

**SX011824-A-VSP+PRL50** [↗](#)

Crossed roller bearing

Crossed roller bearingsdimension series 18 to
DIN 616

Technical information



Your current product variant

Preload	VSP+PRL50	Preloaded, axial and radial run-out reduced by 50%
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Main Dimensions & Performance Data

d ₁	120 mm	Bore Diameter
	0,004 mm	Bore diameter upper tolerance
	-0,018 mm	Bore diameter lower tolerance
D _a	150 mm	Outside Diameter
	0 mm	Outside diameter upper tolerance
	-0,025 mm	Outside diameter lower tolerance
H	16 mm	Height of the assembled bearing
h _i	16 mm	Height inner ring
	0,06 mm	Width upper tolerance
	-0,06 mm	Width lower tolerance
≈m	0,711 kg	Weight



Dimensions

D_i	135,6 mm	Inner diameter outer ring
D_M	135 mm	Rolling element pitch circle diameter
d_a	134,4 mm	Outer diameter inner ring
h	16 mm	Height of individual ring
	0 mm	Height of individual ring upper tolerance
	-0,01 mm	Height of individual ring lower tolerance
r_{min}	1 mm	Chamfer dimension
S	1,5 mm	Diameter of lubrication hole

Temperature range

T_{min}	-30 °C	Operating temperature min.
T_{max}	80 °C	Operating temperature max.

Calculation factors

	0,005 mm	Running accuracy, radial
	0,005 mm	Running accuracy, axial
VSP_{min}	0,005 mm	Minimum bearing preload
VSP_{max}	0,02 mm	Maximum bearing preload
C_a	39.500 N	Basic dynamic load rating, axial
C_{0a}	140.000 N	Basic static load rating, axial
C_r	28.000 N	Basic dynamic load rating, radial (for radial load only)
C_{0r}	69.000 N	Basic static load rating, radial (for radial load only)
$N_{G\ oil}$	565 1/min	Limiting speed for oil lubrication with preload
$N_{G\ Grease}$	280 1/min	Limiting speed for grease lubrication with preload
	61824	Dimensions identical to ISO dimension series 18



Characteristics



Radial load



Axial load in one direction



Axial load in two directions



Grease Lubrication



Oil Lubrication



Not sealed



Small design envelope