

**SX011828-A**

## Crossed roller bearing

Crossed roller bearings dimension series 18 to  
DIN 616

## Technical information

**Main Dimensions & Performance Data**

$d_i$	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
$m$	1,062 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

	0,015 mm	Running accuracy, radial
	0,01 mm	Running accuracy, axial
$S_{r \min}$	0,005 mm	Minimum radial bearing clearance, at standard bearing clearance
$S_{r \max}$	0,02 mm	Maximum radial bearing clearance, at standard bearing clearance
$S_{k \min}$	0,01 mm	Minimum axial tilting clearance, at standard bearing clearance
$S_{k \max}$	0,04 mm	Maximum axial tilting clearance, at standard bearing clearance
$C_a$	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)
$N_{G \text{ oil}}$	975 1/min	Limiting speed for oil lubrication with normal clearance
$N_G$ Grease	485 1/min	Limiting speed for grease lubrication with normal clearance
	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