

Timken to FULL Bearing Cross Reference: Ball, Tapered Roller and Housed Units

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How Timken and Fafnir suffixes map to FULL

Timken / Fafnir	Meaning	FULL
-ZZ (6205-ZZ)	Shields on both sides	ZZ
-2RS (6205-2RS)	Contact seals on both sides	2RS
-C3 (6205-2RS-C3)	Radial clearance larger than normal	C3 (on request)
-2RZ	Non-contact seals on both sides	Not in FULL catalog; send the number and we will reply
Fafnir K	Conrad (deep groove) type, open	Open
Fafnir KDD	K type with two shields	ZZ
Fafnir PP	Two seals	2RS
Fafnir 9100 / 200 / 300	Series that match 6000 / 6200 / 6300	Same series

Timken to FULL cross reference chart: ball bearings

FULL (open / ZZ / 2RS)	d × D × B mm (FULL catalog)	Timken open	Timken shielded	Timken sealed	Timken C3 example	Fafnir shielded (KDD)	Fafnir sealed (PP)
6000 / 6000ZZ / 6000-2RS	10 × 26 × 8	6000	6000-ZZ	6000-2RS	6000-2RS-C3	ask us	ask us
6001 / 6001ZZ / 6001-2RS	12 × 28 × 8	6001	6001-ZZ	6001-2RS	6001-2RS-C3	9101KDD	ask us
6002 / 6002ZZ / 6002-2RS	15 × 32 × 9	6002	6002-ZZ	6002-2RS	6002-2RS-C3	9102KDD	9102PP
6003 / 6003ZZ / 6003-2RS	17 × 35 × 10	6003	6003-ZZ	6003-2RS	6003-2RS-C3	ask us	9103PP
6004 / 6004ZZ / 6004-2RS	20 × 42 × 12	6004	6004-ZZ	6004-2RS	6004-2RS-C3	ask us	9104PP
6005 / 6005ZZ / 6005-2RS	25 × 47 × 12	6005	6005-ZZ	6005-2RS	6005-2RS-C3	9105KDD	9105PP
6006 / 6006ZZ / 6006-2RS	30 × 55 × 13	6006	6006-ZZ	6006-2RS	6006-2RS-C3	ask us	9106PP
6007 / 6007ZZ / 6007-2RS	35 × 62 × 14	6007	6007-ZZ	6007-2RS	6007-2RS-C3	ask us	9107PP
6008 / 6008ZZ / 6008-2RS	40 × 68 × 15	6008	6008-ZZ	6008-2RS	6008-2RS-C3	ask us	ask us
6009 / 6009ZZ / 6009-2RS	45 × 75 × 16	6009	6009-ZZ	6009-2RS	6009-2RS-C3	ask us	ask us
6010 / 6010ZZ / 6010-2RS	50 × 80 × 16	6010	6010-ZZ	6010-2RS	6010-2RS-C3	ask us	ask us

FULI (open / ZZ / 2RS)	d × D × B mm (FULI catalog)	Timken open	Timken shielded	Timken sealed	Timken C3 example	Fafnir shielded (KDD)	Fafnir sealed (PP)
6200 / 6200ZZ / 6200-2RS	10 × 30 × 9	6200-C0	6200-ZZ	6200-2RS	6200-2RS-C3	200KDD	200PP
6201 / 6201ZZ / 6201-2RS	12 × 32 × 10	6201	6201-ZZ	6201-2RS	6201-2RS-C3	201KDD	201PP
6202 / 6202ZZ / 6202-2RS	15 × 35 × 11	6202	6202-ZZ	6202-2RS	6202-2RS-C3	202KDD	202PP
6203 / 6203ZZ / 6203-2RS	17 × 40 × 12	6203	6203-ZZ	6203-2RS	6203-2RS-C3	203KDD	203PP
6204 / 6204ZZ / 6204-2RS	20 × 47 × 14	6204	6204-ZZ	6204-2RS	6204-2RS-C3	204KDD	204PP
6205 / 6205ZZ / 6205-2RS	25 × 52 × 15	6205	6205-ZZ	6205-2RS	6205-2RS-C3	205KDD	205PP
6206 / 6206ZZ / 6206-2RS	30 × 62 × 16	6206	6206-ZZ	6206-2RS	6206-2RS-C3	206KDD	206PP
6207 / 6207ZZ / 6207-2RS	35 × 72 × 17	6207	6207-ZZ	6207-2RS	6207-2RS-C3	207KDD	207PP
6208 / 6208ZZ / 6208-2RS	40 × 80 × 18	6208	6208-ZZ	6208-2RS	6208-2RS-C3	ask us	208PP
6209 / 6209ZZ / 6209-2RS	45 × 85 × 19	6209	6209-ZZ	6209-2RS	6209-2RS-C3	209KDD	209PP
6210 / 6210ZZ / 6210-2RS	50 × 90 × 20	6210	6210-ZZ	6210-2RS	6210-2RS-C3	210KDD	ask us
6211 / 6211ZZ / 6211-2RS	55 × 100 × 21	6211	6211-ZZ	6211-2RS	6211-2RS-C3	211KDD	211PP
6212 / 6212ZZ / 6212-2RS	60 × 110 × 22	6212	6212-ZZ	6212-2RS	6212-2RS-C3	212KDD	ask us
6300 / 6300ZZ / 6300-2RS	10 × 35 × 11	ask us	6300-ZZ	6300-2RS	6300-2RS-C3	ask us	ask us
6301 / 6301ZZ / 6301-2RS	12 × 37 × 12	6301	6301-ZZ	6301-2RS	6301-2RS-C3	ask us	ask us
6302 / 6302ZZ / 6302-2RS	15 × 42 × 13	6302	6302-ZZ	6302-2RS	6302-2RS-C3	ask us	ask us
6303 / 6303ZZ / 6303-2RS	17 × 47 × 14	6303	6303-ZZ	6303-2RS	6303-2RS-C3	303KDD	303PP
6304 / 6304ZZ / 6304-2RS	20 × 52 × 15	6304	6304-ZZ	6304-2RS	6304-2RS-C3	304KDD	304PP
6305 / 6305ZZ / 6305-2RS	25 × 62 × 17	6305	6305-ZZ	6305-2RS	6305-2RS-C3	305KDD	305PP
6306 / 6306ZZ / 6306-2RS	30 × 72 × 19	6306	6306-ZZ	6306-2RS	6306-2RS-C3	306KDD	306PP
6307 / 6307ZZ / 6307-2RS	35 × 80 × 21	6307	6307-ZZ	6307-2RS	6307-2RS-C3	307KDD	307PP
6308 / 6308ZZ / 6308-2RS	40 × 90 × 23	6308	6308-ZZ	6308-2RS	6308-2RS-C3	308KDD	308PP

FULI (open / ZZ / 2RS)	d × D × B mm (FULI catalog)	Timken open	Timken shielded	Timken sealed	Timken C3 example	Fafnir shielded (KDD)	Fafnir sealed (PP)
6309 / 6309ZZ / 6309-2RS	45 × 100 × 25	6309	6309-ZZ	6309-2RS	6309-2RS-C3	309KDD	ask us
6310 / 6310ZZ / 6310-2RS	50 × 110 × 27	6310	6310-ZZ	6310-2RS	6310-2RS-C3	310KDD	ask us

Dimensions are from the FULI catalog. Timken numbers are from the Timken online catalog. Fafnir numbers are from the Timken interchange guide 7536 and are shown only where we have confirmed them; "ask us" means we have not confirmed that Fafnir or Timken number yet, so send it to us and we will check it. The C3 column shows how Timken writes the C3 version; for FULI, C3 is on request. Sources are listed at the end of the page.

Timken U Series housed units

Timken sells UC inserts and UCP, UCF and UCFL units under the same JIS-style numbers, for example UCP205, UCF205 and UCFL205 in the Timken U Series catalog. The catalog states: "Bolt-hole spacing and base-to-center height dimensions are interchangeable with competitive units." The FULI unit with the same number has the same size code and bore.

FULI unit	Timken U Series	Timken catalog page
UCP205	UCP205	U Series catalog p18–19
UCP206	UCP206	U Series catalog p18–19
UCP207	UCP207	U Series catalog p18–19
UCP208	UCP208	U Series catalog p18–19
UCF205	UCF205	U Series catalog p24
UCF208	UCF208	U Series catalog p24
UCFL205	UCFL205	U Series catalog p26
UC205 insert	UC205	U Series catalog

This table lists the metric sizes we have checked in the Timken U Series catalog. For other sizes, send us the Timken number. FULI unit size tables: [UCP 200 series](#) and [UCF and UCFL 200 series](#). SKF, NTN and Koyo unit numbers and Fafnir inch-shaft units: [Pillow block bearing cross reference](#).

Timken metric tapered roller bearings to FULI

Timken sells metric tapered roller bearings under the ISO number, so Timken 30205 is listed as 30205 and the FULI number is also 30205. The Timken catalog E0400-GB also shows the newer ISO 355 numbers (for example T4CB100) and a J prefix for some sizes. If your drawing uses one of those, send it to us and we will check the size.

The other brands add their own codes to the same basic number. These codes mark design or ISO 355 conformance, not seals:

- NSK writes HR in front and J at the end: HR30205J.
- NTN writes 4T- in front: 4T-30205. A few sizes differ, for example 4T-30304A and 32212U.
- Koyo writes JR at the end: 30205JR. A few sizes carry -1, for example 30307JR-1.
- FAG writes -XL or -A at the end: 30205-XL, 30304-A.
- SKF's catalog table shows only the basic number. The SKF order number usually adds J2/Q (J2 = pressed steel cage, Q = improved friction torque and raceway geometry).

FULI	d × D × T mm (FULI catalog)	Timken	SKF	SKF order number	NSK	NTN	Koyo	FAG
30205	25 × 52 × 16.25	30205	30205	30205 J2/Q	HR30205J	4T-30205	30205JR	30205-XL
30206	30 × 62 × 17.25	30206	30206	30206 J2/Q	HR30206J	4T-30206	30206JR	30206-XL

FULI	d × D × T mm (FULI catalog)	Timken	SKF	SKF order number	NSK	NTN	Koyo	FAG
30208	40 × 80 × 19.75	30208	30208	30208 J2/Q	HR30208J	4T-30208	30208JR	30208-XL
30209	45 × 85 × 20.75	30209	30209	30209 J2/Q	HR30209J	4T-30209	30209JR	30209-XL
30210	50 × 90 × 21.75	30210	30210	30210 J2/Q	HR30210J	4T-30210	30210JR	30210-XL
30211	55 × 100 × 22.75	30211	30211	30211 J2/Q	HR30211J	4T-30211	30211JR	30211-XL
30212	60 × 110 × 23.75	30212	30212	30212 J2/Q	HR30212J	4T-30212	30212JR	30212-XL
30304	20 × 52 × 16.25	30304	30304	ask us	HR30304J	4T-30304A	30304AJR	30304-A
30305	25 × 62 × 18.25	30305	30305	30305 J2/Q	HR30305J	4T-30305	30305JR	30305-A
30306	30 × 72 × 20.75	30306	30306	30306 J2/Q	HR30306J	4T-30306	30306JR	30306-XL
30307	35 × 80 × 22.75	30307	30307	30307 J2/Q	HR30307J	4T-30307	30307JR-1	30307-A
30308	40 × 90 × 25.25	30308	30308	ask us	HR30308J	4T-30308	30308JR	30308-A
30310	50 × 110 × 29.25	30310	30310	30310 J2/Q	HR30310J	4T-30310	30310JR	30310-A
32205	25 × 52 × 19.25	32205	32205	32205 BJ2/Q	HR32205J	4T-32205	32205JR	32205-XL
32207	35 × 72 × 24.25	32207	32207	32207 J2/Q	HR32207J	4T-32207	32207JR	32207-XL
32209	45 × 85 × 24.75	32209	32209	32209 J2/Q	HR32209J	4T-32209	32209JR-1	32209-XL
32211	55 × 100 × 26.75	32211	32211	32211 J2/Q	HR32211J	4T-32211	32211JR-1	32211-XL
32212	60 × 110 × 29.75	32212	32212	32212 J2/Q	HR32212J	32212U	32212JR	32212-XL

Notes on this table:

- **30304:** the cone width B (inner ring) is 15 mm at NSK and Timken and 16 mm at NTN and Koyo. Bore d, outside diameter D, total width T and cup width C (13 mm) match. If your fit depends on B, tell us which brand you are replacing.
- **32205:** SKF does not list a standard-angle 32205. It sells 32205 BJ2/Q, where B means a larger contact angle than standard. d, D and T match the other brands; the contact angle does not. Timken lists 32205 and 32205B separately.
- **SKF 30304 and 30308:** we have found the full SKF order number in one source only, so that cell says "ask us".
- **Timken assembly numbers** such as 30205M-90KM1: we have not confirmed what the assembly suffix covers. Send us the full number and we will check it.
- Dimensions d × D × T are from the FULI catalog. Brand numbers are from each maker's catalog; sources are listed at the end of the page. Each FULI number links to its product page.

Reading Fafnir numbers

A Fafnir number is series + size + type. 205KDD is the 200 series, size 05, K type with two shields: the same size as 6205ZZ. 9105PP is the 9100 series, size 05, with two seals: the same size as 6005-2RS. The rules come from Timken ball bearing catalog 10734 and the Timken interchange guide 7536.

Fafnir housed units: check the locking type

Fafnir RAK, RAS, RCJ and RCJT units use eccentric locking collar inserts (for example G1100KRRB). FULI UC units use set screws. Fafnir set-screw units for inch shafts include YAS pillow blocks and YCJ / YCJT flange units. When you replace a Fafnir unit, tell us the full number so we can check the housing and the locking type.

Send your Timken or Fafnir numbers

List the Timken or Fafnir numbers with suffixes and quantities. We reply with the FULI number for each line, price and lead time. Email sales@fuli-bearings.com or use the [contact form](#).

Online version of this chart: <https://www.fuli-bearings.com/products/bearing-cross-reference/timken-bearing-cross-reference/>

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