

BT2-8143/HA1

NR double row tapered roller bearings are ready-to-mount units, manufactured with a predetermined axial clearance or preload. TDO design bearings have a double row outer ring and two single inner rings that usually have an intermediate ring between them. Their roller sets are arranged back-to-back (O-arrangement), which enables them to accommodate tilting moments. Design variants include features such as a helical groove in the bore or lubrication grooves in the side faces of the bearing rings.



- High radial load carrying capacity
- Accommodate axial loads in both directions
- Relatively high stiffness
- Accommodate tilting moments
- Many variants, including a helical groove in the bore or lubrication grooves in the side faces of the bearing rings
- Ready to mount

Design variant/feature	TDO/D	
	Dimensions	
	d	400 mm Bore diameter
	D	540 mm Outside diameter
	T	170 mm Total width
	C	135 mm Width of outer ring
	d ₁	463.6 mm Shoulder diameter of inner ring (large side face)
	D ₁	518.362 mm Raceway diameter of outer ring (large side face)
	r _{1,2}	min. 3.3 mm Chamfer dimension of inner ring
	r _{3,4}	min. 1.5 mm Chamfer dimension of outer ring
	a	176 mm Distance between pressure points

Calculation data

Basic dynamic load rating	C	2 782 kN
Basic static load rating	C ₀	6 300 kN
Fatigue load limit	P _u	490 kN
Limiting value	e	0.31
Calculation factor	Y ₁	2.2
Calculation factor	Y ₂	3.3
Calculation factor	Y ₀	2.2
Comparative radial load rating	C _F	680 kN
Comparative axial load rating	C _{Fa}	206 kN
Thrust factor	K	1.89

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances:
bearings: Normal and CL7C, P5
inch bearings: Normal and CL
- Internal clearance

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit