

**SX011860**

Crossed roller bearing

Crossed roller bearings dimension series 18 to
DIN 616

Technical information

**Main Dimensions & Performance Data**

d_i	300 mm	Bore Diameter
	0,005 mm	Bore diameter upper tolerance
	-0,027 mm	Bore diameter lower tolerance
D_a	380 mm	Outside Diameter
	0 mm	Outside diameter upper tolerance
	-0,036 mm	Outside diameter lower tolerance
H	38 mm	Height of the assembled bearing
h_i	38 mm	Height inner ring
	0,14 mm	Width upper tolerance
	-0,14 mm	Width lower tolerance
$\approx m$	11,6 kg	Weight

Dimensions

D_i	340,8 mm	Inner diameter outer ring
D_M	340 mm	Rolling element pitch circle diameter
d_a	339,2 mm	Outer diameter inner ring
h	38 mm	Height of individual ring
	0 mm	Height of individual ring upper tolerance
	-0,05 mm	Height of individual ring lower tolerance
r_{min}	2,1 mm	Chamfer dimension
S	2,5 mm	Diameter of lubrication hole



Temperature range

T_{\min}	-30 °C	Operating temperature min.
T_{\max}	80 °C	Operating temperature max.

Calculation factors

	0,02 mm	Running accuracy, radial
	0,01 mm	Running accuracy, axial
$S_{r \min}$	0,01 mm	Minimum radial bearing clearance, at standard bearing clearance
$S_{r \max}$	0,04 mm	Maximum radial bearing clearance, at standard bearing clearance
$S_{k \min}$	0,02 mm	Minimum axial tilting clearance, at standard bearing clearance
$S_{k \max}$	0,08 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
C_a	245.000 N	Basic dynamic load rating, axial
C_{0a}	990.000 N	Basic static load rating, axial
C_r	174.000 N	Basic dynamic load rating, radial (for radial load only)
C_{0r}	485.000 N	Basic static load rating, radial (for radial load only)
$N_{G \text{ oil}}$	450 1/min	Limiting speed for oil lubrication with normal clearance
$N_{G \text{ Grease}}$	225 1/min	Limiting speed for grease lubrication with normal clearance
	61860	Dimensions identical to ISO dimension series 18



Characteristics



Radial load



Axial load in one direction



Axial load in two directions



Moments about all axes



Grease Lubrication



Oil Lubrication



Not sealed



Large bearing