

**SX011880**

## Crossed roller bearing

Crossed roller bearingsdimension series 18 to  
DIN 616

## Technical information

**Main Dimensions & Performance Data**

$d_1$	400 mm	Bore Diameter
	0,007 mm	Bore diameter upper tolerance
	-0,029 mm	Bore diameter lower tolerance
$D_a$	500 mm	Outside Diameter
	0 mm	Outside diameter upper tolerance
	-0,04 mm	Outside diameter lower tolerance
H	46 mm	Height of the assembled bearing
$h_i$	46 mm	Height inner ring
	0,15 mm	Width upper tolerance
	-0,15 mm	Width lower tolerance
$\approx m$	23,221 kg	Weight

**Dimensions**

$D_i$	451 mm	Inner diameter outer ring
$D_M$	450 mm	Rolling element pitch circle diameter
$d_a$	449 mm	Outer diameter inner ring
h	46 mm	Height of individual ring
	0 mm	Height of individual ring upper tolerance
	-0,05 mm	Height of individual ring lower tolerance
$r_{min}$	2,1 mm	Chamfer dimension
S	2,5 mm	Diameter of lubrication hole



### Temperature range

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

### Calculation factors

	0,03 mm	Running accuracy, radial
	0,01 mm	Running accuracy, axial
$S_{r \min}$	0,01 mm	Minimum radial bearing clearance, at standard bearing clearance
$S_{r \max}$	0,05 mm	Maximum radial bearing clearance, at standard bearing clearance
$S_{k \min}$	0,02 mm	Minimum axial tilting clearance, at standard bearing clearance
$S_{k \max}$	0,1 mm	Maximum axial tilting clearance, at standard bearing clearance
$C_a$	385.000 N	Basic dynamic load rating, axial
$C_{0a}$	1.660.000 N	Basic static load rating, axial
$C_r$	275.000 N	Basic dynamic load rating, radial (for radial load only)
$C_{0r}$	810.000 N	Basic static load rating, radial (for radial load only)
$N_{G \text{ oil}}$	340 1/min	Limiting speed for oil lubrication with normal clearance
$N_G$ Grease	170 1/min	Limiting speed for grease lubrication with normal clearance
	61880	Dimensions identical to ISO dimension series 18



### Characteristics

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Radial load



Axial load in one direction



Axial load in two directions



Moments about all axes



Grease Lubrication



Oil Lubrication



Not sealed



Large bearing