



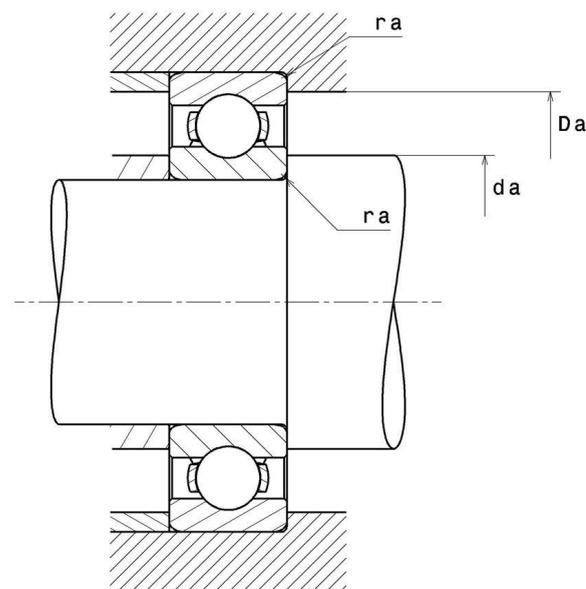
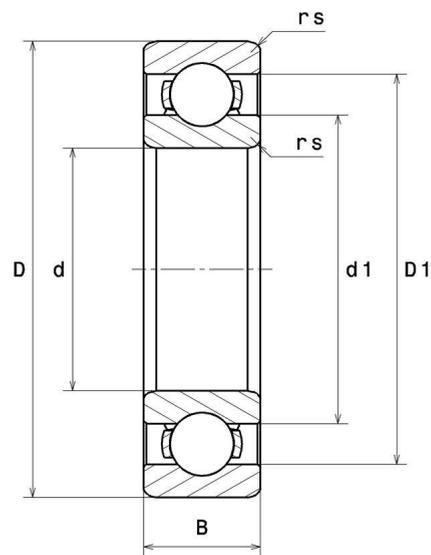
## Technical data

### 6800

Single row deep groove ball bearings

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

### VISUAL (S)



## PRODUCT DEFINITION

<b>Brand</b>	NTN
<b>d - Internal diameter</b>	10 mm
<b>D - External diameter</b>	19 mm
<b>B - Bearing/Inner ring width</b>	5 mm
<b>rs - Min fillet radius</b>	0,3 mm
<b>Radial clearance class</b>	CN
<b>Mass</b>	0,005 kg

## PRODUCT PERFORMANCE

<b>C - Dynamic load</b>	2030000 mN
<b>C0 - Static load</b>	925000 mN
<b>Cu - Fatigue limit load</b>	72000 mN
<b>f0 - Coefficient</b>	14.8
<b>N lim - Oil lubrication limit speed</b>	228000 °/s
<b>N lim - Grease lubrication limit speed</b>	192000 °/s
<b>Tmin - Min operating temperature</b>	233,15 °K
<b>Tmax - Max operating temperature</b>	393,15 °K

## ABUTMENT

<b>da min - Min shoulder diameter IR</b>	12 mm
<b>Da max - Max shoulder diameter OR</b>	17 mm
<b>ra max - Max shaft &amp; housing fillet radius</b>	0,3 mm



## 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  $P_0 = Fr$

