TIMKEN

Four-Row Cylindrical Roller Bearings For Long Product Mills

EASY TO INSTALL AND MADE TO LAST

The metal industry's tough environment places extreme demands on equipment. Maintaining operations and reducing downtime is essential in long product mills where performance and reliability are critical.

The Right Bearing For Long Product Mills

Timken's new four-row cylindrical roller bearing gives mill operators the performance they need to help maximize operational uptime. The optimized internal geometry of the RYL design reduces the risk of damage during mounting which can extend the service life of the bearing.

As a pioneering steel maker and leading bearing supplier to rolling mills, Timken serves this industry with knowledge, technology, dedication, quality and the services to back them.

Optimized for use in long product mills, the RYL type four-row cylindrical bearing can increase performance and reduce total production costs. Timken engineers built on the success of an earlier RY design by improving ease of installation and durability.

Installation Made Easier

The most visible difference is the change in cage material from brass to machined steel to help minimize wear. The high durability of the steel cage minimizes roller drop changes over the bearing life.

For a mill operator with frequent roll changes, this feature combines with an inner ring chamfer to significantly reduce a common risk of bearing failure following collision damage between the inner ring and outer assembly during roll change operations.

Timken's RYL type four-row cylindrical roller bearing is a premium product, from a leading bearing manufacturer with unparalleled expertise in the metal industry.

The RYL four-row cylindrical bearing offers the long products rolling mill industry:

- *Durability: Machined steel cages resist wear and case-carburized races and rollers maximize resistance to shock and debris.*
- *Improved mounting: Reduced roller drop and an inner ring chamfer permit easier installation and reduce the risk of damage during roll change operations.*
- *Optimum performance: High precision (P6 class for boundary and P5 class for run out) permits a higher quality of finished goods.*

The RYL and RXL four-row cylindrical bearings feature:

- *Finger-type machined steel cages*
- *Case-carburized steel materials*
- *One or two piece inner ring*
- *Lubrication slots on the outer ring faces*
- *A modified inner ring chamfer*
- *Reduced roller drop*

FOUR-ROW CYLINDRICAL ROLLER BEARING MAIN PART NUMBER LISTING

d (Bore)	D (O.D.)	B (Width)	DUR (Ø Under Rollers)	Weight	Timken Assembly	Inner Ring*	Outer Assembly	Fig.	Competitive References			
mm	mm	mm	mm	kg					SKF	FAG	NSK	ARB
145.000	225.000	156.000	169.000	23.0	145RYL1452	145ARVSL1452	169RYSL1452	1	313924	538522	145RV2201	AD-4524D
160.000	230.000	130.000	180.000	16.8	160RYL1468	160ARVSL1468	180RYSL1468	1	314190	502894	N/A	AD-4640D
160.000	230.000	168.000	179.000	23.1	160RYL1467	160ARVSL1467	179RYSL1467	1	315189	510150	N/A	AD-4639D
165.100	225.425	168.275	181.000	19.6	165RYL1451	165ARYSL1451	181RYSL1451	2	315642	529468	N/A	AD-4646D
180.000	260.000	168.000	202.000	29.7	180RYL1527	180ARVSL1527	202RYSL1527	1	313812	507536	180RV2601	AD-4719D
200.000	270.000	170.000	222.000	27.9	200RYL1544	200ARVSL1544	222RYSL1544	1	314553	522742	N/A	AD-4741D
200.000	280.000	170.000	222.000	32.4	200RYL1566	200ARVSL1566	222RYSL1566	1	314385	507344	N/A	AD-4742D
200.000	280.000	200.000	222.000	39.0	200RYL1567	200ARVSL1567	222RYSL1567	1	313893	508726	200RV2802	AD-4743D
200.000	290.000	192.000	226.000	41.8	200RYL1585	200ARVSL1585	226RYSL1585	1	313811	512580	200RV2901	AD-4732D
220.000	310.000	192.000	246.000	45.1	220RYL1621	220ARVSL1621	246RYSL1621	1	313839	507333	N/A	AD-4836D
230.000	330.000	206.000	260.000	58.3	230RYL1667	230ARVSL1667	260RYSL1667	1	313824	508727	230RV3301	AD-4924D
260.000	370.000	220.000	292.000	107.6	260RYL1744	260ARVSL1744	292RYSL1744	1	313823	507336	260RV3701	AD-41021D
280.000	390.000	220.000	312.000	81.9	280RYL1783	280ARVSL1783	312RYSL1783	1	313822	507339	280RV3901	AD-41112D
280.000	390.000	275.000	308.000	100.7	280RYL1782	280ARYSL1782	308RYSL1782	2	314719	527104	280RV3903	AD-41119D
300.000	420.000	300.000	332.000	131.9	300RXL1845	300ARXSL1845	332RXSL1845	3	314484	524289	300RV4221	AD-41114D
340.000	480.000	350.000	378.000	201.3	340RYL1963	340ARYSL1963	378RYSL1963	2	314485	527634	340RV4801	AD-41322D

* ARVSL = one piece inner ring, ARYSL = two inner rings

Timken has made every possible effort to ensure that the data in this chart is accurate, but cannot under any circumstances be liable for any errors or omissions.

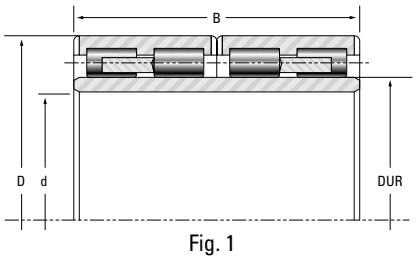


Fig. 1

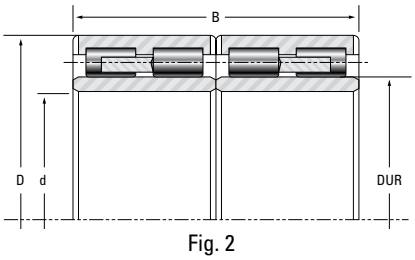


Fig. 2

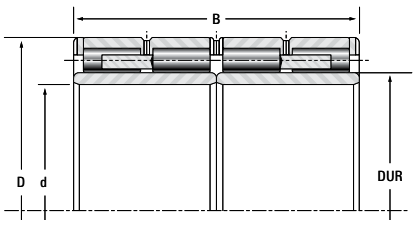
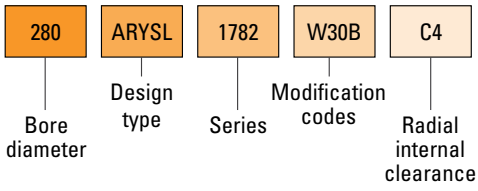
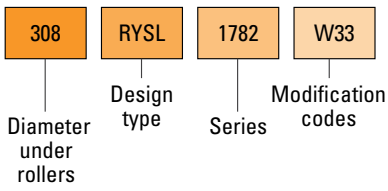


Fig. 3

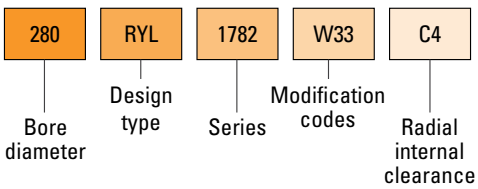
Inner ring part nomenclature



Outer assembly part nomenclature



Bearing assembly nomenclature



Optional modification codes:

- *W30B = removal face slots on inner ring*
- *W2 = two piece inner ring*
- *W33 = lubrication holes and grooves on the outer rings*

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.