

**SX011824-A** [↗](#)

## Crossed roller bearing

Crossed roller bearings dimension series 18 to  
DIN 616

## Technical information

**Main Dimensions & Performance Data**

d <sub>1</sub>	120 mm	Bore Diameter
	0,004 mm	Bore diameter upper tolerance
	-0,018 mm	Bore diameter lower tolerance
D <sub>a</sub>	150 mm	Outside Diameter
	0 mm	Outside diameter upper tolerance
	-0,025 mm	Outside diameter lower tolerance
H	16 mm	Height of the assembled bearing
h <sub>i</sub>	16 mm	Height inner ring
	0,06 mm	Width upper tolerance
	-0,06 mm	Width lower tolerance
≈m	0,698 kg	Weight

**Dimensions**

D <sub>i</sub>	135,6 mm	Inner diameter outer ring
D <sub>M</sub>	135 mm	Rolling element pitch circle diameter
d <sub>a</sub>	134,4 mm	Outer diameter inner ring
h	16 mm	Height of individual ring
	0 mm	Height of individual ring upper tolerance
	-0,01 mm	Height of individual ring lower tolerance
r <sub>min</sub>	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

	0,01 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
$C_a$	39.500 N	Basic dynamic load rating, axial
$C_{0a}$	140.000 N	Basic static load rating, axial
$C_r$	28.000 N	Basic dynamic load rating, radial (for radial load only)
$C_{0r}$	69.000 N	Basic static load rating, radial (for radial load only)
$N_{G \text{ oil}}$	1.130 1/min	Limiting speed for oil lubrication with normal clearance
$N_G$ Grease	565 1/min	Limiting speed for grease lubrication with normal clearance
	61824	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