

**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 &amp; Performance Data

d <sub>1</sub>	120 mm	Bore Diameter
	0,004 mm	Bore diameter upper tolerance
	-0,018 mm	Bore diameter lower tolerance
D <sub>a</sub>	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 <sub>i</sub>	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

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Radial load



Axial load in one direction



Axial load in two directions



Grease Lubrication



Oil Lubrication



Not sealed



Small design envelope