

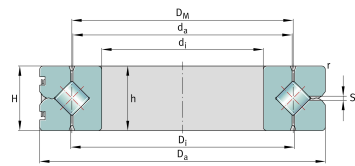


SX011832-A

Crossed roller bearing

Crossed roller bearingsdimension series 18 to  
DIN 616

Technical information



Main Dimensions & Performance Data

d <sub>1</sub>	160 mm	Bore Diameter
	0.004 mm	Bore diameter upper tolerance
	-0.021 mm	Bore diameter lower tolerance
D <sub>a</sub>	200 mm	Outside Diameter
	0 mm	Outside diameter upper tolerance
	-0.029 mm	Outside diameter lower tolerance
H	20 mm	Height of the assembled bearing
h <sub>i</sub>	20 mm	heigh inner ring
	0.1 mm	Width upper tolerance
	-0.1 mm	Width lower tolerance
≈m	1.581 kg	Weight

Dimensions

D <sub>i</sub>	180.8 mm	Inner diameter outer ring
D <sub>M</sub>	180 mm	rolling element pitch circle diameter
d <sub>a</sub>	179.2 mm	outer diameter inner ring
h	20 mm	height of individual ring
	0 mm	Height of individual ring upper tolerance
	-0.025 mm	Height of individual ring lower tolerance
r <sub>min</sub>	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
$C_a$	69,000 N	Basic dynamic load rating, axial
$C_{0a}$	255,000 N	Basic static load rating, axial
$C_r$	49,000 N	Basic dynamic load rating, radial (for radial load only)
$C_{0r}$	126,000 N	Basic static load rating, radial (for radial load only)
$N_{G\ oil}$	850 1/min	Limiting speed for oil lubrication with normal clearance
$N_{G\ Grease}$	425 1/min	Limiting speed for grease lubrication with normal clearance
	61832	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