

PDF technical sheet

241/630BL1K30

Double row spherical roller bearings

Spherical roller bearing, with central rib on inner ring, 2-part machined cage centred on inner ring, groove and lubrication holes on outer ring, tapered bore 1:30

Product definition	
d	24.8031 "
D	40.5512 "
B	15.7480 "
d2	29.4488 "
D1	34.3110 "
rs min	0.2953 "
b	1.6535 "
k	0.9843 "
Associated sleeve reference	AH241/630
e	0.38
Y1	1.78
Y2	2.66
Y0	1.74
Radial clearance class	CN
Brand	NTN

Product performance	
Dynamic load, C	11,600 kN
Static load, C0	25,000 kN
Fatigue limit load, Cu	1,136 kN
Nref	160 RPM
Nlim	490 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.44 Hz
Characteristic rolling element frequency, BSF	8.38 Hz
Characteristic outer ring frequency, BPF0	9.74 Hz
Characteristic inner ring frequency, BPFI	12.26 Hz

Abutment dimensions	
da min	26.0630 "
Da max	39.2913 "
ra max	0.2362 "

Calculation 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	Y1	0.67	Y2

Equivalent static radial load

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

X_0	Y_0
1	Y0

The values for e, Y1, Y2 and Y0 are shown in the above table .