

**SX011818-A**

Crossed roller bearing

Crossed roller bearings dimension series 18 to
DIN 616

Technical information

**Main Dimensions & Performance Data**

d ₁	90 mm	Bore Diameter
	0,004 mm	Bore diameter upper tolerance
	-0,018 mm	Bore diameter lower tolerance
D _a	115 mm	Outside Diameter
	0 mm	Outside diameter upper tolerance
	-0,022 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	0,354 kg	Weight

Dimensions

D _i	102,5 mm	Inner diameter outer ring
D _M	102 mm	Rolling element pitch circle diameter
d _a	101,5 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
$S_{r min}$	0,003 mm	Minimum radial bearing clearance, at standard bearing clearance
$S_{r max}$	0,015 mm	Maximum radial bearing clearance, at standard bearing clearance
$S_{k min}$	0,006 mm	Minimum axial tilting clearance, at standard bearing clearance
$S_{k max}$	0,03 mm	Maximum axial tilting clearance, at standard bearing clearance
C_a	26.500 N	Basic dynamic load rating, axial
C_{0a}	87.000 N	Basic static load rating, axial
C_r	18.900 N	Basic dynamic load rating, radial (for radial load only)
C_{0r}	43.000 N	Basic static load rating, radial (for radial load only)
$N_{G oil}$	1.500 1/min	Limiting speed for oil lubrication with normal clearance
N_G Grease	750 1/min	Limiting speed for grease lubrication with normal clearance
	61818	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