

Technical data

33020U

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage



VISUAL (S)



33020U

Single row tapered roller bearings

PRODUCT DEFINITION	
Brand	NTN
d - Internal diameter	100 mm
D - External diameter	150 mm
B - Bearing/Inner ring width	39 mm
C - Outer ring width	32,5 mm
T - Total width	39 mm
d1 - External diameter inner ring	124,5 mm
a - Charge load application point	29,5 mm
rs - Min fillet radius	2 mm
r1s - Min fillet radius	1,5 mm
Mass	2,4 kg
ISO 355 reference	T2CE100

PRODUCT PERFORMANCE	
C - Dynamic load	248000000 mN
C0 - Static load	390000000 mN
Cu - Fatigue limit load	44500000 mN
A2 - Rating life coefficient	1
e - Coefficient	0.29
Y0 - Static axial load coefficient	1.15
Y2 - Upper axial load coefficient	2.09
N lim - Oil lubrication limit speed	18000 °/s
N lim - Grease lubrication limit speed	13200 °/s
Tmin - Min operating temperature	233,15 °K



NTN Europe

1 rue des Usines · BP 2017 · 74010 Annecy Cedex · France · Tel. +33 (0)4 50 65 30 00
 S.A. au capital de 322 639 919 € · RCS ANNECY B 325 821 072 · Id. Fiscale : FR 48 325 821 072
 SIRET 325 821 072 00015 · Code APE 2815 Z · Code NACE 28.15

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PRODUCT PERFORMANCE

Tmax - Max operating temperature	393,15 °K
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ABUTMENT

da max - Max shoulder diameter IR	108 mm
db min - Min IR shoulder diameter	110 mm
Da min - Min shoulder diameter OR	135 mm
Da max - Max shoulder diameter OR	141,5 mm
Db min - Min OR shoulder diameter	143 mm
Ca - Min clearance	7 mm
Cb - Min clearance	6,5 mm
ra max - Max fillet radius	2 mm
r1a - Max fillet radius	1,5 mm



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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

