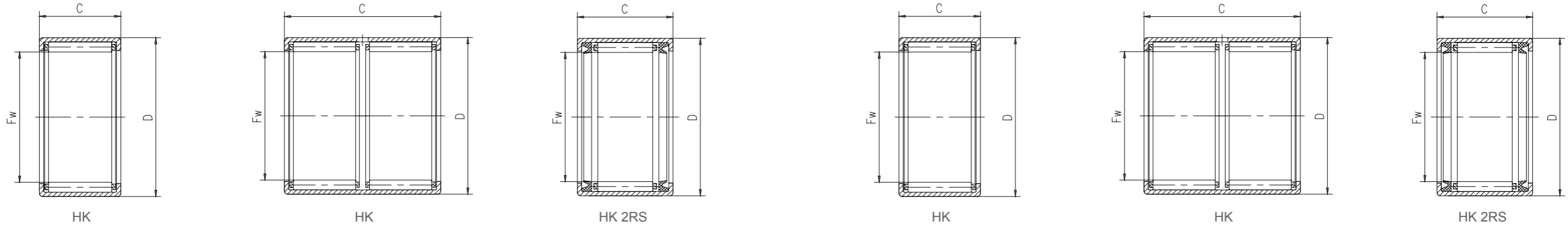


## Suffixes of available designs

Suffix	Meaning
BF	Needle roller with lat ends
D	Deviating or modified internal design with the same boundary dimensions Example: K 40x45x17 D (Needle roller and cage assembly with a double split cage)
DS	Single split needle roller and cage assembly
EGS	Inner ring with a non-directionally ground raceway
VGS	Inner ring with a pre-ground raceway and a machining allowance
ZW	Double row needle roller and cage assembly (double row cage)
AS..	Outer ring with lubrication hole(s), the number following indicates the number of holes
ASR..	Outer ring with annular groove and lubrication hole(s), the number following indicates the number of holes
IS	Inner ring with lubrication hole(s), the number following indicates the number of holes
ISR..	Inner ring with annular groove and lubrication hole(s), the number following indicates the number of holes
RS..2RS	Contact seal on one or both sides, respectively • NBR or FKM or PUR for a drawn cup needle roller bearing • NBR for a machined needle roller bearing
Z	lubrication holes over the outside diameter
TN	Glass fibre reinforced PA66 cage
ISORT..	Tolerance grade of needle rollers of a needle roller and cage assembly, the numbers following identify the actual limits in $\mu\text{m}$ , e.g. /SORT-2-4
CN	Normal radial internal clearance; only used together with an additional letter that identifies a reduced or displaced clearance range H Reduced clearance range corresponding to the upper half of the actual clearance range L Reduced clearance range corresponding to the lower half of the actual clearance range M Reduced clearance range corresponding to the two middle quarters of the actual clearance range P Displaced clearance range comprising the upper half of the actual clearance range plus the lower half of the next larger clearance range R Normal clearance range in accordance with the withdrawn DIN 620-4 The above letters H, L, M and P are also used together with the clearance classes C2, C3, C4

Suffix	Meaning
C2	Radial internal clearance smaller than Normal
C3	Radial internal clearance greater than Normal
C4	Radial internal clearance greater than C3
G2	Needle roller in accordance with ISO 3096 Grade 2
H..	Bearing without an inner ring and reduced inside diameter (under rollers) tolerance, the numbers following indicate the tolerance limits in $\mu\text{m}$ , e.g. H+27+20
M../M..	Diameter tolerance of needle rollers, e.g. M2/M4 indicates diameter tolerance $-2$ to $-4 \mu\text{m}$
NM..	Diameter tolerance of needle rollers, e.g. NM2 indicates diameter tolerance $0$ to $-2 \mu\text{m}$
P5	Dimensional and geometrical tolerances to class P5
P6	Dimensional and geometrical tolerances to class P6
P62	P6 + C2
P63	P6 + C3
P6CNR	P6 + CNR
..S	Matched bearings for an equal load distribution. The number preceding indicates the number of bearings, e.g. NK 50/25 TN/2S
S0	Bearing or inner ring heat stabilized for operating temperatures $\leq 150 \text{ }^\circ\text{C}$ ( $300 \text{ }^\circ\text{F}$ )
S1	Bearing or inner ring heat stabilized for operating temperatures $\leq 200 \text{ }^\circ\text{C}$ ( $390 \text{ }^\circ\text{F}$ )
S2	Bearing or inner ring heat stabilized for operating temperatures $\leq 250 \text{ }^\circ\text{C}$ ( $480 \text{ }^\circ\text{F}$ )
S3	Bearing or inner ring heat stabilized for operating temperatures $\leq 300 \text{ }^\circ\text{C}$ ( $570 \text{ }^\circ\text{F}$ )
SM..	Special grease, two numbers following identify the grease
VG052	Single split PES (polyethersulfone) cage

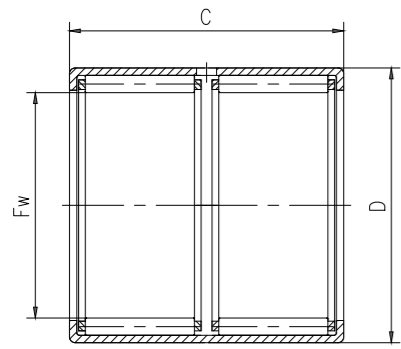
## Drawn cup needle roller bearings



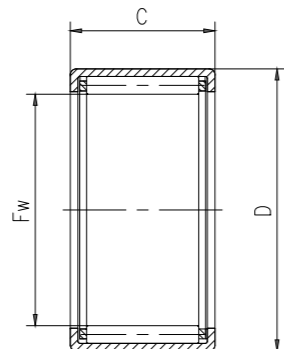
Type	The relevant inner ring		Radial shaft seal		Dimensions			
	IR series	LR series	Simple lip	Lips	F <sub>w</sub>	D	C	r <sub>min.</sub>
-	-	-	-	-	mm			
HK306TN	-	-	-	-	3	6.5	6	0.3
HK408	-	-	G4x8x2S	-	4	8	8	0.3
HK509	-	-	G5x9x2S	-	5	9	9	0.4
HK608	-	-	G6x10x2S	-	6	10	8	0.4
HK609	-	-	G6x10x2S	-	6	10	9	0.4
HK709	-	-	G7x11x2S	-	7	11	9	0.4
HK808	-	-	G8x12x3	-	8	12	8	0.4
HK810	IR5x8x12	-	G8x12x3	-	8	12	10	0.4
HK0812.2RS	-	-	-	-	8	12	12	0.4
HK908	-	-	G9x13x3	-	9	13	8	0.4
HK910	-	-	G9x13x3	-	9	13	10	0.4
HK912	IR6x9x12	-	G9x13x3	-	9	13	12	0.4
HK1010	IR7x10x10.5	LR7x10x10.5	G10x14x3	-	10	14	10	0.4
HK1012	IR7x10x12	-	G10x14x3	-	10	14	12	0.4
HK1014.2RS	-	-	-	-	10	14	14	0.4
HK1015	IR7x10x16	-	G10x14x3	-	10	14	15	0.4
HK1210	IR8x12x10.5	LR8x12x10.5	G12x16x3	-	12	16	10	0.4
HK1212	IR8x12x12.5	LR8x12x12.5	G12x18x3	SD12x18x3	12	18	12	0.8
HK1216.2RS	-	-	-	-	12	18	16	0.8
HK1312	IR10x13x12.5	LR10x13x12.5	G13x19x3	-	13	19	12	0.8
HK1412	IR10x14x13	-	G14x20x3	SD14x20x3	14	20	12	0.8
HK1512	IR12x15x12.5	LR12x15x12.5	G15x21x3	SD15x21x3	15	21	12	0.8
HK1516	IR12x15x16.5	LR12x15x16.5	G15x21x3	SD15x21x3	15	21	16	0.8
HK1522	IR12x15x22.5	LR12x15x22.5	G15x21x3	SD15x21x3	15	21	22	0.8
HK1612	IR12x16x13	-	G16x22x3	SD16x22x3	16	22	12	0.8
HK1616	IR12x16x16	-	G16x22x3	SD16x22x3	16	22	16	0.8
HK1620.2RS	-	-	-	-	16	22	20	0.8
HK1622	IR12x16x22	-	G16x22x3	SD16x22x3	16	22	22	0.8
HK1712	-	-	G17x23x3	SD17x23x3	17	23	12	0.8
HK1812	-	LR15x18x12.5	G18x24x3SD	SD18x24x3	18	24	12	0.8
HK1816.2RS	IR15x18x16.5	LR15x18x16.5	-	-	18	24	16	0.8
HK1816	IR15x18x16.5	LR15x18x16.5	G18x24x3SD	SD18x24x3	18	24	16	0.8
HK2010	-	-	G20x26x4SD	SD20x26x4	20	26	10	0.8
HK2012	IR15x20x13	-	G20x26x4SD	SD20x26x4	20	26	12	0.8
HK2016.2RS	IR17x20x16.5	LR17x20x16.5	-	-	20	26	16	0.8

Type	The relevant inner ring		Radial shaft seal		Weight	Basic load rating		Fatigue load limit P <sub>u</sub>	Rated speed	
	IR series	LR series	Simple lip	Lips		Dynamic C	Static C <sub>0</sub>		reference speed	Maximum speed
-	-	-	-	-	kg	kN		kN	r/min	
HK306TN	-	-	-	-	1	1.2915	0.924	0.0924	25200	27300
HK408	-	-	G4x8x2S	-	2	1.848	1.4385	0.147	23100	27300
HK509	-	-	G5x9x2S	-	2	2.499	2.184	0.231	23100	25200
HK608	-	-	G6x10x2S	-	2.1	2.1105	1.8165	0.189	21000	23100
HK609	-	-	G6x10x2S	-	2.5	2.9505	2.835	0.29925	21000	23100
HK709	-	-	G7x11x2S	-	2.6	3.1815	3.2025	0.34125	21000	23100
HK808	-	-	G8x12x3	-	2.7	2.835	2.8875	0.29925	19950	23100
HK810	IR5x8x12	-	G8x12x3	-	3	3.8745	4.2525	0.462	19950	23100
HK0812.2RS	-	-	-	-	3.3	2.835	2.8875	0.29925	-	13650
HK908	-	-	G9x13x3	-	3	3.696	4.095	0.43575	18900	21000
HK910	-	-	G9x13x3	-	4	4.3365	5.04	0.5565	18900	21000
HK912	IR6x9x12	-	G9x13x3	-	4.6	5.376	6.72	0.756	18900	21000
HK1010	IR7x10x10.5	LR7x10x10.5	G10x14x3	-	4.1	4.5045	5.565	0.5985	18900	21000
HK1012	IR7x10x12	-	G10x14x3	-	4.8	5.6595	7.2975	0.819	18900	21000
HK1014.2RS	-	-	-	-	4.6	4.5045	5.565	0.5985	-	12600
HK1015	IR7x10x16	-	G10x14x3	-	6	6.93	9.45	1.071	18900	21000
HK1210	IR8x12x10.5	LR8x12x10.5	G12x16x3	-	4.6	5.082	6.72	0.7455	16800	18900
HK1212	IR8x12x12.5	LR8x12x12.5	G12x18x3	SD12x18x3	9.5	6.5835	7.7175	0.8925	16800	18900
HK1216.2RS	-	-	-	-	11	6.5835	7.7175	0.8925	-	10500
HK1312	IR10x13x12.5	LR10x13x12.5	G13x19x3	-	10.5	6.93	8.4	0.96075	16800	17850
HK1412	IR10x14x13	-	G14x20x3	SD14x20x3	10.5	7.161	9.0825	1.029	15750	17850
HK1512	IR12x15x12.5	LR12x15x12.5	G15x21x3	SD15x21x3	11	8.0325	9.975	1.134	15750	16800
HK1516	IR12x15x16.5	LR12x15x16.5	G15x21x3	SD15x21x3	15	10.605	15.33	1.785	15750	16800
HK1522	IR12x15x22.5	LR12x15x22.5	G15x21x3	SD15x21x3	20	13.65	21	2.394	15750	16800
HK1612	IR12x16x13	-	G16x22x3	SD16x22x3	12	7.7385	10.29	1.176	14700	16800
HK1616	IR12x16x16	-	G16x22x3	SD16x22x3	16	11.025	16.38	1.89	14700	16800
HK1620.2RS	-	-	-	-	18	11.025	16.38	1.89	-	9450
HK1622	IR12x16x22	-	G16x22x3	SD16x22x3	24	13.44	20.58	2.352	14700	16800
HK1712	-	-	G17x23x3	SD17x23x3	13	8.0325	11.13	1.26	14700	15750
HK1812	-	LR15x18x12.5	G18x24x3SD	SD18x24x3	13	8.316	11.76	1.3335	13650	15750
HK1816.2RS	IR15x18x16.5	LR15x18x16.5	-	-	15	8.316	11.76	1.3335	-	8925
HK1816	IR15x18x16.5	LR15x18x16.5	G18x24x3SD	SD18x24x3	18	11.76	18.48	2.142	13650	15750
HK2010	-	-	G20x26x4SD	SD20x26x4	12	6.468	8.925	0.9765	12600	14700
HK2012	IR15x20x13	-	G20x26x4SD	SD20x26x4	14	8.841	13.125	1.47	12600	14700
HK2016.2RS	IR17x20x16.5	LR17x20x16.5	-	-	18	8.841	13.125	1.47	-	8400

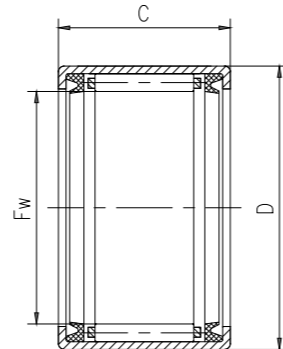
## Drawn cup needle roller bearings



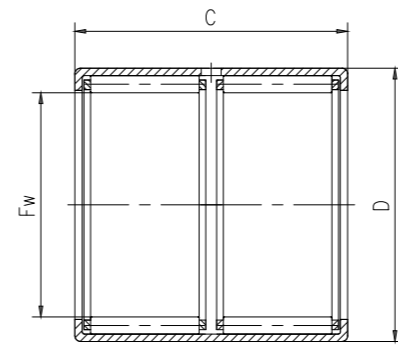
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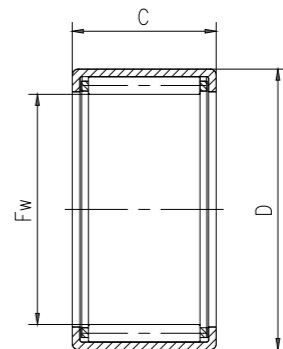
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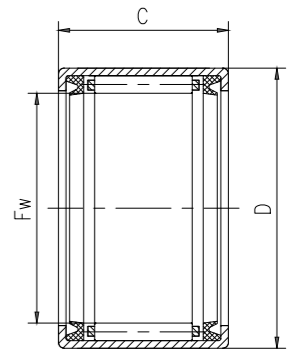
HK 2RS



HK



HK

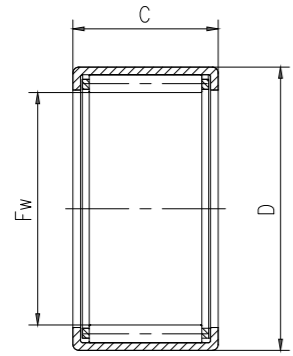


HK 2RS

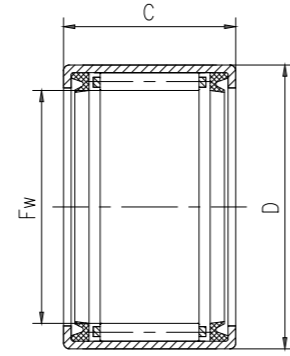
Type	The relevant inner ring		Radial shaft seal		Dimensions			
	IR series	LR series	Simple lip	Lips	F <sub>w</sub>	D	C	r <sub>min.</sub>
-	-	-	-	-	mm			
HK2016	IR17x20x16.5	LR17x20x16.5	G20x26x4SD	SD20x26x4	20	26	16	0.8
HK2020.2RS	IR17x20x20.5	LR17x20x20.5	-	-	20	26	20	0.8
HK2020	IR17x20x20.5	LR17x20x20.5	G20x26x4SD	SD20x26x4	20	26	20	0.8
HK2030	IR17x20x30.5	LR17x20x30.5	G20x26x4SD	SD20x26x4	20	26	30	0.8
HK2210	-	-	G22x28x4SD	SD22x28x4	22	28	10	0.8
HK2212	IR17x22x13	-	G22x28x4SD	SD22x28x4	22	28	12	0.8
HK2216.2RS	IR17x22x23	-	-	-	22	28	16	0.8
HK2216	IR17x22x23	-	G22x28x4SD	SD22x28x4	22	28	16	0.8
HK2220.2RS	IR17x22x23	-	-	-	22	28	20	0.8
HK2220	IR17x22x23	-	G22x28x4SD	SD22x28x4	22	28	20	0.8
HK2512	-	LR20x25x12.5	G25x32x4-	-	25	32	12	0.8
HK2516.2RS	IR20x25x17	LR20x25x16.5	-	-	25	32	16	0.8
HK2516	IR20x25x17	LR20x25x16.5	G25x32x4-	-	25	32	16	0.8
HK2520.2RS	IR20x25x20.5	LR20x25x20.5	-	-	25	32	20	0.8
HK2520	IR20x25x20.5	LR20x25x20.5	G25x32x4-	-	25	32	20	0.8
HK2526	IR20x25x26.5	LR20x25x26.5	G25x32x4-	-	25	32	26	0.8
HK2530.2RS	IR20x25x30	-	-	-	25	32	30	0.8
HK2538	IR20x25x38.5	LR20x25x38.5	G25x32x4-	-	25	32	38	0.8
HK2816	IR22x28x17	-	G28x35x4SD	SD28x35x4	28	35	16	0.8
HK2820.2RS	IR22x28x20.5	LR22x28x20.5	-	-	28	35	20	0.8
HK2820	IR22x28x20.5	LR22x28x20.5	G28x35x4SD	SD28x35x4	28	35	20	0.8
HK3012	-	LR25x30x12.5	G30x37x4SD	SD30x37x4	30	37	12	0.8
HK3016.2RS	IR25x30x17	LR25x30x16.5	-	-	30	37	16	0.8
HK3016	IR25x30x17	LR25x30x16.5	G30x37x4SD	SD30x37x4	30	37	16	0.8
HK3020	IR25x30x20.5	LR25x30x20.5	G30x37x4SD	SD30x37x4	30	37	20	0.8
HK3026	IR25x30x26.5	LR25x30x26.5	G30x37x4SD	SD30x37x4	30	37	26	0.8
HK3038	IR25x30x38.5	LR25x30x38.5	G30x37x4SD	SD30x37x4	30	37	38	0.8
HK3512	-	LR30x35x12.5	G35x42x4	SD35x42x4	35	42	12	0.8
HK3516	IR30x35x17	LR30x35x16.5	G35x42x4	SD35x42x4	35	42	16	0.8
HK3520.2RS	IR30x35x20.5	LR30x35x20.5	-	-	35	42	20	0.8
HK3520	IR30x35x20.5	LR30x35x20.5	G35x42x4	SD35x42x4	35	42	20	0.8
HK4012	-	LR35x40x12.5	G40x47x4	SD40x47x4	40	47	12	0.8
HK4016.2RS	IR35x40x20	LR35x40x16.5	-	-	40	47	16	0.8
HK4016	IR35x40x20	LR35x40x16.5	G40x47x4	SD40x47x4	40	47	16	0.8

Type	The relevant inner ring		Radial shaft seal		Weight	Basic load rating		Fatigue load limit P <sub>u</sub>	Rated speed	
	IR series	LR series	Simple lip	Lips		Dynamic C	Static C <sub>0</sub>		reference speed	Maximum speed
-	-	-	-	-	kg	kN		kN	r/min	
HK2016	IR17x20x16.5	LR17x20x16.5	G20x26x4SD	SD20x26x4	19	12.915	21.42	2.478	12600	14700
HK2020.2RS	IR17x20x20.5	LR17x20x20.5	-	-	23	12.915	21.42	2.478	-	8400
HK2020	IR17x20x20.5	LR17x20x20.5	G20x26x4SD	SD20x26x4	24	15.855	27.825	3.3075	12600	14700
HK2030	IR17x20x30.5	LR17x20x30.5	G20x26x4SD	SD20x26x4	35	21.945	42.525	4.9875	12600	14700
HK2210	-	-	G22x28x4SD	SD22x28x4	13	7.5705	11.13	1.26	11550	12600
HK2212	IR17x22x13	-	G22x28x4SD	SD22x28x4	15	9.24	14.385	1.638	11550	12600
HK2216.2RS	IR17x22x23	-	-	-	18	9.24	14.385	1.638	-	7875
HK2216	IR17x22x23	-	G22x28x4SD	SD22x28x4	21	13.65	23.52	2.73	11550	12600
HK2220.2RS	IR17x22x23	-	-	-	23	13.65	23.52	2.73	-	7875
HK2220	IR17x22x23	-	G22x28x4SD	SD22x28x4	26	16.485	30.45	3.6225	11550	12600
HK2512	-	LR20x25x12.5	G25x32x4-	-	20	11.025	16.065	1.848	9975	11550
HK2516.2RS	IR20x25x17	LR20x25x16.5	-	-	27	11.025	16.065	1.848	-	7035
HK2516	IR20x25x17	LR20x25x16.5	G25x32x4-	-	25	15.855	25.2	2.9925	9975	11550
HK2520.2RS	IR20x25x20.5	LR20x25x20.5	-	-	31	15.855	25.2	2.9925	-	7035
HK2520	IR20x25x20.5	LR20x25x20.5	G25x32x4-	-	33	19.95	34.125	4.2	9975	11550
HK2526	IR20x25x26.5	LR20x25x26.5	G25x32x4-	-	44	25.41	47.25	5.775	9975	11550
HK2530.2RS	IR20x25x30	-	-	-	47	25.41	47.25	5.775	-	7035
HK2538	IR20x25x38.5	LR20x25x38.5	G25x32x4-	-	64	34.65	68.775	8.4	9975	11550
HK2816	IR22x28x17	-	G28x35x4SD	SD28x35x4	26.5	16.485	27.825	3.3075	9450	9975
HK2820.2RS	IR22x28x20.5	LR22x28x20.5	-	-	34	16.485	27.825	3.3075	-	6615
HK2820	IR22x28x20.5	LR22x28x20.5	G28x35x4SD	SD28x35x4	36	21.105	38.325	4.62	9450	9975
HK3012	-	LR25x30x12.5	G30x37x4SD	SD30x37x4	23	12.285	19.215	2.226	8400	9450
HK3016.2RS	IR25x30x17	LR25x30x16.5	-	-	31	12.285	19.215	2.226	-	5880
HK3016	IR25x30x17	LR25x30x16.5	G30x37x4SD	SD30x37x4	31	17.325	30.45	3.57	8400	9450
HK3020	IR25x30x20.5	LR25x30x20.5	G30x37x4SD	SD30x37x4	38	21.945	42	4.9875	8400	9450
HK3026	IR25x30x26.5	LR25x30x26.5	G30x37x4SD	SD30x37x4	51	28.35	56.7	6.8775	8400	9450
HK3038	IR25x30x38.5	LR25x30x38.5	G30x37x4SD	SD30x37x4	76	37.59	84	9.975	8400	9450
HK3512	-	LR30x35x12.5	G35x42x4	SD35x42x4	27	13.125	22.68	2.5725	7350	8400
HK3516	IR30x35x17	LR30x35x16.5	G35x42x4	SD35x42x4	36	18.795	35.7	4.2	7350	8400
HK3520.2RS	IR30x35x20.5	LR30x35x20.5	-	-	41	18.795	35.7	4.2	-	5250
HK3520	IR30x35x20.5	LR30x35x20.5	G35x42x4	SD35x42x4	44	24.045	48.825	5.88	7350	8400
HK4012	-	LR35x40x12.5	G40x47x4	SD40x47x4	30	14.07	25.725	2.94	6615	7350
HK4016.2RS	IR35x40x20	LR35x40x16.5	-	-	37	15.225	28.875	3.3075	-	4725
HK4016	IR35x40x20	LR35x40x16.5	G40x47x4	SD40x47x4	39	19.95	40.95	4.7775	6615	7350

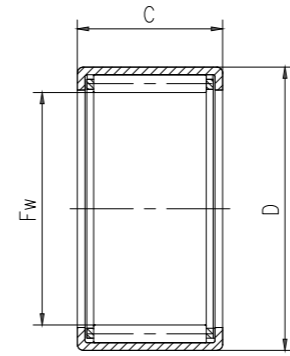
## Drawn cup needle roller bearings



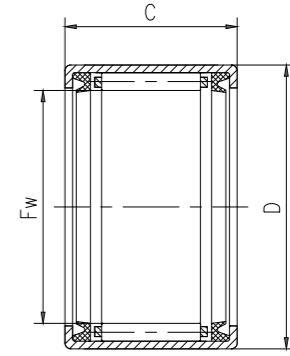
HK



HK 2RS



HK



HK 2RS

Type	The relevant inner ring		Radial shaft seal		Dimensions			
	IR series	LR series	Simple lip	Lips	F <sub>w</sub>	D	C	r <sub>min.</sub>
-	-	-	-	-	mm			
HK4020.2RS	IR35x40x20.5	LR35x40x20.5	-	-	40	47	20	0.8
HK4020	IR35x40x20.5	LR35x40x20.5	G40x47x4	SD40x47x4	40	47	20	0.8
HK4512	-	-	G45x52x4	SD45x52x4	45	52	12	0.8
HK4516	IR40x45x17	LR40x45x16.5	G45x52x4	SD45x52x4	45	52	16	0.8
HK4520.2RS	IR40x45x20.5	LR40x45x20.5	-	-	45	52	20	0.8
HK4520	IR40x45x20.5	-	G45x52x4	SD45x52x4	45	52	20	0.8
HK5020	-	LR45x50x20.5	G50x58x4	SD50x58x4	50	58	20	0.8
HK5024.2RS	IR45x50x25.5	LR45x50x25.5	-	-	50	58	24	0.8
HK5025	IR45x50x25.5	LR45x50x25.5	G50x58x4	SD50x58x4	50	58	25	0.8
HK5520	-	LR50x55x20.5	G55x63x5	-	55	63	20	0.8
HK5528	-	-	G55x63x5	-	55	63	28	0.8
HK6012	-	-	-	-	60	68	12	0.8
HK6020	-	-	-	-	60	68	20	0.8
HK6032	-	-	-	-	60	68	32	0.8

Type	The relevant inner ring		Radial shaft seal		Weight	Basic load rating		Fatigue load limit P <sub>u</sub>	Rated speed	
	IR series	LR series	Simple lip	Lips		Dynamic C	Static C <sub>0</sub>		reference speed	Maximum speed
-	-	-	-	-	kg	kN		kN	r/min	
HK4020.2RS	IR35x40x20.5	LR35x40x20.5	-	-	48	19.95	40.95	4.7775	-	4725
HK4020	IR35x40x20.5	LR35x40x20.5	G40x47x4	SD40x47x4	54	25.41	55.65	6.72	6615	7350
HK4512	-	-	G45x52x4	SD45x52x4	33	14.91	28.875	3.36	5880	6615
HK4516	IR40x45x17	LR40x45x16.5	G45x52x4	SD45x52x4	47	21.525	45.15	5.355	5880	6615
HK4520.2RS	IR40x45x20.5	LR40x45x20.5	-	-	54	21.525	45.15	5.355	-	4200
HK4520	IR40x45x20.5	-	G45x52x4	SD45x52x4	56	27.3	63	7.56	5880	6615
HK5020	-	LR45x50x20.5	G50x58x4	SD50x58x4	70	30.66	66.15	8.19	5250	5880
HK5024.2RS	IR45x50x25.5	LR45x50x25.5	-	-	81	30.66	66.15	8.19	-	3780
HK5025	IR45x50x25.5	LR45x50x25.5	G50x58x4	SD50x58x4	85	38.745	89.25	11.13	5250	5880
HK5520	-	LR50x55x20.5	G55x63x5	-	74	31.815	70.35	8.715	4725	5250
HK5528	-	-	G55x63x5	-	105	43.89	109.2	13.545	4725	5250
HK6012	-	-	-	-	49	18.48	33.6	3.99	4515	5040
HK6020	-	-	-	-	81	33.495	78.75	9.765	4515	5040
HK6032	-	-	-	-	136	53.76	143.85	17.85	4515	5040