

Technical data

33114U

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage



VISUAL (S)



PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	70 mm
D - External diameter	120 mm
B - Bearing/Inner ring width	37 mm
C - Outer ring width	29 mm
T - Total width	37 mm
a - Charge load application point	28 mm
rs - Min fillet radius	2 mm
r1s - Min fillet radius	1,5 mm
Mass	1,68 kg
ISO 355 reference	T3DE070

PRODUCT PERFORMANCE

C - Dynamic load	190000000 mN
C0 - Static load	251000000 mN
Cu - Fatigue limit load	30500000 mN
A2 - Rating life coefficient	1
e - Coefficient	0.38
Y0 - Static axial load coefficient	0.87
Y2 - Upper axial load coefficient	1.58
N lim - Oil lubrication limit speed	24600 °/s
N lim - Grease lubrication limit speed	18600 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K



ABUTMENT

da max - Max shoulder diameter IR	80 mm
db min - Min IR shoulder diameter	79 mm
Da min - Min shoulder diameter OR	101,5 mm
Da max - Max shoulder diameter OR	111,5 mm
Db min - Min OR shoulder diameter	115,5 mm
ra max - Max fillet radius	2 mm
r1a - Max fillet radius	1,5 mm

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y2

Equivalent static radial load

$$P_0 = X_0.F_r + Y_0.F_a$$

X_0	Y_0
0.5	Y0

If $P_0 \leq F_r$, then use $P_0 = F_r$

The values for e, Y2 and Y0 are shown in the above table

