

BT4-8050/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	TQIN	
Bore type	Cylindrical	
	Dimensions	
	d	400 mm Bore diameter
	D	540 mm Outside diameter
	B	339.96 mm Total bearing width over inner rings
	T	295 mm Total bearing width over outer rings
	d ₁	≈ 455 mm Abutment diameter shaft
	D ₁	≈ 519 mm Abutment diameter housing
	r _{1,2}	min. 3.3 mm Inner ring radius (chamfer)
	r _{3,4}	min. 1.15 mm Chamfer dimension outer ring

Calculation data		
Basic dynamic load rating	C	4 840 kN
Basic static load rating	C ₀	12 500 kN

Fatigue load limit	P_u	980 kN
Comparative radial load rating	C_F	1 270 kN
Comparative axial load rating	C_{Fa}	193 kN
Thrust factor	K	1.89
Limiting value	e	0.31
Calculation factor	Y_1	2.2
Calculation factor	Y_2	3.3
Calculation factor	Y_0	2.2

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