



FAG

## 31314-XL

Tapered roller bearing

Schaeffler ID:  
0867476900000Tapered roller bearings 313, main  
dimensions to DIN ISO 355 / DIN 720,  
separable, adjusted or in pairs

X-life

## Technical information



## Main Dimensions &amp; Performance Data

d	70 mm	Bore diameter
D	150 mm	Outside diameter
B	35 mm	Width, inner ring
C	25 mm	Width, outer ring
T	38 mm	Width, total
$C_r$	221.000 N	Basic dynamic load rating, radial
$C_{0r}$	219.000 N	Basic static load rating, radial
$C_{ur}$	33.500 N	Fatigue load limit, radial
$n_G$	5.200 1/min	Limiting speed
$n_{gr}$	3.450 1/min	Thermal speed rating
	2,888 kg	Weight

## Dimensions

	T7GB070	Comparative designation to ISO 10317 and ISO 355
$r_{1,2 \text{ min}}$	3 mm	Minimum chamfer dimension of inner ring back face
$r_{3,4 \text{ min}}$	2,5 mm	Minimum chamfer dimension of outer ring back face
a	47 mm	Distance between the apexes of the pressure cones
$d_1$	110,4 mm	Guidance rib diameter of inner ring

### Mounting dimensions

$d_{a \max}$	84 mm	Maximum diameter of shaft shoulder
$d_{b \min}$	82 mm	Minimum diameter of shaft shoulder
$D_{a \min}$	118 mm	Minimum diameter of housing shoulder
$D_{a \max}$	138 mm	Maximum diameter of housing shoulder
$D_{b \min}$	141 mm	Minimum diameter of housing shoulder
$C_{a \min}$	5 mm	Minimum axial space
$C_{b \min}$	13 mm	Minimum axial space
$r_{a \max}$	3 mm	Maximum fillet radius of shaft
$r_{b \max}$	2,5 mm	Maximum fillet radius of housing

### Calculation factors

e	0,83	Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y
Y	0,73	Dynamic axial load factor
$Y_0$	0,4	Static axial load factor

### Temperature range

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