

**SX011814-A-VSP+UG**

Crossed roller bearing

Crossed roller bearingsdimension series 18 to  
DIN 616

## Technical information

**Your current product variant**

Preload	VSP	Bearing preload Standard
Lubricant	UG	Ungreased

**Main Dimensions & Performance Data**

$d_1$	70 mm	Bore Diameter
	0,004 mm	Bore diameter upper tolerance
	-0,015 mm	Bore diameter lower tolerance
$D_a$	90 mm	Outside Diameter
	0 mm	Outside diameter upper tolerance
	-0,022 mm	Outside diameter lower tolerance
H	10 mm	Height of the assembled bearing
$h_i$	10 mm	Height inner ring
	0,06 mm	Width upper tolerance
	-0,06 mm	Width lower tolerance
$\approx m$	0,174 kg	Weight



### Dimensions

$D_i$	80,5 mm	Inner diameter outer ring
$D_M$	80 mm	Rolling element pitch circle diameter
$d_a$	79,5 mm	Outer diameter inner ring
$h$	10 mm	Height of individual ring
	0 mm	Height of individual ring upper tolerance
	-0,01 mm	Height of individual ring lower tolerance
$r_{min}$	0,6 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
$VSP_{min}$	0,003 mm	Minimum bearing preload
$VSP_{max}$	0,015 mm	Maximum bearing preload
$C_a$	16.600 N	Basic dynamic load rating, axial
$C_{0a}$	52.000 N	Basic static load rating, axial
$C_r$	11.800 N	Basic dynamic load rating, radial (for radial load only)
$C_{0r}$	25.500 N	Basic static load rating, radial (for radial load only)
$N_{G\ oil}$	955 1/min	Limiting speed for oil lubrication with preload
$N_G$ Grease	475 1/min	Limiting speed for grease lubrication with preload
	61814	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