

Spindle ball bearing HY S 619/9 C TA P4+

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Components

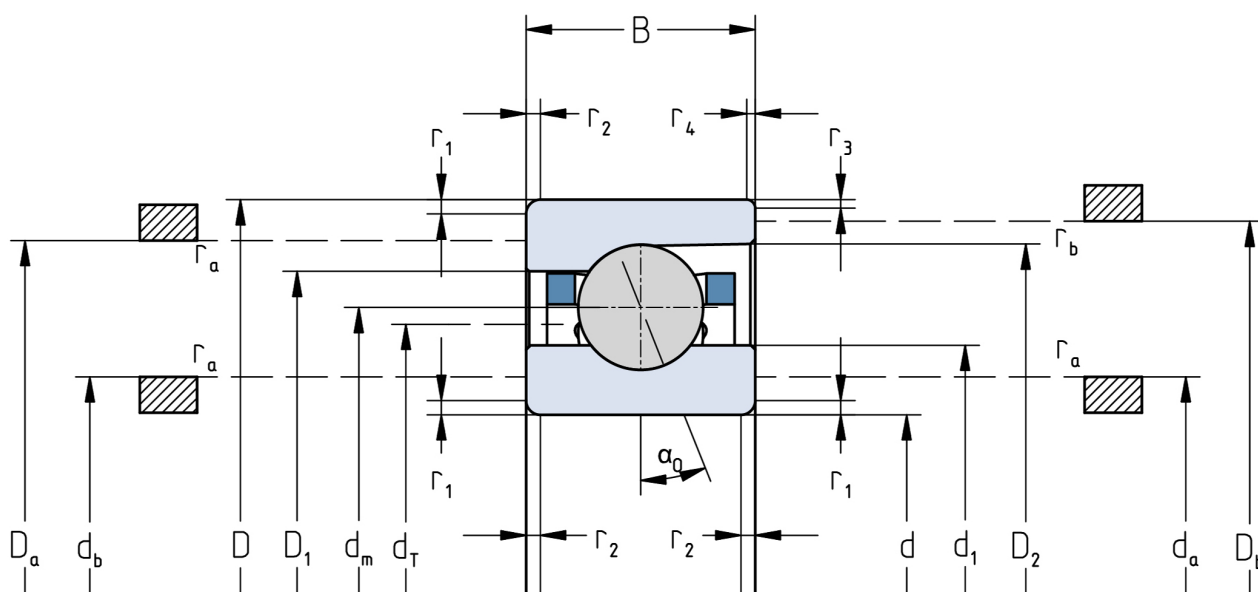
Bearing designation:	HY S 619/9 C TA
Bearing design:	S
Series / size:	619/9
Ball material:	Ceramic
Cage:	TA
Precision:	P4+
Main dimensions [d x D x B]:	9 x 20 x 6 mm

Load data

Static load capacity	C_{0r} : 1290 N
Dynamic load capacity	C_r : 2800 N
Fatigue load limit	C_U : 49 N
Speed limit	n_{grease} : 108750 1/min
Speed limit	n_{oil} : 145000 1/min
Light preload	L: 12 N
Axial rigidity	C_{ax} : 14 N/ μ m
Medium preload	M: 40 N
Axial rigidity	C_{ax} : 23 N/ μ m
Heavy preload	S: 75 N
Axial rigidity	C_{ax} : 31 N/ μ m
Spring preload	Ff: 55 N (for n_{max})

Geometrical Data

Bore diameter	d: 9 mm	Oiling nozzle position	d_T : 13.7 mm
Outer diameter	D: 20 mm	Pitch circle diameter	d_m : 14.8 mm
Width of single bearing	B: 6 mm	Inner diameter of outer ring	D_1 : 17.2 mm
Ball diameter	D_w : 3.175 mm	Undercut of associated component	$r_{a \max}$: 0.3 mm
Number of balls	Z: 11	Undercut of associated component (open side)	$r_{b \max}$: 0.2 mm
Chamfer (min)	$r_{1,2 \min}$: 0.3 mm	Abutment diameter inner ring	$d_{a,b \min}$: 10.9 mm
Chamfer (min), open side	$r_{3,4 \min}$: 0.2 mm	Abutment diameter outer ring	$D_{a,b \max}$: 18.5 mm
Outer diameter of inner ring	d_1 : 12.4 mm	Inner diameter of outer ring (open side)	D_2 : 18 mm
Outer diameter of inner ring (open side)	d_2 : -	Bearing weight	m: 0.006 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.