

Rod End Bearing Tolerances

Rod end bearings have bore, width and center height tolerances that are considered critical. These tolerances are used in order to select a rod end bearing to fit a specific application. Below are the various tolerances for rod end bearings supplied by AST Bearings and are organized by product series:

Tolerances for AST Rod End Bearing Series: SI-E, SI-ES, SA-E, SA-ES, SI-C, SA-C, SI-ET, and SA-ET

d (mm)		Δ dmp (μ m)		Δ Bs (μ m)	
over	incl.	max	min	max	min
—	18	0	-8	0	-120
18	30	0	-10	0	-120
30	50	0	-12	0	-120
50	80	0	-15	0	-150

Tolerances for AST Rod End Bearing Series: SIBP-S, SABP-S, SIZP-S, SAZP-S, SIZJ, and SAZJ

d (mm)		Δ dmp (μ m)		Δ Bs (μ m)	
over	incl.	max	min	max	min
—	6	+12	0	0	-100
6	10	+15	0	0	-100
10	18	+18	0	0	-100
18	30	+21	0	0	-100

Tolerances for AST Rod End Bearing Series: SIJK-C, SAJK-C, SIK-C, SAK-C

d (mm)		Δ dmp (μ m)		Δ Bs (μ m)	
over	incl.	max	min	max	min
—	6	+12	0	0	-150
6	10	+15	0	0	-150
10	12	+18	0	0	-150
12	18	+18	0	0	-200
18	30	+21	0	0	-200

Center height tolerances for all Rod End Bearing Series:

d (mm)		Δ hs (mm)		Δ h1s (mm)	
over	incl.	max	min	max	min
—	6	+0.80	-1.20	+0.65	-1.05
6	20	+0.80	-1.20	+0.80	-1.20
20	30	+1.00	-1.70	+1.00	-1.70
30	45	+1.40	-2.10	+1.40	-2.10
45	60	+1.80	-2.70	+1.80	-2.70
60	80	+2.25	-3.40	+2.25	-3.40

Key for Tolerance Tables

d	Bearing bore diameter, nominal
Δdmp	Single plane mean bore diameter deviation
ΔBs	Deviation of a single width of the inner ring
B	Width of the inner ring, nominal
Δhs	Center height deviation (male)
Δh1s	Center height deviation (Female)