



FAG

31316-XL-DF-A100-140

Tapered roller bearing set

Tapered roller bearing set 313...DF, X-arrangement

X-life

Technical information



Your current product variant

Tolerance class	PN	Normal (ISO 492:2023)
Heat treatment	Standard	
Cage	Standard	Sheet steel cage, window cage, roller-guided
Axial internal clearance	A100-140	Axial internal clearance between 100 and 140 µm
Quality level	XL	X-life
Matched arrangement	F	X arrangement
Number of rows	2	Double-row design

Main Dimensions & Performance Data

d	80 mm	Bore diameter
D	170 mm	Outside diameter
2B	78 mm	Inner ring total width
2T	85 mm	Outer ring total width
C_r	485.000 N	Basic dynamic load rating, radial
C_{0r}	540.000 N	Basic static load rating, radial
C_{ur}	79.000 N	Fatigue load limit, radial
n_G	5.000 1/min	Limiting speed
n_{gr}	2.950 1/min	Thermal speed rating
$\approx m$	8,652 kg	Weight





Mounting dimensions

$d_{a \max}$	97 mm	Maximum diameter of shaft shoulder
$D_{a \min}$	134 mm	Minimum diameter of housing shoulder
$D_{a \max}$	158 mm	Maximum diameter of housing shoulder
$C_{a \min}$	6 mm	Minimum axial space
$r_{b \max}$	2,5 mm	Maximum fillet radius of housing

Dimensions

$r_{3,4 \min}$	2,5 mm	Minimum chamfer dimension of outer ring back face
A	31 mm	Width of spacer







Temperature range

T_{\min}	-30 °C	Operating temperature min.
T_{\max}	120 °C	Operating temperature max.

Calculation factors

e	0,83	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	0,82	Dynamic axial load factor
Y_2	1,22	Dynamic axial load factor
Y_0	0,8	Static axial load factor

Characteristics

	Radial load
	Axial load in one direction
	Axial load in two directions
	Grease Lubrication
	Oil Lubrication
	Not sealed