

Spindle ball bearing HY S 6208 C TXM P4+

16.07.2024



Components

Bearing designation:	HY S 6208 C TXM
Bearing design:	S
Series / size:	6208
Ball material:	Ceramic
Cage:	TXM
Precision:	P4+ (UP+ Upon request)
Main dimensions [d x D x B]:	40 x 80 x 18 mm

Load data

Static load capacity	C_{0r} : 24600 N
Dynamic load capacity	C_r : 36500 N
Fatigue load limit	C_U : 934 N
Speed limit	n_{grease} : 26250 1/min
Speed limit	n_{oil} : 35000 1/min
Light preload	L: 185 N
Axial rigidity	C_{ax} : 64 N/ μ m
Medium preload	M: 560 N
Axial rigidity	C_{ax} : 105 N/ μ m
Heavy preload	S: 1100 N
Axial rigidity	C_{ax} : 147 N/ μ m
Spring preload	Ff: 1020 N (for n_{max})

Geometrical Data

Bore diameter	d: 40 mm	Oiling nozzle position	d_T : 56.9 mm
Outer diameter	D: 80 mm	Pitch circle diameter	d_m : 60 mm
Width of single bearing	B: 18 mm	Inner diameter of outer ring	D_1 : 67.6 mm
Ball diameter	D_w : 11.906 mm	Undercut of associated component	$r_{a \max}$: 1 mm
Number of balls	Z: 13	Undercut of associated component (open side)	$r_{b \max}$: 0.6 mm
Chamfer (min)	$r_{1,2 \min}$: 1.1 mm	Abutment diameter inner ring	$d_{a,b \min}$: 47 mm
Chamfer (min), open side	$r_{3,4 \min}$: 0.6 mm	Abutment diameter outer ring	$D_{a,b \max}$: 74.6 mm
Outer diameter of inner ring	d_1 : 52.8 mm	Inner diameter of outer ring (open side)	D_2 : 72.1 mm
Outer diameter of inner ring (open side)	d_2 : -	Bearing weight	m: 0.31 kg
		Contact angle	Alpha 0: 15°



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