

Spindle ball bearing S 619/6 C TA P4+

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Components

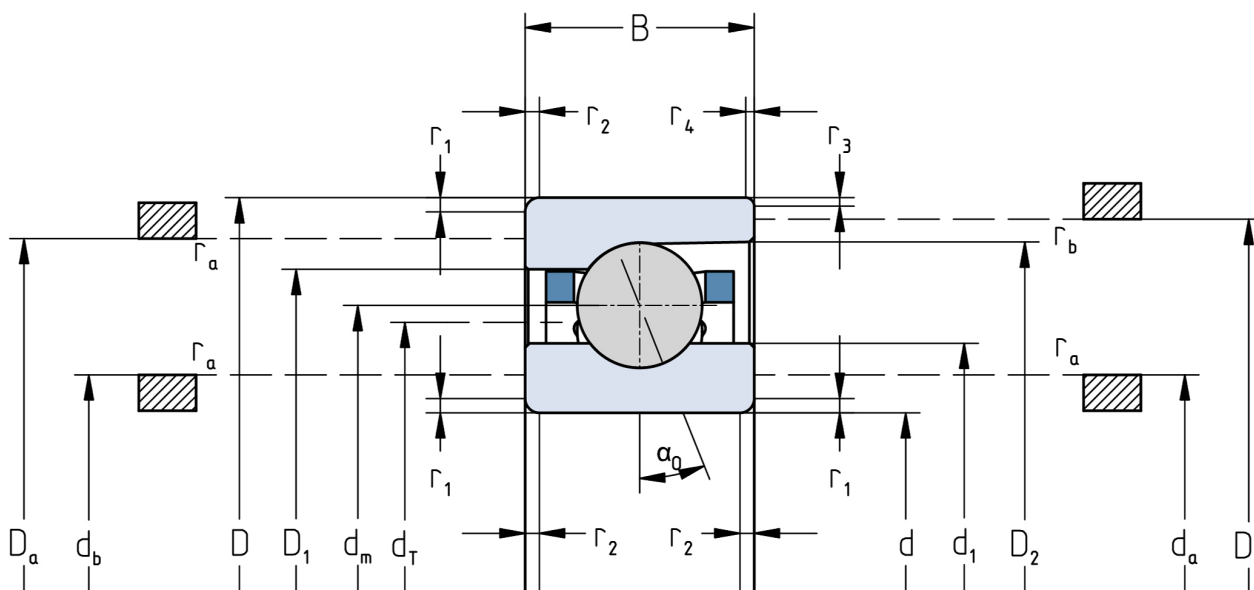
Bearing designation:	S 619/6 C TA
Bearing design:	S
Series / size:	619/6
Ball material:	Steel 100Cr6
Cage:	TA
Precision:	P4+
Main dimensions [d x D x B]:	6 x 15 x 5 mm

Load data

Static load capacity	C_{0r} : 515 N
Dynamic load capacity	C_r : 1320 N
Fatigue load limit	C_U : 27 N
Speed limit	n_{grease} : 123750 1/min
Speed limit	n_{oil} : 165000 1/min
Light preload	L: 7 N
Axial rigidity	C_{ax} : 8 N/ μ m
Medium preload	M: 20 N
Axial rigidity	C_{ax} : 12 N/ μ m
Heavy preload	S: 40 N
Axial rigidity	C_{ax} : 17 N/ μ m
Spring preload	Ff: 30 N (for n_{max})

Geometrical Data

Bore diameter	d: 6 mm	Oiling nozzle position	d_T : 9.4 mm
Outer diameter	D: 15 mm	Pitch circle diameter	d_m : 10.3 mm
Width of single bearing	B: 5 mm	Inner diameter of outer ring	D_1 : 12.1 mm
Ball diameter	D_w : 2.381 mm	Undercut of associated component	$r_{a max}$: 0.2 mm
Number of balls	Z: 9	Undercut of associated component (open side)	$r_{b max}$: 0.2 mm
Chamfer (min)	$r_{1,2 min}$: 0.2 mm	Abutment diameter inner ring	$d_{a,b min}$: 7.4 mm
Chamfer (min), open side	$r_{3,4 min}$: 0.2 mm	Abutment diameter outer ring	$D_{a,b max}$: 14 mm
Outer diameter of inner ring	d_1 : 8.5 mm	Inner diameter of outer ring (open side)	D_2 : 12.7 mm
Outer diameter of inner ring (open side)	d_2 : -	Bearing weight	m: 0.004 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.