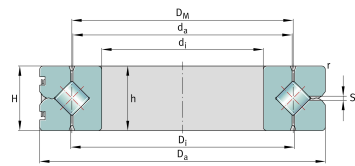## SX011824-A

Crossed roller bearing

Crossed roller bearingsdimension series 18 to DIN 616

Technical information

Main Dimensions & Performance Data

d_1	120	mm	Bore Diameter
	0.004	mm	Bore diameter upper tolerance
	-0.018	mm	Bore diameter lower tolerance
D_a	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_i	16	mm	heigth inner ring
	0.06	mm	Width upper tolerance
	-0.06	mm	Width lower tolerance
≈m	0.698	kg	Weight

Dimensions

D_i	135.6	mm	Inner diameter outer ring
D_M	135	mm	rolling element pitch circle diameter
d_a	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_{min}	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)
$N_{G\ oil}$	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

F_r	Radial load
F_a	Axial load in one direction
F_a	Axial load in two directions
	Grease Lubrication
	Oil Lubrication
	Not sealed
	Small design envelope

The datasheet is only an overview of dimensions and basic load ratings of the selected product. Please always observe all further information and guidelines for this product.For further information you can use the contact form on our website