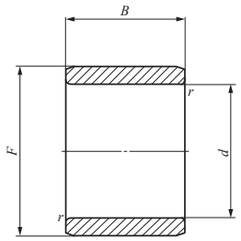
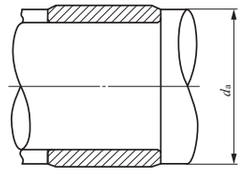
INNER RINGS

Inner Rings for Shell Type Needle Roller Bearings







IRT

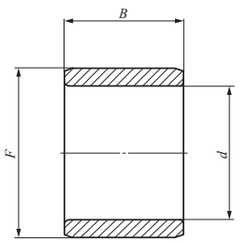
Shaft dia. 50 — 60mm

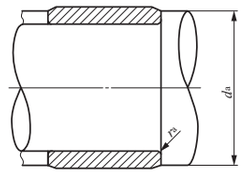
Shaft dia. mm	Identification number	Mass (Ref.) g	Boundary dimensions mm d	F	B	$r_{s\,min}$ (1)	Standard mounting dimension mm d_a Min.	Max.	Assembled bearings TA···Z (TAM)	TLA···Z (TLAM)	YT YTL
50	**IRT 5020-1**	65	50	55	20.5	0.6	54	54.5	**TA 5520Z**	**TLA 5520Z**	—
	IRT 5025-1	81	50	55	25.5	0.6	54	54.5	**TA 5525Z**	**TLA 5525Z**	—
	IRT 5030-1	96.5	50	55	30.5	0.6	54	54.5	**TA 5530Z**	—	—
	IRT 5040-1	128	50	55	40.5	0.6	54	54.5	**TA 5540Z**	—	—
	IRT 5045-1	144	50	55	45.5	0.6	54	54.5	**TAW 5545Z**	—	—
	IRT 5050-1	160	50	55	50.5	0.6	54	54.5	**TAW 5550Z**	—	—
	IRT 5025	169	50	60	25.5	1.5	58	59	**TA 6025Z**	—	—
	IRT 5030	205	50	60	30.5	1.5	58	59	**TA 6030Z**	—	—
	IRT 5040	270	50	60	40.5	1.5	58	59	**TA 6040Z**	—	—
	IRT 5045	300	50	60	45.5	1.5	58	59	**TAW 6045Z**	—	—
	IRT 5050	335	50	60	50.5	1.5	58	59	**TAW 6050Z**	—	—
52	**IRT 5212**	86	52	62	12.5	1.5	60	60.5	**TA 6212Z**	—	—
55	**IRT 5525**	185	55	65	25.5	1.5	63	63.5	**TA 6525Z**	—	—
	IRT 5530	220	55	65	30.5	1.5	63	63.5	**TA 6530Z**	—	—
	IRT 5545	330	55	65	45.5	1.5	63	63.5	**TAW 6545Z**	—	—
	IRT 5550	365	55	65	50.5	1.5	63	63.5	**TAW 6550Z**	—	—
60	**IRT 6025**	200	60	70	25.5	1.5	68	68.5	**TA 7025Z**	—	—
	IRT 6030	240	60	70	30.5	1.5	68	68.5	**TA 7030Z**	—	—
	IRT 6040	320	60	70	40.5	1.5	68	68.5	**TA 7040Z**	—	—
	IRT 6050	395	60	70	50.5	1.5	68	68.5	**TAW 7050Z**	—	—

Note(1) Minimum allowable value of chamfer dimension r
Remark No oil hole is provided.

Inner Rings for Shell Type Needle Roller Bearings Inch Series







IRB

Shaft dia. 7.938 — 15.875mm

Shaft dia. mm (inch)	Identification number	Mass (Ref.) g	Boundary dimensions mm(inch) d	F	B	Standard mounting dimensions mm (1) d_a Min.	Max.	$r_{as\,max}$ Max.	Assembled bearings BA···Z (BAM)	BHA···Z (BHAM)	YB YBH
7.938 (5/16)	**IRB 58**	8	7.938 (5/16)	12.700 (1/2)	13.08	11.3	11.7	0.3	**BA 88Z**	**BHA 88Z**	**YB 88**
9.525 (3/8)	**IRB 68**	8.9	9.525 (3/8)	14.288 (9/16)	13.08	12.8	13.2	0.3	**BA 98Z**	**BHA 98Z**	**YB 98**
	IRB 68-1	12.6	9.525 (3/8)	15.875 (5/8)	13.08	12.8	14	0.3	**BA 108Z**	**BHA 108Z**	**YB 108** **YBH 108**
	IRB 612	13.2	9.525 (3/8)	14.288 (9/16)	19.43	12.8	13.2	0.3	**BA 912Z**	—	**YB 912**
	IRB 612-1	18.8	9.525 (3/8)	15.875 (5/8)	19.43	12.8	14	0.3	**BA 1012Z**	**BHA 1012Z**	**YB 1012**
11.112 (7/16)	**IRB 78**	10.1	11.112 (7/16)	15.875 (5/8)	13.08	14.4	14.8	0.3	**BA 108Z**	**BHA 108Z**	**YB 108** **YBH 108**
	IRB 712	15	11.112 (7/16)	15.875 (5/8)	19.43	14.4	14.8	0.3	**BA 1012Z**	**BHA 1012Z**	**YB 1012**
	IRB 714	17.4	11.112 (7/16)	15.875 (5/8)	22.60	14.4	14.8	0.3	**BA 1014Z**	—	—
	IRB 716	19.9	11.112 (7/16)	15.875 (5/8)	25.78	14.4	14.8	0.3	**BA 1016Z**	**BHA 1016Z**	—
12.700 (1/2)	**IRB 86**	8.5	12.700 (1/2)	17.462 (11/16)	9.90	16.9	16.9	0.3	**BA 116Z**	—	—
	IRB 88	11.2	12.700 (1/2)	17.462 (11/16)	13.08	16.9	16.9	0.3	**BA 118Z**	**BHA 118Z**	—
	IRB 812	16.7	12.700 (1/2)	17.462 (11/16)	19.43	16.9	16.9	0.3	**BA 1112Z**	**BHA 1112Z**	**YB 1112**
	IRB 88-1	15.8	12.700 (1/2)	19.050 (3/4)	13.08	16.9	17.5	0.6	**BA 128Z**	—	**YB 128**
	IRB 810-1	19.6	12.700 (1/2)	19.050 (3/4)	16.25	16.9	17.5	0.6	**BA 1210Z**	—	**YB 1210**
	IRB 812-1	23.5	12.700 (1/2)	19.050 (3/4)	19.43	16.9	17.5	0.6	**BA 1212Z**	**BHA 1212Z**	**YB 1212**
	IRB 814-1	27.5	12.700 (1/2)	19.050 (3/4)	22.60	16.9	17.5	0.6	**BA 1214Z**	—	—
	IRB 816-1	31	12.700 (1/2)	19.050 (3/4)	25.78	16.9	17.5	0.6	**BA 1216Z**	—	—
14.288 (9/16)	**IRB 98**	17.3	14.288 (9/16)	20.638 (13/16)	13.08	19	19.6	0.6	**BA 138Z**	**BHA 138Z**	**YB 138**
	IRB 910	21.5	14.288 (9/16)	20.638 (13/16)	16.25	19	19.6	0.6	**BA 1310Z**	**BHA 1310Z**	**YBH 1310**
	IRB 912	26	14.288 (9/16)	20.638 (13/16)	19.43	19	19.6	0.6	**BA 1312Z**	**BHA 1312Z**	**YBH 1312**
	IRB 914	30	14.288 (9/16)	20.638 (13/16)	22.60	19	19.6	0.6	**BA 1314Z**	—	—
	IRB 916	34.5	14.288 (9/16)	20.638 (13/16)	25.78	19	19.6	0.6	**BA 1316Z**	—	—
	IRB 920	43	14.288 (9/16)	20.638 (13/16)	32.13	19	19.6	0.6	**BA 1320Z**	—	—
15.875 (5/8)	**IRB 106**	14.5	15.875 (5/8)	22.225 (7/8)	9.90	20.7	21.2	0.6	**BA 146Z**	—	—
	IRB 108	18.9	15.875 (5/8)	22.225 (7/8)	13.08	20.7	21.2	0.6	**BA 148Z**	—	**YB 148**
	IRB 1012	28	15.875 (5/8)	22.225 (7/8)	19.43	20.7	21.2	0.6	**BA 1412Z**	**BHA 1412Z**	**YB 1412**

Note(1) Maximum allowable fillet corner radius of shaft
Remark No oil hole is provided.

1N=0.102kgf=0.2248lbs.
1mm=0.03937inch

INNER RINGS

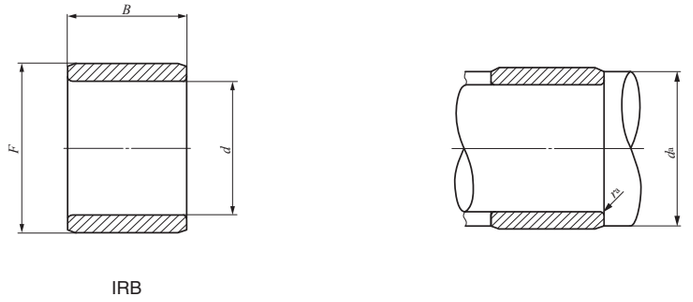
Inner Rings for Shell Type Needle Roller Bearings Inch Series



Shaft dia. 15.875 — 63.500mm

Shaft dia. mm (inch)	Identification number	Mass (Ref.) g	Boundary dimensions mm(inch) d	F	B	Standard mounting dimensions mm (1) d_a Min.	d_a Max.	$r_{as\,max}$ Max.	Assembled bearings BA···Z (BAM)	BHA···Z (BHAM)	YB YBH
15.875 (5/8)	IRB 1014	33	15.875 (5/8)	22.225 (7/8)	22.60	20.7	21.2	0.6	BA 1414Z	—	—
	IRB 1016	37.5	15.875 (5/8)	22.225 (7/8)	25.78	20.7	21.2	0.6	BA 1416Z	BHA 1416Z	YB 1416
	IRB 1022	51.5	15.875 (5/8)	22.225 (7/8)	35.30	20.7	21.2	0.6	BA 1422Z	—	—
17.462 (11/16)	IRB 1110	25.5	17.462 (11/16)	23.812 (15/16)	16.25	22.3	22.8	0.6	BA 1510Z	—	—
	IRB 1116	40.5	17.462 (11/16)	23.812 (15/16)	25.78	22.3	22.8	0.6	BA 1516Z	—	—
19.050 (3/4)	IRB 128	22	19.050 (3/4)	25.400 (1)	13.08	23.9	24.4	0.6	BA 168Z	BHA 168Z	YB 168 YBH 168
	IRB 1212	33	19.050 (3/4)	25.400 (1)	19.43	23.9	24.4	0.6	BA 1612Z	BHA 1612Z	YB 1612 YBH 1612
	IRB 1214	38.5	19.050 (3/4)	25.400 (1)	22.60	23.9	24.4	0.6	BA 1614Z	BHA 1614Z	—
	IRB 1216	43.5	19.050 (3/4)	25.400 (1)	25.78	23.9	24.4	0.6	BA 1616Z	BHA 1616Z	YB 1616 YBH 1616
	IRB 1220	54.5	19.050 (3/4)	25.400 (1)	32.13	23.9	24.4	0.6	BA 1620Z	BHA 1620Z	—
20.638 (13/16)	IRB 1316	34	20.638 (13/16)	25.400 (1)	25.78	24.9	24.9	0.6	BA 1616Z	BHA 1616Z	YB 1616 YBH 1616
22.225 (7/8)	IRB 148	25	22.225 (7/8)	28.575 (1 1/8)	13.08	27	27.5	0.6	BA 188Z	—	YB 188
	IRB 1412	37.5	22.225 (7/8)	28.575 (1 1/8)	19.43	27	27.5	0.6	BA 1812Z	BHA 1812Z	YB 1812
	IRB 1416	50	22.225 (7/8)	28.575 (1 1/8)	25.78	27	27.5	0.6	BA 1816Z	BHA 1816Z	YB 1816
	IRB 1420	62.5	22.225 (7/8)	28.575 (1 1/8)	32.13	27	27.5	0.6	BA 1820Z	BHA 1820Z	—
25.400 (1)	IRB 168	28.5	25.400 (1)	31.750 (1 1/4)	13.08	30	30.7	0.6	BA 208Z	BHA 208Z	—
	IRB 1610	35.5	25.400 (1)	31.750 (1 1/4)	16.25	30	30.7	0.6	BA 2010Z	—	YB 2010
	IRB 1612	42.5	25.400 (1)	31.750 (1 1/4)	19.43	30	30.7	0.6	BA 2012Z	BHA 2012Z	YB 2012
	IRB 1616	56	25.400 (1)	31.750 (1 1/4)	25.78	30	30.7	0.6	BA 2016Z	BHA 2016Z	YB 2016
	IRB 1620	70	25.400 (1)	31.750 (1 1/4)	32.13	30	30.7	0.6	BA 2020Z	BHA 2020Z	—
	IRB 168-1	36.5	25.400 (1)	33.338 (1 5/16)	13.08	30	32.1	0.6	BA 218Z	—	—
	IRB 1610-1	45.5	25.400 (1)	33.338 (1 5/16)	16.25	30	32.1	0.6	BA 2110Z	—	—
	IRB 1612-1	54.5	25.400 (1)	33.338 (1 5/16)	19.43	30	32.1	0.6	BA 2112Z	—	—

Note(1) Maximum allowable fillet corner radius of shaft
Remark No oil hole is provided.



IRB

Shaft dia. mm (inch)	Identification number	Mass (Ref.) g	Boundary dimensions mm(inch) d	F	B	Standard mounting dimensions mm (1) d_a Min.	d_a Max.	$r_{as\,max}$ Max.	Assembled bearings BA···Z (BAM)	BHA···Z (BHAM)	YB YBH
28.575 (1 1/8)	IRB 188	31.5	28.575 (1 1/8)	34.925 (1 3/8)	13.08	33.2	33.9	0.6	BA 228Z	BHA 228Z	YB 228
	IRB 1812	47	28.575 (1 1/8)	34.925 (1 3/8)	19.43	33.2	33.9	0.6	BA 2212Z	BHA 2212Z	YB 2212
	IRB 1816	62.5	28.575 (1 1/8)	34.925 (1 3/8)	25.78	33.2	33.9	0.6	BA 2216Z	BHA 2216Z	—
	IRB 1820	78	28.575 (1 1/8)	34.925 (1 3/8)	32.13	33.2	33.9	0.6	BA 2220Z	BHA 2220Z	YB 2220
31.750 (1 1/4)	IRB 2010	43	31.750 (1 1/4)	38.100 (1 1/2)	16.25	37	37.1	0.6	BA 2410Z	—	—
	IRB 2014	60	31.750 (1 1/4)	38.100 (1 1/2)	22.60	37	37.1	0.6	BA 2414Z	—	YB 2414
	IRB 2016	68.5	31.750 (1 1/4)	38.100 (1 1/2)	25.78	37	37.1	0.6	BA 2416Z	—	YB 2416
	IRB 2020	85.5	31.750 (1 1/4)	38.100 (1 1/2)	32.13	37	37.1	0.6	BA 2420Z	—	YB 2420
34.925 (1 3/8)	IRB 2210	47	34.925 (1 3/8)	41.275 (1 5/8)	16.25	40.2	40.2	0.6	BA 2610Z	—	YB 2610
	IRB 2220	93.5	34.925 (1 3/8)	41.275 (1 5/8)	32.13	40.2	40.2	0.6	BA 2620Z	—	—
36.512 (1 7/16)	IRB 2316	99	36.512 (1 7/16)	44.450 (1 3/4)	25.78	42.5	43.2	0.6	BA 2816Z	—	—
38.100 (1 1/2)	IRB 2412	62	38.100 (1 1/2)	44.450 (1 3/4)	19.43	43.3	43.4	0.6	BA 2812Z	—	—
	IRB 2416	81	38.100 (1 1/2)	44.450 (1 3/4)	25.78	43.3	43.4	0.6	BA 2816Z	—	YB 2816
	IRB 2424	121	38.100 (1 1/2)	44.450 (1 3/4)	38.48	43.3	43.4	0.6	BA 2824Z	BHA 2824Z	—
	IRB 248-1	64	38.100 (1 1/2)	47.625 (1 7/8)	13.08	44.5	45.5	1	BA 308Z	—	—
	IRB 2410-1	79.5	38.100 (1 1/2)	47.625 (1 7/8)	16.25	44.5	45.5	1	BA 3010Z	—	—
41.275 (1 5/8)	IRB 2616	136	41.275 (1 5/8)	50.800 (2)	25.78	47.5	48.5	1	BA 3216Z	—	—
	IRB 2628	235	41.275 (1 5/8)	50.800 (2)	44.83	47.5	48.5	1	BAW 3228Z	—	—
42.862 (1 11/16)	IRB 2720	146	42.862 (1 11/16)	50.800 (2)	32.13	48.5	49.5	0.6	BA 3220Z	— —	— —
47.625 (1 7/8)	IRB 3016	100	47.625 (1 7/8)	53.975 (2 1/8)	25.78	52.9	52.9	0.6	BA 3416Z	—	—
	IRB 3024	149	47.625 (1 7/8)	53.975 (2 1/8)	38.48	52.9	52.9	0.6	BA 3424Z	—	—
57.150 (2 1/4)	IRB 3616	183	57.150 (2 1/4)	66.675 (2 5/8)	25.78	63.5	64.5	1	BA 4216Z	— —	— —
63.500 (2 1/2)	IRB 4016	131	63.500 (2 1/2)	69.850 (2 3/4)	25.78	68.7	68.8	0.6	BA 4416Z	—	—
	IRB 4020	164	63.500 (2 1/2)	69.850 (2 3/4)	32.13	68.7	68.8	0.6	BA 4420Z	—	—

Note(1) Maximum allowable fillet corner radius of shaft
Remark No oil hole is provided.

1N=0.102kgf=0.2248lbs.
1mm=0.03937inch