

Inner rings



Inner rings are made from hardened rolling bearing steel and have precision machined or ground raceways.

They are used where:

- the shaft cannot be used as a raceway for needle roller and cage assemblies, drawn cup needle roller bearings with open ends, drawn cup needle roller bearings with closed end and needle roller bearings
- needle roller bearings must be combined with wider inner rings in order to allow larger axial displacements of the shaft in relation to the housing
- optimum running surfaces are required for seal lips.

[Download the current general catalogue EN](#)

Table legend:

○ with lubrication hole

- with lubrication hole without counterbore

Dimensions				Designation	Mass
d	F	D	r _{min}		g
mm					
5	8	12	0.3	IR5x8x12	2.8
5	8	16	0.3	IR5x8x16	3.7
6	9	12	0.3	IR6x9x12	3.2
6	9	16	0.3	IR6x9x16	4.3
6	10	10	0.3	IR6x10x10	3.7
6	10	12	0.3	• IR6x10x12	4.6
7	10	11	0.3	IR7x10x10.5	3.1
7	10	12	0.3	IR7Xx10x12	3.6
7	10	16	0.3	IR7x10x16	4.9
8	12	10	0.3	IR8x12x10	4.8
8	12	11	0.3	IR/LR8x12x10.5	5.0
8	12	12	0.3	IR8x12x12	5.7
8	12	13	0.3	IR8x12x12.5	5.9
9	12	12	0.3	IR9x12x12	4.5

Dimensions				Designation	Mass	
d	F	D	r _{min}		g	
mm						
9	12	16	0.3	IR9x12x16	6.1	
10	13	13	0.3	IR/LR10x13x12.5	5.2	
10	14	12	0.3	o IR10x14x12	7.3	
10	14	13	0.3	IR10x14x13	7.4	
10	14	14	0.3	• IR10x14x14	8.0	
10	14	16	0.3	IR10x14x16	9.2	
10	14	20	0.3	IR10x14x20	11.6	
12	15	12	0.3	IR12x15x12	5.8	
12	15	13	0.3	IR12x15x12.5	6.1	
12	15	16	0.3	IR12x15x16	8.0	
12	15	17	0.3	IR/LR12x15x16.5	8.1	
12	15	23	0.3	IR/LR12x15x22.5	11.0	
12	16	12	0.3	o IR12x16x12	7.9	
12	16	13	0.3	IR12x16x13	8.7	
12	16	14	0.3	• IR12x16x14	9.5	
12	16	16	0.3	IR12x16x16	11.0	
12	16	20	0.3	IR12x16x20	13.5	
14	17	17	0.3	IR14x17x17	10.0	
15	18	13	0.3	IR15x18x12.5	7.2	
15	18	16	0.3	IR15x18x16	9.6	
15	18	17	0.3	IR15x18x16.5	9.9	
15	19	16	0.3	IR15x19x16	12.8	
15	19	20	0.3	IR15x15x20	16.4	
15	20	12	0.3	o IR15x20x12	12.1	
15	20	13	0.3	IR15x20x13	13.5	
15	20	14	0.3	• IR15x20x14	14.7	
15	20	23	0.3	IR15x20x23	24.4	

Dimensions				Designation	Mass
d	F	D	r _{min}		g
mm					
17	20	16	0.3	IR17x20x16	10.7
17	20	17	0.3	IR17x20x16.5	11.1
17	20	20	0.3	IR17x20x20	13.5
17	20	21	0.3	IR17x20x20.5	13.8
17	20	31	0.3	IR17x20x30.5	20.6
17	21	16	0.3	IR17x21x16	14.3
17	21	20	0.3	IR17x21x20	18.0
17	22	13	0.3	IR17x22x13	14.9
17	22	14	0.3	• IR17x22x14	16.4
17	22	16	0.3	IR17x22x16	18.7
17	22	23	0.3	IR17x22x23	27.1
17	24	20	0.3	IR17x24x20	33.6
20	24	16	0.3	IR20x24x16	16.5
20	24	20	0.3	IR20x24x20	21.3
20	25	13	0.3	IR20x25x12.5	20.0
20	25	17	0.3	IR20x25x17	22.4
20	25	18	0.3	IR20x25x18	24.3
20	25	20	0.3	IR20x25x20	27.5
20	25	21	0.3	IR20x25x20.5	28.2
22	26	16	0.3	IR22x26x16	17.5
22	26	20	0.3	IR22x26x20	23.2
22	28	17	0.3	IR22x28x17	29.8
22	28	20	0.3	IR22x28x20	35.0
22	28	21	0.3	IR22x28x20.5	36.0
25	29	20	0.3	IR25x29x20	25.5
25	29	30	0.3	IR25x29x30	39.3
25	30	13	0.3	IR25x30x12.5	20.0

Dimensions				Designation	Mass
d	F	D	r _{min}		g
mm					
25	30	16	0.3	IR25x30x15.5	23.2
25	30	17	0.3	IR25x30x16.5	26.7
25	30	17	0.3	• IR25x30x17	27.5
25	30	18	0.3	IR25x30x18	29.8
25	30	20	0.3	IR25x30x20	32.6
25	30	21	0.3	IR25x30x20.5	33.5
25	30	27	0.3	IR25x30x26.5	43.3
25	30	30	0.3	IR25x30x30	50.1
25	30	32	0.3	IR25x30x32	53.0
25	30	39	0.3	IR25x30x38.5	63.8
30	35	13	0.3	IR30x35x12.5	23.3
30	35	13	0.3	IR30x35x13	25.0
30	35	16	0.3	IR30x35x16	30.8
30	35	17	0.3	IR30x35x17	32.3
30	35	18	0.3	• IR30x35x18	35.3
30	35	20	0.3	IR30x35x20	40.0
30	35	21	0.3	IR30x35x20.5	40.7
30	35	26	0.3	IR30x35x26	50.3
30	35	30	0.3	IR30x35x30	58.9
35	40	13	0.3	IR35x40x12.5	27.2
35	40	17	0.3	IR35x40x16.5	37.4
35	40	17	0.3	IR35x40x17	38.4
35	40	20	0.3	IR35x40x20	44.4
35	40	21	0.3	IR35x40x20.5	46.1
35	40	30	0.3	IR35x40x30	67.9
40	45	17	0.3	IR40x45x16.5	41.4
40	45	17	0.3	IR40x45x17	42.5

Dimensions				Designation	Mass	
d	F	D	r _{min}		g	
mm						
40	45	20	0.3	IR40x45x20	50.5	
40	45	21	0.3	IR40x45x20.5	52.5	
40	45	30	0.3	IR40x45x30	77.1	
45	50	21	0.3	IR45x50x20	57.0	
45	50	26	0.3	IR45x50x25.5	75.1	
45	50	35	0.3	IR45x50x35	101.0	