

**SX011828-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	140 mm	Bore Diameter
	0,004 mm	Bore diameter upper tolerance
	-0,021 mm	Bore diameter lower tolerance
D _a	175 mm	Outside Diameter
	0 mm	Outside diameter upper tolerance
	-0,025 mm	Outside diameter lower tolerance
H	18 mm	Height of the assembled bearing
h _i	18 mm	Height inner ring
	0,06 mm	Width upper tolerance
	-0,06 mm	Width lower tolerance
≈m	1,095 kg	Weight



Dimensions

D_i	157,7 mm	Inner diameter outer ring
D_M	157 mm	Rolling element pitch circle diameter
d_a	156,3 mm	Outer diameter inner ring
h	18 mm	Height of individual ring
	0 mm	Height of individual ring upper tolerance
	-0,01 mm	Height of individual ring lower tolerance
r_{min}	1,1 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

	0,008 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	64.000 N	Basic dynamic load rating, axial
C_{0a}	223.000 N	Basic static load rating, axial
C_r	45.500 N	Basic dynamic load rating, radial (for radial load only)
C_{0r}	109.000 N	Basic static load rating, radial (for radial load only)
$N_{G\ oil}$	485 1/min	Limiting speed for oil lubrication with preload
N_G Grease	240 1/min	Limiting speed for grease lubrication with preload
	61828	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