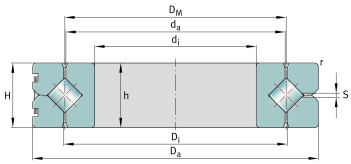
SX011840-A-UG

Crossed roller bearing

Crossed roller bearingsdimension series 18 to DIN 616

Technical information



Your current product variant

Lubricant	UG	Ungreased

Main Dimensions & Performance Data

d_1	200 mm	Bore Diameter
	0,004 mm	Bore diameter upper tolerance
	-0,024 mm	Bore diameter lower tolerance
D_a	250 mm	Outside Diameter
	0 mm	Outside diameter upper tolerance
	-0,029 mm	Outside diameter lower tolerance
H	24 mm	Height of the assembled bearing
h_i	24 mm	Height inner ring
	0,1 mm	Width upper tolerance
	-0,1 mm	Width lower tolerance
≈m	2,949 kg	Weight

Dimensions

D_i	225,8 mm	Inner diameter outer ring
D_M	225 mm	Rolling element pitch circle diameter
d_a	224,2 mm	Outer diameter inner ring
h	24 mm	Height of individual ring
	0 mm	Height of individual ring upper tolerance
	-0,025 mm	Height of individual ring lower tolerance
r_{min}	1,5 mm	Chamfer dimension
S	2 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
$S_{r\ max}$	0,025 mm	Maximum radial bearing clearance, at standard bearing clearance
$S_{k\ min}$	0,01 mm	Minimum axial tilting clearance, at standard bearing clearance
$S_{k\ max}$	0,05 mm	Maximum axial tilting clearance, at standard bearing clearance
RLO_{max}	0,005 mm	Low clearance: Radial clearance
RLO_{max}	0,01 mm	Low clearance: Preload
VSP_{min}	0,005 mm	Minimum bearing preload
VSP_{max}	0,025 mm	Maximum bearing preload
C_a	104.000 N	Basic dynamic load rating, axial
C_{0a}	400.000 N	Basic static load rating, axial
C_r	74.000 N	Basic dynamic load rating, radial (for radial load only)
C_{0r}	197.000 N	Basic static load rating, radial (for radial load only)
$N_{G\ oil}$	680 1/min	Limiting speed for oil lubrication with normal clearance
N_G Grease	340 1/min	Limiting speed for grease lubrication with normal clearance
$N_{G\ oil}$	340 1/min	Limiting speed for oil lubrication with preload
N_G Grease	170 1/min	Limiting speed for grease lubrication with preload
	61840	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