



SX011820-A-VSP [↗](#)

Crossed roller bearing

Crossed roller bearingsdimension series 18 to
DIN 616

Technical information



Your current product variant

Preload	VSP	Bearing preload Standard
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Main Dimensions & Performance Data

d ₁	100 mm	Bore Diameter
	0,004 mm	Bore diameter upper tolerance
	-0,018 mm	Bore diameter lower tolerance
D _a	125 mm	Outside Diameter
	0 mm	Outside diameter upper tolerance
	-0,025 mm	Outside diameter lower tolerance
H	13 mm	Height of the assembled bearing
h _i	13 mm	Height inner ring
	0,06 mm	Width upper tolerance
	-0,06 mm	Width lower tolerance
≈m	403 g	Weight



Dimensions

D_i	112,5 mm	Inner diameter outer ring
D_M	112 mm	Rolling element pitch circle diameter
d_a	111,5 mm	Outer diameter inner ring
h	13 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	1,2 mm	Diameter of lubrication hole

Temperature range

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

Calculation factors

	0,01 mm	Running accuracy, radial
	0,01 mm	Running accuracy, axial
VSP _{min}	0,005 mm	Minimum bearing preload
VSP _{max}	0,02 mm	Maximum bearing preload
C_a	28.000 N	Basic dynamic load rating, axial
C_{0a}	97.000 N	Basic static load rating, axial
C_r	20.000 N	Basic dynamic load rating, radial (for radial load only)
C_{0r}	47.500 N	Basic static load rating, radial (for radial load only)
$N_{G\ oil}$	680 1/min	Limiting speed for oil lubrication with preload
N_G Grease	340 1/min	Limiting speed for grease lubrication with preload
	61820	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