

Spindle ball bearing S 6202 E TXM P4+

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Components

Bearing designation:	S 6202 E TXM
Bearing design:	S
Series / size:	6202
Ball material:	Steel 100Cr6
Cage:	TXM
Precision:	P4+ (UP+ Upon request)
Main dimensions [d x D x B]:	15 x 35 x 11 mm

Load data

Static load capacity	C_{0r} : 4750 N
Dynamic load capacity	C_r : 8700 N
Fatigue load limit	C_U : 245 N
Speed limit	n_{grease} : 42750 1/min
Speed limit	n_{oil} : 57000 1/min
Light preload	L: 75 N
Axial rigidity	C_{ax} : 61 N/ μ m
Medium preload	M: 220 N
Axial rigidity	C_{ax} : 93 N/ μ m
Heavy preload	S: 440 N
Axial rigidity	C_{ax} : 124 N/ μ m
Spring preload	Ff: 460 N (for n_{max})

Geometrical Data

Bore diameter	d: 15 mm	Oiling nozzle position	d_T : 23.4 mm
Outer diameter	D: 35 mm	Pitch circle diameter	d_m : 25.3 mm
Width of single bearing	B: 11 mm	Inner diameter of outer ring	D_1 : 29 mm
Ball diameter	D_w : 5.953 mm	Undercut of associated component	$r_{a max}$: 0.6 mm
Number of balls	Z: 11	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	$d_{a,b min}$: 18.6 mm
Chamfer (min), open side	$r_{3,4 min}$: 0.3 mm	Abutment diameter outer ring	$D_{a,b max}$: 32.3 mm
Outer diameter of inner ring	d_1 : 21.1 mm	Inner diameter of outer ring (open side)	D_2 : 31.3 mm
Outer diameter of inner ring (open side)	d_2 : -	Bearing weight	m: 0.043 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.