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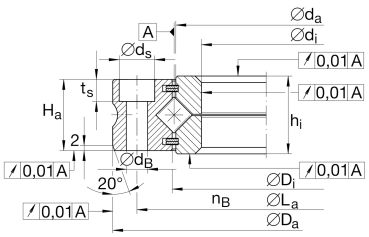
SCHAEFFLER

XV50

Crossed roller bearing

Crossed roller bearings without gear teeth,
lamellar seals on both sides

Technical information



Main Dimensions & Performance Data

d_1	50 mm	Bore Diameter
	0,01 mm	Bore diameter upper tolerance
	-0,006 mm	Bore diameter lower tolerance
D_a	100 mm	Outside Diameter
	0 mm	Outside diameter upper tolerance
	-0,022 mm	Outside diameter lower tolerance
h_i	17 mm	Height inner ring
≈m	0,699 kg	Weight

Dimensions

D_i	64,5 mm	Inner diameter outer ring
d_a	63,5 mm	Outer diameter inner ring
H_a	16 mm	Width outer ring
L_a	85 mm	Pitch circle diameter fixing holes
n_B	12	Quantity of fixed holes evenly around the circumfence
d_B	5,6 mm	Diameter fixing hole outer ring
d_S	10 mm	Countersunk diameter of fixing holes
t_S	5,4 mm	Countersunk depth of fixing holes

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
C_a	20.500 N	Basic dynamic load rating, axial
C_{0a}	54.000 N	Basic static load rating, axial
C_r	14.700 N	Basic dynamic load rating, radial (for radial load only)
C_{0r}	26.500 N	Basic static load rating, radial (for radial load only)
$F_{r\ zul.}$	8.180 N	Max. radial load screws (frictional contact)
N_G Grease	1.194 1/min	Limiting speed for grease lubrication with normal clearance
N_G Grease	597 1/min	Limiting speed for grease lubrication with preload

Characteristics

Radial load

Axial load in one direction

Axial load in two directions


Moments about all axes


Grease Lubrication


Sealed on both sides


Small design envelope