



Technical data

16024

Single row deep groove ball bearings

Deep groove ball bearing, radial contact, pressed steel cage, open

VISUAL (S)



16024

Single row deep groove ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	120 mm
D - External diameter	180 mm
B - Bearing/Inner ring width	19 mm
rs - Min fillet radius	1 mm
Radial clearance class	CN
Mass	1,56 kg

PRODUCT PERFORMANCE

C - Dynamic load	70000000 mN
C0 - Static load	63500000 mN
Cu - Fatigue limit load	3500000 mN
f0 - Coefficient	16.4
N lim - Oil lubrication limit speed	24600 °/s
N lim - Grease lubrication limit speed	21000 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	125 mm
Da max - Max shoulder diameter OR	175 mm
ra max - Max shaft & housing fillet radius	1 mm



NTN Europe

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 S.A. au capital de 322 639 919 € · RCS ANNECY B 325 821 072 · Id. Fiscale : FR 48 325 821 072
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INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$$P = X \cdot Fr + Y \cdot Fa$$

$\frac{f_0 F_a}{C_0}$	e	Fa / Fr ≤ e		Fa / Fr > e	
		X	Y	X	Y
0.172	0.19	1	0	0.56	2.3
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.3				1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1

Equivalent static radial load

$$P_0 = X_0 \cdot Fr + Y_0 \cdot Fa$$

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement :

If $P_0 < Fr$, then use $P_0 = Fr$

