

# PRECISION CYLINDRICAL ROLLER BEARINGS FOR ROTARY TABLES, MILLING HEADS, DEFENSE AND ROBOTICS

Greater Productivity. Stronger Performance.

As a global leader in bearing technology with extensive engineering experience in the machine tool industry, we understand the value of increasing productivity and performance.

#### **Greater Productivity and Stronger Performance for Precision Rotary Tables**

Timken® precision cylindrical roller bearings are engineered for consistency, accuracy and rigidity in rotary table applications.

They feature an integrated design that includes an L-shaped inner ring, shaft washer, outer ring, two thrust-roller cage assemblies and a radial full complement row.

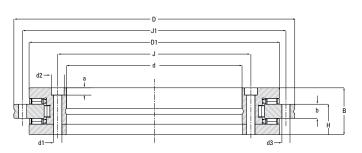
- + Superior running accuracy, lower operating temperature and reduced noise through P4 precision class
- + Greater load carrying capacity and better bearing stiffness control, due to closely controlled preload
- + Potential for increased axial stiffness with an optional thrust washer
- + Effectively manages loads from multiple directions
- + Easy bearing selection due to direct competitor interchange
- + Oil lubrication is standard; grease lubrication available

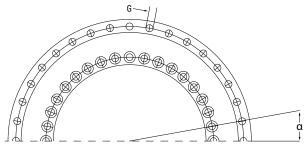
#### Applications:

- Machine Tools
  - Vertical-axis
    Rotation
  - Positioning and Indexing Tables
- Rotary Grinding Machines
- Industrial
  Robotic Arms
- Defense
  - Ordnance
  - Radar Turrets
  - Large Telescopes



### YRC: Combined Radial Axial Roller Bearing





Part Number	Suitable Table Diameter	d	D	В	Н	b	D1	J	J1	d1	d2	а	Oty of Fixing Holes
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
YRC80	200	80	146	35	23.35	12	130	92	138	5.6	10	4.0	9
YRC100	260	100	185	38	25.00	12	160	112	170	5.6	10	5.4	16
YRC120	315	120	210	40	26.00	12	184	135	195	7.0	11	6.2	22
YRC150	350	150	240	40	26.00	12	214	165	225	7.0	11	6.2	34
YRC180	400	180	280	43	29.00	15	244	194	260	7.0	11	6.2	46
YRC200	500	200	300	45	30.00	15	274	215	285	7.0	11	6.2	46
YRC260	630	260	385	55	36.50	18	345	280	365	9.3	15	8.2	34
YRC325	700	325	450	60	40.00	20	415	342	430	9.3	15(1)	8.2	34
YRC395	800	395	525	65	42.50	20	486	415	505	9.3	15	8.2	46
YRC460	1000	460	600	70	46.00	22	560	482	580	9.3	15	8.2	46

							Axial and	Load	l Ratings A	according to		Max Speed	Max Speed	
							Radial Runout	Radial		Axial		Axial Stiffness	with Oil Lubrication	with Grease
Part Number	d3	Qty of d3	Oty of Assembly Screws	G	G Qty	Oty x °	nunout	Dynamic	Static	Dynamic	Static		Lubrication	Lubrication
	mm						μm	kN	kN	kN	kN	kN/μm	rpm	rpm
YRC80	4.6	12	3	-	-	12 x 30°	3	45.3	106.8	55.4	278.7	1.7	870	420
YRC100	5.6	15	2	M5	3	18 x 20°	3	67.7	162.3	97.8	528.0	2.1	700	330
YRC120	7.0	21	2	M8	3	24 X 15°	3	71.9	174.5	108.5	633.6	2.3	570	270
YRC150	7.0	33	2	M8	3	36 x 10°	3	82.0	236.2	109.7	681.1	2.4	520	250
YRC180	7.0	45	2	M8	3	48 X 7.5°	4	88.5	274.2	102.1	643.2	2.9	470	230
YRC200	7.0	45	2	M8	3	48 X 7.5°	4	135.4	297.2	103.6	681.1	2.8	420	200
YRC260	9.3	33	2	M12	3	36 x 10°	6	149.5	478.3	125.0	946.0	4.1	320	160
YRC325	9.3	33	2	M12	3	36 x 10°	6	165.5	581.9	219.9	1837.4	5.1	270	130
YRC395	9.3	45	2	M12	3	48 X 7.5°	6	180.5	696.2	238.2	2143.6	6.4	220	110
YRC460	9.3	45	2	M12	3	48 X 7.5°	6	195.3	810.5	258.3	2480.5	7.0	200	100

<sup>(1)</sup> Milled slots open towards bearing bore



## **TIMKEN**

The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets high-performance mechanical components, including bearings, belts, chain, gears and related mechanical power transmission products and services.