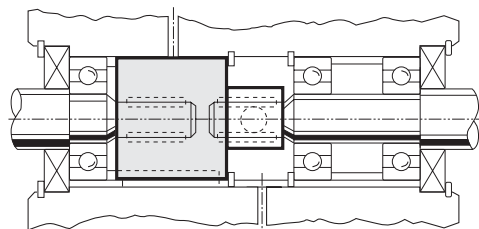


Combined bearing/clutch models

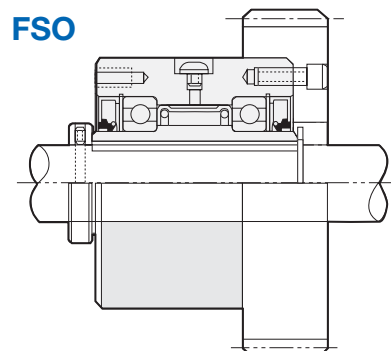
CSK



RL



FSO



Mounting Requirements

Metric Keyseat Dimensions

Bore size (mm)	DIN 6885.1 (mm)				DIN 6885.3 (mm)			
	b (width)	h (key height)	t1 (keyseat-shaft)	t2 (keyseat-housing)	b (width)	h (key height)	t1 (keyseat-shaft)	t2 (keyseat-housing)
6 – 8.0	2 ± 0,020	2	1,2 + 0,1	1 + 0,3				
8.1 – 10.0	3 ± 0,020	3	1,8 + 0,1	1,4 + 0,3				
10.1 – 12.0	4 ± 0,024	4	2,5 + 0,1	1,8 + 0,3				
12.1 – 17.0	5 ± 0,024	5	3 + 0,1	2,3 + 0,3	5 ± 0,024	3	1,9 + 0,1	1,2 + 0,3
17.1 – 22.0	6 ± 0,024	6	3,5 + 0,1	2,8 + 0,3	6 ± 0,024	4	2,5 + 0,1	1,6 + 0,3
22.1 – 30.0	8 ± 0,029	7	4 + 0,2	3,3 + 0,4	8 ± 0,029	5	3,1 + 0,1	2 + 0,3
30.1 – 38.0	10 ± 0,029	8	5 + 0,2	3,3 + 0,4	10 ± 0,029	6	3,7 + 0,2	2,4 + 0,3
38.1 – 44.0	12 ± 0,035	8	5 + 0,2	3,3 + 0,4	12 ± 0,035	6	3,9 + 0,2	2,2 + 0,3
44.1 – 50.0	14 ± 0,035	9	5,5 + 0,2	3,8 + 0,4	14 ± 0,035	6	4 + 0,2	2,1 + 0,3
50.1 – 58.0	16 ± 0,035	10	6 + 0,2	4,3 + 0,4	16 ± 0,035	7	4,7 + 0,2	2,4 + 0,3
58.1 – 65.0	18 ± 0,035	11	7 + 0,2	4,4 + 0,4	18 ± 0,035	7	4,8 + 0,2	2,3 + 0,3
65.1 – 75.0	20 ± 0,042	12	7,5 + 0,2	4,9 + 0,4	20 ± 0,042	8	5,4 + 0,2	2,7 + 0,3
75.1 – 85.0	22 ± 0,042	14	9 + 0,2	5,4 + 0,4	22 ± 0,042	9	6 + 0,2	3,1 + 0,4
85.1 – 95.0	25 ± 0,042	14	9 + 0,2	5,4 + 0,4	25 ± 0,042	9	6,2 + 0,2	2,9 + 0,4
95.1 – 110.0	28 ± 0,042	16	10 + 0,2	6,4 + 0,4	28 ± 0,042	10	6,9 + 0,2	3,2 + 0,4
110.1 – 130.0	32 ± 0,050	18	11 + 0,3	7,4 + 0,4	32 ± 0,050	11	7,6 + 0,2	3,5 + 0,4
130.1 – 150.0	36 ± 0,050	20	12 + 0,3	8,4 + 0,4	36 ± 0,050	12	8,3 + 0,2	3,8 + 0,4

Note: For key assemblies on outer race (models GFRN, ALP, RIZN) the outer member bore should be to H7 tolerance.

ISO tolerance limits for shafts

Tolerance zone	Deviation	Nominal Shaft Dimension in mm					Tolerance Dimension in mm											
		1 incl. 3	over 3 incl. 6	over 6 incl. 10	over 10 incl. 18	over 18 incl. 30	over 30 incl. 40	over 40 incl. 50	over 50 incl. 65	over 65 incl. 80	over 80 incl. 100	over 100 incl. 120	over 120 incl. 140	over 140 incl. 160	over 160 incl. 180	over 180 incl. 200	over 200 incl. 225	over 225 incl. 250
h5	upper lower	0 -.004	0 -.005	0 -.006	0 -.008	0 -.009	0 -.011	0 -.013	0 -.015	0 -.018	0 -.020							
h6	upper lower	0 -.006	0 -.008	0 -.009	0 -.011	0 -.012	0 -.016	0 -.019	0 -.022	0 -.025	0 -.029							
h7	upper lower	0 -.007	0 -.012	0 -.015	0 -.018	0 -.021	0 -.025	0 -.030	0 -.035	0 -.040	0 -.045							
j6	upper lower	+ .004 -.002	+ .006 -.002	+ .007 -.002	+ .008 -.003	+ .009 -.004	+ .011 -.005	+ .012 -.007	+ .013 -.009	+ .014 -.011	+ .016 -.013							
k6	upper lower	-.006 0	+ .009 +.001	+ .010 +.001	+ .012 +.001	+ .015 +.002	+ .018 +.002	+ .021 +.002	+ .025 +.003	+ .028 +.003	+ .033 +.004							
n6	upper lower	+ .010 +.004	+ .016 +.008	+ .019 +.010	+ .023 +.012	+ .028 +.015	+ .033 +.017	+ .039 +.020	+ .045 +.023	+ .052 +.027	+ .060 +.031							
p5	upper lower	+ .010 +.006	+ .017 +.012	+ .021 +.015	+ .026 +.018	+ .031 +.022	+ .037 +.026	+ .045 +.032	+ .052 +.037	+ .061 +.043	+ .070 +.050							
p6	upper lower	+ .012 +.008	+ .020 +.012	+ .024 +.015	+ .029 +.018	+ .035 +.022	+ .042 +.026	+ .051 +.032	+ .059 +.037	+ .068 +.043	+ .079 +.050							
p7	upper lower	+ .018 +.008	+ .024 +.012	+ .030 +.015	+ .036 +.018	+ .043 +.022	+ .051 +.026	+ .062 +.032	+ .072 +.037	+ .083 +.043	+ .096 +.050							
r6	upper lower	+ .016 +.010	+ .023 +.015	+ .028 +.019	+ .034 +.023	+ .041 +.028	+ .050 +.034	+ .060 +.041	+ .062 +.043	+ .073 +.051	+ .076 +.054	+ .088 +.063	+ .090 +.065	+ .093 +.068	+ .106 +.077	+ .109 +.080	+ .113 +.084	

ISO tolerance limits for holes/bores

Tolerance zone	Deviation	Nominal Hole/Bore Dimension in mm					Tolerance Dimension in mm											
		over 3 incl. 6	over 6 incl. 10	over 10 incl. 18	over 18 incl. 30	over 30 incl. 40	over 40 incl. 50	over 50 incl. 65	over 65 incl. 80	over 80 incl. 100	over 100 incl. 120	over 120 incl. 140	over 140 incl. 160	over 160 incl. 180	over 180 incl. 200	over 200 incl. 225	over 225 incl. 250	over 250 incl. 280
H6	upper lower	+ .008 0	+ .009 0	+ .011 0	+ .013 0	+ .016 0	+ .019 0	+ .022 0	+ .025 0	+ .029 0	+ .032 0							
H7	upper lower	+ .012 .00	+ .015 0	+ .018 0	+ .021 0	+ .025 0	+ .030 0	+ .035 0	+ .040 0	+ .046 0	+ .052 0							
H11	upper lower	+ .075 .00	+ .090 0	+ .110 0	+ .130 0	+ .160 0	+ .190 0	+ .220 0	+ .250 0	+ .290 0	+ .320 0							
K6	upper lower	+ .002 -.006	+ .002 -.007	+ .002 -.009	+ .002 -.011	+ .003 -.013	+ .004 -.015	+ .004 -.018	+ .004 -.021	+ .005 -.024	+ .005 -.027							
N6	upper lower	-.005 -.013	-.007 -.016	-.009 -.020	-.011 -.024	-.012 -.028	-.014 -.033	-.016 -.038	-.020 -.045	-.022 -.051	-.025 -.057							
P6	upper lower	-.009 -.017	-.012 -.021	-.015 -.026	-.016 -.031	-.021 -.037	-.026 -.045	-.030 -.052	-.036 -.061	-.041 -.070	-.047 -.079							
R6	upper lower	-.012 -.020	-.015 -.025	-.020 -.031	-.024 -.037	-.029 -.045	-.035 -.054	-.037 -.056	-.044 -.066	-.047 -.069	-.056 -.081	-.058 -.083	-.061 -.086	-.068 -.097	-.071 -.100	-.075 -.104	-.085 -.117	-.089 -.121
R7	upper lower	-.011 -.023	-.013 -.026	-.016 -.034	-.020 -.041	-.025 -.050	-.030 -.060	-.032 -.062	-.038 -.073	-.041 -.076	-.048 -.088	-.050 -.090	-.053 -.093	-.060 -.106	-.063 -.109	-.067 -.113	-.074 -.126	-.078 -.130