

# Spindle ball bearing HY SM 61924 C TA P4+

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## Components

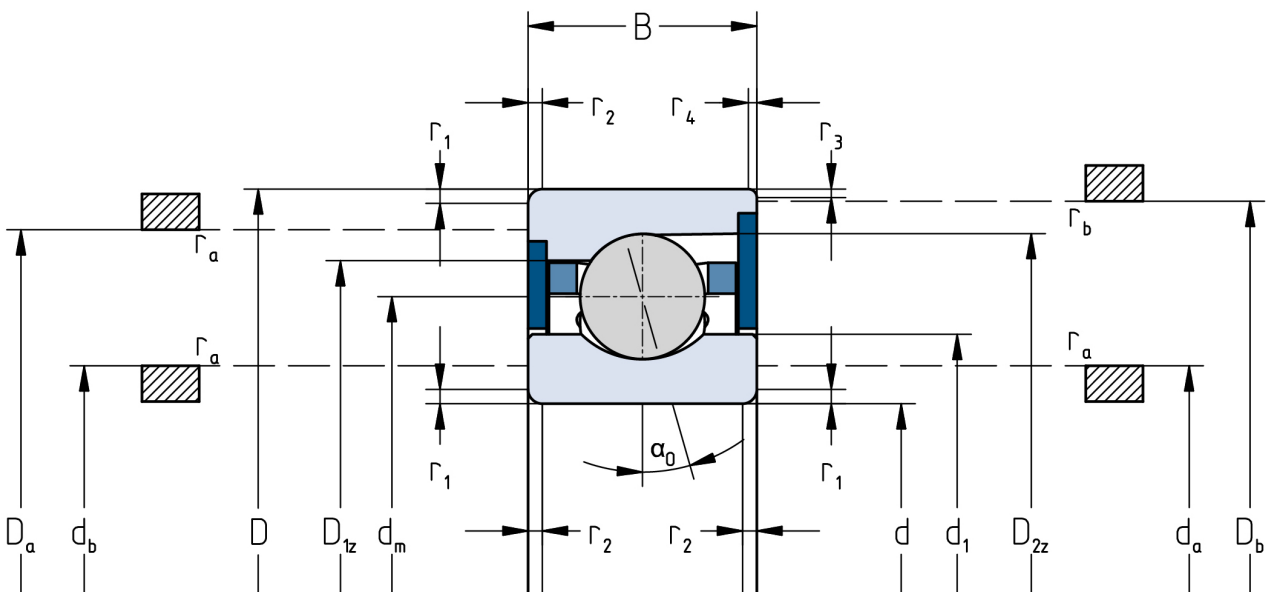
Bearing designation:	HY SM 61924 C TA
Bearing design:	SM
Series / size:	61924
Ball material:	Ceramic
Cage:	TA
Seal:	2RZ upon request
Precision:	P4+
Main dimensions [d x D x B]:	120 x 165 x 22 mm

## Load data

Static load capacity	$C_{0r}$ : 42000 N
Dynamic load capacity	$C_r$ : 49500 N
Fatigue load limit	$C_U$ : 1322 N
Speed limit	$n_{grease}$ : 13125 1/min
Speed limit	$n_{oil}$ : 17500 1/min
Light preload	L: 250 N
Axial rigidity	$C_{ax}$ : 142 N/ $\mu$ m
Medium preload	M: 750 N
Axial rigidity	$C_{ax}$ : 212 N/ $\mu$ m
Heavy preload	S: 1500 N
Axial rigidity	$C_{ax}$ : 278 N/ $\mu$ m
Spring preload	Ff: 1850 N (for $n_{max}$ )

## Geometrical Data

Bore diameter	d: 120 mm	Oiling nozzle position	$d_f$ : 138.5 mm
Outer diameter	D: 165 mm	Pitch circle diameter	$d_m$ : 142.5 mm
Width of single bearing	B: 22 mm	Inner diameter of outer ring	$D_1$ : 150.7 mm
Ball diameter	$D_w$ : 13.494 mm	Undercut of associated component	$r_{a \max}$ : 0.6 mm
Number of balls	Z: 27	Undercut of associated component (open side)	$r_{b \max}$ : 0.6 mm
Chamfer (min)	$r_{1,2 \min}$ : 0.6 mm	Abutment diameter inner ring	$d_{a,b \min}$ : 126.3 mm
Chamfer (min), open side	$r_{3,4 \min}$ : 0.6 mm	Abutment diameter outer ring	$D_{a,b \max}$ : 159.7 mm
Outer diameter of inner ring	$d_1$ : 134.3 mm	Inner diameter of outer ring (open side)	$D_2$ : 156.2 mm
Outer diameter of inner ring (open side)	$d_2$ : -	Bearing weight	m: 1 kg
		Contact angle	Alpha 0: 19°



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