

BT4-8053/HA1

Four-row tapered roller bearings can accommodate combined heavy radial and axial loads at low to moderate speeds. They are used almost exclusively in work roll applications such as rolling mills. NR manufactures four-row tapered roller bearings in TQO and TQI designs, in many variants and with different features.



- Very high radial load carrying capacity
- Accommodate axial loads in both directions
- Axial space-saving solution for roll necks
- Low friction
- Long service life

Design variant/feature	TQI	
Bore type	Cylindrical	
	Dimensions	
	d	450 mm Bore diameter
	D	595 mm Outside diameter
	B	400 mm Total bearing width over inner rings
	T	352 mm Total bearing width over outer rings
	d ₁	≈ 510 mm Abutment diameter shaft
	D ₁	≈ 573 mm Abutment diameter housing
	r _{1,2}	min. 6 mm Inner ring radius (chamfer)
	r _{3,4}	min. 1.5 mm Chamfer dimension outer ring

Calculation data		
Basic dynamic load rating	C	5 500 kN
Basic static load rating	C ₀	16 300 kN

Fatigue load limit	P_u	1 220 kN
Comparative radial load rating	C_F	1 460 kN
Comparative axial load rating	C_{Fa}	236 kN
Thrust factor	K	1.76
Limiting value	e	0.33
Calculation factor	Y_1	2
Calculation factor	Y_2	3
Calculation factor	Y_0	2

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: bearings (Normal and CL7C), inch bearings
- Internal clearance

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit