

Spindle ball bearing HY S 61908 E TA P4+

08.05.2024



Components

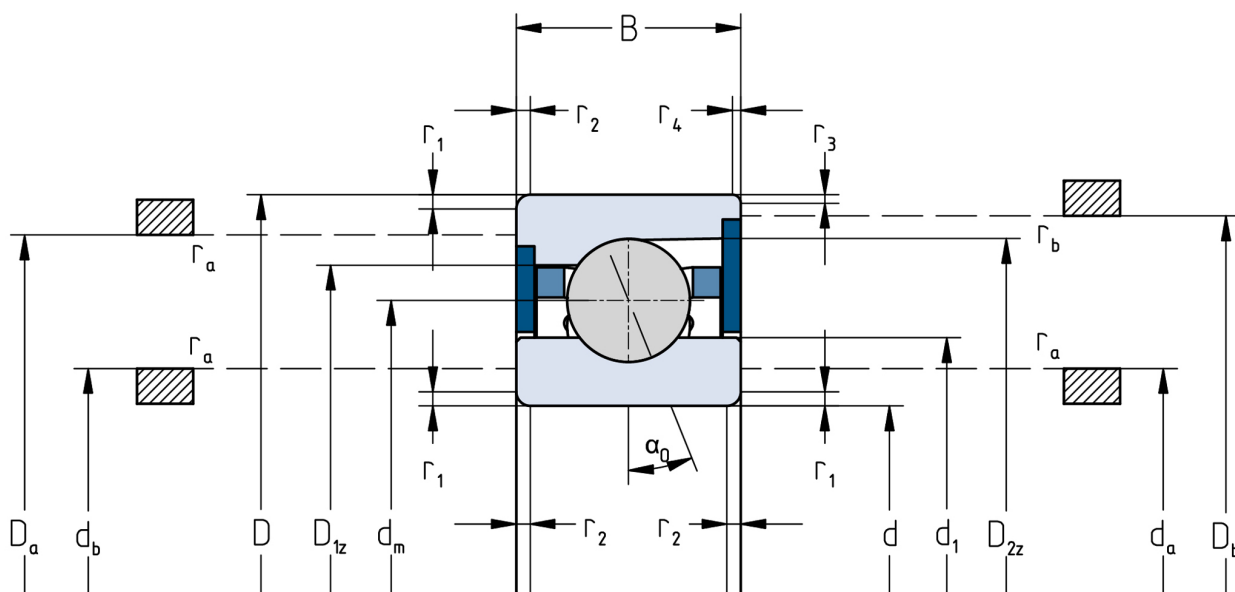
Bearing designation:	HY S 61908 E TA
Bearing design:	S
Series / size:	61908
Ball material:	Ceramic
Cage:	TA
Seal:	2RZ optional (with grease)
Precision:	P4+
Main dimensions [d x D x B]:	40 x 62 x 12 mm

Load data

Static load capacity	C_{0r} : 11700 N
Dynamic load capacity	C_r : 14100 N
Fatigue load limit	C_U : 441 N
Speed limit	n_{grease} : 27000 1/min
Speed limit	n_{oil} : 36000 1/min
Light preload	L: 120 N
Axial rigidity	C_{ax} : 121 N/μm
Medium preload	M: 360 N
Axial rigidity	C_{ax} : 184 N/μm
Heavy preload	S: 720 N
Axial rigidity	C_{ax} : 244 N/μm
Spring preload	Ff: 840 N (for n_{max})

Geometrical Data

Bore diameter	d: 40 mm	Oiling nozzle position	d_T : 49 mm
Outer diameter	D: 62 mm	Pitch circle diameter	d_m : 51 mm
Width of single bearing	B: 12 mm	Inner diameter of outer ring	D_1 : 55.2 mm
Ball diameter	D_w : 6.35 mm	Undercut of associated component	$r_{a max}$: 0.6 mm
Number of balls	Z: 19	Undercut of associated component (open side)	$r_{b max}$: 0.3 mm
Chamfer (min)	$r_{1,2 min}$: 0.6 mm	Abutment diameter inner ring	$d_{a,b min}$: 43.5 mm
Chamfer (min), open side	$r_{3,4 min}$: 0.3 mm	Abutment diameter outer ring	$D_{a,b max}$: 59 mm
Outer diameter of inner ring	d_1 : 46.8 mm	Inner diameter of outer ring (open side)	D_2 : 57.4 mm
Outer diameter of inner ring (open side)	d_2 : -	Bearing weight	m: 0.094 kg
		Contact angle	Alpha 0: 25°



The given speed limits apply to individual bearings with spring preload. Correction factors must be considered for all properties which deviate from this.