

**SX0118/500**

Crossed roller bearing

Crossed roller bearings dimension series 18 to
DIN 616

Technical information

**Main Dimensions & Performance Data**

d _i	500 mm	Bore Diameter
	0,008 mm	Bore diameter upper tolerance
	-0,032 mm	Bore diameter lower tolerance
D _a	620 mm	Outside Diameter
	0 mm	Outside diameter upper tolerance
	-0,044 mm	Outside diameter lower tolerance
H	56 mm	Height of the assembled bearing
h _i	56 mm	Height inner ring
	0,16 mm	Width upper tolerance
	-0,16 mm	Width lower tolerance
m	42,7 kg	Weight

Dimensions

D _i	561,2 mm	Inner diameter outer ring
D _M	560 mm	Rolling element pitch circle diameter
d _a	558,8 mm	Outer diameter inner ring
h	56 mm	Height of individual ring
	0 mm	Height of individual ring upper tolerance
	-0,05 mm	Height of individual ring lower tolerance
r _{min}	3 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

	0,04 mm	Running accuracy, radial
	0,01 mm	Running accuracy, axial
$S_{r min}$	0,015 mm	Minimum radial bearing clearance, at standard bearing clearance
$S_{r max}$	0,06 mm	Maximum radial bearing clearance, at standard bearing clearance
$S_{k min}$	0,03 mm	Minimum axial tilting clearance, at standard bearing clearance
$S_{k max}$	0,12 mm	Maximum axial tilting clearance, at standard bearing clearance
C_a	550.000 N	Basic dynamic load rating, axial
C_{0a}	2.470.000 N	Basic static load rating, axial
C_r	390.000 N	Basic dynamic load rating, radial (for radial load only)
C_{0r}	1.210.000 N	Basic static load rating, radial (for radial load only)
$N_{G oil}$	275 1/min	Limiting speed for oil lubrication with normal clearance
N_G Grease	135 1/min	Limiting speed for grease lubrication with normal clearance
	618/500	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