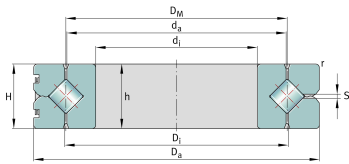


**SX011848-A** [🔗](#)

Crossed roller bearing

Crossed roller bearingsdimension series 18 to
DIN 616

Technical information



Main Dimensions & Performance Data

d ₁	240 mm	Bore Diameter
	0.005 mm	Bore diameter upper tolerance
	-0.024 mm	Bore diameter lower tolerance
D _a	300 mm	Outside Diameter
	0 mm	Outside diameter upper tolerance
	-0.032 mm	Outside diameter lower tolerance
H	28 mm	Height of the assembled bearing
h _i	28 mm	heigth inner ring
	0.1 mm	Width upper tolerance
	-0.1 mm	Width lower tolerance
≈m	4.965 kg	Weight

Dimensions

D _i	270.8 mm	Inner diameter outer ring
D _M	270 mm	rolling element pitch circle diameter
d _a	269.2 mm	outer diameter inner ring
h	28 mm	height of individual ring
	0 mm	Height of individual ring upper tolerance
	-0.025 mm	Height of individual ring lower tolerance
r _{min}	2 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

	0.02 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}	0.03 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}	0.06 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	149,000 N	Basic dynamic load rating, axial
C _{0a}	600,000 N	Basic static load rating, axial
C _r	106,000 N	Basic dynamic load rating, radial (for radial load only)
C _{0r}	295,000 N	Basic static load rating, radial (for radial load only)
N _{G oil}	565 1/min	Limiting speed for oil lubrication with normal clearance
N _{G Grease}	280 1/min	Limiting speed for grease lubrication with normal clearance
N _{G oil}	280 1/min	Limiting speed for oil lubrication with preload
N _{G Grease}	140 1/min	Limiting speed for grease lubrication with preload
61848		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