

ZEN™

STANDARD CATALOGUE

ZEN™

BEARINGS FOR YOUR FUTURE

Zen Ball Bearings are manufactured to the highest quality for standard and non-standard applications.

Apart from our extensive miniature ball bearing range of more than 1000 different types, ranging from 1-10 mm bore (Including inch dimensions), our range also includes Thin section, Three part thrust, Popular metric and any kind of non standard bearing. We are able to design bearings according to your requirements using new materials like ceramic or special steels for applications in Industry, Medicine, Chemistry and Food Processing.

For any items not listed in our catalogue, please contact our experienced sales team. Our technical department can modify any non-standard bearings to your specific requirements, regardless of quantity.

Zen Ball Bearings Shanghai has been awarded the German ISO TUV Rheinland certification for inspection of ZEN products. This certification is the highest standard a business in our industry can achieve. It is internationally recognised as a guarantee of quality, customer focus and continual improvement.



Our Bearings can always be found where reliability is paramount.

Inhaltsverzeichnis / Contents

Produktgruppe Product	Seite Page
Referenztabelle Reference Table	04
Spezifikationen Specifications	05
Dichtungen Seals & Shields	09
Käfige & Schmierung Cages & Lubrication	10
Metrische Miniaturrillenkugellager Miniature Metric Series	12
Zöllige Miniaturrillenkugellager Miniature Inch Series	26
Hybrid & Keramik Kugellager Hybrid & Ceramic Bearings	30
Zöllige Rillenkugellager Inch Series	40
Dünnringlager Thin Section Series	42
Zweireihiges Dünnringlager Double Row Thin Section	54
Axialrillenkugellager Three Part Thrust Series	56
Standardrillenkugellager Popular Metric Series	58
Rostfreie Standardrillenkugellager Stainless Steel Popular Metric Series	66
Laufrolle der LR Serie LR Series (track roller)	70
Zöllige Radialrillenkugellager (Sondergrössen) Commercial Inch Series	74
Radialkugellager mit Kunststoffkäfig Ball Bearings with Plastic Cages	76
Kunststofflager (POM) Plastic Bearings	78
Sondermasse Special Dimension Bearings	80
Nadellager Needle Roller Bearings	82
Hülsenfreilauf HF Bearings	86
IR Innenringe IR Bearings	88
NK Nadellager NK Bearings	90
KR Kurvenrollen KR Bearings	96
Rostfreie Gehäuse Stainless Steel Pillow Blocks	100
Thermoplastische Gehäuse Thermoplastic Pillow Blocks	101
Rostfreie Lagereinsätze Stainless Steel Inserts	103
Einreihige Schrägkugellager Single Row Angular Contact Bearings	104
Pendelkugellager Double Row Self Aligning Bearings	105
Schrägkugellager Double Row Angular Contact Bearings	106
Zweireihige Kugellager Double Row Bearings	108
NUTR Stützrollen NUTR Bearings	109
Vollrollige Zylinderrollenlager Full Compliment Cylindrical Roller Bearings	110
Gelenklager (GE-ES & GE-ES-2RS) Spherical Plain Bearing Series (GE-ES & GE-ES-2RS)	112
Umschlüsselung anderer Hersteller Conversion Tables	114

Referenztabelle / Reference Table

Material

S = Rostfreier Stahl / Stainless Steel
Kein Präfix / No Prefix = Chromstahl / Chrome Steel

Referenz / Bearing type

MF = Metrisch mit Flansch / Metric with Flange
MR = Metrisch / Metric
R = Zöllig / Inch
FR = Zöllig mit Flansch / Inch with Flange
F = Metrisch mit Flansch / Metric with Flange
Kein Präfix / No Prefix = Metrisch / Metric

Typenbezeichnung / Bearing Part Number

Dichtscheiben / Shields

2Z = Metalldichtscheiben / Metal Shields
2RS = Gummidichtscheiben / Rubber Seals
2TS = PTFE Dichtscheiben / PTFE Seals
2TZ = Metall / PTFE Dichtungscheiben / Metal / PTFE Shields

Kein Suffix / No Suffix = Offen / Open

S	FR	144	-2Z	. . . Abm./Dimen. . . .
	FR	85		,,
		635	-2RS	,,
S		682X		,,

KEY TO APPLICATION ICONS

Ölschmierung
Oil lubrictaion

Lösungsmittelresistent
Chemical solvent Resistant

Geeignet für hohe Temperaturen
Suitable for high Temperatures

Geeignet für hohe Tragzahlen
Suitable for heavy Load rating

Fettschmierung
Grease lubrication

Wetterbeständig
Outdoor durability

Gummidichtscheiben verfügbar
Rubber seal option Available

Geeignet für geräuscharme Anwendungen
Suitable for low Noise applications

Keine Schmierung
No lubricant

Geeignet für niedrige Temperaturen
Suitable for low Temperatures

Geeignet für hohe Drehzahlen
Suitable for high Speed applications

Metalldeckscheiben verfügbar
Metal shield option Available

Spezifikationen / Specifications

Allgemeine Merkmale / General Details

Material	Komponenten Components		Merkmale Details	Anwendungsbereiche Application
	Ringe Rings	Kugeln Balls		
Kugellagerchromstahl Ball Bearing Chrome Steel 100 Cr6 (Nr. 1.3505)	✓	✓	Gute Verschleißfestigkeit Hard wearing Schlag- und Korrosionsbeständigkeit Good shock and corrosive resistance	Standard Standard
Rostfreier Stahl Stainless Steel AISI 440 C (Nr. 1.4125) †	✓	✓	Sehr gute Korrosionsbeständigkeit Very good corrosive resistance	Nahrungsmittel, Pharma, Schiffsbau und andere korrosive Umgebungen Food industry, pharmaceutical industry, ship building and other corrosive surroundings
AISI 420 (Nr. 1.4021)	✓	✓	Sehr gute Korrosionsbeständigkeit Very good corrosive resistance	Nahrungsmittel, Pharma, Schiffsbau und andere korrosive Umgebungen Food industry, pharmaceutical industry, ship building and other corrosive surroundings
AISI304	✓	✓	Sehr gute Korrosionsbeständigkeit Very good corrosive resistance	Korrosive Medien Corrosive surroundings
AISI316	✓	✓	Ausgezeichnete Korrosionsbeständigkeit Excellent corrosive resistance	Korrosive Medien Corrosive surroundings
AISI316L	✓	✓	Ausgezeichnete Korrosionsbeständigkeit Excellent corrosive resistance	Korrosive Medien Corrosive surroundings
Si3N4	✓	✓	Hohe thermische Isolation, Exzellente Korrosionsbeständigkeit High temperature insulation Excellent corrosive resistance	Chemische-, Elektro- und Nahrungsmittelindustrie, Marine, Medizintechnik Chemistry, Electronic, Food, Marine & Medical
Zr02	✓	✓	Hohe thermische Isolation, Exzellente Korrosionsbeständigkeit High temperature insulation Excellent corrosive resistance	Chemische-, Elektro- und Nahrungsmittelindustrie, Marine, Medizintechnik Chemistry, Electronic, Food, Marine & Medical
Zr02	✓	✓	Hohe thermische Isolation, Exzellente Korrosionsbeständigkeit High temperature insulation Excellent corrosive resistance	Chemische-, Elektro- und Nahrungsmittelindustrie, Marine, Medizintechnik Chemistry, Electronic, Food, Marine & Medical

†Die statische und dynamische Belastung von AISI 440 C-Lagern liegt bei ca. 75-80% von 100 Cr6-Lagern.
†The static and dynamic load rating of AISI 440 C - ball bearings is approximately 75-80% of the 100 Cr6 - ball bearings.

Technische Merkmale / Technical Details

Material	Härte Hardness	Max. Temp. Max. Temp.	C	Si	Mn	P	S	Cr	Mo	
100 Cr6 (Nr. 1.3505)	60-64HRC	max. 150°C	0.5~1.10	0.15~0.35	≤0.5	≤0.025	≤0.025	1.3~1.6	≤0.08	
AISI440 C (Nr. 1.4125)	≥58HRC	Max. 230°C	0.95~1.2	≤1.1	≤1.0	≤0.04	≤0.03	16.0~18.0	≤0.75	
AISI420 (Nr. 1.4021)	≤55HRC	Max. 230°C	0.16~0.25	≤1.0	≤1.5	≤0.04	≤0.03	12.0~14.0		
AISI304	15~20HRC	900	≤0.07	≤1.00	≤2.00	≤0.035	≤0.030	18.0~208.0		8.0~10.0
AISI316	15~20HRC	900	≤0.08	≤1.00	≤2.00	≤0.035	≤0.030	16.0~19.0	1.80-2.50	10.0~14.0
AISI 316L	15~20HRC	450	≤0.03	≤1.00	≤2.00	≤0.035	≤0.030	16.0~18.0	2.00-3.00	12.0~15.0
Si3N4	75~80HRC	1050	Component:		88% Si3N4 / 4% Al2O3 / 4% Y2O3 / 4% Other					
Zr02	70HRC	750	Component:		95% ZrO2 / 5% Y2O3					
Al203	80HRC	1750	Component:		99.5% Al2O3 / 0.5% Others					

Spezifikationen / Specifications

Tolerance of inner ring (ISO)

Unit μm

d(mm)		ΔdmpP0		ΔdmpP6	ΔdmpP5	ΔdmpP4	ΔdsP4		VdpP0			VdpP6			VdpP5		VdpP4		VdmpP0	VdmpP6	VdmpP5	VdmpP4
							Diameter series		Diameter series			Diameter series			Diameter series		Diameter series					
							0,2,3		7,8,9	0	2,3	7,8,9	0	2,3	7,8,9	0,2,3	7,8,9	0,2,3				
Over	incl.	Upper	Lower	Lower	Lower	Lower	Upper	Lower	Max.			Max.			Max.		Max.		Max.	Max.	Max.	Max.
0.6 (1)	2.5	0	-8	-7	-5	-4	0	-4	10	8	6	9	7	5	5	4	4	3	6	5	3	2
2.5	10	0	-8	-7	-5	-4	0	-4	10	8	6	9	7	5	5	4	4	3	6	5	3	2
10	18	0	-8	-7	-5	-4	0	-4	10	8	6	9	7	5	5	4	4	3	6	5	3	2
18	30	0	-10	-8	-6	-5	0	-5	13	10	8	10	8	6	6	5	5	4	8	6	3	2.5
30	50	0	-12	-10	-8	-6	0	-6	15	12	9	13	10	8	8	6	6	5	9	8	4	3

Note 1: The upper value of the bore diameter in this table is not applicable when the distance from the bearing ring face is less than 1.2 times the chamferdimension.
Note 2: According to the revision of ANSI/ABMA Std,20-1996, the classes ABEC1·ABEC3·ABEC5·ABEC7 are equivalent to SS0·CLASS6·CLASS5·CLASS4.

Tolerance of outer ring (ISO)

Unit μm

D(mm)		ΔDmpP0	ΔDmpP6	ΔDmpP5	ΔDmpP4		ΔDsP0		VDpP0			VDpP6			VDpP5		VDpP4		VDmpP0	VDmpP6	VDmpP5	VDmpP4
							Open	Seal Shield	Open			Seal Shield			Open		Open					
						Diameter series	Diameter series		Diameter series			Diameter series			Diameter series		Diameter series					
						0,2,3	7,8,9	0	2,3	2,3	7,8,9	0	2,3	2,3	7,8,9	0,2,3	7,8,9	0,2,3				
Over	incl.	Upper	Lower	Lower	Lower	Lower	Upper	Lower	Max.				Max.				Max.		Max.		Max.		Max.	Max.	Max.	Max.
2.5(1)	6	0	-8	-7	-5	-4	0	-4	10	8	6	10	9	7	5	9	5	4	4	3	6	5	3	2
6	18	0	-8	-7	-5	-4	0	-4	10	8	6	10	9	7	5	9	5	4	4	3	6	5	3	2
18	30	0	-9	-8	-6	-5	0	-5	12	9	7	12	10	8	6	10	6	5	5	4	7	6	3	2.5
30	50	0	-11	-9	-7	-6	0	-6	14	11	8	16	11	9	7	13	7	5	6	5	8	7	4	3
50	80	0	-13	-11	-9	-7	0	-7	16	13	10	20	14	11	8	16	9	7	7	5	10	8	5	3.5

Note(1) : SIze 2.5mm is included in this classification.
Note(2) : The outer ring width variations for CLASS0 and CLASS6 are the same as for the inner ring of the same bearing size.

Radial internal clearance of standard radial ball bearings

Unit μm

"NOMINAL BORE DIAMETER d(mm)		CLEARANCE									
		C2		CN(C0)		C3		C4		C5	
OVER	INCL.	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
10(ONLY)		0	7	2	13	8	23	14	29	20	37
10	18	0	9	3	18	11	25	18	33	25	45
18	24	0	10	5	20	13	28	20	36	28	48
24	30	1	11	5	20	13	28	23	41	30	53
30	40	1	11	6	20	15	33	28	46	40	64
40	50	1	11	6	23	18	36	30	51	45	73

Unit μm

ΔBs(ΔCs)(2)			VBs(VCs)(2)				Kia				Sd		Sia		d(mm)	
Single bearing			Inner/outer ring		Inner ring											
P0 P6	P5 P4		P0	P6	P5	P4	P0	P6	P5	P4	P5	P4	P5	P4		
Upper	Lower	Lower	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Over	Incl.
0	-40	-40	12	12	5	2.5	10	5	4	2.5	7	3	7	3	0.6(1)	2.5
0	-120	-40	15	15	5	2.5	10	6	4	2.5	7	3	7	3	2.5	10
0	-120	-80	20	20	5	2.5	10	7	4	2.5	7	3	7	3	10	18
0	-120	-120	20	20	5	2.5	13	8	4	3	8	4	8	4	18	30
0	-120	-120	20	20	5	3	15	10	5	4	8	4	8	4	30	50

Note(1) : 0.6mm is included in this classification.
Note(2) : The inner ring width variation is the same for the outer ring of the same bearing size, CLASS5 and CLASS4 referring to outer ring only.

Unit μm

Kca				SD		Sea		VCs(2)		D(mm)			ΔDis								ΔCis			
													Flanged type											
P0	P6	P5	P4	P5	P4	P5	P4	P5	P4				P0	P6	P5	P4	P0	P6	P5	P4				
Max.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Over	Incl.		Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower				
15	8	5	3	8	4	8	5	5	2.5	2.5(l)	6		+125	-50	0	-25	0	-50	0	-50				
15	8	5	3	8	4	8	5	5	2.5	6	18		+125	-50	0	-25	0	-50	0	-50				
15	9	6	4	8	4	8	5	5	2.5	18	30		+125	-50	0	-25	0	-50	0	-50				
20	10	7	5	8	4	8	5	5	2.5	30	50		+125	-50	0	-25	0	-50	0	-50				
25	13	8	5	8	4	10	5	6	3	50	80		+125	-50	0	-25	0	-50	0	-50				

Note 1 : The lower value of the outside diameter in this table is not applicable when the distance from the bearing ring face is less than 1.2 times the chamfer dimension.
Note 2 : According to the revision of AFBMA Std20-1978, the classes ABEC1 ABEC3 ABEC5 ABEC7 are equivalent to CLASS0 • CLASS6 • CLASS5 • CLASS4

d : Nominal bore diameter
Δdmp : Single plane mean bore diameter deviation
Δds : Deviation of a single bore diameter
Vdp : Bore diameter variation in a single radial plane
Vdmp : Mean bore diameter variation
ΔBs (ΔCs) : Deviation of a single inner and outer ring width from the nominal dimension
VBs (VCs) : Variation of a inner and outer ring width
Kia : Radial runout of assembled bearing inner ring
Sd : Face runout with bore
Sia : Assembled bearing inner ring face runout with raceway

D : Nominal outside diameter
ΔDmp : Single plane mean outside diameter deviation
ΔDs : Deviation of a single outside diameter
VDp : Outside diameter variation in a single radial plane
VDmp : Mean outside diameter variation
Kea : Radial runout of assembled bearing outer ring
SD : Variation of a outside surface generatrix inclination with face
Sea : Assembled bearing outer ring face runout with raceway
VCs : Variation of the outer ring width
ΔDis : Flange outside diameter deviation
ΔCis : Flange width deviation

Wichtig / Important

*** Max. Drehzahlen:**
Die im Katalog angegebenen Werte sind ungefähre Werte. Abhängig von der Toleranzklasse, Werkstoff, Einbautoleranzen, Befettung, Käfigtype, Umgebungstemperatur, etc., können unterschiedliche Werte realisiert werden. Die maximalen Drehzahlen für RS- und TS-gedichtete Lager sind deutlich geringer. Bitte erfragen Sie die Werte in besonderen Fällen.

*** Limiting Speeds :**
The values shown in the catalogue are approximated values. Depending on the tolerance class, material, mounting tolerances, lubrication, cage, surrounding temperature, etc., different values can be obtained. The limiting speeds for RS- and TS-shielded bearings are significantly lower. Please contact Engineering for special cases.

*** Tragzahlen:**
Die Tragzahlen und Drehzahlen beziehen sich auf 100Cr6 (Chromstahl), falls nicht anders spezifiziert. Die Werte für rostfreien Stahl sind ungefähr 20% niedriger.

*** Load Ratings:**
Load ratings and Limiting Speeds are calculated based on material 100Cr6 (Chrome Steel), if not stated different. The rates are approximately 20% lower for stainless steel.

Spezifikationen / Specifications

Toleranzklassen / Tolerance Class

Toleranzklassen Tolerance class	Äquivalenzen / Equivalences ISO	AFBMA
DIN P0	Klasse class 0	ABEC 1
DIN P6	Klasse class 6	ABEC 3
DIN P5	Klasse class 5	ABEC 5
DIN P4	Klasse class 4	ABEC 7
DIN P2	Klasse class 2	ABEC 9

Technische Eigenschaften der Kunststoffe / Plastic properties

Material	HDPE	PP	POM	PA6	PA66	PBT GF30	PVDF	PPS	PTFE	PEEK	PI
Long time working temp.(°C)	90	100	110	100	100	120	150	230	260	260	300
Density	0.96	0.91	1.42	1.13	1.14	1.53	1.77	1.35	2.18	1.32	1.35
Tensile strength at yield	25	30	70	85	80		50	75	25	95	
Tensile strength at break	35		170			13.5	4.6				116
Ball indentation hardness	50	80		160	170	190	80	190	30		
Impact strength	(None)					60		50			75
Coefficient of sliding friction	0.29	0.3	0.34	0.38-0.45	0.35-0.42	0.24	0.3		0.08-0.01	0.3-0.38	0.3-0.38
Slide wear		11	4.6	0.23	0.9				21		0.3-0.38
Vicat softening temp. (°C)	130	165	175	220	260	225	172	280	327	343	
DSC/Tg (°C) Heat deflection temp.	-95	-18	-60	60	72	60	-18	90	-20	143	
HDT/A (°C) Heat deflection temp.	42-49	65	124	75	100	210	95	110	55	140	368
HDT/B (°C) Max working temp	70-85	105	170	190	>200	225	140		121	182	
Short time (°C)	90	140	150	160	170	200	150	260	260	300	350
Coef. of linear expansion	13-15	17	10	8	8	3.5	13	5	12	5.0	4.9
Dielectric constant at 1Mhz	2.4	2.25	3.7	3.7-7	3.6-5	3.8	8		2.1	3.2-3.3	3.1
Volume resistivity	>										
Anti-hot water and alkali for washing	+	+	-	(+)	(+)	-	+	+	+	+	(+)
Flammability UL94	HB	HB	HB	HB	HB	HB	V0	V0	V0	V0	V0
Anti-weathering	-	-	-	-	-	-	+	-	-	-	(+)

Für weitergehende technische Informationen wenden Sie sich bitte an Ihren offiziellen ZEN-Händler
For further technical information please contact your local authorized ZEN distributor

Dichtungen / Seals & Shields

		Design Design	Spezifikation Specification	Vorteile/Nachteile Advantage/Disadvantage
	-	Keine Dichtung No seals	Offen Open	Kein Reibungswiderstand No friction Einfache Nachschmierung Easy to re-lube Starke Verschmutzung No protection against contamination
	2Z	Metalldeckscheiben Metal shields	Nichtschleifende Dichtung Non contact seals	Kein Reibungswiderstand No friction Gute Abdichtung gegen Schmutz Good protection against contamination
	2RS	Gummidichtscheiben Rubber seals	Schleifende Dichtung aus Kunststoff Contact seals made of synthetic rubber	Erhöhter Reibungswiderstand Higher friction Ausgezeichnete Abdichtung gegen Schmutz Very good protection against contamination
	2TS	PTFE Dichtscheiben PTFE seals	Schleifende Dichtung aus PTFE Contact seals made of Teflon	Geringer Reibungswiderstand Low friction Ausgezeichnete Abdichtung gegen Schmutz Very good protection against contamination Gute chemische Eigenschaften Good chemical characteristics
	2TZ	Metalldeckscheiben mit PTFE Dichtungscheiben PTFE seals with metal shields	Schleifende Dichtung aus PTFE Contact seals made of Teflon	Geringer Reibungswiderstand Low friction Ausgezeichnete Abdichtung gegen Schmutz Very good protection against contamination Gute chemische Eigenschaften Good chemical characteristics
	2VS	Viton Dichtungen Viton seals	Schleifende Dichtungen aus Viton Seals made of Viton	Erhöhter Reibungswiederstand Higher friction Temperaturbeständig Chemisch High temperature Gute chemische Eigenschaften Good chemical characteristics Ausgezeichnete Abdichtung gegen Schmutz Very good protection against contamination
	2DU	Gummidichtscheiben Rubber seal	Nicht schleifende Dichtung aus Gummi Non contact seal made of synthetic rubber	Kein Reibungswiderstand No friction Ausgezeichnete Abdichtung gegen Schmutz Very good protection against contamination

Wichtig / Important

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Käfige / Cages

	Referenz Reference	Käfigtype Cage type	Anmerkung Remarks
	FC	Vollkugelig / ohne Käfig Full Complement / No Cage	Geringe Drehzahlen, hohe Belastungswerte Low revolution high load rating
	W	Kronenkäfig Crown Cage	Geringes Gewicht, geringe Reibung Light weight, smooth, low friction
	J	Lappenkäfig Ribbon Cage	Standardkäfig, hohe Lebensdauer Standard cage, good durability
	T9H	Kronenkäfig aus glasfaserverstärktem Kunststoff Glass Fibre Reinforced Cage	Geringes Gewicht, hohe Lebensdauer, hohe Drehzahlen Light weight, strong, high speed
		Massivkäfig aus Kunststoff Phenolic Cage	Geringes Gewicht, hohe Lebensdauer, hohe Drehzahlen Light weight, strong, high speed
	M	Messingkäfig Brass Cage	Geringe Reibung, hohe Lebensdauer, Low friction, good durability
	PEEK	PEEK	Für hohe Temperaturen High temperature Hohe Lebensdauer Good durability Korrosionsbeständig Corrosion resistant Isolierend Insulated
	PTFE	PTFE	Für hohe Temperaturen High temperature Hohe Lebensdauer Good durability Korrosionsbeständig Corrosion resistant Isolierend Insulated

Schmierung / Lubrication

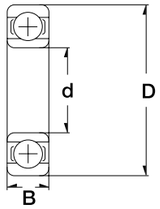
Schmiermittel Lubricant	Anmerkung Remarks	Vorteile/Anwendung Advantages/Applications
Kein Schmiermittel No lubricant	Nur bei Edelstahllagern oder mit Verwendung von Korrosionsschutz Only with stainless steel bearings or with the use of corrosion preventive fluid	Wenn Schmierung vom Kunden gestellt wird When the lubrication is provided by the customer
Fett Grease	Standardfüllung 30-40% Standard filling 30-40%	Lebenslange Schmierung möglich Life-time lubrication is possible Guter Korrosionsschutz Good protection against corrosion Differenzierte Anwendungsmöglichkeiten je nach Fett According to the application a variety of greases can be used
Öl Oil	-	Geringer Reibungswiderstand Low friction Hohe Drehzahlen High revolution

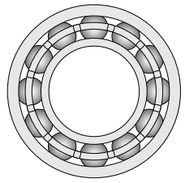
Schmierung / Lubrication

Hersteller Mfg	Name Brand	Verdicker Thickener	Grundöl Base oil	Tropfpunkt Drop Point °C	Viskosität Consistency	Tempera-rurbereich Operating temperature range °C	Anwendung Application
Exxon	Beacon 325	Lithium	Diester	193	290	-60~+120	low temp
	Andok B	Nathium	Mineral	260	280	-40~+120	general purpose
	Andok C	Nathium	Mineral	»260	205	-20~+120	general purpose
	Andok 260	Nathium	Mineral	200	250	-30~+150	general purpose
Kyodo Yushi	Multemp PS2	Lithium	Diester	189	280	-50~+110	low temp
	Multemp SRL	Lithium	Ester	191	245	-40~+150	low temp
	Multemp SRH	Lithium	Ester	250	201	-40~+150	low temp
	Multemp SB-M	Diurea	Synthetic oil	220	260	-40~+200	high speed/temp
	ET-K	Diurea	Synthetic oil/ester”	260	300	-40~+200	high temp/ speed alternator
Kluber	Asonic GLY32	Lithium	Synthetic	190	265-295	-50~+140	low temp
	Asonic GHY72	Polyhamstoff	Ester Mineral	250	250-280	-40~+180	high temp/low noise
	Isoflex Super LDS18	Lithium	Diester	190	280	-60~+130	low temp
	Isoflex LDS18 Special A	Lithium	Diester	190	280	-60~+130	low temp
	Isoflex Topas NB52”	Barium	Synthetic hydrocarbon	204	280	-60~+170	low/high temp
	Barrierta L55/2	PTFE	Fluorinated		280	-35~+260	low/high temp
	Barrierta TK44N2	Na-Komples	Silicone			-60~+230	low/high temp
	Isoflex NCA15	Special Ca	Ester Mineral	180	265-295	-40~+130	high speed
	Asonic HQ72-102”	Urea	Ester	240	250-280	-40~+180	low/high temp & low noise
Dow Corning	Molykote 33M	Lithium	Silicone	210	260	-70~+180	low/high temp
	Molykote 44M	Lithium	Silicone	204	260	-40~+200	high temp
	Molykote 55M	Lithium	Silicone			-55~+165	low temp
	Molykete BR2 plus	Lithium	Silicone		280	-30~+150	high speed
	Molykete FS1292	PTFE	Phlorosilicon	»232	310	-40~+200	hight speed
	Molykete FS3451	PTFE	Phlorosilicon	»260	285	-40~+230	chemical solvent resistant
Shell	Alvania No.2	Lithium	Mineral	182	272	-25~+120	general purpose
	Alvania No.3	Lithium	Mineral	183	233	-20~+135	general purpose
	Alvania RA	Lithium	Mineral	183	252	-25~+120	general purpose
	Alvania EP2	Lithium	Mineral	185	276	-10~+100	general purpose
	Dolium R		Mineral	238	281	-20~+140	general purpose
	Aero Shell NO.5	Microgel	Mineral	»260	282	-10~+130	general purpose
	Aero Shell NO.7	Microgel	Mineral	»260	288	-70~+150	low temp
	Aero Shell RLQ2	Lithium	Mineral	195	266	-50~+150	low noise/high speed”
Mobil Oil	Mobilux2	Lithium	Mineral	190	280	-20~+120	general purpose
	Mobil 22	Lithium	Diester Mineral	192	274	-50~+140	low temp
	Mobil 28	Bentonite	syntheic hydrocarbon	»260	280	-60~+180	low/high temp
	Mobilitemp SHC22	Glue-earth	Synthetic oil	250	265-295	-50~+180	high speed/temp
	Mobiitemp SHC100	Glue-earth	Synthetic oil	250	265-295	-40~+200	high speed/temp
Du Pont	Krytox240AC	PTFE	Fluorinated		282	-35~+280	high speed/temp
Caltex	Chevron SRI-2	Urea	Mineral		293	-30~+175	high temp
Hangu	Hangu#2	-	Mineral	-	-	-20~+120	general purpose
Great Wall	Great Wall BLE	Urea	Mineral	260	280	-30~+200	low noise/high temp”
Yiping	YP7201	Synthetic	Mineral	272	272	-20~+120	low noise/anti-rust

Metrische Miniaturrillenkugellager / Miniature Metric Series



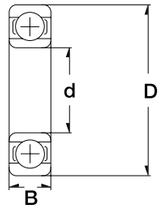


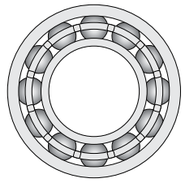


standard or flanged	Dimension (mm)			Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Standard cage type Others on request	Weight (g) approx.
				open		2Z		2RS/2TS							
	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil		
standard	1.0	3.0	1.0	681	S681	-	-	-	-	96	26	130.0	150.0	W	< 1 g
flanged	1.0	3.0	1.0	F 681	SF 681	-	-	-	-	96	26	130.0	150.0	W	< 1 g
standard	1.0	3.0	1.5	MR 31	SMR 31	-	-	-	-	96	26	130.0	150.0	W	< 1 g
standard	1.0	4.0	1.6	691	S691	-	-	-	-	141	37	100.0	120.0	W	< 1 g
flanged	1.0	4.0	1.6	F 691	SF 691	-	-	-	-	141	37	100.0	120.0	W	< 1 g
standard	1.2	4.0	2.5	-	-	MR 41X-2Z	SMR 41X-2Z	-	-	112	33	110.0	130.0	W	< 1 g
standard	1.5	4.0	1.2	681X	S681X	-	-	-	-	112	33	100.0	120.0	W	< 1 g
flanged	1.5	4.0	1.2	F 681X	SF 681X	-	-	-	-	112	33	100.0	120.0	W	< 1 g
standard	1.5	4.0	2.0	-	-	681X-2Z	S681X-2Z	-	-	112	33	100.0	120.0	W	< 1 g
flanged	1.5	4.0	2.0	-	-	F 681X-2Z	SF 681X-2Z	-	-	112	33	100.0	120.0	W	< 1 g
standard	1.5	5.0	1.7	X 1.5	SX 1.5	-	-	-	-	112	33	100.0	120.0	W	< 1 g
standard	1.5	5.0	2.0	691X	S691X	-	-	-	-	169	50	85.0	100.0	W	< 1 g
flanged	1.5	5.0	2.0	F 691X	SF 691X	-	-	-	-	169	50	85.0	100.0	W	< 1 g
standard	1.5	5.0	2.6	-	-	691X-2Z	S691X-2Z	-	-	169	50	85.0	100.0	W	< 1 g
flanged	1.5	5.0	2.6	-	-	F 691X-2Z	SF 691X-2Z	-	-	169	50	85.0	100.0	W	< 1 g
standard	1.5	6.0	2.5	601X	S601X	-	-	-	-	330	99	75.0	90.0	W	< 1 g
flanged	1.5	6.0	2.5	F 601X	SF 601X	-	-	-	-	330	99	75.0	90.0	W	< 1 g
standard	1.5	6.0	3.0	-	-	601X-2Z	S601X-2Z	-	-	330	99	75.0	90.0	W	< 1 g
flanged	1.5	6.0	3.0	-	-	F 601X-2Z	SF 601X-2Z	-	-	330	99	75.0	90.0	W	< 1 g
standard	2.0	4.0	1.2	672	S672	-	-	-	-	124	40	91.0	104.0	W	< 1 g
standard	2.0	5.0	1.5	682	S682	-	-	-	-	169	50	85.0	100.0	W,J	< 1 g
flanged	2.0	5.0	1.5	F 682	SF 682	-	-	-	-	169	50	85.0	100.0	W,J	< 1 g
standard	2.0	5.0	2.0	MR 52	SMR 52	-	-	-	-	169	50	85.0	100.0	W,J	< 1 g
standard	2.0	5.0	2.3	-	-	682-2Z	S682-2Z	-	-	169	50	85.0	100.0	W,J	< 1 g
flanged	2.0	5.0	2.3	-	-	F 682-2Z	SF 682-2Z	-	-	169	50	85.0	100.0	W,J	< 1 g
standard	2.0	5.0	2.5	-	-	MR 52-2Z	SMR 52-2Z	-	-	169	50	85.0	100.0	W	< 1 g
flanged	2.0	5.0	2.5	-	-	MF 52-2Z	SMF 52-2Z	-	-	169	50	85.0	100.0	W	< 1 g
standard	2.0	6.0	2.3	692	S692	692-2ZW2.3	S692-2ZW2.3	-	-	330	99	75.0	90.0	W	< 1 g
flanged	2.0	6.0	2.3	F 692	SF 692	F 692-2ZW2.3	SF 692-2ZW2.3	-	-	330	99	75.0	90.0	W	< 1 g
standard	2.0	6.0	2.5	MR 62	SMR 62	MR 62-2Z	SMR 62-2Z	-	-	330	99	75.0	90.0	W	< 1 g
flanged	2.0	6.0	2.5	MF 62	SMF 62	MF 62-2Z	SMF 62-2Z	-	-	330	99	75.0	90.0	W	< 1 g

Metrische Miniaturrillenkugellager / Miniature Metric Series



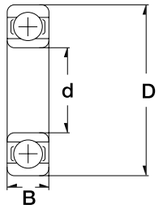


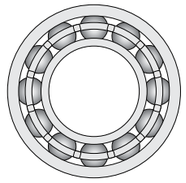


standard or flanged	Dimension (mm)			Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Standard cage type Others on request	Weight (g) approx.
				open		2Z		2RS/2TS							
	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil		
standard	2.0	6.0	3.0	-	-	692-2Z	S692-2Z	-	-	330	99	75.0	90.0	W	< 1 g
flanged	2.0	6.0	3.0	-	-	F 692-2Z	SF 692-2Z	-	-	330	99	75.0	90.0	W	< 1 g
standard	2.0	7.0	2.5	602	S602	-	-	-	-	386	129	60.0	71.0	W	< 1 g
standard	2.0	7.0	2.8	MR 72	SMR 72	-	-	-	-	386	129	63.0	75.0	W	< 1 g
standard	2.0	7.0	3.5	-	-	602-2Z	S602-2Z	-	-	386	129	60.0	71.0	W	< 1 g
flanged	2.0	7.0	3.5	-	-	F 602-2Z	SF 602-2Z	-	-	386	129	60.0	71.0	W	< 1 g
standard	2.0	7.0	3.0	-	-	MR 72-2Z	SMR 72-2Z	-	-	386	129	63.0	75.0	W	< 1 g
flanged	2.0	7.0	3.0	-	-	MF 72-2Z	SMF 72-2Z	-	-	386	129	63.0	75.0	W	< 1 g
standard	2.5	6.0	1.8	682X	S682X	-	-	-	-	209	74	71.0	80.0	W	< 1 g
flanged	2.5	6.0	1.8	F 682X	SF 682X	-	-	-	-	209	74	71.0	80.0	W	< 1 g
standard	2.5	6.0	2.6	-	-	682X-2Z	S682X-2Z	-	-	209	74	71.0	80.0	W	< 1 g
flanged	2.5	6.0	2.6	-	-	F 682X-2Z	SF 682X-2Z	-	-	209	74	71.0	80.0	W	< 1 g
standard	2.5	7.0	2.5	692X	S692X	-	-	-	-	386	129	63.0	75.0	W	< 1 g
flanged	2.5	7.0	2.5	F 692X	SF 692X	-	-	-	-	386	129	63.0	75.0	W	< 1 g
standard	2.5	7.0	3.0	-	-	X 2.5-2Z	SX 2.5-2Z	-	-	386	129	63.0	75.0	W	< 1 g
standard	2.5	7.0	3.5	-	-	692X-2Z	S692X-2Z	-	-	386	129	63.0	75.0	W	< 1 g
flanged	2.5	7.0	3.5	-	-	F 692X-2Z	SF 692X-2Z	-	-	386	129	63.0	75.0	W	< 1 g
standard	2.5	8.0	2.5	MR 82X	SMR 82X	-	-	-	-	558	180	60.0	67.0	W	< 1 g
standard	2.5	8.0	2.8	602X	S602X	-	-	-	-	552	177	60.0	71.0	W	< 1 g
flanged	2.5	8.0	2.8	F 602X	SF 602X	-	-	-	-	552	177	60.0	71.0	W	< 1 g
standard	2.5	8.0	4.0	-	-	602X-2Z	S602X-2Z	-	-	552	177	60.0	71.0	W	< 1 g
flanged	2.5	8.0	4.0	-	-	F 602X-2Z	SF 602X-2Z	-	-	552	177	60.0	71.0	W	< 1 g
standard	3.0	6.0	2.0	MR 63	SMR 63	-	-	-	-	209	74	71.0	80.0	W	< 1 g
flanged	3.0	6.0	2.0	MF 63	SMF 63	-	-	-	-	209	74	71.0	80.0	W	< 1 g
standard	3.0	6.0	2.5	-	-	MR 63-2Z	SMR 63-2Z	-	-	209	74	71.0	80.0	W	< 1 g
flanged	3.0	6.0	2.5	-	-	MF 63-2Z	SMF 63-2Z	-	-	209	74	71.0	80.0	W	< 1 g
standard	3.0	7.0	2.0	683	S683	-	-	-	-	311	112	63.0	75.0	W,J	< 1 g
flanged	3.0	7.0	2.0	F 683	SF 683	-	-	-	-	311	112	63.0	75.0	W,J	< 1 g
standard	3.0	7.0	3.0	-	-	683-2Z	S683-2Z	683-2TS	S683-2TS	311	112	63.0	75.0	W,J	< 1 g
flanged	3.0	7.0	3.0	-	-	F 683-2Z	SF 683-2Z	-	-	311	112	63.0	75.0	W,J	< 1 g
standard	3.0	8.0	2.5	MR 83	SMR 83	-	-	-	-	395	141	60.0	67.0	W	< 1 g
flanged	3.0	8.0	2.5	MF 83	SMF 83	-	-	-	-	395	141	60.0	67.0	W	< 1 g

Metrische Miniaturrillenkugellager / Miniature Metric Series



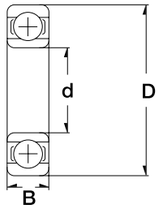


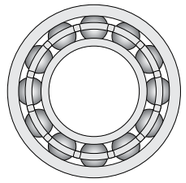


standard or flanged	Dimension (mm)			Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Standard cage type Others on request	Weight (g) approx.
				open		2Z		2RS/2TS							
	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil		
standard	3.0	8.0	3.0	693	S693	-	-	-	-	558	180	60.0	67.0	W	< 1 g
flanged	3.0	8.0	3.0	F 693	SF 693	-	-	-	-	558	180	60.0	67.0	W	< 1 g
standard	3.0	8.0	3.0	-	-	MR 83-2Z	SMR 83-2Z	-	-	395	141	60.0	67.0	W	< 1 g
flanged	3.0	8.0	3.0	-	-	MF 83-2Z	SMF 83-2Z	-	-	395	141	60.0	67.0	W	< 1 g
standard	3.0	8.0	4.0	-	-	693-2Z	S693-2Z	-	-	558	180	60.0	67.0	W	< 1 g
flanged	3.0	8.0	4.0	-	-	F 693-2Z	SF 693-2Z	-	-	558	180	60.0	67.0	W	< 1 g
standard	3.0	9.0	2.5	MR 93	SMR 93	-	-	-	-	571	189	56.0	67.0	W	< 1 g
flanged	3.0	9.0	2.5	MF 93	SMF 93	-	-	-	-	571	189	56.0	67.0	W	< 1 g
standard	3.0	9.0	3.0	603	S603	-	-	-	-	571	189	56.0	67.0	W	< 2 g
flanged	3.0	9.0	3.0	F 603	SF 603	-	-	-	-	571	189	56.0	67.0	W	< 2 g
standard	3.0	9.0	4.0	-	-	MR 93-2Z	SMR 93-2Z	-	-	571	189	56.0	67.0	W	< 2 g
flanged	3.0	9.0	4.0	-	-	MF 93-2Z	SMF 93-2Z	-	-	571	189	56.0	67.0	W	< 2 g
standard	3.0	9.0	5.0	-	-	603-2Z	S603-2Z	-	-	571	189	56.0	67.0	W	< 2 g
flanged	3.0	9.0	5.0	-	-	F 603-2Z	SF 603-2Z	-	-	571	189	56.0	67.0	W	< 2 g
standard	3.0	10.0	4.0	623	S623	623-2Z	S623-2Z	623-2RS	S623-2RS	631	219	50.0	60.0	W,J	< 2 g
flanged	3.0	10.0	4.0	F 623	SF 623	F 623-2Z	SF 623-2Z	F 623-2RS	SF 623-2RS	631	219	50.0	60.0	W,J	< 2 g
standard	3.0	13.0	5.0	-	-	633-2Z	S633-2Z	-	-	1301	488	40.0	48.0	J	< 4 g
standard	3.5	9.0	4.0	-	-	MR 93X-2Z	SMR 93X-2Z	-	-	571	189	56.0	67.0	W	< 3 g
standard	4.0	7.0	2.0	MR 74	SMR 74	-	-	-	-	255	108	60.0	67.0	W	< 1 g
flanged	4.0	7.0	2.0	MF 74	SMF 74	-	-	-	-	255	108	60.0	67.0	W	< 1 g
standard	4.0	7.0	2.5	-	-	MR 74-2Z	SMR 74-2Z	-	-	255	108	60.0	67.0	W	< 1 g
flanged	4.0	7.0	2.5	-	-	MF 74-2Z	SMF 74-2Z	-	-	255	108	60.0	67.0	W	< 1 g
standard	4.0	8.0	2.0	MR 84	SMR 84	-	-	-	-	395	141	56.0	67.0	W	< 1 g
flanged	4.0	8.0	2.0	MF 84	SMF 84	-	-	-	-	395	141	56.0	67.0	W	< 1 g
standard	4.0	8.0	3.0	-	-	MR 84-2Z	SMR 84-2Z	MR 84-2RS	SMR 84-2RS	395	141	56.0	67.0	W	< 2 g
flanged	4.0	8.0	3.0	-	-	MF 84-2Z	SMF 84-2Z	MF 84-2RS	SMF 84-2RS	395	141	56.0	67.0	W	< 2 g
standard	4.0	9.0	2.5	684	S684	-	-	-	-	641	227	53.0	63.0	W,J	< 2 g
flanged	4.0	9.0	2.5	F 684	SF 684	-	-	-	-	641	227	53.0	63.0	W,J	< 2 g
standard	4.0	9.0	4.0	-	-	684-2Z	S684-2Z	684-2RS	S684-2RS	641	227	53.0	63.0	W,J	< 2 g
flanged	4.0	9.0	4.0	-	-	F 684-2Z	SF 684-2Z	F 684-2RS	SF 684-2RS	641	227	53.0	63.0	W,J	< 2 g
standard	4.0	10.0	3.0	MR 104	SMR 104	-	-	-	-	711	272	48.0	56.0	W,J	< 2 g
flanged	4.0	10.0	3.0	MF 104	SMF 104	-	-	-	-	711	272	48.0	56.0	W,J	< 2 g

Metrische Miniaturrillenkugellager / Miniature Metric Series



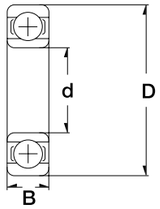


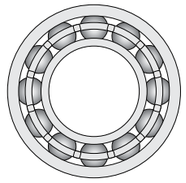


standard or flanged	Dimension (mm)			Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Standard cage type Others on request	Weight (g) approx.
				open		2Z		2RS/2TS							
	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil		
standard	4.0	10.0	4.0	-	-	MR 104-2Z	SMR 104-2Z	MR 104-2TS	SMR 104-2TS	711	272	48.0	56.0	W,J	< 2 g
flanged	4.0	10.0	4.0	-	-	MF 104-2Z	SMF 104-2Z	MF 104-2TS	SMF 104-2TS	711	272	48.0	56.0	W,J	< 2 g
standard	4.0	11.0	4.0	694	S694	694-2Z	S694-2Z	694-2RS	S694-2RS	957	350	48.0	56.0	W,J	< 2 g
flanged	4.0	11.0	4.0	F 694	SF 694	F 694-2Z	SF 694-2Z	F 694-2RS	SF 694-2RS	957	350	48.0	56.0	W,J	< 2 g
standard	4.0	12.0	4.0	604	S604	604-2Z	S604-2Z	604-2RS	S604-2RS	957	350	48.0	56.0	W,J	< 3 g
flanged	4.0	12.0	4.0	F 604	SF 604	F 604-2Z	SF 604-2Z	F 604-2RS	SF 604-2RS	957	350	48.0	56.0	W,J	< 3 g
standard	4.0	13.0	5.0	624	S624	624-2Z	S624-2Z	624-2RS	S624-2RS	1301	488	40.0	48.0	W,J	< 4 g
flanged	4.0	13.0	5.0	F 624	SF 624	F 624-2Z	SF 624-2Z	F 624-2RS	SF 624-2RS	1301	488	40.0	48.0	W,J	< 4 g
standard	4.0	16.0	5.0	634	S634	634-2Z	S634-2Z	634-2RS	S634-2RS	1340	523	36.0	43.0	W,J	< 6 g
flanged	4.0	16.0	5.0	F 634	SF 634	F 634-2Z	SF 634-2Z	F 634-2RS	SF 634-2RS	1340	523	36.0	43.0	W,J	< 6 g
standard	5.0	8.0	2.0	MR 85	SMR 85	-	-	-	-	218	90	53.0	63.0	W	< 1 g
flanged	5.0	8.0	2.0	MF 85	SMF 85	-	-	-	-	218	90	53.0	63.0	W	< 1 g
standard	5.0	8.0	2.5	-	-	MR 85-2Z	SMR 85-2Z	-	-	218	90	53.0	63.0	W	< 1 g
flanged	5.0	8.0	2.5	-	-	MF 85-2Z	SMF 85-2Z	-	-	218	90	53.0	63.0	W	< 1 g
standard	5.0	9.0	2.5	MR 95	SMR 95	-	-	-	-	431	169	50.0	60.0	W	< 1 g
flanged	5.0	9.0	2.5	MF 95	SMF 95	-	-	-	-	431	169	50.0	60.0	W	< 1 g
standard	5.0	9.0	3.0	-	-	MR 95-2Z	SMR 95-2Z	MR 95-2TS	SMR 95-2TS	431	169	50.0	60.0	W	< 1 g
flanged	5.0	9.0	3.0	-	-	MF 95-2Z	SMF 95-2Z	MF 95-2TS	SMF 95-2TS	431	169	50.0	60.0	W	< 1 g
standard	5.0	10.0	3.0	MR 105	SMR 105	-	-	-	-	431	169	50.0	60.0	W,J	< 2 g
flanged	5.0	10.0	3.0	MF 105	SMF 105	-	-	-	-	431	169	50.0	60.0	W,J	< 2 g
standard	5.0	10.0	4.0	-	-	MR 105-2Z	SMR 105-2Z	MR 105-2RS	SMR 105-2RS	431	169	50.0	60.0	W,J	< 2 g
flanged	5.0	10.0	4.0	-	-	MF 105-2Z	SMF 105-2Z	MF 105-2RS	SMF 105-2RS	431	169	50.0	60.0	W,J	< 2 g
standard	5.0	11.0	3.0	S685	S685	-	-	-	-	716	282	45.0	53.0	W	< 2 g
flanged	5.0	11.0	3.0	F 685	SF 685	-	-	-	-	716	282	45.0	53.0	W	< 2 g
standard	5.0	11.0	4.0	-	-	MR 115-2Z	SMR 115-2Z	MR 115-2RS	SMR 115-2RS	716	282	45.0	53.0	W,J	< 1 g
flanged	5.0	11.0	4.0	-	-	MF 115-2Z	SMF 115-2Z	MF 115-2RS	SMF 115-2RS	716	282	45.0	53.0	W,J	< 1 g
standard	5.0	11.0	5.0	-	-	685-2Z	S685-2Z	685-2RS	S685-2RS	716	282	45.0	53.0	W	< 2 g
flanged	5.0	11.0	5.0	-	-	F 685-2Z	SF 685-2Z	F 685-2RS	SF 685-2RS	716	282	45.0	53.0	W	< 2 g
standard	5.0	13.0	4.0	695	S695	695-2Z	S695-2Z	695-2RS	S695-2RS	1077	432	43.0	50.0	W,J	< 3 g
flanged	5.0	13.0	4.0	F 695	SF 695	F695-2Z	SF695-2Z	F695-2RS	SF695-2RS	1077	432	43.0	50.0	W,J	< 3 g
standard	5.0	13.0	5.0	695W5	S695W5	695-2ZW5	S695-2Z W5	695-2RSW5	S695-2RSW5	1077	432	43.0	50.0	W,J	< 3 g

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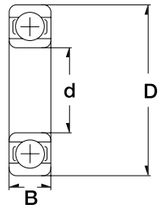


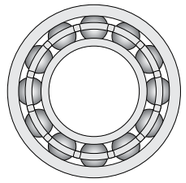


standard or flanged	Dimension (mm)			Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Standard cage type Others on request	Weight (g) approx.
				open		2Z		2RS/2TS							
	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil		
standard	5.0	14.0	5.0	605	S605	605-2Z	S605-2Z	605-2RS	S605-2RS	1329	507	40.0	50.0	W,J	< 5 g
flanged	5.0	14.0	5.0	F 605	SF 605	F 605-2Z	SF 605-2Z	F 605-2RS	SF 605-2RS	1329	507	40.0	50.0	W,J	< 5 g
standard	5.0	14.0	7.0	Zweireihiges Radiallager	Double Row Bearing	30/5-2Z	-	30/5-2RS	-	2020	930	30.0	38.0	J	< 8 g
standard	5.0	16.0	5.0	625	S625	625-2Z	S625-2Z	625-2RS	S625-2RS	1729	675	36.0	43.0	W,J	< 6 g
flanged	5.0	16.0	5.0	F 625	SF 625	F 625-2Z	SF 625-2Z	F 625-2RS	SF 625-2RS	1729	675	36.0	43.0	W,J	< 6 g
standard	5.0	19.0	6.0	635	S635	635-2Z	S635-2Z	635-2RS	S635-2RS	2336	896	32.0	40.0	J	< 8 g
flanged	5.0	19.0	6.0	F 635	SF 635	F 635-2Z	SF 635-2Z	F 635-2RS	SF 635-2RS	2336	896	32.0	40.0	J	< 10 g
standard	6.0	10.0	2.5	MR 106	SMR 106	-	-	-	-	496	218	45.0	53.0	W	< 1 g
flanged	6.0	10.0	2.5	MF 106	SMF 106	-	-	-	-	496	218	45.0	53.0	W	< 1 g
standard	6.0	10.0	3.0	-	-	MR 106-2Z	SMR 106-2Z	MR 106-2RS	SMR 106-2RS	496	218	45.0	53.0	W	< 1 g
flanged	6.0	10.0	3.0	-	-	MF 106-2Z	SMF 106-2Z	MF 106-2RS	SMF 106-2RS	496	218	45.0	53.0	W	< 1 g
standard	6.0	12.0	3.0	MR 126	SMR 126	-	-	-	-	716	295	43.0	50.0	W,J	< 2 g
flanged	6.0	12.0	3.0	MF 126	SMF 126	-	-	-	-	716	295	43.0	50.0	W,J	< 2 g
standard	6.0	12.0	4.0	-	-	MR 126-2Z	SMR 126-2Z	MR 126-2RS	SMR 126-2RS	716	295	43.0	50.0	W,J	< 2 g
flanged	6.0	12.0	4.0	-	-	MF 126-2Z	SMF 126-2Z	MF 126-2RS	SMF 126-2RS	716	295	43.0	50.0	W,J	< 2 g
standard	6.0	13.0	3.5	686	S686	-	-	-	-	1082	442	40.0	50.0	W,J	< 3 g
flanged	6.0	13.0	3.5	F 686	SF 686	-	-	-	-	1082	442	40.0	50.0	W,J	< 4 g
standard	6.0	13.0	4.5	-	-	686-2ZW4.5	S686-2ZW4.5	686-2TS4.5	S686-2TS4.5	1082	442	40.0	50.0	W,J	< 4 g
standard	6.0	13.0	5.0	686W5	S686W5	686-2Z	S686-2Z	686-2RS	S686-2RS	1082	442	40.0	50.0	W,J	< 4 g
flanged	6.0	13.0	5.0			F 686-2Z	SF 686-2Z	F 686-2RS	SF 686-2RS	1082	442	40.0	50.0	W,J	< 4 g
standard	6.0	15.0	5.0	696W5	S696W5	696-2ZW5	S696-2ZW5	696-2RSW5	S696-2RSW5	1340	523	40.0	45.0	W,J	< 4 g
flanged	6.0	15.0	5.0	F 696	SF 696	F 696-2Z	SF 696-2Z	F 696-2RS	SF 696-2RS	1340	523	40.0	45.0	W,J	< 4 g
standard	6.0	16.0	5.0	696A	S696A	696A-2Z	S696A-2Z	696A-2RS	S696A-2RS	1340	523	40.0	45.0	J	< 7 g
flanged	6.0	16.0	5.0	F 696A	SF 696A	F 696A-2Z	SF 696A-2Z	F 696A-RS	SF 696A-2RS	1340	523	40.0	45.0	J	< 7 g
standard	6.0	17.0	6.0	606	S606	606-2Z	S606-2Z	606-2RS	S606-2RS	2263	846	38.0	45.0	J	< 7 g
flanged	6.0	17.0	6.0	F 606	SF 606	F 606-2Z	SF 606-2Z	F 606-2RS	SF 606-2RS	2263	846	38.0	45.0	J	< 8 g
standard	6.0	17.0	6.0	Zweireihiges Radiallager	Double Row Bearing	30/6-2Z	-	30/6-2RS	-	3080	1450	30.0	39.0	J	< 10 g
standard	6.0	19.0	6.0	626	S626	626-2Z	S626-2Z	626-2RS	S626-2RS	2336	896	32.0	40.0	J	< 8 g
flanged	6.0	19.0	6.0	F 626	SF 626	F 626-2Z	SF 626-2Z	F 626-2RS	SF 626-2RS	2336	896	32.0	40.0	J	< 10 g
standard	6.0	22.0	7.0	636	S636	636-2Z	S636-2Z	636-2RS	S636-2RS	3333	1423	30.0	36.0	J	< 5 g
standard	7.0	11.0	2.5	MR 117	SMR 117	-	-	-	-	455	202	43.0	50.0	W	< 1 g
flanged	7.0	11.0	2.5	MF 117	SMF 117	-	-	-	-	455	202	43.0	50.0	W	< 1 g

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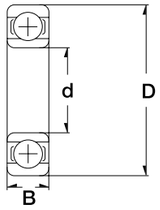


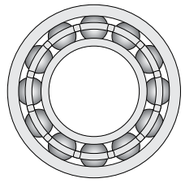


standard or flanged	Dimension (mm)			Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Standard cage type Others on request	Weight (g) approx.
				open		2Z		2RS/2TS							
	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil		
standard	7.0	11.0	3.0	-	-	MR 117-2Z	SMR 117-2Z	MR 117-2RS	SMR 117-2RS	455	202	43.0	50.0	W	< 1 g
flanged	7.0	11.0	3.0	-	-	MF 117-2Z	SMF 117-2Z	MF 117-2RS	SMF 117-2RS	455	202	43.0	50.0	W	< 1 g
standard	7.0	13.0	3.0	MR 137	SMR 137	-	-	-	-	541	276	40.0	48.0	W	< 3 g
flanged	7.0	13.0	3.0	MF 137	SMF 137	-	-	-	-	541	276	40.0	48.0	W	< 3 g
standard	7.0	13.0	4.0	-	-	MR 137-2Z	SMR 137-2Z	MR 137-2RS	SMR 137-2RS	541	276	40.0	48.0	W	< 3 g
flanged	7.0	13.0	4.0	-	-	MF 137-2Z	SMF 137-2Z	MF 137-2RS	SMF 137-2RS	541	276	40.0	48.0	W	< 3 g
standard	7.0	14.0	3.5	687	S687	-	-	-	-	1173	513	40.0	50.0	W,J	< 4 g
flanged	7.0	14.0	3.5	F 687	SF 687	-	-	-	-	1173	513	40.0	50.0	W,J	< 4 g
standard	7.0	14.0	5.0	-	-	687-2Z	S687-2Z	687-2RS	S687-2RS	1173	513	40.0	50.0	W,J	< 4 g
flanged	7.0	14.0	5.0	-	-	F 687-2Z	SF 687-2Z	F 687-2RS	SF 687-2RS	1173	513	40.0	50.0	W,J	< 4 g
standard	7.0	17.0	5.0	697	S697	697-2Z	S697-2Z	697-2RS	S697-2RS	1605	719	36.0	43.0	J	< 6 g
flanged	7.0	17.0	5.0	F 697	SF 697	F 697-2Z	SF 697-2Z	F 697-2RS	SF 697-2RS	1605	719	36.0	43.0	J	< 6 g
standard	7.0	19.0	6.0	607	S607	607-2Z	S607-2Z	607-2RS	S607-2RS	2336	896	36.0	43.0	J	< 8 g
flanged	7.0	19.0	6.0	F 607	SF 607	F 607-2Z	SF 607-2Z	F 607-2RS	SF 607-2RS	2336	896	36.0	43.0	J	<10 g
standard	7.0	19.0	10.0	Zweireihiges Radiallager	Double Row Bearing	30/7-2Z	-	30/7-2RS	-	3650	2000	28.0	30.0	J	< 12 g
standard	7.0	22.0	7.0	627	S627	627-2Z	S627-2Z	627-2RS	S627-2RS	3287	1379	30.0	36.0	J	< 14 g
flanged	7.0	22.0	7.0	F 627	SF 627	F 627-2Z	SF 627-2Z	F 627-2RS	SF 627-2RS	3287	1379	30.0	36.0	J	< 15 g
standard	8.0	12.0	2.5	MR 128	SMR 128	-	-	-	-	543	274	40.0	48.0	W	< 1 g
flanged	8.0	12.0	2.5	MF 128	SMF 128	-	-	-	-	543	274	40.0	48.0	W	< 2 g
standard	8.0	12.0	3.5	-	-	MR 128-2Z	SMR 128-2Z	MR 128-2RS	SMR 128-2RS	543	274	40.0	48.0	W	< 2 g
flanged	8.0	12.0	3.5	-	-	MF 128-2Z	SMF 128-2Z	MF 128-2RS	SMF 128-2RS	543	274	40.0	48.0	W	< 2 g
standard	8.0	14.0	3.5	MR 148	SMR 148	-	-	-	-	817	386	38.0	45.0	W	< 3 g
flanged	8.0	14.0	3.5	MF 148	SMF 148	-	-	-	-	817	386	38.0	45.0	W	< 3 g
standard	8.0	14.0	4.0	-	-	MR 148-2Z	SMR 148-2Z	MR 148-2RS	SMR 148-2RS	817	386	38.0	45.0	W	< 3 g
flanged	8.0	14.0	4.0	-	-	MF 148-2Z	SMF 148-2Z	MF 148-2RS	SMF 148-2RS	817	386	38.0	45.0	W	< 3 g
standard	8.0	16.0	4.0	688	S688	688-2ZW4	S688-2ZW4	688-2RSW4	S688-2RSW4	1252	592	36.0	43.0	W,J	< 4 g
flanged	8.0	16.0	4.0	F 688	SF 688	F 688-2ZW4	SF 688-2ZW4	F 688-2RSW4	SF 688-2RSW4	1252	592	36.0	43.0	W,J	< 4 g
standard	8.0	16.0	5.0	688W5	S688W5	688-2Z	S688-2Z	688-2RS	S688-2RS	1252	592	36.0	43.0	W,J	< 4 g
flanged	8.0	16.0	5.0	F 688W5	SF 688W5	F 688-2Z	SF 688-2Z	F 688-2RS	SF 688-2RS	1252	592	36.0	43.0	W,J	< 4 g
standard	8.0	16.0	6.0	688W6	S688W6	688-2ZW6	S688-2ZW6	688-2RSW6	S688-2RSW6	1252	592	36.0	43.0	W,J	< 5 g
flanged	8.0	16.0	6.0	F 688W6	SF 688W6	F 688-2ZW6	SF 688-2ZW6	F 688-2RSW6	SF 688-2RSW6	1252	592	36.0	43.0	W,J	< 5 g
standard	8.0	19.0	6.0	698	S698	698-2Z	S698-2Z	698-2RS	S698-2RS	2237	917	36.0	43.0	J	< 8 g
flanged	8.0	19.0	6.0	F 698	SF 698	F 698-2Z	SF 698-2Z	F 698-2RS	SF 698-2RS	2237	917	36.0	43.0	J	< 8 g

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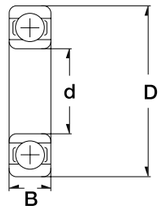


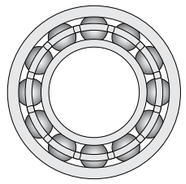


standard or flanged	Dimension (mm)			Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Standard cage type Others on request	Weight (g) approx.
				open		2Z		2RS/2TS							
	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil		
standard	8.0	22.0	6.0	608W6	S608W6	608-2ZW6	S608-2ZW6	608-2RSW6	S608-2RSW6	3293	1379	34.0	40.0	J	< 13 g
standard	8.0	22.0	7.0	608	S608	608-2Z	S608-2Z	608-2RS	S608-2RS	3293	1379	34.0	40.0	J	< 14 g
flanged	8.0	22.0	7.0	F 608	SF 608	F 608-2Z	SF 608-2Z	F 608-2RS	SF 608-2RS	3293	1379	34.0	40.0	J	< 15 g
standard	8.0	22.0	11.0	-	-	630/8-2Z	-	630/8-2RS	-	3293	1379	34.0	40.0	J	< 19 g
standard	8.0	22.0	11.0	Zweireihiges Radiallager	Double Row Bearing	30/8-2Z	-	30/8-2RS	-	5070	2580	30.0	36.0	J	< 20 g
standard	8.0	24.0	7.0	608/24	S608/24	608/24-2Z	S608/24-2Z	608/24-2RS	S608/24-2RS	3293	1379	34.0	40.0	J	< 25 g
standard	8.0	24.0	8.0	628	S628	628-2Z	S628-2Z	628-2RS	S628-2RS	3333	1423	28.0	34.0	J	< 18 g
flanged	8.0	24.0	8.0	F 628	SF 628	F 628-2Z	SF 628-2Z	F 628-2RS	SF 628-2RS	3333	1423	28.0	34.0	J	< 20 g
standard	8.0	26.0	7.0	608/26	S608/26	608/26-2Z	S608/26-2Z	608/26-2RS	S608/26-2RS	3293	1379	34.0	40.0	J	< 28 g
standard	8.0	28.0	9.0	638	S638	638-2Z	S638-2Z	638-2RS	S638-2RS	4563	1983	28.0	34.0	J	< 31 g
standard	9.0	14.0	3.0	679	S679	-	-	-	-	919	468	36.0	42.0	W	< 3 g
standard	9.0	17.0	4.0	689	S689	-	-	-	-	1327	668	36.0	43.0	J	< 5 g
flanged	9.0	17.0	4.0	F 689	SF 689	-	-	-	-	1327	668	36.0	43.0	J	< 5 g
standard	9.0	17.0	5.0	-	-	689-2Z	S689-2Z	689-2RS	S689-2RS	1327	668	36.0	43.0	J	< 5 g
flanged	9.0	17.0	5.0	-	-	F 689-2Z	SF 689-2Z	F 689-2RS	SF 689-2RS	1327	668	36.0	43.0	J	< 5 g
standard	9.0	17.0	6.0	689W6	S689W6	689-2ZW6	S689-2ZW6	689-2RSW6	S689-2RSW6	1327	668	36.0	43.0	J	< 5 g
standard	9.0	20.0	6.0	699	S699	699-2Z	S699-2Z	699-2RS	S699-2RS	2467	1081	34.0	40.0	J	< 8 g
flanged	9.0	20.0	6.0	F 699	SF 699	F 699-2Z	SF 699-2Z	F 699-2RS	SF 699-2RS	2467	1081	34.0	40.0	J	< 10 g
standard	9.0	24.0	7.0	609	S609	609-2Z	S609-2Z	609-2RS	S609-2RS	3356	1444	32.0	38.0	J	< 16 g
flanged	9.0	24.0	7.0	F 609	SF 609	F 609-2Z	SF 609-2Z	F 609-2RS	SF 609-2RS	3356	1444	32.0	38.0	J	< 18 g
standard	9.0	26.0	8.0	629	S629	629-2Z	S629-2Z	629-2RS	S629-2RS	4575	1983	28.0	34.0	J	< 22 g
flanged	9.0	26.0	8.0	F 629	SF 629	F 629-2Z	SF 629-2Z	F 629-2RS	SF 629-2RS	4575	1983	28.0	34.0	J	< 24 g

Zöllige Miniaturrillenkugellager / Miniature Inch Series





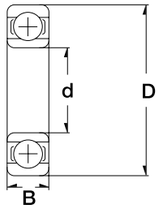


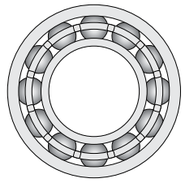
standard or flanged	Dimension (mm)			Dimension (inch)			Dimension (inch)		
	d	D	B	d	D	B	d	D	B
standard	1.984	6.350	2.380	0.0781	0.2500	0.0937	5/64	1/4	3/32
flanged	1.984	6.350	2.380	0.0781	0.2500	0.0937	5/64	1/4	3/32
standard	1.984	6.350	3.571	0.0781	0.2500	0.1406	5/64	1/4	9/64
flanged	1.984	6.350	3.571	0.0781	0.2500	0.1406	5/64	1/4	9/64
standard	2.380	4.763	1.588	0.0937	0.1875	0.0625	3/32	3/16	1/16
flanged	2.380	4.763	1.588	0.0937	0.1875	0.0625	3/32	3/16	1/16
standard	2.380	4.763	2.380	0.0937	0.1875	0.0937	3/32	3/16	3/32
flanged	2.380	4.763	2.380	0.0937	0.1875	0.0937	3/32	3/16	3/32
standard	2.380	7.938	2.779	0.0937	0.3125	0.1094	3/32	5/16	7/64
flanged	2.380	7.938	2.779	0.0937	0.3125	0.1094	3/32	5/16	7/64
standard	2.380	7.938	3.571	0.0937	0.3125	0.1406	3/32	5/16	9/64
flanged	2.380	7.938	3.571	0.0937	0.3125	0.1406	3/32	5/16	9/64
standard	3.175	6.350	2.380	0.1250	0.2500	0.0937	1/8	1/4	3/32
flanged	3.175	6.350	2.380	0.1250	0.2500	0.0937	1/8	1/4	3/32
standard	3.175	6.350	2.779	0.1250	0.2500	0.1094	1/8	1/4	7/64
flanged	3.175	6.350	2.779	0.1250	0.2500	0.1094	1/8	1/4	7/64
standard	3.175	7.938	2.779	0.1250	0.3125	0.1094	1/8	5/16	7/64
flanged	3.175	7.938	2.779	0.1250	0.3125	0.1094	1/8	5/16	7/64
standard	3.175	7.938	3.571	0.1250	0.3125	0.1406	1/8	5/16	9/64
flanged	3.175	7.938	3.571	0.1250	0.3125	0.1406	1/8	5/16	9/64
standard	3.175	9.525	2.779	0.1250	0.3750	0.1094	1/8	3/8	7/64
flanged	3.175	9.525	2.779	0.1250	0.3750	0.1094	1/8	3/8	7/64
standard	3.175	9.525	3.571	0.1250	0.3750	0.1406	1/8	3/8	9/64
flanged	3.175	9.525	3.571	0.1250	0.3750	0.1406	1/8	3/8	9/64
standard	3.175	9.525	3.967	0.1250	0.3750	0.1562	1/8	3/8	5/32
flanged	3.175	9.525	3.967	0.1250	0.3750	0.1562	1/8	3/8	5/32
standard	3.175	12.700	4.366	0.1250	0.5000	0.1719	1/8	1/2	11/64
flanged	3.175	12.700	4.366	0.1250	0.5000	0.1719	1/8	1/2	11/64
standard	3.967	7.938	2.779	0.1562	0.3125	0.1094	5/32	5/16	7/64
flanged	3.967	7.938	2.779	0.1562	0.3125	0.1094	5/32	5/16	7/64
standard	3.967	7.938	3.175	0.1562	0.3125	0.1250	5/32	5/16	1/8
flanged	3.967	7.938	3.175	0.1562	0.3125	0.1250	5/32	5/16	1/8
standard	4.763	7.938	2.779	0.1875	0.3125	0.1094	3/16	5/16	7/64
flanged	4.763	7.938	2.779	0.1875	0.3125	0.1094	3/16	5/16	7/64
standard	4.763	7.938	3.175	0.1875	0.3125	0.1250	3/16	5/16	1/8
flanged	4.763	7.938	3.175	0.1875	0.3125	0.1250	3/16	5/16	1/8
standard	4.763	9.525	3.175	0.1875	0.3750	0.1250	3/16	3/8	1/8
flanged	4.763	9.525	3.175	0.1875	0.3750	0.1250	3/16	3/8	1/8

Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Weight (g) approx.
open		2Z		2RS/2TS						
Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil	
R 1-4	SR 1-4	-	-	-	-	284	96	67.0	80.0	< 1 g
FR 1-4	SFR 1-4	-	-	-	-	284	96	67.0	80.0	< 1 g
-	-	R 1-4-2Z	SR 1-4-2Z	-	-	284	96	67.0	80.0	< 1 g
-	-	FR 1-4-2Z	SFR 1-4-2Z	-	-	284	96	67.0	80.0	< 1 g
R 133	SR 133	-	-	-	-	144	53	80.0	95.0	< 1 g
FR 133	SFR 133	-	-	-		144	53	80.0	95.0	< 1 g
-	-	R 133-2Z	SR 133-2Z	-	-	144	53	80.0	95.0	< 1 g
-	-	FR 133-2Z	SFR 133-2Z	-	-	144	53	80.0	95.0	< 1 g
R 1-5	SR 1-5	-	-	-	-	552	176	60.0	71.0	< 1 g
FR 1-5	SFR 1-5	-	-	-	-	552	176	60.0	71.0	< 1 g
-	-	R 1-5-2Z	SR 1-5-2Z	-	-	552	176	60.0	71.0	< 1 g
-	-	FR 1-5-2Z	SFR 1-5-2Z	-	-	552	176	60.0	71.0	< 1 g
R 144	SR 144	-	-	-	-	284	96	67.0	80.0	< 1 g
FR 144	SFR 144	-	-	-	-	284	96	67.0	80.0	< 1 g
-	-	R 144-2Z	SR 144-2Z	-	-	284	96	67.0	80.0	< 1 g
-	-	FR 144-2Z	SFR 144-2Z	-	-	284	96	67.0	80.0	< 1 g
R 2-5	SR 2-5	-	-	-	-	558	180	60.0	67.0	< 1 g
FR 2-5	SFR 2-5	-	-	-	-	558	180	60.0	67.0	< 1 g
-	-	R 2-5-2Z	SR 2-5-2Z	-	-	558	180	60.0	67.0	< 1 g
-	-	FR 2-5-2Z	SFR 2-5-2Z	-	-	558	180	60.0	67.0	< 1 g
R 2-6	SR 2-6	-	-	-	-	640	227	53.0	63.0	< 2 g
FR 2-6	SFR 2-6	-	-	-	-	640	227	53.0	63.0	< 2 g
-	-	R 2-6-2Z	SR 2-6-2Z	-	-	640	227	53.0	63.0	< 2 g
-	-	FR 2-6-2Z	SFR 2-6-2Z	-	-	640	227	53.0	63.0	< 2 g
R 2	SR 2	R 2-2Z	SR 2-2Z	R 2-2RS	SR 2-2RS	631	219	56.0	67.0	< 2 g
FR 2	SFR 2	FR 2-2Z	SFR 2-2Z	FR 2-2RS	SFR 2-2RS	631	219	56.0	67.0	< 2 g
R 2A	SR 2A	R 2A-2Z	SR 2A-2Z	R 2A-2RS	SR 2A -2RS	640	227	53.0	63.0	< 3 g
FR 2A	SFR 2A	FR 2A-2Z	SFR 2A-2Z	FR 2A-2RS	SFR 2A -2RS	640	227	53.0	63.0	< 3 g
R 155	SR 155	-	-	-	-	359	150	53.0	63.0	< 1 g
FR 155	SFR 155	-	-	-	-	359	150	53.0	63.0	< 1 g
-	-	R 155-2Z	SR 155-2Z	-	-	359	150	53.0	63.0	< 1 g
-	-	FR 155-2Z	SFR 155-2Z	-	-	359	150	53.0	63.0	< 1 g
R 156	SR 156	-	-	-	-	359	150	53.0	63.0	< 1 g
FR 156	SFR 156	-	-	-	-	359	150	53.0	63.0	< 1 g
-	-	R 156-2Z	SR 156-2Z	R 156-2TS	SR 156-2TS	359	150	53.0	63.0	< 1 g
-	-	FR 156-2Z	SFR 156-2Z	FR 156-2TS	SFR 156-2TS	359	150	53.0	63.0	< 1 g
R 166	SR 166	R 166-2Z	SR 166-2Z	R 166-2TS	SR 166-2TS	709	272	50.0	60.0	< 1 g
FR 166	SFR 166	FR 166-2Z	SFR 166-2Z	FR 166-2TS	SFR 166-2TS	709	272	50.0	60.0	< 1 g

Zöllige Miniaturrillenkugellager / Miniature Inch Series





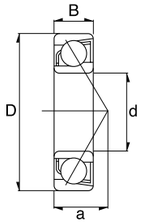


standard or flanged	Dimension (mm) d	Dimension (mm) D	Dimension (mm) B	Dimension (inch) d	Dimension (inch) D	Dimension (inch) B	Dimension (inch) d	Dimension (inch) D	Dimension (inch) B
standard	4.763	12.700	3.967	0.1875	0.5000	0.1562	3/16	1/2	5/32
flanged	4.763	12.700	3.967	0.1875	0.5000	0.1562	3/16	1/2	5/32
standard	4.763	12.700	4.978	0.1875	0.5000	0.1960	3/16	1/2	-
flanged	4.763	12.700	4.978	0.1875	0.5000	0.1960	3/16	1/2	-
standard	4.763	15.875	4.978	0.1875	0.6250	0.1960	3/16	5/8	-
flanged	4.763	15.875	4.978	0.1875	0.6250	0.1960	3/16	5/8	-
standard	6.350	9.525	3.175	0.2500	0.3750	0.1250	1/4	3/8	1/8
flanged	6.350	9.525	3.175	0.2500	0.3750	0.1250	1/4	3/8	1/8
standard	6.350	12.700	3.175	0.2500	0.5000	0.1250	1/4	1/2	1/8
flanged	6.350	12.700	3.175	0.2500	0.5000	0.1250	1/4	1/2	1/8
standard	6.350	12.700	4.763	0.2500	0.5000	0.1875	1/4	1/2	3/16
flanged	6.350	12.700	4.763	0.2500	0.5000	0.1875	1/4	1/2	3/16
standard	6.350	15.875	4.978	0.2500	0.6250	0.1960	1/4	5/8	-
flanged	6.350	15.875	4.978	0.2500	0.6250	0.1960	1/4	5/8	-
standard	6.350	15.875	8.733	0.2500	0.6250	0.3438	1/4	5/8	11/32
standard	6.350	19.050	5.558	0.2500	0.7500	0.2188	1/4	3/4	7/32
standard	6.350	19.050	7.142	0.2500	0.7500	0.2812	1/4	3/4	9/32
standard	7.938	12.700	3.967	0.3125	0.5000	0.1562	5/16	1/2	5/32
flanged	7.938	12.700	3.967	0.3125	0.5000	0.1562	5/16	1/2	5/32
standard	9.525	22.225	5.558	0.3750	0.8750	0.2188	3/8	7/8	7/32
flanged	9.525	22.225	5.558	0.3750	0.8750	0.2188	3/8	7/8	7/32
standard	9.525	22.225	7.142	0.3750	0.8750	0.2812	3/8	7/8	9/32
flanged	9.525	22.225	7.142	0.3750	0.8750	0.2812	3/8	7/8	9/32
standard	9.525	22.225	9.525	0.3750	0.8750	0.3750	3/8	7/8	3/8

Designation/Type: open, Chrome Steel	open, Stainless	2Z, Chrome Steel	2Z, Stainless	2RS/2TS, Chrome Steel	2RS/2TS, Stainless	* Load Rating (only 100 Cr6) C, dyn. N	* Load Rating (only 100 Cr6) C, stat. N	* Limiting Speed x1000rpm (open & 2Z) Grease	* Limiting Speed x1000rpm (open & 2Z) Oil	Weight (g) approx.
R 3	SR 3	R 3-2ZW.15	-	-	-	1301	488	43.0	53.0	< 3 g
FR 3	SFR 3	-	-	-	-	1301	488	43.0	53.0	< 3 g
-	-	R 3-2Z	SR 3-2Z	R 3-2RS	SR 3-2RS	1301	488	43.0	53.0	< 3 g
-	-	FR 3-2Z	SFR 3-2Z	FR 3-2RS	SFR 3-2RS	1301	488	43.0	53.0	< 5 g
R 3A	SR 3A	R 3A-2Z	SR 3A-2Z	-	-	1480	621	38.0	45.0	< 5 g
FR 3A	SFR 3A	FR 3A-2Z	SFR 3A-2Z	-	-	1480	621	38.0	45.0	< 5 g
R 168	SR 168	R 168-2Z	SR 168-2Z	R 168-2TS	SR 168-2TS	373	172	48.0	56.0	< 1 g
FR 168	SFR 168	FR 168-2Z	SFR 168-2Z	FR 168-2TS	SFR 168-2TS	373	172	48.0	56.0	< 1 g
R 188	SR 188	-	-	-	-	1082	442	40.0	50.0	< 3 g
FR 188	SFR 188	-	-	-	-	1082	442	40.0	50.0	< 3 g
-	-	R 188-2Z	SR 188-2Z	-	-	1082	442	40.0	50.0	< 3 g
-	-	FR 188-2Z	SFR 188-2Z	-	-	1082	442	40.0	50.0	< 3 g
R 4	SR 4	R 4-2Z	SR 4-2Z	R 4-2RS	SR 4-2RS	1480	621	38.0	45.0	< 5 g
FR 4	SFR 4	FR 4-2Z	SFR 4-2Z	FR 4-2RS	SFR 4-2RS	1480	621	38.0	45.0	< 5 g
-	-	WR 4-2Z	WSR 4-2Z	-	-	-	-	-	-	< 8 g
R 4A	SR 4A	-	-	-	-	2336	896	36.0	43.0	< 10 g
-	-	R 4A-2Z	SR 4A-2Z	R 4A-2RS	SR 4A-2RS	2336	896	36.0	43.0	< 10 g
-	-	R 1810-2Z	SR 1810-2Z	-	-	542	276	40.0	48.0	< 2 g
-	-	FR 1810-2Z	SFR 1810-2Z	-	-	542	276	40.0	48.0	< 2 g
R 6	SR 6	-	-	-	-	3332	1422	32.0	38.0	12 g
FR 6	SFR 6	-	-	-	-	3332	1422	32.0	38.0	12 g
-	-	R 6-2Z	SR 6-2Z	R 6-2RS	SR 6-2RS	3332	1422	32.0	38.0	12 g
-	-	FR 6-2Z	SFR 6-2Z	FR 6-2RS	SFR 6-2S	3332	1422	32.0	38.0	12 g
-	-	WR 6-2Z	WSR 6-2Z	-	-	-	-	-	-	20 g

Keramiklager / Solid Ceramic Bearings

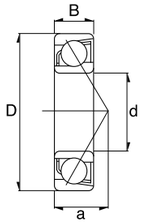




Dimension (mm)			Designation/Type	* Load Rating		Weight (g) approx.
d	D	B		C, dyn. N	C, stat. N	
8.0	22.0	7.0	608	1976	827	14 g
9.0	24.0	7.0	609	2014	866	16 g
8.0	24.0	8.0	628	2000	854	18 g
9.0	26.0	8.0	629	2745	1190	22 g
8.0	16.0	5.0	688	751	355	4 g
9.0	17.0	5.0	689	796	401	5 g
8.0	19.0	6.0	698	1342	550	8 g
9.0	20.0	6.0	699	1480	649	8 g
10.0	26.0	8.0	6000	2730	1182	18 g
10.0	30.0	9.0	6200	3060	1434	32 g
10.0	35.0	11.0	6300	4860	2070	52 g
12.0	28.0	8.0	6001	3060	1422	22 g
12.0	32.0	10.0	6201	4080	1830	37 g
12.0	37.0	12.0	6301	5820	2520	60 g
15.0	32.0	9.0	6002	3360	1698	31 g
15.0	35.0	11.0	6202	4590	2250	45 g
15.0	42.0	13.0	6302	6840	3270	83 g
17.0	35.0	10.0	6003	3600	1950	41 g
17.0	40.0	12.0	6203	5730	2880	67 g
17.0	47.0	14.0	6303	8160	3990	113 g
17.0	62.0	17.0	6403	13740	6480	270 g
20.0	42.0	12.0	6004	5640	3000	68 g
20.0	47.0	14.0	6204	7680	3960	107 g
20.0	52.0	15.0	6304	9540	4740	145 g

Keramiklager / Solid Ceramic Bearings

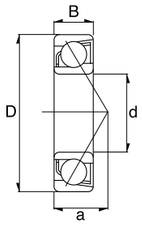




Dimension (mm)			Designation/Type	* Load Rating		Weight (g) approx.
d	D	B		C, dyn. N	C, stat. N	
20.0	72.0	19.0	6404	18420	9000	400 g
25.0	47.0	12.0	6005	6060	3510	79 g
25.0	52.0	15.0	6205	840	4710	129 g
25.0	62.0	17.0	6305	12360	6720	235 g
25.0	80.0	21.0	6405	21000	11460	530 g
30.0	55.0	13.0	6006	7920	4980	116 g
30.0	62.0	16.0	6206	11700	6780	199 g
30.0	72.0	19.0	6306	16020	9000	345 g
30.0	90.0	23.0	6406	26100	14280	740 g
35.0	62.0	14.0	6007	9600	6180	151 g
35.0	72.0	17.0	6207	15420	9180	284 g
35.0	80.0	21.0	6307	20100	11520	464 g
35.0	100.0	25.0	6407	33120	18900	950 g
40.0	68.0	15.0	6008	10080	6900	190 g
40.0	80.0	18.0	6208	17460	10740	366 g
40.0	90.0	23.0	6308	24300	14400	636 g
40.0	110.0	27.0	6408	37800	21600	1250 g
10.0	19.0	5.0	6800	1030	504	5.5 g
10.0	22.0	6.0	6900	1617	764	10 g
12.0	21.0	5.0	6801	1149	625	6.3 g
12.0	24.0	6.0	6901	1732	880	11 g
15.0	24.0	5.0	6802	1244	752	7.4 g
15.0	28.0	7.0	6902	2593	1355	16 g
17.0	26.0	5.0	6803	1340	874	8.2 g

Keramiklager / Solid Ceramic Bearings

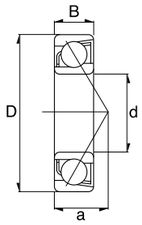




Dimension (mm)			Designation/Type	* Load Rating		Weight (g) approx.
d	D	B		C, dyn. N	C, stat. N	
17.0	30.0	7.0	6903	2753	1539	18 g
20.0	32.0	7.0	6804	2409	1477	18 g
20.0	37.0	9.0	6904	3829	2209	38 g
25.0	37.0	7.0	6805	2582	1759	22 g
25.0	42.0	9.0	6905	4201	2724	45 g
30.0	42.0	7.0	6806	2723	2041	27 g
30.0	47.0	9.0	6906	4345	3002	51 g
35.0	47.0	7.0	6807	2837	2293	30 g
35.0	55.0	10.0	6907	6540	4691	80 g
40.0	52.0	7.0	6808	2954	2507	34 g
10.0	26.0	8.0	7000	2268	1290	18 g
10.0	30.0	9.0	7200	3120	1530	30 g
12.0	28.0	8.0	7001	2448	1452	20 g
12.0	32.0	10.0	7201	3390	1890	35 g
15.0	32.0	9.0	7002	2880	1770	28 g
15.0	35.0	11.0	7202	4980	2580	43 g
17.0	35.0	10.0	7003	3048	1932	36 g
17.0	40.0	12.0	7203	5028	3228	62 g
20.0	42.0	12.0	7004	6300	3612	67 g
20.0	47.0	14.0	7204	8760	4920	100 g
25.0	47.0	12.0	7005	5832	3750	89 g
25.0	52.0	15.0	7205	8400	5232	146 g
30.0	55.0	13.0	7006	7500	5172	130 g
30.0	62.0	16.0	7206	11700	7500	222 g

Keramiklager / Solid Ceramic Bearings



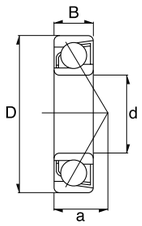


Dimension (mm)			Designation/Type	* Load Rating		Weight (g) approx.
d	D	B		C, dyn. N	C, stat. N	
35.0	62.0	14.0	7007	9660	6960	173 g
35.0	72.0	17.0	7207	15420	10200	318 g
40.0	68.0	15.0	7008	10260	8040	215 g
40.0	80.0	18.0	7208	19500	13620	406 g
45.0	75.0	16.0	7009	12720	10140	271 g
45.0	85.0	19.0	7209	20340	14940	467 g
50.0	80.0	16.0	7010	14040	11400	288 g
50.0	90.0	20.0	7210	21420	16020	521 g

Dimension (mm)			Designation/Type	* Load Rating			Weight (g) approx.
d	D	B		S	C	ds	
12.0	40.0	27.4	UC201	11.5	14	M5x0.75	4 g
15.0	40.0	27.4	UC202	11.5	14	M5x0.75	4 g
17.0	40.0	27.4	UC203	11.5	14	M5x0.75	4 g
20.0	47.0	31	UC204	12.7	17	M5x0.75	5 g
25.0	52.0	34.1	UC205	14.3	17	M5x0.75	5 g
30.0	62.0	38.1	UC206	15.9	19	M5x0.75	5 g
35.0	72.0	42.9	UC207	17.5	20	M8x1.00	7 g

Hybridkugellager / Hybid Bearings

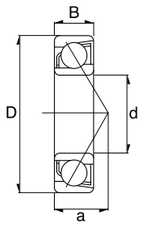




Dimension (mm)			Designation/Type	* Load Rating		Weight (g) approx.
d	D	B		C, dyn. N	C, stat. N	
3.0	7.0	2.0	HYB 683	187	67	1 g
3.0	8.0	3.0	HYB 693	335	108	1 g
4.0	8.0	2.0	HYB MR 84	237	85	1 g
4.0	9.0	2.5	HYB 684	385	136	2 g
4.0	10.0	3.0	HYB MR 104	427	163	2 g
4.0	11.0	4.0	HYB 694	574	210	2 g
5.0	8.0	2.0	HYB MR 85	131	54	1 g
5.0	10.0	3.0	HYB MR 105	259	101	2 g
5.0	11.0	3.0	HYB 685	430	169	2 g
5.0	11.0	4.0	HYB MR 115	430	169	1 g
5.0	13.0	4.0	HYB 695	646	259	3 g
6.0	10.0	2.5	HYB MR 106	298	131	1 g
6.0	12.0	3.0	HYB MR 126	430	177	2 g
6.0	13.0	3.5	HYB 686	649	265	3 g
6.0	15.0	5.0	HYB 696	804	314	4 g
7.0	14.0	3.5	HYB 687	704	308	4 g
7.0	17.0	5.0	HYB 697	963	431	6 g
8.0	12.0	2.5	HYB MR 128	326	164	1 g
8.0	14.0	3.5	HYB MR 148	490	232	3 g
8.0	16.0	4.0	HYB 688	751	355	4 g
8.0	19.0	6.0	HYB 698	1342	550	8 g
2.38	4.763	1.588	HYB R 133	86	32	1 g
3.175	6.35	2.38	HYB R 144	170	58	1 g
3.175	7.938	2.779	HYB R 2-5	335	108	1 g

Hybridkugellager / Hybid Bearings

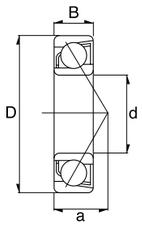




Dimension (mm)			Designation/Type	* Load Rating		Weight (g) approx.
d	D	B		C, dyn. N	C, stat. N	
3.175	9.525	3.967	HYB R 2	379	131	2 g
3.967	7.938	2.779	HYB R 155	215	90	1 g
4.763	9.525	3.175	HYB R 166	425	163	1 g
4.763	12.7	3.967	HYB R 3	781	293	3 g
6.35	9.525	3.175	HYB R 168	224	103	1 g
6.35	12.7	3.175	HYB R 188	649	265	3 g
6.35	15.875	4.978	HYB R 4	888	373	5 g
9.525	22.225	5.558	HYB R 6	1994	853	12 g
8.0	22.0	7.0	HYB 608	1976	827	14 g
9.0	24.0	7.0	HYB 609	2014	866	16 g
8.0	24.0	8.0	HYB 628	2000	854	18 g
9.0	26.0	8.0	HYB 629	2745	1190	22 g
8.0	16.0	5.0	HYB 688	751	355	4 g
9.0	17.0	5.0	HYB 689	796	401	5 g
8.0	19.0	6.0	HYB 698	1342	550	8 g
9.0	20.0	6.0	HYB 699	1480	649	8 g
10.0	26.0	8.0	HYB 6000	2730	1182	18 g
10.0	30.0	9.0	HYB 6200	3060	1434	32 g
10.0	35.0	11.0	HYB 6300	4860	2070	52 g
12.0	28.0	8.0	HYB 6001	3060	1422	22 g
12.0	32.0	10.0	HYB 6201	4080	1830	37 g
12.0	37.0	12.0	HYB 6301	5820	2520	60 g
15.0	32.0	9.0	HYB 6002	3360	1698	31 g

Hybridkugellager / Hybid Bearings

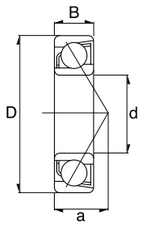




Dimension (mm)			Designation/Type	* Load Rating		Weight (g) approx.
d	D	B		C, dyn. N	C, stat. N	
15.0	35.0	11.0	HYB 6202	4590	2250	45 g
15.0	42.0	13.0	HYB 6302	6840	3270	83 g
17.0	35.0	10.0	HYB 6003	3600	1950	41 g
17.0	40.0	12.0	HYB 6203	5730	2880	67 g
17.0	47.0	14.0	HYB 6303	8160	3990	113 g
17.0	62.0	17.0	HYB 6403	13740	6480	270 g
20.0	42.0	12.0	HYB 6004	5640	3000	68 g
20.0	47.0	14.0	HYB 6204	7680	3960	107 g
20.0	52.0	15.0	HYB 6304	9540	4740	145 g
20.0	72.0	19.0	HYB 6404	18420	9000	400 g
25.0	47.0	12.0	HYB 6005	6060	3510	79 g
25.0	52.0	15.0	HYB 6205	840	4710	129 g
25.0	62.0	17.0	HYB 6305	12360	6720	235 g
25.0	80.0	21.0	HYB 6405	21000	11460	530 g
30.0	55.0	13.0	HYB 6006	7920	4980	116 g
30.0	62.0	16.0	HYB 6206	11700	6780	199 g
30.0	72.0	19.0	HYB 6306	16020	9000	345 g
30.0	90.0	23.0	HYB 6406	26100	14280	740 g
35.0	62.0	14.0	HYB 6007	9600	6180	151 g
35.0	72.0	17.0	HYB 6207	15420	9180	284 g
35.0	80.0	21.0	HYB 6307	20100	11520	464 g
35.0	100.0	25.0	HYB 6407	33120	18900	950 g
40.0	68.0	15.0	HYB 6008	10080	6900	190 g
40.0	80.0	18.0	HYB 6208	17460	10740	366 g

Hybridkugellager / Hybid Bearings

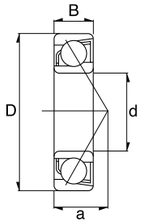




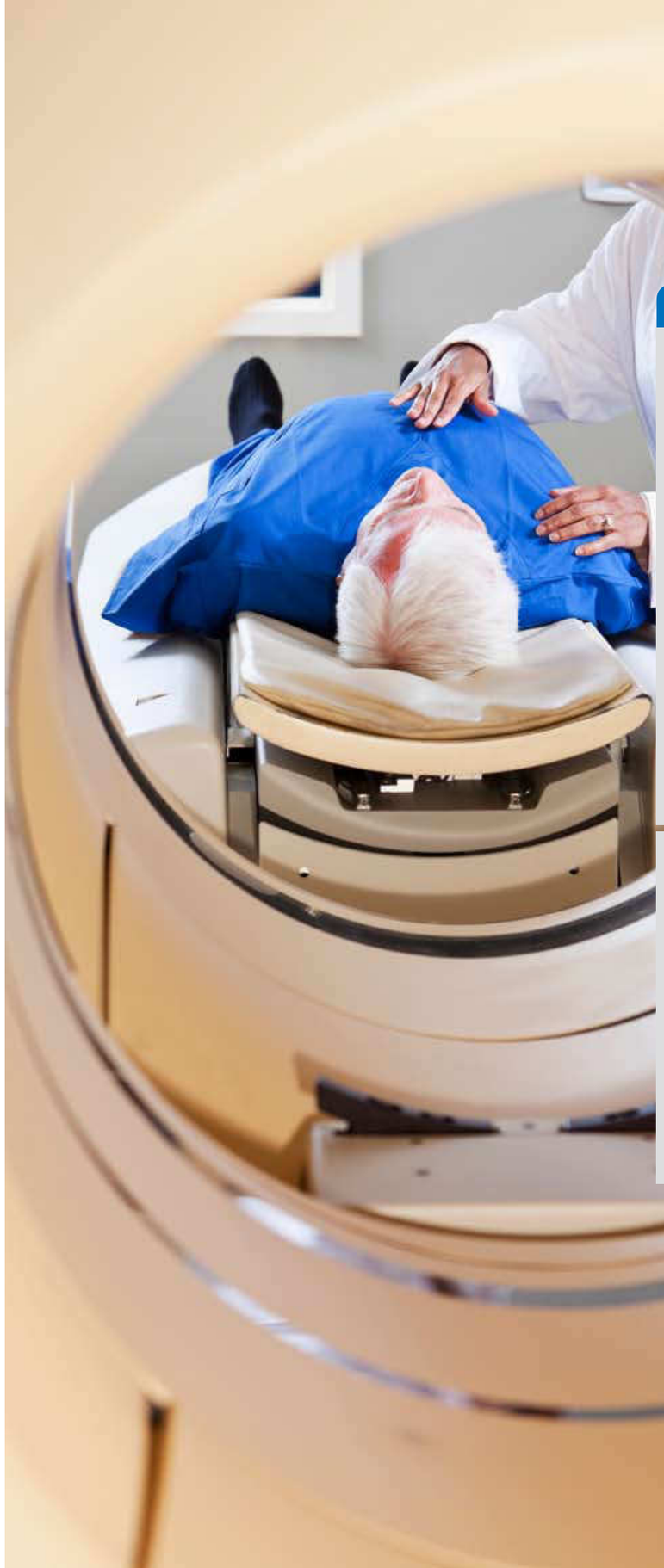
Dimension (mm)			Designation/Type	* Load Rating		Weight (g) approx.
d	D	B		C, dyn. N	C, stat. N	
40.0	90.0	23.0	HYB 6308	24300	14400	636 g
40.0	110.0	27.0	HYB 6408	37800	21600	1250 g
10.0	19.0	5.0	HYB 6800	1030	504	5.5 g
10.0	22.0	6.0	HYB 6900	1617	764	10 g
12.0	21.0	5.0	HYB 6801	1149	625	6.3 g
12.0	24.0	6.0	HYB 6901	1732	880	11 g
15.0	24.0	5.0	HYB 6802	1244	752	7.4 g
15.0	28.0	7.0	HYB 6902	2593	1355	16 g
17.0	26.0	5.0	HYB 6803	1340	874	8.2 g
17.0	30.0	7.0	HYB 6903	2753	1539	18 g
20.0	32.0	7.0	HYB 6804	2409	1477	18 g
20.0	37.0	9.0	HYB 6904	3829	2209	38 g
25.0	37.0	7.0	HYB 6805	2582	1759	22 g
25.0	42.0	9.0	HYB 6905	4201	2724	45 g
30.0	42.0	7.0	HYB 6806	2723	2041	27 g
30.0	47.0	9.0	HYB 6906	4345	3002	51 g
35.0	47.0	7.0	HYB 6807	2837	2293	30 g
35.0	55.0	10.0	HYB 6907	6540	4691	80 g
40.0	52.0	7.0	HYB 6808	2954	2507	34 g
10.0	26.0	8.0	HYB 7000	2268	1290	18 g
10.0	30.0	9.0	HYB 7200	3120	1530	30 g
12.0	28.0	8.0	HYB 7001	2448	1452	20 g
12.0	32.0	10.0	HYB 7201	3390	1890	35 g

Hybridkugellager / Hybid Bearings





Dimension (mm)			Designation/Type	* Load Rating		Weight (g) approx.
d	D	B		C, dyn. N	C, stat. N	
15.0	32.0	9.0	HYB 7002	2880	1770	28 g
15.0	35.0	11.0	HYB 7202	4980	2580	43 g
17.0	35.0	10.0	HYB 7003	3048	1932	36 g
17.0	40.0	12.0	HYB 7203	5028	3228	62 g
20.0	42.0	12.0	HYB 7004	6300	3612	67 g
20.0	47.0	14.0	HYB 7204	8760	4920	100 g
25.0	47.0	12.0	HYB 7005	5832	3750	89 g
25.0	52.0	15.0	HYB 7205	8400	5232	146 g
30.0	55.0	13.0	HYB 7006	7500	5172	130 g
30.0	62.0	16.0	HYB 7206	11700	7500	222 g
35.0	62.0	14.0	HYB 7007	9660	6960	173 g
35.0	72.0	17.0	HYB 7207	15420	10200	318 g
40.0	68.0	15.0	HYB 7008	10260	8040	215 g
40.0	80.0	18.0	HYB 7208	19500	13620	406 g
45.0	75.0	16.0	HYB 7009	12720	10140	271 g
45.0	85.0	19.0	HYB 7209	20340	14940	467 g
50.0	80.0	16.0	HYB 7010	14040	11400	288 g
50.0	90.0	20.0	HYB 7210	21420	16020	521 g



Produktfocus / Product focus



Rostfreie Lager der Serie 60,62 und 63
Stainless Steel Popular Metric

- ✓ Marine
  Marine
- ✓ Nahrungsmittelindustrie
  Food industry
- ✓ Medizintechnik
  Medical equipment
- ✓ Luftfahrt
  Aerospace

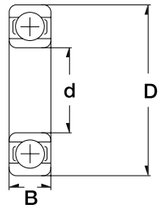
Rostfreie ZEN-Rillenkugellager der Baureihen 60, 62 und 63 sind erhältlich in offen, mit Metalldeckscheiben, mit Gummidichtscheiben oder mit PTFE-Abdichtungen. Durch den wirksamen Korrosionsschutz des rostfreien Stahls sind auch Anwendungen in aggressiven oder wässrigen Medien möglich.

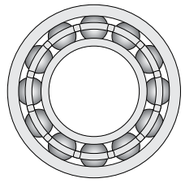
ZEN Stainless steel popular metric bearings are versatile, self-retaining bearings available in open, shielded, rubber sealed or PTFE sealed. These bearings are suitable for a wide variety of applications, durable in operation and easy to maintain.

SIEHE SEITE 66 / SEE PAGE 66

Zöllige Rillenkugellager / Inch Series







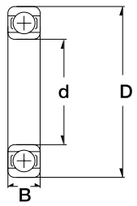


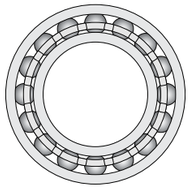
standard or flanged	Dimension (mm) d	D	B	Dimension (inch) d	D	B	Dimension (inch) d	D	B
standard	12.700	19.050	3.967	0.5000	0.7500	0.1562	1/2	3/4	5/32
standard	12.700	28.575	6.350	0.5000	1.1250	0.2500	1/2	1 1/8	1/4
standard	12.700	28.575	7.938	0.5000	1.1250	0.3125	1/2	1 1/8	5/16
flanged	12.700	28.575	7.938	0.5000	1.1250	0.3125	1/2	1 1/8	5/16
standard	12.700	33.338	9.525	0.5000	1.3125	0.3750	1/2	1 5/16	3/8
standard	15.875	22.225	3.967	0.6250	0.8750	0.1562	5/8	7/8	5/32
standard	15.875	34.925	7.142	0.6250	1.3750	0.2812	5/8	1 3/8	9/32
standard	15.875	34.925	8.733	0.6250	1.3750	0.3438	5/8	1 3/8	11/32
standard	15.875	39.688	11.113	0.6250	1.5625	0.4375	5/8	1 9/16	7/16
standard	19.050	25.400	3.967	0.7500	1.0000	0.1562	3/4	1	5/32
standard	19.050	41.275	7.938	0.7500	1.6250	0.3125	3/4	1 5/8	5/16
standard	19.050	41.275	11.113	0.7500	1.6250	0.4375	3/4	1 5/8	7/16
standard	19.050	47.625	14.288	0.7500	1.8750	0.5625	3/4	1 7/8	9/16
standard	22.225	47.625	9.525	0.8750	1.8750	0.3750	7/8	1 7/8	3/8
standard	22.225	47.625	12.700	0.8750	1.8750	0.5000	7/8	1 7/8	1/2
standard	22.225	50.800	14.288	0.8750	2.0000	0.5625	7/8	2	9/16
standard	25.400	50.800	9.525	1.0000	2.0000	0.3750	1	2	3/8
standard	25.400	50.800	12.700	1.0000	2.0000	0.5000	1	2	1/2
standard	25.400	57.150	15.875	1.0000	2.2500	0.6250	1	2 1/4	5/8
standard	28.575	53.975	9.500	1.1250	2.1250	0.3740	1 1/8	2 1/8	3/8
standard	28.575	53.975	12.700	1.1250	2.1250	0.5000	1 1/8	2 1/8	1/2
standard	28.575	63.500	15.875	1.1250	2.5000	0.6250	1 1/8	2 1/5	5/8
standard	31.750	57.150	9.525	1.2500	2.2500	0.3750	1 1/4	2 1/4	3/8
standard	31.750	57.150	12.700	1.2500	2.2500	0.5000	1 1/4	2 1/4	1/2
standard	31.750	69.850	17.463	1.2500	2.7500	0.6875	1 1/4	2 3/4	11/16
standard	34.925	63.500	11.113	1.3750	2.5000	0.4375	1 3/8	2 1/2	7/16
standard	34.925	63.500	14.288	1.3750	2.5000	0.5625	1 3/8	2 1/2	9/16
standard	38.100	82.550	19.050	1.5000	3.2500	0.7500	1 1/2	3 1/4	3/4

Designation/Type open Chrome Steel	open Stainless	2Z Chrome Steel	2Z Stainless	2RS/2TS Chrome Steel	2RS/2TS Stainless	* Load Rating (only 100 Cr6) C, dyn. N	C, stat. N	* Limiting Speed x1000rpm (open & 2Z) Grease	Oil	Weight (g) approx.
-	-	R 1212-2Z	SR 1212-2Z	-	-	9400	5500	24.0	-	5 g
R 8	SR 8	-	-	-	-	5108	2413	27.0	32.0	25 g
-	-	R 8-2Z	SR 8-2Z	R 8-2RS	SR 8-2RS	5108	2413	27.0	32.0	25 g
-	-	FR 8-2Z	SFR 8-2Z	-	-	5108	2413	27.0	32.0	25 g
RLS 4	SRLS 4	RLS 4-2Z	-	RLS 4-2RS	SRLS 4-2RS	6950	3220	21.0	28.5	37 g
-	-	RI 1458-2Z	SRI 1458-2Z	-	-	9900	6300	20.0	-	7 g
R 10	-	-	-	-	-	5988	3287	21.0	25.0	38 g
-	-	R 10-2Z	SR 10-2Z	R 10-2RS	SR 10-2RS	5988	3287	21.0	25.0	40 g
RLS 5	SRLS 5	RLS 5-2Z	-	RLS 5-2RS	SRLS 5-2RS	10900	5250	18.0	-	67 g
-	-	R 1634-2Z	SR 1634-2Z	-	-	10300	7000	17.0	21.0	9 g
R 12	-	-	-	-	-	9378	5057	17.0	21.0	65 g
-	-	R 12-2Z	SR 12-2Z	R 12-2RS	SR 12-2RS	9378	5057	17.0	21.0	70 g
RLS 6	SRLS 6	RLS 6-2Z	-	RLS 6-2RS	SRLS 6-2RS	14200	6700	15.5	-	109 g
R 14	-	-	-	-	-	12000	6400	15.0	-	78 g
-	-	R 14-2Z	SR 14-2Z	R 14-2RS	SR 14-2RS	12000	6400	15.0	-	102 g
RLS 7	-	RLS 7-2Z	-	RLS 7-2RS	-	14400	7000	14.3	-	116 g
R 16	-	-	-	-	-	11800	7200	13.6	-	85 g
-	-	R 16-2Z	SR 16-2Z	R 16-2RS	SR 16-2RS	11800	7200	13.6	-	112 g
RLS 8	SRLS 8	RLS 8-2Z	-	RLS 8-2RS	SRLS 8-2RS	-	-	-	-	174 g
R 18	-	-	-	-	-	11700	7300	13.0	-	88 g
-	-	R 18-2Z	-	R 18-2RS	-	11700	7300	13.0	-	118 g
RLS 9	-	RLS 9-2Z	-	RLS 9-2RS	-	22000	11300	11.7	-	219 g
R 20	-	-	-	-	-	12800	8700	12.0	-	96 g
-	-	R 20-2Z	-	R 20-2RS	-	12800	8700	12.0	-	128 g
RLS 10	SRLS 10	RLS 10-2Z	-	RLS 10-2RS	SRLS 10-2RS	27700	15000	10.6	-	310 g
R 22	-	-	-	-	-	14400	9360	11.1	-	134 g
-	-	R 22-2Z	-	R 22-2RS	-	14400	9360	11.1	-	162 g
RLS 12	SRLS 12	-	-	RLS 12-2RS	SRLS 12-2RS	30200	17500	9.8	-	512 g

Dünnringlager / Thin Section Series







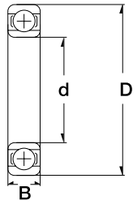
standard or flanged	Dimension (mm)			Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Standard cage type Others on request	Weight (g) approx.
				open		2Z		2RS/2TS							
	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil		
standard	10.0	15.0	3.0	61700	S61700	-	-	-	-	855	435	15.0	17.0	W	< 2 g
flanged	10.0	15.0	3.0	F 61700	SF 61700	-	-	-	-	855	435	15.0	17.0	W	< 2 g
standard	10.0	15.0	4.0	-	-	61700-2Z	S61700-2Z	61700-2RS	S61700-2RS	855	435	15.0	17.0	W	< 2 g
flanged	10.0	15.0	4.0	-	-	F 61700-2Z	SF 61700-2Z	F 61700-2RS	SF 61700-2RS	855	435	15.0	17.0	W	< 2 g
standard	10.0	19.0	5.0	61800	S61800	61800-2Z	S61800-2Z	61800-2RS	S61800-2RS	1716	840	37.0	43.0	J	< 6 g
flanged	10.0	19.0	5.0	F 61800	SF 61800	F 61800-2Z	SF 61800-2Z	F 61800-2RS	SF 61800-2RS	1716	840	37.0	43.0	J	< 6 g
standard	10.0	19.0	6.0	62800	-	62800-2Z	-	62800-2RS	-	-	-	-	-	J	< 7 g
standard	10.0	19.0	7.0	63800	S63800	63800-2Z	S63800-2Z	63800-2RS	-	1716	840	37.0	43.0	J	< 8 g
flanged	10.0	19.0	7.0	F 63800	SF 63800	F 63800-2Z	SF 63800-2Z	-	-	1716	840	37.0	43.0	J	< 8 g
standard	10.0	22.0	6.0	61900	S61900	61900-2Z	S61900-2Z	61900-2RS	S61900-2RS	2695	1273	34.0	41.0	J	10 g
flanged	10.0	22.0	6.0	F 61900	SF 61900	F 61900-2Z	SF 61900-2Z	F 61900-2RS	SF 61900-2RS	2695	1273	34.0	41.0	J	11 g
standard	11.0	22.0	6.0	-	-	619/11-2Z	-	-	-	-	-	-	-	J	14 g
standard	12.0	18.0	4.0	61701	S61701	61701-2Z	S61701-2Z	61701-2RS	S61701-2RS	926	530	13.0	15.0	W	< 4 g
flanged	12.0	18.0	4.0	F 61701	SF 61701	F 61701-2Z	SF 61701-2Z	F 61701-2RS	SF 61701-2RS	926	530	13.0	15.0	W	< 4 g
standard	12.0	21.0	5.0	61801	S61801	61801-2Z	S61801-2Z	61801-2RS	S61801-2RS	1915	1041	33.0	39.0	J	< 7 g
flanged	12.0	21.0	5.0	F 61801	SF 61801	F 61801-2Z	SF 61801-2Z	F 61801-2RS	SF 61801-2RS	1915	1041	33.0	39.0	J	< 9 g
standard	12.0	21.0	6.0	62801	-	62801-2Z	-	62801-2RS	-	-	-	-	-	J	< 9 g
standard	12.0	21.0	7.0	63801	-	63801-2Z	-	63801-2RS	-	1915	1041	33.0	39.0	J	10 g
standard	12.0	24.0	6.0	61901	S61901	61901-2Z	S61901-2Z	61901-2RS	S61901-2RS	2886	1466	31.0	36.0	J	10 g
flanged	12.0	24.0	6.0	F 61901	SF 61901	F 61901-2Z	SF 61901-2Z	F 61901-2RS	SF 61901-2RS	2886	1466	31.0	36.0	J	12 g
standard	12.0	24.0	6.0	61901.T9H	-	-	-	-	-	2886	1466	31.0	36.0	J	10 g
standard	13.0	24.0	6.0	619/13	-	-	-	-	-	2886	1466	31.0	36.0	J	10 g
standard	13.0	24.0	6.0	619/13.TNH	-	-	-	-	-	2886	1466	31.0	36.0	J	10 g
standard	15.0	21.0	4.0	61702	S61702	61702-2Z	S61702-2Z	61702-2RS	S61702-2RS	937	582	11.0	13.0	W	< 4 g
flanged	15.0	21.0	4.0	F 61702	SF 61702	F 61702-2Z	SF 61702-2Z	F 61702-2RS	SF 61702-2RS	937	582	11.0	13.0	W	< 4 g
standard	15.0	24.0	5.0	61802	S61802	61802-2Z	S61802-2Z	61802-2RS	S61802-2RS	2073	1253	28.0	33.0	J	< 9 g
flanged	15.0	24.0	5.0	F61802	SF 61802	F 61802-2Z	SF 61802-2Z	F 61802-2RS	SF 61802-2RS	2073	1253	28.0	33.0	J	10 g
standard	15.0	24.0	7.0	63802	-	63802-2Z	-	63802-2RS	-	2073	1253	28.0	33.0	J	11 g
standard	15.0	28.0	7.0	61902	S61902	61902-2Z	S61902-2Z	61902-2RS	S61902-2RS	4321	2259	26.0	30.0	J	15 g
flanged	15.0	28.0	7.0	F 61902	SF 61902	F 61902-2Z	SF 61902-2Z	F 61902-2RS	SF 61902-2RS	4321	2259	26.0	30.0	J	18 g

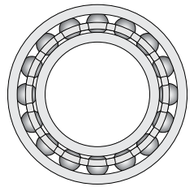
Auch erhältlich in C2, C0 und C3 / Also available in C2, C0 and C3

Weitere Abmessungen auf Anfrage / Non-standard sizes on request

Dünnringlager / Thin Section Series





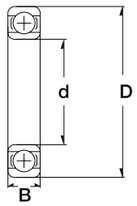


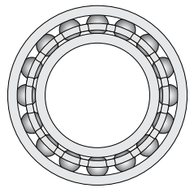
standard or flanged	Dimension (mm)			Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Standard cage type Others on request	Weight (g) approx.
				open		2Z		2RS/2TS							
	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil		
standard	17.0	23.0	4.0	61703	S61703	61703-2Z	S61703-2Z	61703-2RS	S61703-2RS	1000	658	9.5	11.0	W	< 5 g
flanged	17.0	23.0	4.0	F 61703	SF 61703	F 61703-2Z	SF 61703-2Z	F 61703-2RS	SF 61703-2RS	1000	658	9.5	11.0	W	< 5 g
standard	17.0	26.0	5.0	61803	S61803	61803-2Z	S61803-2Z	61803-2RS	S61803-2RS	2233	1456	26.0	30.0	J	< 9 g
flanged	17.0	26.0	5.0	F 61803	SF 61803	F 61803-2Z	SF 61803-2Z	F 61803-2RS	SF 61803-2RS	2233	1456	26.0	30.0	J	10 g
standard	17.0	26.0	7.0	-	-	63803-2Z	-	63803-2RS	-	2233	1456	26.0	30.0	J	11 g
standard	17.0	30.0	7.0	61903	S61903	61903-2Z	S61903-2Z	61903-2RS	S61903-2RS	4588	2565	23.0	38.0	J	10 g
flanged	17.0	30.0	7.0	F 61903	SF 61903	F 61903-2Z	SF 61903-2Z	F 61903-2RS	SF 61903-2RS	4588	2565	23.0	38.0	J	12 g
standard	17.0	32.0	8.0	-	-	Y 17-2Z	-	-	-	-	-	-	-	J	14 g
standard	17.0	32.0	8.0	Y 17.C3	-	-	-	-	-	-	-	-	-	J	14 g
standard	20.0	27.0	4.0	61704	S61704	61704-2Z	S61704-2RS	61704-2Z	S61704-2RS	1402	729	8.5	10.0	W	< 6 g
flanged	20.0	27.0	4.0	F 61704	SF 61704	F 61704-2Z	SF 61704-2RS	F 61704-2Z	SF 61704-2RS	1402	729	8.5	10.0	W	< 6 g
standard	20.0	32.0	7.0	61804	S61804	61804-2Z	S61804-2Z	61804-2RS	S61804-2RS	4015	2462	21.0	25.0	J	18 g
flanged	20.0	32.0	7.0	F 61804	SF 61804	F 61804-2Z	SF 61804-2Z	F 61804-2RS	SF 61804-2RS	4015	2462	21.0	25.0	J	20 g
standard	20.0	37.0	9.0	61904	S61904	61904-2Z	S61904-2Z	61904-2RS	S61904-2RS	6381	3682	19.0	23.0	J	40 g
flanged	20.0	37.0	9.0	F 61904	SF 61904	F 61904-2Z	SF 61904-2Z	F 61904-2RS	SF 61904-2RS	6381	3682	19.0	23.0	J	43 g
standard	25.0	32.0	4.0	61705	S61705	61705-2Z	S61705-2Z	61705-2RS	S61705-2RS	1091	838	7.0	8.0	W	< 8 g
flanged	25.0	32.0	4.0	F 61705	SF 61705	F 61705-2Z	SF 61705-2Z	F 61705-2RS	SF 61705-2RS	1091	838	7.0	8.0	W	< 8 g
standard	25.0	37.0	7.0	61805	S61805	61805-2Z	S61805-2Z	61805-2RS	S61805-2RS	4303	2932	18.0	21.0	J	24 g
flanged	25.0	37.0	7.0	F 61805	SF 61805	F 61805-2Z	SF 61805-2Z	F 61805-2RS	SF 61805-2RS	4303	2932	18.0	21.0	J	27 g
standard	25.0	42.0	9.0	61905	S61905	61905-2Z	S61905-2Z	61905-2RS	S61905-2RS	7001	4540	16.0	19.0	J	47 g
flanged	25.0	42.0	9.0	F 61905	SF 61905	F 61905-2Z	SF 61905-2Z	F 61905-2RS	SF 61905-2RS	7001	4540	16.0	19.0	J	47 g
standard	30.0	37.0	4.0	61706	S61706	61706-2Z	S61706-2Z	61706-2RS	S61706-2RS	1143	947	5.5	7.0	W	< 9 g
flanged	30.0	37.0	4.0	F 61706	SF 61706	F 61706-2Z	SF 61706-2Z	F 61706-2RS	SF 61706-2RS	1143	947	5.5	7.0	W	< 9 g
standard	30.0	42.0	7.0	61806	S61806	61806-2Z	S61806-2Z	61806-2RS	S61806-2RS	4538	3402	15.0	18.0	J	27 g
flanged	30.0	42.0	7.0	F 61806	SF 61806	F 61806-2Z	SF 61806-2Z	F 61806-2RS	SF 61806-2RS	4538	3402	15.0	18.0	J	29 g
standard	30.0	47.0	9.0	61906	S61906	61906-2Z	S61906-2Z	61906-2RS	S61906-2RS	7242	5003	14.0	17.0	J	53 g
flanged	30.0	47.0	9.0	F 61906	SF 61906	F 61906-2Z	SF 61906-2Z	F 61906-2RS	SF 61906-2RS	7242	5003	14.0	17.0	J	57 g
standard	35.0	44.0	5.0	61707	-	61707-2Z	-	61707-2RS	-	1866	1635	4.9	6.0	W	15 g
standard	35.0	47.0	7.0	61807	S61807	61807-2Z	-	61807-2RS	S61807-2RS	4729	3821	13.0	16.0	J	32 g
standard	35.0	55.0	10.0	61907	S61907	61907-2Z	-	61907-2RS	S61907-2RS	10900	7818	12.0	14.0	W	88 g

Auch erhältlich in C2, C0 und C3 / Also available in C2, C0 and C3

Dünnringlager / Thin Section Series





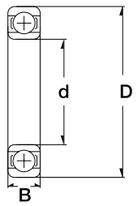


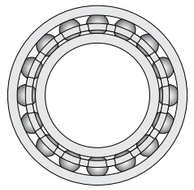
standard or flanged	Dimension (mm)			Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Standard cage type Others on request	Weight (g) approx.
				open		2Z		2RS/2TS							
	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil		
standard	40.0	50.0	6.0	61708	S61708	61708-2Z	-	61708-2RS	S61708-2RS	2516	2233	4.3	5.0	J	23 g
standard	40.0	52.0	7.0	61808	S61808	61808-2Z	-	61808-2RS	S61808-2RS	4923	4178	12.0	14.0	J	35 g
standard	40.0	62.0	12.0	61908	S61908	61908-2Z	-	61908-2RS	S61908-2RS	13678	9968	11.0	13.0	J	132 g
standard	45.0	55.0	6.0	61709	S61709	61709-2Z	-	61709-2RS	S61709-2RS	2580	2397	3.9	4.6	W	25 g
standard	45.0	58.0	7.0	61809	S61809	61809-2Z	-	61809-2RS	S61809-2RS	6187	5381	11.0	13.0	J	42 g
standard	45.0	68.0	12.0	61909	S61909	61909-2Z	-	61909-2RS	S61909-2RS	14100	10830	9.7	11.0	J	148 g
standard	50.0	65.0	7.0	61810	S61810	61810-2Z	-	61810-2RS	S61810-2RS	6610	6090	9.6	11.0	J	65 g
standard	50.0	72.0	12.0	61910	S61910	61910-2Z	-	61910-2RS	S61910-2RS	14540	11710	9.0	11.0	J	145 g
standard	55.0	72.0	9.0	61811	S61811	61811-2Z	-	61811-2RS	S61811-2RS	8800	8100	8.7	10.0	J	84 g
standard	55.0	80.0	13.0	61911	S61911	61911-2Z	-	61911-2RS	S61911-2RS	16600	14100	8.1	9.6	J	185 g
standard	60.0	78.0	10.0	61812	S61812	61812-2Z	-	61812-2RS	S61812-2RS	11500	10600	8.0	9.4	J	105 g
standard	60.0	85.0	13.0	61912	S61912	61912-2Z	-	61912-2RS	S61912-2RS	20200	17300	7.5	8.9	J	192 g
standard	65.0	85.0	10.0	61813	S61813	61813-2Z	-	61813-2RS	S61813-2RS	11900	11500	7.3	8.6	J	126 g
standard	65.0	90.0	13.0	61913	S61913	61913-2Z	-	61913-2RS	S61913-2RS	17400	16100	7.1	8.4	J	212 g
standard	70.0	90.0	10.0	61814	S61814	61814-2Z	-	61814-2RS	S61814-2RS	12100	11900	6.8	8.1	J	134 g
standard	70.0	100.0	16.0	61914	S61914	61914-2Z	-	61914-2RS	S61914-2RS	23700	21200	6.4	7.6	J	344 g
standard	75.0	95.0	10.0	61815	S61815	61815-2Z	-	61815-2RS	S61815-2RS	12500	12900	12.5	12.9	J	144 g
standard	75.0	105.0	16.0	61915	S61915	61915-2Z	-	61915-2RS	S61915-2RS	24400	22600	6.1	7.2	J	365 g
standard	80.0	100.0	10.0	61816	S61816	61816-2Z	-	61816-2RS	S61816-2RS	12700	13300	12.7	13.3	J	150 g
standard	80.0	110.0	16.0	61916	S61916	61916-2Z	-	61916-2RS	S61916-2RS	25000	24000	5.7	6.8	J	384 g
standard	85.0	110.0	13.0	61817	S61817	61817-2Z	-	61817-2RS	S61817-2RS	18700	19000	5.6	6.6	J	266 g
standard	85.0	120.0	18.0	61917	S61917	61917-2Z	-	61917-2RS	S61917-2RS	31900	29600	5.3	6.3	J	540 g
standard	90.0	115.0	13.0	61818	S61818	61818-2Z	-	61818-2RS	S61818-2RS	19000	19700	5.3	6.3	J	280 g
standard	90.0	125.0	18.0	61918	S61918	61918-2Z	-	61918-2RS	S61918-2RS	32800	31600	5.1	6.0	J	570 g

Auch erhältlich in C2, C0 und C3 / Also available in C2, C0 and C3

Dünnringlager / Thin Section Series





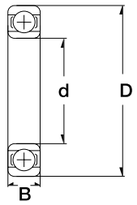


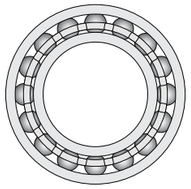
standard or flanged	Dimension (mm)			Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Standard cage type Others on request	Weight (g) approx.
				open		2Z		2RS/2TS							
	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil		
standard	100.0	125.0	13.0	61820	S61820	61820-2Z	-	61820-2RS	S61820-2RS	20100	22000	4.8	5.1	J	310 g
standard	100.0	140.0	20.0	61920	S61920	61920-2Z	-	61920-2RS	S61920-2RS	42300	41500	4.5	5.3	J	830 g
standard	105.0	130.0	13.0	61821	S61821	61821-2Z	-	61821-2RS	S61821-2RS	20800	23600	4.6	5.3	J	330 g
standard	105.0	145.0	20.0	61921	S61921	61921-2Z	-	61921-2RS	S61921-2RS	44200	44000	4.3	5.0	J	870 g
standard	110.0	140.0	16.0	61822	S61822	61822-2Z	-	61822-2RS	S61822-2RS	28000	30500	4.3	5.0	J	500 g
standard	110.0	150.0	20.0	61922	S61922	61922-2Z	-	61922-2RS	S61922-2RS	43600	45000	4.0	4.8	J	900 g
standard	120.0	150.0	16.0	61824	S61824	61824-2Z	-	61824-2RS	S61824-2RS	29000	33000	4.0	4.6	J	550 g
standard	120.0	165.0	22.0	61924	S61924	61924-2Z	-	61924-2RS	S61924-2RS	55300	57000	3.6	4.3	J	1200 g
standard	130.0	165.0	18.0	61826	S61826	61826-2Z	-	61826-2RS	S61826-2RS	38000	43000	3.6	4.4	J	780 g
standard	130.0	180.0	24.0	61926	S61926	61926-2Z	-	61926-2RS	S61926-2RS	65000	67000	3.4	4.0	J	1600 g
standard	140.0	175.0	18.0	61828	S61828	61828-2Z	-	61828-2RS	S61828-2RS	39000	46000	3.4	4.1	J	860 g
standard	140.0	190.0	24.0	61928	S61928	61928-2Z	-	61928-2RS	S61928-2RS	66300	72000	3.2	3.8	J	1700 g
standard	150.0	190.0	20.0	61830	-	-	-	on request		49000	57000	3.0	4.6	J	1200 g
standard	150.0	210.0	28.0	61930	-	-	-	auf Anfrage	-	66500	75000	2.8	3.2	J	3000 g
standard	160.0	200.0	20.0	61832	-	-	-	on request	-	49500	59000	2.8	3.4	J, M, MA, MB	1250 g
standard	160.0	220.0	25.0	61932	-	-	-	auf Anfrage	-	65500	75500	2.6	3.0	J, M, MA, MB	3200 g
standard	170.0	215.0	22.0	61834	-	-	-	on request	-	61000	73000	2.6	3.2	J, M, MA, MB	1630 g
standard	170.0	230.0	28.0	61934	-	-	-	auf Anfrage	-	67500	80000	2.4	2.9	J, M, MA, MB	3400 g
standard	180.0	225.0	22.0	61836	-	-	-	on request	-	62000	76000	2.4	3.0	J, M, MA, MB	1720 g
standard	180.0	250.0	33.0	61936	-	-	-	auf Anfrage	-	86000	99500	2.2	2.6	J, M, MA, MB	4500 g
standard	190.0	240.0	24.0	61838	-	-	-	on request	-	75000	92000	2.2	2.8	J, M, MA, MB	2200 g
standard	190.0	260.0	33.0	61938	-	-	-	auf Anfrage	-	88500	105000	2.0	2.6	J, M, MA, MB	4800 g
standard	200.0	250.0	24.0	61840	-	-	-	on request	-	76000	95000	2.1	2.6	J, M, MA, MB	2300 g
standard	200.0	280.0	38.0	61940	-	-	-	auf Anfrage	-	112000	132000	2.0	2.4	J, M, MA, MB	6600 g

Auch erhältlich in C2, C0 und C3 / Also available in C2, C0 and C3

Dünnringlager / Thin Section Series





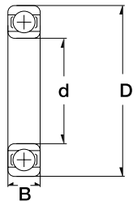


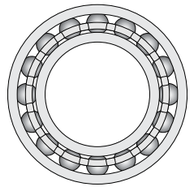
standard or flanged	Dimension (mm)			Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Standard cage type Others on request	Weight (g) approx.
				open		2Z		2RS/2TS							
	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil		
standard	220.0	270.0	24.0	61844	-	-	-	on request	-	78000	102000	1.9	2.4	M, MA, MB	2530 g
standard	220.0	300.0	38.0	61944	-	-	-	auf Anfrage	-	118000	132000	1.9	2.4	M, MA, MB	7800 g
standard	240.0	300.0	28.0	61848	-	-	-	on request	-	108000	139000	1.8	2.1	M, MA, MB	3840 g
standard	240.0	320.0	38.0	61948	-	-	-	auf Anfrage	-	122000	146000	1.8	2.2	M, MA, MB	8450 g
standard	260.0	320.0	28.0	61852	-	-	-	61852-2RS	-	79500	119000	1.6	2.0	M, MA, MB	4900 g
standard	260.0	360.0	46.0	61952	-	-	-	-	-	163000	200000	1.6	1.9	M, MA, MB	14500 g
standard	280.0	350.0	33.0	61856	-	-	-	-	-	102000	149000	1.5	1.8	M, MA, MB	7300 g
standard	280.0	380.0	46.0	61956	-	-	-	-	-	166000	212000	1.5	1.8	M, MA, MB	15000 g
standard	300.0	380.0	38.0	61860	-	-	-	-	-	144000	189000	1.4	1.6	M, MA, MB	10400 g
standard	300.0	420.0	56.0	61960	-	-	-	-	-	208000	280000	1.3	1.6	M, MA, MB	24000 g
standard	320.0	400.0	38.0	61864	-	-	-	-	-	134000	180000	1.3	1.6	M, MA, MB	11000 g
standard	320.0	440.0	56.0	61964	-	-	-	-	-	212000	290000	1.2	1.5	M, MA, MB	25500 g
standard	340.0	420.0	38.0	61868	-	-	-	-	-	137000	196000	1.2	1.5	M, MA, MB	11500 g
standard	340.0	460.0	56.0	61968	-	-	-	-	-	220000	310000	1.1	1.4	M, MA, MB	26500 g
standard	360.0	440.0	38.0	61872	-	-	-	-	-	140000	200000	1.4	-	M, MA, MB	12000 g
standard	380.0	480.0	46.0	61876	-	-	-	-	-	190000	280000	1.3	-	M, MA, MB	20000 g
standard	360.0	480.0	56.0	61972	-	-	-	-	-	224000	325000	1.4	-	M, MA, MB	28000 g
standard	400.0	500.0	46.0	61880	-	-	-	-	-	190000	290000	1.3	-	M, MA, MB	20500 g
standard	420.0	520.0	46.0	61884	-	-	-	-	-	193000	300000	1.2	-	M, MA, MB	21500 g
standard	440.0	540.0	46.0	61888	-	-	-	-	-	228000	355000	2.6	-	M, MA, MB	23800 g
standard	460.0	580.0	56.0	61892	-	-	-	-	-	290000	480000	2.4	-	M, MA, MB	35800 g
standard	480.0	600.0	56.0	61896	-	-	-	-	-	290000	500000	2.2	-	M, MA, MB	37300 g
standard	500.0	620.0	56.0	618/500	-	-	-	-	-	300000	510000	2	-	M, MA, MB	38700 g
standard	530.0	650.0	56.0	618/530	-	-	-	-	-	305000	550000	2	-	M, MA, MB	41300 g

Auch erhältlich in C2, C0 und C3 / Also available in C2, C0 and C3

Dünnringlager / Thin Section Series





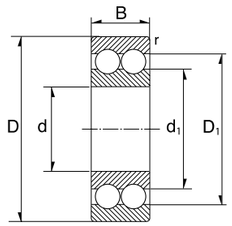


standard or flanged	Dimension (mm)			Designation/Type						* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open & 2Z)		Standard cage type Others on request	Weight (g) approx.
				open		2Z		2RS/2TS							
	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil		
standard	560.0	680.0	56.0	618/560	-	-	-	-	-	310000	560000	1.9	-	M, MA, MB	35100 g
standard	600.0	730.0	60.0	618/600	-	-	-	-	-	355000	670000	1.8	-	M, MA, MB	54200 g
standard	630.0	780.0	69.0	618/630	-	-	-	-	-	400000	780000	1.6	-	M, MA, MB	75900 g
standard	670.0	820.0	69.0	618/670	-	-	-	-	-	405000	815000	1.5	-	M, MA, MB	80400 g
standard	710.0	870.0	74.0	618/710	-	-	-	-	-	465000	980000	1.4	-	M, MA, MB	96000 g
standard	750.0	920.0	78.0	618/750	-	-	-	-	-	510000	1120000	1.3	-	M, MA, MB	114000 g
standard	800.0	980.0	82.0	618/800	-	-	-	-	-	550000	1270000	1.3	-	M, MA, MB	136000 g
standard	850.0	1030.0	82.0	618/850	-	-	-	-	-	560000	1290000	1.2	-	M, MA, MB	144000 g
standard	900.0	1090.0	85.0	618/900	-	-	-	-	-	558000	1460000	3.7	4.3	M, MA, MB	206000 g
standard	1000.0	1220.0	100.0	618/1000	-	-	-	-	-	589000	1650000	3.1	3.8	M, MA, MB	230000 g

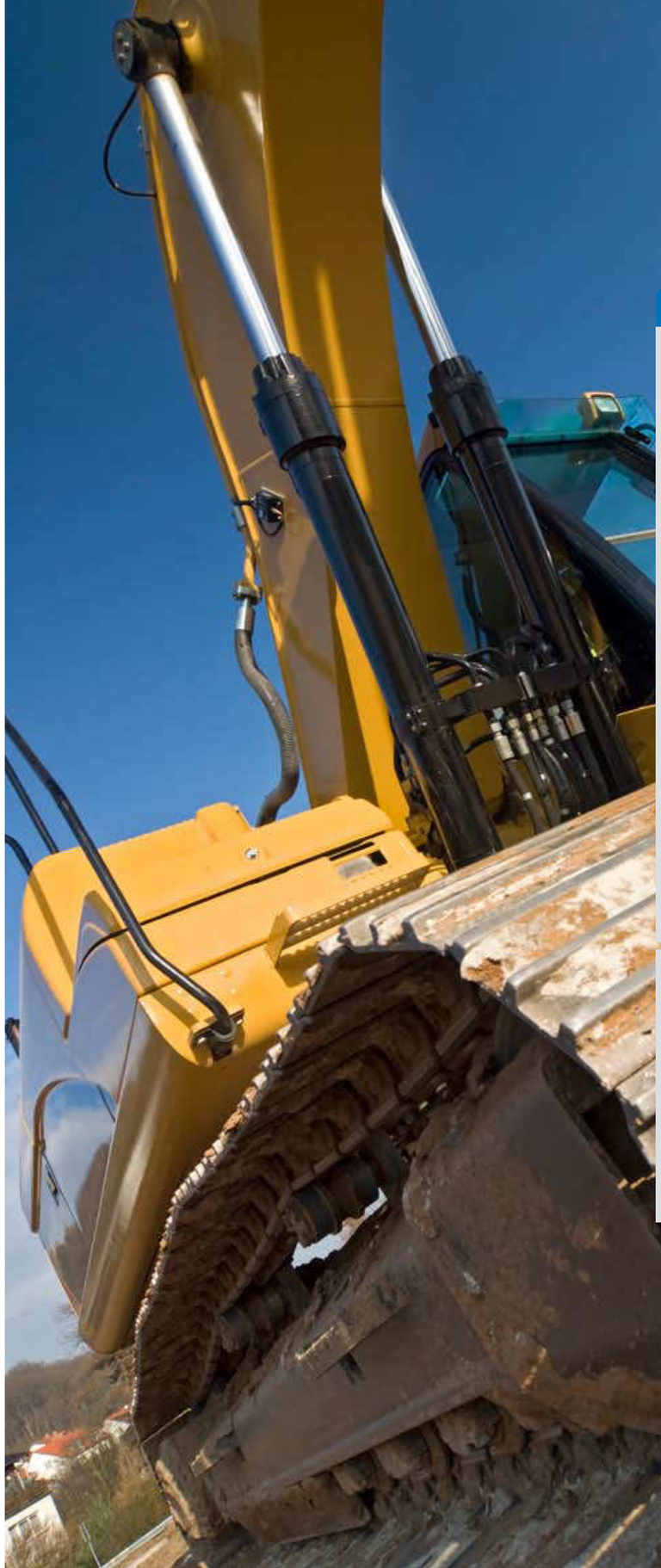
Auch erhältlich in C2, C0 und C3 / Also available in C2, C0 and C3

Zweireihiges Dünnringlager / Double Row Thin Section





Dimension (mm)			Designation/Type			* Load Rating		* Limiting Speed x1000rpm	Weight (g) approx.
d	D	B	Open	2Z	2RS	C, dyn. N	C, stat. N		
10.000	19.000	7.000	3800	3800-2Z	3800-2RS	2120	1400	18.0	8 g
12.000	21.000	7.000	3801	3801-2Z	3801-2RS	2190	1550	16.0	8 g
15.000	24.000	7.000	3802	3802-2Z	3802-2RS	2430	1960	16.0	9 g
17.000	26.000	7.000	3803	3803-2Z	3803-2RS	2480	2080	14.0	15 g
20.000	32.000	10.000	3804	3804-2Z	3804-2RS	5800	4850	10.0	20 g
25.000	37.000	10.000	3805	3805-2Z	3805-2RS	6000	5600	8.5	25 g
30.000	42.000	10.000	3806	3806-2Z	3806-2RS	6300	6100	7.0	30 g
35.000	47.000	10.000	3807	3807-2Z	3807-2RS	6700	7000	6.0	37 g
40.000	52.000	10.000	3808	3808-2Z	3808-2RS	7000	7800	5.3	40 g



Produktfocus / Product focus

ZEN™



Gelenklager

Spherical Plain Bearing Series
(GE-ES & GE-ES-2RS)

- ✓ Für hohe radiale und axiale Belastungen
  High capacity of radial and axial loads
- ✓ Ideal für Anwendungen mit Einbauversatz
  Ideal for applications where misalignment may be common
- ✓ Verschleissbeständig
  High wear resistance
- ✓ Selbstausrichtend
  Self aligning
- ✓ Ideal für die Aufnahme schwerer, alternierender Lasten
  Designed to accommodate heavy loads of alternating direction

ZEN-Pendelrollenlager sind ideal für die Aufnahme schwerer, alternierender Lasten.

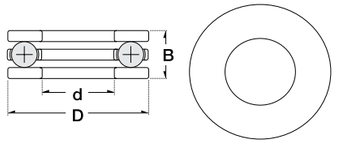
ZEN Spherical bearings are designed to accommodate heavy loads of alternating direction. They are commonly used in hydraulic cylinder rod ends, vehicle steering linkage suspensions and heavy equipment articulated joints.

SIEHE SEITE 112 / SEE PAGE 112

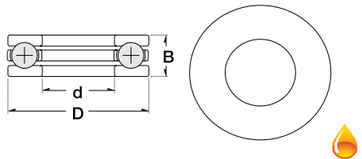
Axialrillenkugellager / Three Part Thrust Series



Type F ohne Laufnute / without groove



Type B mit Laufnute / with groove

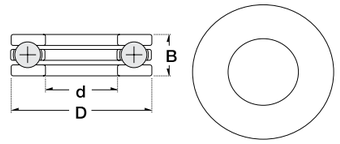


Dimension (mm)			Designation/Type		* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm		Weight (g) approx.
d	D	B	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil	
2.0	6.0	3.0	F 2-6	-	123	82	-	7.5	< 1 g
4.0	9.0	4.0	F 4-9	-	167	157	-	6.5	< 1 g
4.0	10.0	4.5	F 4-10	-	274	245	-	6.0	< 2 g
5.0	11.0	4.5	F 5-11	-	284	284	-	5.0	< 3 g
6.0	12.0	4.5	F 6-12	-	274	284	-	4.0	< 3 g
7.0	15.0	5.0	F 7-15	-	559	549	-	3.8	< 5 g
8.0	16.0	5.0	F 8-16	-	598	627	-	3.5	< 5 g
9.0	17.0	5.0	F 9-17	-	578	627	-	3.5	< 6 g
10.0	18.0	5.5	F10-18	-	617	706	-	3.0	< 6 g
3.0	8.0	3.5	B 3	SB 3	602	611	-	15.0	< 2 g
4.0	10.0	4.0	B 4	SB 4	602	611	-	15.0	< 2 g
5.0	12.0	4.0	B 5	SB 5	640	810	-	13.0	< 2 g
6.0	14.0	5.0	B 6	SB 6	1275	1560	-	10.0	< 2 g
7.0	17.0	6.0	B 7	SB 7	1830	2450	-	10.0	< 2 g
8.0	19.0	7.0	B 8	SB 8	2340	3190	-	8.0	< 2 g
9.0	20.0	7.0	B 9	SB 9	2400	3190	-	8.0	< 2 g
10.0	24.0	9.0	51100	S51100	8710	8800	7.5	9.5	20 g
10.0	26.0	11.0	51200	S51200	12700	17000	6.0	8.0	29 g
12.0	26.0	9.0	51101	S51101	9035	10000	7.0	9.5	22 g
12.0	28.0	11.0	51201	S51201	13200	19000	6.0	8.0	32 g
15.0	28.0	9.0	51102	S51102	9360	11200	6.3	8.5	24 g
15.0	32.0	12.0	51202	S51202	16600	25000	5.0	6.7	43 g
17.0	30.0	9.0	51103	S51103	9750	12200	6.3	8.5	28 g
17.0	35.0	12.0	51203	S51203	17300	27500	5.0	6.7	50 g
20.0	35.0	10.0	51104	S51104	12740	16600	5.6	7.5	40 g

Axialrillenkugellager / Three Part Thrust Series



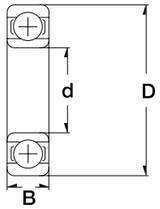
Type 51... mit Laufnute / with groove

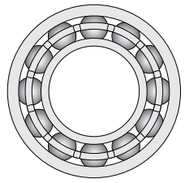


Dimension (mm)			Designation/Type		* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm		Weight (g) approx.
d	D	B	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil	
20.0	40.0	14.0	51204	S51204	19890	25000	4.3	5.6	82 g
25.0	42.0	11.0	51105	S51105	15860	22800	4.8	6.3	59 g
25.0	47.0	15.0	51205	S51205	25090	34000	3.8	5.0	120 g
25.0	52.0	18.0	51305	-	34500	55000	3.2	4.3	154 g
30.0	47.0	11.0	51106	S51106	16770	26500	4.5	6.0	68 g
30.0	52.0	16.0	51206	S51206	25480	37500	3.6	4.5	150 g
30.0	60.0	21.0	51306	-	38000	65500	3.0	4.0	244 g
35.0	52.0	12.0	51107	S51107	17420	30000	4.3	5.6	90 g
35.0	62.0	18.0	51207	S51207	39000	78000	3.0	4.0	220 g
35.0	68.0	24.0	51307	-	50000	88000	2.7	3.6	351 g
40.0	60.0	13.0	51108	S51108	23400	40000	3.8	5.0	120 g
40.0	68.0	19.0	51208	S51208	46500	98000	2.9	3.8	270 g
40.0	78.0	26.0	51308	-	61000	112000	2.4	3.2	536 g
45.0	65.0	14.0	51109	S51109	24180	45000	3.4	4.5	150 g
45.0	73.0	20.0	51209	S51209	47500	105000	2.5	3.5	320 g
45.0	85.0	28.0	51309	-	75000	14000	2.1	3.0	612 g
50.0	70.0	14.0	51110	S51110	25480	50000	3.3	4.5	160 g
50.0	78.0	22.0	51210	S51210	48500	111000	2.4	3.4	390 g
50.0	95.0	31.0	51310	-	86500	170000	1.9	2.8	932 g
55.0	78.0	16.0	51111	S51111	34500	93000	2.7	3.8	240 g
55.0	90.0	25.0	51211	S51211	69000	159000	1.9	2.8	610 g
55.0	105.0	35.0	51311	-	102000	208000	1.7	2.4	1300 g
60.0	85.0	17.0	51112	S51112	41500	113000	2.6	3.7	290 g
60.0	85.0	17.0	51212	S51212	73000	179000	1.9	2.7	690 g
60.0	110.0	35.0	51312	S51312	100000	208000	1.6	2.2	1360 g

Standardrillenkugellager / Popular Metric Series





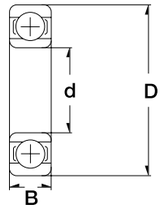


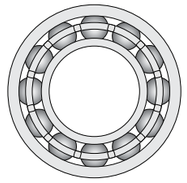
standard or flanged	Dimension (mm) d	D	B	Designation/Type Open Chrome Steel	2Z Chrome Steel	2RS/2TS Chrome Steel	* Load Rating C, dyn. N	C, stat. N	* Limiting Speed x1000rpm (open & 2Z) Grease	Weight (g) approx.
standard	10.0	26.0	8.0	6000	6000-2Z	6000-2RS	4550	1970	30.0	18 g
flanged	10.0	26.0	8.0	F 6000	F 6000-2Z	F 6000-2RS	4550	1970	30.0	20 g
standard	10.0	28.0	8.0	16100	16100-2Z	16100-2RS	4620	1960	28.0	22 g
standard	12.0	28.0	7.0	16001	16001-2Z	16001-2RS	4650	1980	27.0	22 g
standard	10.0	30.0	9.0	6200	6200-2Z	6200-2RS	5100	2390	24.0	32 g
standard	10.0	30.0	14.0	-	-	62200-2RS	5070	2360	17.0	40 g
standard	10.0	35.0	11.0	6300	6300-2Z	6300-2RS	8100	3450	22.0	52 g
standard	10.0	35.0	17.0	-	-	62300-2RS	8060	3400	15.0	60 g
standard	12.0	28.0	8.0	6001	6001-2Z	6001 -2RS	5100	2370	28.0	22 g
flanged	12.0	28.0	8.0	F 6001	F 6001-2Z	F 6001 -2RS	5100	2370	28.0	24 g
standard	12.0	30.0	8.0	16101	16101-2Z	16101-2RS	5070	2360	26.0	23 g
standard	12.0	32.0	10.0	6201	6201-2Z	6201-2RS	6800	3050	22.0	37 g
standard	12.0	32.0	14.0	-	-	62201-2RS	6890	3100	15.0	45 g
standard	12.0	37.0	12.0	6301	6301-2Z	6301-2RS	9700	4200	20.0	60 g
standard	12.0	37.0	17.0	-	-	62301-RS	9750	4150	14.0	70 g
standard	15.0	32.0	8.0	16002	16002-2Z	16002-2RS	5590	2850	22.0	25 g
standard	15.0	32.0	9.0	6002	6002-2Z	6002-2RS	5600	2830	24.0	31 g
standard	15.0	35.0	11.0	6202	6202-2Z	6202-2RS	7650	3750	20.0	45 g
standard	15.0	35.0	14.0	-	-	62202-2RS	7800	3750	13.0	54 g
standard	15.0	42.0	13.0	6302	6302-2Z	6302-2RS	11400	5450	17.0	83 g
standard	15.0	42.0	17.0	-	-	62302-2RS	11400	5400	12.0	110 g
standard	17.0	35.0	8.0	16003	16003-2Z	16003-2RS	6050	3250	19.0	32 g
standard	17.0	35.0	10.0	6003	6003-2Z	6003-2RS	6000	3250	22.0	41 g
standard	17.0	40.0	12.0	6203	6203-2Z	6203-2RS	9550	4800	17.0	67 g
standard	17.0	40.0	16.0	-	-	62203-2RS	9560	4750	12.0	83 g
standard	17.0	47.0	14.0	6303	6303-2Z	6303-2RS	13600	6650	15.0	113 g

Auch erhältlich in C2, C0 und C3 / Also available in C2, C0 and C3

Standardrillenkugellager / Popular Metric Series



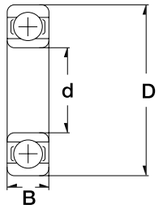


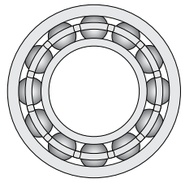


standard or flanged	Dimension (mm) d	D	B	Designation/Type Open Chrome Steel	2Z Chrome Steel	2RS/2TS Chrome Steel	* Load Rating C, dyn. N	C, stat. N	* Limiting Speed x1000rpm (open & 2Z) Grease	Weight (g) approx.
standard	17.0	47.0	19.0	-	-	62303-2RS	13500	6550	11.0	150 g
standard	17.0	62.0	17.0	6403	6403-2Z	6403-2RS	22900	10800	15.0	270 g
standard	20.0	42.0	8.0	16004	16004-2Z	16004-2RS	6900	4050	17.0	50 g
standard	20.0	42.0	12.0	6004	6004-2Z	6004-2RS	9400	5000	18.0	68 g
standard	20.0	47.0	14.0	6204	6204-2Z	6204-2RS	12800	6600	15.0	107 g
standard	20.0	47.0	18.0	-	-	62204-2RS	12700	6550	10.0	130 g
standard	20.0	52.0	15.0	6304	6304-2Z	6304-2RS	15900	7900	14.0	145 g
standard	20.0	52.0	21.0	-	-	62304-2RS	15900	7800	9.5	200 g
standard	20.0	72.0	19.0	6404	6404-2Z	6404-2RS	30700	15000	9.9	400 g
standard	25.0	47.0	8.0	16005	16005-2Z	16005-2RS	7600	4700	14.0	60 g
standard	25.0	47.0	12.0	6005	6005-2Z	6005-2RS	10100	5850	15.0	79 g
standard	25.0	52.0	15.0	6205	6205-2Z	6205-2RS	14000	7850	13.0	129 g
standard	25.0	52.0	18.0	-	-	62205-2RS	14000	7800	8.5	150 g
standard	25.0	62.0	17.0	6305	6305-2Z	6305-2RS	20600	11200	11.0	235 g
standard	25.0	62.0	24.0	-	-	62305-2RS	22500	11600	7.5	320 g
standard	25.0	80.0	21.0	6405	6405-2Z	6405-2RS	35000	19100	8.8	530 g
standard	30.0	55.0	9.0	16006	16006-2Z	16006-2RS	8300	5800	12.0	85 g
standard	30.0	55.0	13.0	6006	6006-2Z	6006-2RS	13200	8300	13.0	116 g
standard	30.0	62.0	16.0	6206	6206-2Z	6206-2RS	19500	11300	11.0	199 g
standard	30.0	62.0	20.0	-	-	62206-2RS	19500	11200	7.5	240 g
standard	30.0	72.0	19.0	6306	6306-2Z	6306-2RS	26700	15000	9.5	345 g
standard	30.0	72.0	27.0	-	-	62306-2RS	28100	16000	6.3	480 g
standard	30.0	90.0	23.0	6406	-	-	43500	23800	8.7	740 g
standard	35.0	62.0	9.0	16007	16007-2Z	16007-2RS	9000	6600	9.5	110 g
standard	35.0	62.0	14.0	6007	6007-2Z	6007-2RS	16000	10300	11.0	151 g

Standardrillenkugellager / Popular Metric Series





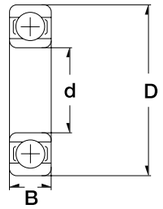


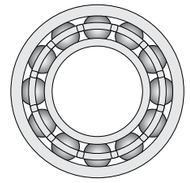
standard or flanged	Dimension (mm) d	D	B	Designation/Type Open Chrome Steel	2Z Chrome Steel	2RS/2TS Chrome Steel	* Load Rating C, dyn. N	C, stat. N	* Limiting Speed x1000rpm (open & 2Z) Grease	Weight (g) approx.
standard	35.0	72.0	17.0	6207	6207-2Z	6207-2RS	25700	15300	9.5	284 g
standard	35.0	72.0	23.0	-	-	62207-2RS	25500	15300	6.3	370 g
standard	35.0	80.0	21.0	6307	6307-2Z	6307-2RS	33500	19200	8.5	464 g
standard	35.0	80.0	31.0	-	-	62307-2RS	33200	19000	6.0	660 g
standard	35.0	100.0	25.0	6407	-	-	55200	31500	6.8	950 g
standard	40.0	68.0	9.0	16008	16008-2Z	16008-2RS	9700	7450	9.0	130 g
standard	40.0	68.0	15.0	6008	6008-2Z	6008-2RS	16800	11500	10.0	190 g
standard	40.0	80.0	18.0	6208	6208-2Z	6208-2RS	29100	17900	8.5	366 g
standard	40.0	80.0	23.0	62208	-	62208-2RS	30700	19000	5.6	440 g
standard	40.0	90.0	23.0	6308	6308-2Z	6308-2RS	40500	24000	7.5	636 g
standard	40.0	90.0	33.0	62308	-	62308-2RS	41000	24000	5.0	890 g
standard	40.0	110.0	27.0	6408	-	-	63000	36000	6.5	1250 g
standard	45.0	75.0	10.0	16009	16009-2Z	16009-2RS	11500	8950	8.5	170 g
standard	45.0	75.0	16.0	6009	6009-2Z	6009-2RS	20900	15200	9.0	241 g
standard	45.0	85.0	19.0	6209	6209-2Z	6209-2RS	31500	20400	7.5	420 g
standard	45.0	85.0	23.0	62209	-	62209-2RS	33200	21600	5.0	480 g
standard	45.0	100.0	25.0	6309	6309-2Z	6309-2RS	53000	32000	6.7	829 g
standard	45.0	100.0	36.0	62309	-	62309-2RS	52700	31500	4.5	1150 g
standard	45.0	120.0	29.0	6409	-	-	75500	44500	5.8	1550 g
standard	50.0	80.0	10.0	16010	16010-2Z	16010-2RS	12000	9650	8.0	180 g
standard	50.0	80.0	16.0	6010	6010-2Z	6010-2RS	21800	16600	8.5	261 g
standard	50.0	90.0	20.0	6210	6210-2Z	6210-2RS	35000	23200	7.1	459 g
standard	50.0	90.0	23.0	62210	-	62210-2RS	35100	23200	4.8	520 g
standard	50.0	110.0	27.0	6310	6310-2Z	6310-2RS	62000	38500	6.0	1060 g
standard	50.0	110.0	40.0	62310	-	62310-2RS	61800	38000	4.3	1550 g

Auch erhältlich in C2, C0 und C3 / Also available in C2, C0 and C3

Standardrillenkugellager / Popular Metric Series



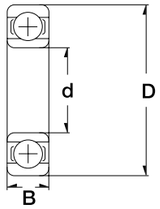


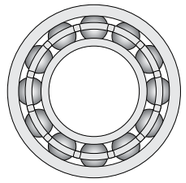


standard or flanged	Dimension (mm) d	D	B	Designation/Type Open Chrome Steel	2Z Chrome Steel	2RS/2TS Chrome Steel	* Load Rating C, dyn. N	C, stat. N	* Limiting Speed x1000rpm (open & 2Z) Grease	Weight (g) approx.
standard	50.0	130.0	31.0	6410	-	-	87000	51500	5.2	1900 g
standard	55.0	90.0	11.0	16011	16011-2Z	16011-2RS	16600	14000	19.0	270 g
standard	55.0	90.0	18.0	6011	6011-2Z	6011-2RS	28500	21200	7.5	410 g
standard	55.0	100.0	21.0	6211	6211-2Z	6211-2RS	43000	29000	6.7	630 g
standard	55.0	120.0	29.0	6311	6311-2Z	6311-2RS	76500	47500	5.3	1430 g
standard	55.0	140.0	33.0	6411	-	-	99500	62000	4.9	2300 g
standard	60.0	95.0	11.0	16012	16012-2Z	16012-2RS	20000	17600	17.0	280 g
standard	60.0	95.0	18.0	6012	6012-2Z	6012-2RS	29000	23200	7.0	430 g
standard	60.0	110.0	22.0	6212	6212-2Z	6212-2RS	52000	36000	6.0	810 g
standard	60.0	130.0	31.0	6312	6312-2Z	6312-2RS	81500	52000	5.0	1790 g
standard	60.0	150.0	35.0	6412	-	-	109000	70000	4.7	2750 g
standard	65.0	100.0	11.0	16013	16013-2Z	16013-2RS	21200	19600	16.0	300 g
standard	65.0	100.0	18.0	6013	6013-2Z	6013-2RS	30500	25000	6.3	460 g
standard	65.0	120.0	23.0	6213	6213-2Z	6213-2RS	60000	41500	5.3	1030 g
standard	65.0	140.0	33.0	6313	6313-2Z	6313-2RS	93000	60000	4.5	2180 g
standard	65.0	160.0	37.0	6413	-	-	120000	77000	4.5	3300 g
standard	70.0	110.0	13.0	16014	16014-2Z	16014-2RS	28000	25000	14.0	440 g
standard	70.0	110.0	20.0	6014	6014-2Z	6014-2RS	38000	31000	14.0	640 g
standard	70.0	125.0	24.0	6214	6214-2Z	6214-2RS	62000	44000	5.0	1110 g
standard	70.0	150.0	35.0	6314	6314-2Z	6314-2RS	104000	68000	4.3	260 g
standard	70.0	170.0	42.0	6414	-	-	145000	99000	3.7	4850 g
standard	75.0	115.0	13.0	16015	16015-2Z	16015-2RS	28500	27000	13.0	460 g
standard	75.0	115.0	20.0	6015	6015-2Z	6015-2RS	39000	33500	12.0	850 g
standard	75.0	130.0	25.0	6215	6215-2Z	6215-2RS	65500	49000	48.0	1210 g
standard	75.0	160.0	37.0	6315	6315-2Z	6315-2RS	114000	76500	7.0	3180 g

Standardrillenkugellager / Popular Metric Series





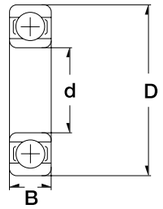


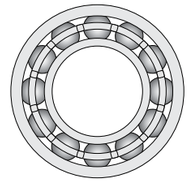
standard or flanged	Dimension (mm) d	D	B	Designation/Type Open Chrome Steel	2Z Chrome Steel	2RS/2TS Chrome Steel	* Load Rating C, dyn. N	C, stat. N	* Limiting Speed x1000rpm (open & 2Z) Grease	Weight (g) approx.
standard	75.0	190.0	45.0	6415	-	-	152000	114000	3.6	6800 g
standard	80.0	125.0	14.0	16016	16016-2Z	16016-2RS	32000	31000	13.0	610 g
standard	80.0	125.0	22.0	6016	6016-2Z	6016 2RS	47500	40000	5.0	890 g
standard	80.0	140.0	26.0	6216	6216-2Z	6216-2RS	72000	54000	4.5	1490 g
standard	80.0	170.0	39.0	6316	6316-2Z	6316-2RS	122000	86500	6.7	3750 g
standard	80.0	200.0	48.0	6416	-	-	164000	126000	3.4	8000 g
standard	85.0	130.0	14.0	16017	16017-2Z	16017-2RS	34000	33500	12.0	670 g
standard	85.0	130.0	22.0	6017	6017-2Z	6017-2RS	49000	43000	4.8	940 g
standard	85.0	150.0	28.0	6217	6217-2Z	6217-2RS	83000	64000	4.3	1910 g
standard	85.0	180.0	41.0	6317	6317-2Z	6317-2RS	132000	96500	6.3	4250 g
standard	90.0	140.0	16.0	16018	16018-2Z	16018-2RS	41500	39000	11.0	870 g
standard	90.0	140.0	24.0	6018	6018-2Z	6018-2RS	58500	50000	4.5	1230 g
standard	90.0	160.0	30.0	6218	6218-2Z	6218-2RS	96500	72000	3.8	2260 g
standard	90.0	190.0	43.0	6318	6318-2Z	6318-2RS	134000	102000	6.0	5530 g
standard	95.0	145.0	16.0	16019	16019-2Z	16019-2RS	40000	40500	11.0	920 g
standard	95.0	145.0	24.0	6019	6019-2Z	6019-2RS	60000	54000	4.2	1290 g
standard	95.0	170.0	32.0	6219	6219-2Z	6219-2RS	108000	81500	3.6	2790 g
standard	95.0	200.0	45.0	6319	6319-2Z	6319-2RS	146000	114000	4.5	7140 g
standard	100.0	150.0	16.0	16020	16020-2Z	16020-2RS	44000	44000	10.0	960 g
standard	100.0	150.0	24.0	6020	6020-2Z	6020-2RS	60000	54000	4.0	1350 g
standard	100.0	180.0	34.0	6220	6220-2Z	6220-2RS	122000	93000	3.4	3660 g
standard	100.0	215.0	47.0	6320	6320-2Z	6320-2RS	163000	134000	4.0	7780 g
standard	110.0	170.0	19.0	16022 (M)	-	-	43000	41500	4.3	1450 g
standard	110.0	170.0	28.0	6022	-	6022-2RS	62500	56000	3.6	1950 g
standard	110.0	200.0	38.0	6222	-	-	111500	99000	2.8	4350 g

Auch erhältlich in C2, C0 und C3 / Also available in C2, C0 and C3

Standardrillenkugellager / Popular Metric Series



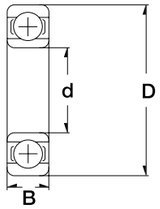


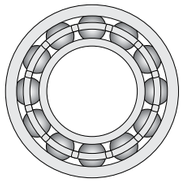


standard or flanged	Dimension (mm) d	D	B	Designation/Type Open Chrome Steel	2Z Chrome Steel	2RS/2TS Chrome Steel	* Load Rating C, dyn. N	C, stat. N	* Limiting Speed x1000rpm (open & 2Z) Grease	Weight (g) approx.
standard	110.0	240.0	50.0	6322	-	-	155500	165000	2.4	9550 g
standard	120.0	180.0	19.0	16024 (M)	-	-	46500	46500	3.8	1600 g
standard	120.0	180.0	28.0	6024	-	6024-2RS	65000	60000	3.2	2050 g
standard	120.0	215.0	40.0	6224	-	-	111500	99000	2.6	5150 g
standard	120.0	260.0	55.0	6324	-	-	159500	165000	2.2	14500 g
standard	130.0	200.0	22.0	16026	-	-	60000	60000	3.6	2350 g
standard	130.0	200.0	33.0	6026	-	6026-2RS	81000	77000	3.0	3150 g
standard	130.0	230.0	40.0	6226	-	-	119500	111000	2.4	5800 g
standard	130.0	280.0	58.0	6326	-	-	175500	192000	2.0	18000 g
standard	140.0	210.0	22.0	16028 (M)	-	-	61000	63000	3.4	2500 g
standard	140.0	210.0	33.0	6028	-	6028-2RS	84500	82000	2.8	3350 g
standard	140.0	250.0	42.0	6228	-	-	126500	121000	2.2	7450 g
standard	140.0	300.0	62.0	6328 (M)	-	-	195500	223000	1.8	22000 g
standard	150.0	225.0	24.0	16030 (M)	-	-	70000	72500	3.0	3150 g
standard	150.0	225.0	35.0	6030 (M)	-	6030-2RS	96000	95500	2.4	4800 g
standard	150.0	270.0	45.0	6230 (M)	-	-	133500	136000	1.8	9400 g
standard	160.0	240.0	25.0	16032 (M)	-	-	75500	79000	2.8	3700 g
standard	160.0	240.0	38.0	6032 (M)	-	6032-2RS	109500	111000	2.2	5900 g
standard	160.0	290.0	48.0	6232 (M)	-	-	142500	145000	1.7	14500 g
standard	170.0	260.0	28.0	16034 (M)	-	-	90500	95500	2.6	5000 g
standard	170.0	260.0	28.0	16034 (M)	-	-	90500	95500	2.6	5000 g
standard	170.0	260.0	42.0	6034 (M)	-	-	128500	133000	2.0	7900 g
standard	170.0	310.0	52.0	6234 (M)	-	-	162500	179000	1.7	17500 g
standard	180.0	280.0	31.0	16036 (M)	-	-	105000	111000	2.4	6600 g
standard	180.0	280.0	31.0	16036 (M)	-	-	105000	111000	2.4	6600 g

Standardrillenkugellager / Popular Metric Series







standard or flanged	Dimension (mm)			Designation/Type			* Load Rating		* Limiting Speed x1000rpm (open & 2Z)	Weight (g) approx.
				Open	2Z	2RS/2TS				
	d	D	B	Chrome Steel	Chrome Steel	Chrome Steel	C, dyn. N	C, stat. N	Grease	
standard	180.0	280.0	46.0	6036 (M)	-	-	145500	155000	2.0	10500 g
standard	180.0	320.0	52.0	6236 (M)	-	-	175500	195000	1.6	18500 g
standard	190.0	290.0	31.0	16038 (M)	-	-	113000	124000	2.4	7900 g
standard	190.0	290.0	46.0	6038 (M)	-	-	149500	165000	1.8	11000 g
standard	190.0	340.0	55.0	6238 (M)	-	-	195500	231000	1.5	23000 g
standard	200.0	310.0	34.0	16040 (M)	-	-	128000	142000	2.2	8850 g
standard	200.0	310.0	51.0	6040 (M)	-	-	165500	189000	1.7	14000 g
standard	200.0	360.0	58.0	6240 (M)	-	-	207500	249000	1.5	28000 g
standard	220.0	340.0	37.0	16044 (M)	-	-	133000	152000	2.0	11500 g
standard	220.0	340.0	56.0	6044 (M)	-	-	189500	227000	1.6	18500 g
standard	220.0	400.0	65.0	6244 (M)	-	-	227500	289000	1.3	37000 g
standard	240.0	360.0	37.0	16048 (M)	-	-	136000	159000	1.8	14500 g
standard	240.0	360.0	56.0	6048 (M)	-	-	195500	244000	1.5	19500 g
standard	260.0	400.0	44.0	16052 (M)	-	-	182000	231000	1.6	21500 g
standard	260.0	400.0	65.0	6052 (M)	-	-	223500	289000	1.3	29500 g
standard	280.0	420.0	65.0	6056 (M)	-	-	231500	314000	1.2	31000 g
standard	300.0	460.0	74.0	6060 (M)	-	-	274500	389000	1.0	44000 g
standard	320.0	480.0	74.0	6064 (M)	-	-	284500	414000	0.9	46000 g
standard	340.0	520.0	82.0	6068 (M)	-	-	339500	539000	0.8	62000 g

Auch erhältlich in C2, C0 und C3 / Also available in C2, C0 and C3



Produktfocus / Product focus

Sonderbefettungen
Special Lubricants

ZEN™

- ✓ Wasserfest oder - abweisend
  Water resistant
- ✓ Für hohe Temperaturen
  High temperature
- ✓ Für niedrige Temperaturen
  Low temperature
- ✓ Zertifizierte lebensmittelbefettung
  FDA Approved

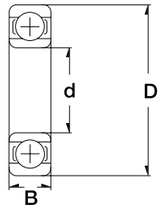
MANUFACTURED TO FDA STANDARDS

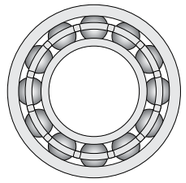
Die Lebensdauer eines Wälzlagers hängt entscheidend von der dem Einsatzzweck angemessenen Befettung ab. ZEN verwendet nur hochwertige, ausgesuchte Schmierstoffe. So werden Reibung und Korrosion sowohl bei hohen als auch bei niedrigen Temperaturen verhindert. Weitergehende Informationen erhalten Sie von Ihrer autorisierten ZEN-Vertretung.

To maintain the perfomance of any bearing, proper lubrication is essential. Zen have selected the best lubricants to reduce friction, prevent wear, protect bearing surfaces from corrosion and perform in high and low temperatures. For more information please contact your authourized ZEN distributor.

Rostfreie Standardrillenkugellager / Stainless Steel Popular Metric Series



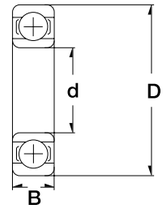


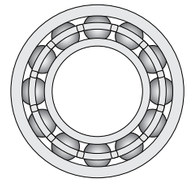


Dimension (mm)			Designation/Type					* Load Rating		Weight (g) approx.
d	D	B	Open	2Z	2RS	2TS	in C3	C, dyn. N	C, stat. N	
10.0	26.0	8.0	S6000	S6000-2Z	S6000-2RS	S6000-2TS	avail. / lieferb.	4620	1990	19 g
10.0	28.0	8.0	S16100	S16100-2Z	S16100-2RS	-	-	on request	auf Anfrage	22 g
10.0	30.0	9.0	S6200	S6200-2Z	S6200-2RS	S6200-2TS	avail. / lieferb.	5070	2360	32 g
10.0	30.0	14.0	-	-	S62200-2RS	-	avail. / lieferb.	on request	auf Anfrage	40 g
10.0	35.0	11.0	S6300	S6300-2Z	S6300-2RS	-	avail. / lieferb.	8060	3400	53 g
10.0	35.0	17.0	-	-	S62300-2RS	-	-	on request	auf Anfrage	60 g
12.0	28.0	8.0	S6001	S6001-2Z	S6001-2RS	S6001-2TS	avail. / lieferb.	5070	2360	22 g
12.0	30.0	8.0	S16001	S16001-2Z	S16001-2RS	-	avail. / lieferb.	on request	auf Anfrage	22 g
12.0	32.0	10.0	S6201	S6201-2Z	S6201-2RS	S6201-2TS	avail. / lieferb.	6870	3100	37 g
12.0	32.0	14.0	-	-	S62201-2RS	-	-	on request	auf Anfrage	45 g
12.0	37.0	12.0	S6301	S6301-2Z	S6301-2RS	-	avail. / lieferb.	9750	4150	60 g
12.0	37.0	17.0	-	-	S62301-2RS	-	-	on request	auf Anfrage	70 g
15.0	32.0	8.0	S16002	S16002-2Z	S16002-2RS	-	avail. / lieferb.	on request	auf Anfrage	25 g
15.0	32.0	9.0	S6002	S6002-2Z	S6002-2RS	S6002-2TS	avail. / lieferb.	5590	2850	30 g
15.0	35.0	11.0	S6202	S6202-2Z	S6202-2RS	S6202-2TS	avail. / lieferb.	7800	3100	45 g
15.0	35.0	14.0	-	-	S62202-2RS	-	-	on request	auf Anfrage	54 g
15.0	42.0	13.0	S6302	S6302-2Z	S6302-2RS	-	-	11400	5400	82 g
15.0	42.0	17.0	-	-	S62302-2RS	-	-	on request	auf Anfrage	110 g
17.0	35.0	8.0	S16003	S16003-2Z	S16003-2RS	-	-	on request	auf Anfrage	32 g
17.0	35.0	10.0	S6003	S6003-2Z	S6003-2RS	S6003-2TS	avail. / lieferb.	6050	3250	39 g
17.0	40.0	12.0	S6203	S6203-2Z	S6203-2RS	S6203-2TS	avail. / lieferb.	9650	4750	65 g
17.0	40.0	16.0	-	-	S62203-2RS	-	-	on request	auf Anfrage	83 g
17.0	47.0	14.0	S6303	S6303-2Z	S6303-2RS	-	-	13500	6550	120 g
17.0	47.0	19.0	-	-	S62303-2RS	-	-	on request	auf Anfrage	150 g
20.0	42.0	8.0	S16004	S16004-2Z	S16004-2RS	-	-	on request	auf Anfrage	50 g

Rostfreie Standardrillenkugellager / Stainless Steel Popular Metric Series



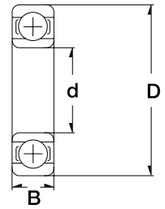


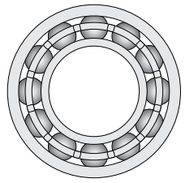


Dimension (mm)			Designation/Type					* Load Rating		Weight (g) approx.
d	D	B	Open	2Z	2RS	2TS	in C3	C, dyn. N	C, stat. N	
20.0	42.0	12.0	S6004	S6004-2Z	S6004-2RS	S6004-2TS	avail. / lieferb.	9360	5000	69 g
20.0	47.0	14.0	S6204	S6204-2Z	S6204-2RS	S6204-2TS	avail. / lieferb.	12700	6550	110 g
20.0	47.0	18.0	-	-	S62204-2RS	-	-	on request	auf Anfrage	130 g
20.0	52.0	15.0	S6304	S6304-2Z	S6304-2RS	-	avail. / lieferb.	15900	7800	140 g
20.0	52.0	21.0	-	-	S62304-2RS	-	-	on request	auf Anfrage	200 g
25.0	47.0	8.0	S16005	S16005-2Z	S16005-2RS	-	-	on request	auf Anfrage	60 g
25.0	47.0	12.0	S6005	S6005-2Z	S6005-2RS	-	avail. / lieferb.	11200	6550	80 g
25.0	52.0	15.0	S6205	S6205-2Z	S6205-2RS	-	avail. / lieferb.	14000	7800	130 g
25.0	52.0	18.0	-	-	S62205-2RS	-	-	on request	auf Anfrage	150 g
25.0	62.0	17.0	S6305	S6305-2Z	S6305-2RS	-	avail. / lieferb.	22500	11600	230 g
25.0	62.0	24.0	-	-	S62305-2RS	-	-	on request	auf Anfrage	320 g
30.0	55.0	13.0	S6006	S6006-2Z	S6006-2RS	-	-	13300	8300	120 g
30.0	62.0	16.0	S6206	S6206-2Z	S6206-2RS	-	-	19500	11200	200 g
30.0	72.0	19.0	S6306	S6306-2Z	S6306-2RS	-	-	28100	16000	350 g
35.0	62.0	14.0	S6007	S6007-2Z	S6007-2RS	-	-	15900	10200	160 g
35.0	72.0	17.0	S6207	S6207-2Z	S6207-2RS	-	-	25500	15300	290 g
40.0	68.0	15.0	S6008	S6008-2Z	S6008-2RS	-	-	16800	11600	190 g
40.0	80.0	18.0	S6208	S6208-2Z	S6208-2RS	-	-	30700	19000	370 g
40.0	90.0	23.0	S6308	S6308-2Z	S6308-2RS	-	-	33200	19000	460 g
45.0	75.0	16.0	S6009	S6009-2Z	S6009-2RS	-	-	20860	14600	250 g

Rostfreie Standardrillenkugellager / Stainless Steel Popular Metric Series







Dimension (mm)			Designation/Type					* Load Rating		Weight (g) approx.
d	D	B	Open	2Z	2RS	2TS	in C3	C, dyn. N	C, stat. N	
45.0	85.0	19.0	S6209	S6209-2Z	S6209-2RS	-	-	33200	21600	410 g
50.0	80.0	16.0	S6010	S6010-2Z	S6010-2RS	-	-	21600	16000	260 g
50.0	90.0	20.0	S6210	S6210-2Z	S6210-2RS	-	-	35100	23200	460 g
55.0	90.0	18.0	S6011	-	S6011-2RS	-	-	28100	21100	390 g
55.0	100.0	21.0	S6211	-	S6211-2RS	-	-	43600	29000	610 g
60.0	95.0	18.0	S6012	-	S6012-2RS	-	-	29600	23200	420 g
60.0	110.0	22.0	S6212	-	S6212-2RS	-	-	47500	32500	780 g
65.0	100.0	18.0	S6013	-	S6013-2RS	-	-	30700	25000	440 g
65.0	120.0	23.0	S6213	-	S6213-2RS	-	-	55900	40500	990 g
70.0	110.0	20.0	S6014	-	S6014-2RS	-	-	29680	24200	580 g
70.0	125.0	24.0	S6214	-	S6214-2RS	-	-	46790	37590	1080 g
75.0	115.0	20.0	S6015	-	S6015-2RS	-	-	30910	26600	610 g
75.0	130.0	25.0	S6215	-	S6215-2RS	-	-	50850	41260	1180 g
80.0	125.0	22.0	S6016	-	S6016-2RS	-	-	on request	auf Anfrage	850 g
80.0	140.0	26.0	S6216	-	S6216-2RS	-	-	on request	auf Anfrage	1400 g
90.0	140.0	24.0	S6018	-	S6018-2RS	-	-	on request	auf Anfrage	1150 g
90.0	160.0	30.0	S6218	-	S6218-2RS	-	-	on request	auf Anfrage	2150 g
100.0	150.0	24.0	S6020	-	S6020-2RS	-	-	on request	auf Anfrage	1250 g
100.0	180.0	34.0	S6220	-	S6220-2RS	-	-	on request	auf Anfrage	3150 g
110.0	170.0	28.0	S6022	-	S6022-2RS	-	-	on request	auf Anfrage	1950 g
120.0	180.0	28.0	S6024	-	S6024-2RS	-	-	on request	auf Anfrage	2050 g



Produktfocus / Product focus

ZEN™

Rostfreie ZEN-Gehäuseeinheiten
Stainless Steel & Thermoplastic Housings

✓ Pharmazeutische und chemische Industrie
Pharmaceutical & Chemical Processing
✓ Medizintechnik
Medical Machinery
✓ Getränke- und Nahrungsmittelindustrie
Food and Beverage Processing

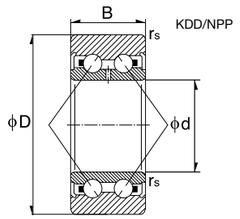
Rostfreie und thermoplastische Gehäuse mit ihren rostfreien Einsätzen sind die ideale Lösung für Anwendungen mit hygienischen Ansprüchen.

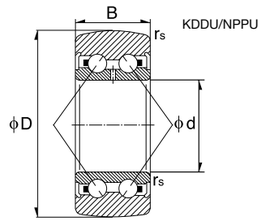
ZEN Stainless Steel and Thermoplastic Housings with Stainless Steel Inserts offer the perfect solution for requirements that need hygienic and clean-room applications.

SIEHE SEITE 100 / SEE PAGE 100

Laufrolle der LR Serie / LR Series (track roller)



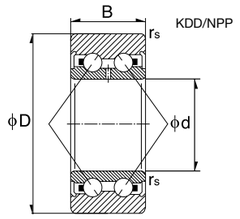


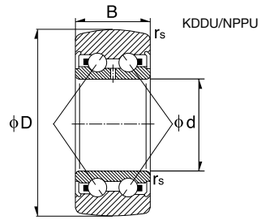


Dimension (mm)			Designation/Type				* Load Rating		Radius	* Limiting Speed x1000rpm		Weight (g) approx.
d	D	B	KDD	KDDU	NPP	NPPU	C, dyn. N	C, stat. N		NPP(U)	KDD(U)	
5.0	17.0	7.0	-	-	-	LR 50/5 NPPU	1650	950	0.2	12.0	-	10 g
6.0	19.0	9.0	-	-	-	LR 50/6 NPPU	2650	1310	0.3	11.0	-	20 g
7.0	22.0	10.0	-	-	-	LR 50/7 NPPU	3300	1690	0.3	10.0	-	20 g
8.0	24.0	11.0	-	-	-	LR 50/8 NPPU	4200	2360	0.3	10.0	-	30 g
10.0	28.0	12.0	-	-	-	LR 5000 NPPU	4750	2850	0.3	9.0	-	30 g
10.0	32.0	9.0	-	-	LR 200 NPP	LR 200 NPPU	4350	2130	0.6	13.0	-	50 g
10.0	32.0	14.0	LR 5200 KDD	LR 5200 KDDU	-	LR 5200 NPPU	6800	4050	0.6	8.0	11.0	70 g
12.0	30.0	12.0		-	-	LR 5001 NPPU	4950	3100	0.3	8.0	-	30 g
12.0	35.0	10.0	-	-	LR 201 NPP	LR 201 NPPU	5600	2700	0.6	12.0	-	50 g
12.0	35.0	15.9	LR 5201 KDD	LR 5201 KDDU	-	LR 5201 NPPU	8600	5100	0.6	7.0	10.0	80 g
12.0	42.0	19.0	-	-	-	LR 5301 NPPU	11300	7100	1.0	5.0	-	120 g
15.0	35.0	13.0	-	-	-	LR 5002 NPPU	6500	4100	0.3	7.0	-	50 g
15.0	40.0	11.0	-	-	LR 202 NPP	LR 202 NPPU	6500	3300	0.6	11.0	-	70 g
15.0	40.0	15.9	LR 5202 KDD	LR 5202 KDDU	-	LR 5202 NPPU	9800	6200	0.6	7.0	10.0	110 g
15.0	47.0	19.0	-	-	-	LR 5302 NPPU	14600	9200	1.0	5.0	-	150 g
17.0	40.0	14.0	-	-	-	LR 5003 NPPU	7700	5200	0.3	6.0	-	70 g
17.0	47.0	12.0	-	-	LR 203 NPP	LR 203 NPPU	8400	4400	0.6	9.0	-	110 g
17.0	47.0	17.5	LR 5203 KDD	LR 5203 KDDU	-	LR 5203 NPPU	12600	8200	0.6	5.5	7.0	170 g
17.0	52.0	22.2	-	-	-	LR 5303 NPPU	17200	11100	0.6	4.7	-	210 g
20.0	47.0	16.0	-	-	-	LR 5004 NPPU	11500	7700	0.6	5.5	-	120 g
20.0	52.0	14.0	-	-	LR 204 NPP	LR 204 NPPU	10500	5600	1.0	8.0	-	150 g
20.0	52.0	20.6	LR 5204 KDD	LR 5204 KDDU	-	LR 5204 NPPU	15800	10500	1.0	5.0	7.0	230 g
20.0	62.0	22.2	LR 5304 KDD	LR 5304 KDDU	-	LR 5304 NPPU	21100	14500	1.1	4.5	6.5	340 g
25.0	52.0	16.0	-	-	-	LR 5005 NPPU	11600	8100	0.6	4.7	-	150 g
25.0	62.0	15.0	-	-	LR 205 NPP	LR 205 NPPU	12500	7100	1.0	7.0	-	230 g

Laufrolle der LR Serie / LR Series (track roller)



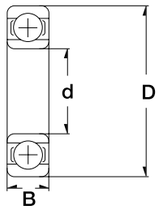


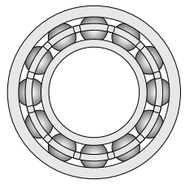


Dimension (mm)			Designation/Type				* Load Rating		Radius	* Limiting Speed x1000rpm		Weight (g) approx.
d	D	B	KDD	KDDU	NPP	NPPU	C, dyn. N	C, stat. N		NPP(U)	KDD(U)	
25.0	62.0	20.6	LR 5205 KDD	LR 5205 KDDU	-	LR 5205 NPPU	18500	13000	1.1	4.5	6.5	340 g
25.0	72.0	25.4	LR 5305 KDD	LR 5305 KDDU	-	LR 5305 NPPU	27500	19500	1.1	3.9	5.5	500 g
30.0	62.0	19.0	-	-	-	LR 5006 NPPU	15800	11800	1.0	4.0	-	250 g
30.0	72.0	16.0	-	-	LR 206 NPP	LR 206 NPPU	16600	9600	1.0	5.5	-	330 g
30.0	72.0	23.8	LR 5206 KDD	LR 5206 KDDU	-	LR 5206 NPPU	24600	21400	1.0	3.5	5.0	510 g
30.0	80.0	30.2	LR 5306 KDD	LR 5306 KDDU	-	LR 5306 NPPU	36500	26500	1.1	3.1	4.3	670 g
35.0	68.0	20.0	-	-	-	LR 5007 NPPU	17600	13100	1.0	4.3	-	300 g
35.0	80.0	17.0	-	-	LR 207 NPP	LR 207 NPPU	20200	11900	1.1	4.5	-	400 g
35.0	80.0	27.0	LR 5207 KDD	LR 5207 KDDU	-	LR 5207 NPPU	30500	22400	1.1	2.8	3.9	660 g
35.0	90.0	34.9	LR 5307 KDD	LR 5307 KDDU	-	LR 5307 NPPU	44500	33000	1.5	2.5	3.6	970 g
40.0	75.0	21.0	-	-	-	LR 5008 NPPU	18400	14600	1.0	3.1	-	370 g
40.0	85.0	18.0	-	-	LR 208 NPP	LR 208 NPPU	22800	13600	1.1	4.0	-	450 g
40.0	85.0	30.2	LR 5208 KDD	LR 5208 KDDU	-	LR 5208 NPPU	34500	25500	1.1	2.5	3.5	750 g
40.0	100.0	36.5	LR 5308 KDD	LR 5308 KDDU	-	LR 5308 NPPU	56000	4200	1.5	2.3	3.3	1200 g
45.0	90.0	19.0	-	-	LR 209 NPP	LR 209 NPPU	22500	13700	1.1	3.6	-	500 g

Zöllige Radialrillenkugellager (Sondergrössen) / Commercial Inch Series



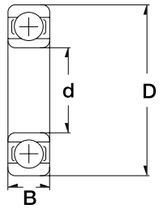


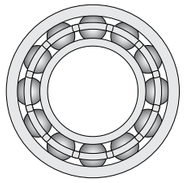


Dimension (mm)			Dimension (inch)			Dimension (inch)			Designation/Type				* Load Rating (only 100 Cr6)		Weight (g) approx.
									2Z		2RS				
d	D	B	d	D	B	d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	
4.762	17.462	6.350	0.188	0.688	0.250	3/16	11/16	1/4	1601-2Z	S1601-2Z			1308	650	5 g
4.762	17.462	7.937	0.188	0.688	0.313	3/16	11/16	5/16			1601-2RS	S1601-2RS	1308	650	5 g
6.350	17.462	6.350	0.250	0.688	0.250	1/4	11/16	1/4	1602-2Z	S1602-2Z			1308	650	6 g
6.350	17.462	7.937	0.250	0.688	0.313	1/4	11/16	5/16			1602-2RS	S1602-2RS	1308	650	6 g
7.937	22.225	7.143	0.313	0.875	0.281	5/16	7/8	9/32	1603-2Z	S1603-2Z			2065	1014	9 g
7.937	22.225	8.731	0.313	0.875	0.344	5/16	7/8	11/32			1603-2RS	S1603-2RS	2065	1014	9 g
9.525	22.225	7.143	0.375	0.875	0.281	3/8	7/8	9/32	1604-2Z	S1604-2Z			2065	1014	8 g
9.525	22.225	8.731	0.375	0.875	0.344	3/8	7/8	11/32			1604-2RS	S1604-2RS	2065	1014	8 g
7.937	23.018	7.937	0.313	0.906	0.313	5/16	29/32	5/16	1605-2Z	S1605-2Z	1605-2RS	S1605-2RS	2065	1014	16 g
9.525	23.018	7.937	0.375	0.906	0.313	3/8	29/32	5/16	1606-2Z	S1606-2Z	1606-2RS	S1606-2RS	2065	1014	21 g
11.112	23.018	7.937	0.438	0.906	0.313	7/16	29/32	5/16	1607-2Z	S1607-2Z	1607-2RS	S1607-2RS	1780	1020	22 g
9.525	28.575	9.525	0.375	1.125	0.375	3/8	1 1/8	3/8	1614-2Z	S1614-2Z	1614-2RS	S1614-2RS	1780	1020	35 g
11.112	28.575	9.525	0.438	1.125	0.375	7/16	1 1/8	3/8	1615-2Z	S1615-2Z	1615-2RS	S1615-2RS	1780	1020	32 g
12.700	28.575	9.525	0.500	1.125	0.375	1/2	1 1/8	3/8	1616-2Z	S1616-2Z	1616-2RS	S1616-2RS	1780	1020	29 g
11.112	34.925	11.112	0.438	1.375	0.438	7/16	1 3/8	7/16	1620-2Z	S1620-2Z	1620-2RS	S1620-2RS	2670	1575	45 g
12.700	34.925	11.112	0.500	1.375	0.438	1/2	1 3/8	7/16	1621-2Z	S1621-2Z	1621-2RS	S1621-2RS	2670	1575	50 g
14.287	34.925	11.112	0.563	1.375	0.438	9/16	1 3/8	7/16	1622-2Z	S1622-2Z	1622-2RS	S1622-2RS	2670	1575	46 g
15.875	34.925	11.112	0.625	1.375	0.438	5/8	1 3/8	7/16	1623-2Z	S1623-2Z	1623-2RS	S1623-2RS	2670	1575	40 g
15.875	41.275	12.700	0.625	1.625	0.500	5/8	1 5/8	1/2	1628-2Z	S1628-2Z	1628-2RS	S1628-2RS	3284	2020	72 g
19.050	44.450	12.700	0.750	1.750	0.500	3/4	1 3/4	1/2	1635-2Z	S1635-2Z	1635-2RS	S1635-2RS	3284	2020	84 g
22.225	50.800	14.287	0.875	2.000	0.563	7/8	2	9/16	1640-2Z	S1640-2Z	1640-2RS	S1640-2RS	4895	3155	111 g

Radialkugellager mit Kunststoffkäfig / Ball Bearings with Plastic Cages



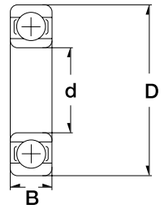


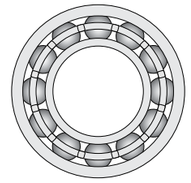


Dimension (mm)			Designation/Type	* Limiting Speed x1000rpm	* Load Rating		Lubrication	Weight (g) approx.
d	D	B			C, dyn. N	C, stat. N		
4.0	13.0	5.0	624-2Z.T9H.C3	40.0	1300	485	Oil	4 g
5.0	16.0	5.0	625-2Z.T9H.C3	36.0	1730	670	Oil	6 g
6.0	13.0	5.0	686-2Z.T9H.C3	40.0	1080	440	Oil	4 g
6.0	19.0	6.0	626-2Z.T9H.C3	32.0	2340	885	Oil	10 g
7.0	14.0	5.0	687-2Z.T9H.C3	40.0	1170	510	Oil	4 g
7.0	19.0	6.0	607-2Z.T9H.C3	36.0	2340	885	Oil	8 g
7.0	22.0	7.0	627-2Z.T9H.C3	30.0	3300	1370	Oil	14 g
8.0	16.0	5.0	688-2Z.T9H.C3	36.0	1260	590	Oil	4 g
8.0	22.0	7.0	608-2Z.T9H.C3	34.0	3300	1370	Oil	14 g
8.0	24.0	8.0	628-2Z.T9H.C3	28.0	3350	1430	Oil	18 g
9.0	17.0	5.0	689-2Z.T9H.C3	36.0	1330	665	Oil	5 g
9.0	26.0	8.0	629-2Z.T9H.C3	28.0	4550	1970	Oil	22 g
10.0	26.0	8.0	6000-2Z.T9H.C3	30.0	4550	1970	Oil	18 g
10.0	30.0	9.0	6200-2Z.T9H.C3	24.0	5100	2390	Oil	32 g
10.0	19.0	5.0	61800-Z.T9H.C3	34.0	1720	840	Oil	6 g
10.0	22.0	6.0	61900-Z.T9H.C3	32.0	2700	1270	Oil	9 g
12.0	28.0	8.0	6001-2Z.T9H.C3	28.0	5100	2370	Oil	22 g
12.0	32.0	10.0	6201-2Z.T9H.C3	22.0	6800	3050	Oil	37 g
12.0	21.0	5.0	61801-Z.T9H.C3	32.0	1920	1040	Oil	7 g
12.0	24.0	6.0	61901-Z.T9H.C3	30.0	2890	1460	Oil	10 g
15.0	32.0	9.0	6002-2Z.T9H.C3	24.0	5600	2830	Oil	31 g
15.0	35.0	11.0	6202-2Z.T9H.C3	20.0	7650	3750	Oil	45 g
15.0	24.0	5.0	61802-Z.T9H.C3	28.0	2070	1260	Oil	8 g
15.0	28.0	7.0	61902-Z.T9H.C3	26.0	4350	2260	Oil	15 g
17.0	35.0	10.0	6003-2Z.T9H.C3	22.0	6000	3250	Oil	41 g

Radialkugellager mit Kunststoffkäfig / Ball Bearings with Plastic Cages



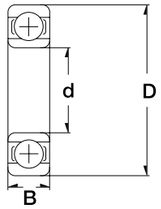


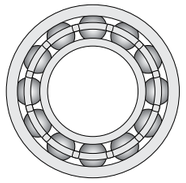


Dimension (mm)			Designation/Type	* Limiting Speed x1000rpm	* Load Rating		Lubrication	Weight (g) approx.
d	D	B			C, dyn. N	C, stat. N		
17.0	40.0	12.0	6203-2Z.T9H.C3	17.0	9550	4800	Oil	67 g
17.0	26.0	5.0	61803-Z.T9H.C3	26.0	2630	1570	Oil	9 g
17.0	30.0	7.0	61903-Z.T9H.C3	24.0	4600	2550	Oil	10 g
20.0	42.0	12.0	6004-2Z.T9H.C3	18.0	9400	5000	Oil	68 g
20.0	47.0	14.0	6204-2Z.T9H.C3	15.0	12800	6600	Oil	107 g

Kunststofflager (POM) / Plastic Bearings



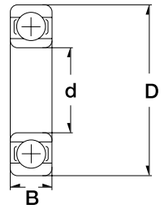


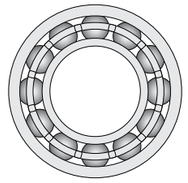


standard or flanged	Dimension (mm) d	d Tolerance	D	D Tolerance	B	B Tolerance	Designation/Type Glass Balls	Stainless Steel Balls	Load Rating C, dyn. N	C, stat. N	Weight (g)
standard	8.0	0,+0.12	22.0	0,-0.12	7.0	0,-0.15	P608-GB	P608-SB	98.0	-	3 g
standard	9.0	0,+0.12	24.0	0,-0.12	7.0	0,-0.15	P609-GB	P609-SB	107.8	-	3 g
standard	10.0	0,+0.12	26.0	0,-0.12	8.0	0,-0.15	P6000-GB	P6000-SB	117.6	-	4 g
standard	12.0	0,+0.12	28.0	0,-0.12	8.0	0,-0.15	P6001-GB	P6001-SB	117.6	-	4 g
standard	15.0	0,+0.12	32.0	0,-0.12	9.0	0,-0.15	P6002-GB	P6002-SB	127.4	-	6 g
standard	17.0	0,+0.12	35.0	0,-0.12	10.0	0,-0.15	P6003-GB	P6003-SB	127.4	-	8 g
standard	20.0	0,+0.12	32.0	0,-0.12	12.0	0,-0.15	P6004-GB	P6004-SB	137.2	-	13 g
standard	25.0	0,+0.12	47.0	0,-0.12	12.0	0,-0.15	P6005-GB	P6005-SB	147.0	-	15 g
standard	30.0	0,+0.12	55.0	0,-0.12	13.0	0,-0.15	P6006-GB	P6006-SB	166.6	-	22 g
standard	35.0	0,+0.12	62.0	0,-0.12	14.0	0,-0.15	P6007-GB	P6007-SB	176.4	-	29 g
standard	40.0	0,+0.12	68.0	0,-0.12	15.0	0,-0.15	P6008-GB	P6008-SB	196.0	-	37 g
standard	45.0	0,+0.12	75.0	0,-0.12	16.0	0,-0.15	P6009-GB	P6009-SB	215.6	-	46 g
standard	50.0	0,+0.12	80.0	0,-0.12	16.0	0,-0.15	P6010-GB	P6010-SB	245.0	-	50 g
standard	6.0	0,+0.12	19.0	0,-0.12	6.0	0,-0.15	P626-GB	P626-SB	78.4	-	2 g
standard	7.0	0,+0.12	22.0	0,-0.12	7.0	0,-0.15	P627-GB	P627-SB	88.2	-	3 g
standard	8.0	0,+0.12	24.0	0,-0.12	8.0	0,-0.15	P628-GB	P628-SB	98.0	-	4 g
standard	9.0	0,+0.12	26.0	0,-0.12	8.0	0,-0.15	P629-GB	P629-SB	107.8	-	4 g
standard	10.0	0,+0.12	30.0	0,-0.12	9.0	0,-0.15	P6200-GB	P6200-SB	117.6	-	6 g
standard	12.0	0,+0.12	32.0	0,-0.12	10.0	0,-0.15	P6201-GB	P6201-SB	127.4	-	7 g
standard	15.0	0,+0.12	35.0	0,-0.12	11.0	0,-0.15	P6202-GB	P6202-SB	147.0	-	9 g
standard	17.0	0,+0.12	40.0	0,-0.12	12.0	0,-0.15	P6203-GB	P6203-SB	156.8	-	13 g
standard	20.0	0,+0.12	47.0	0,-0.12	14.0	0,-0.15	P6204-GB	P6204-SB	166.6	-	21 g
standard	25.0	0,+0.12	52.0	0,-0.12	15.0	0,-0.15	P6205-GB	P6205-SB	176.4	-	25 g
standard	30.0	0,+0.12	62.0	0,-0.12	16.0	0,-0.15	P6206-GB	P6206-SB	196.0	-	38 g
standard	35.0	0,+0.12	72.0	0,-0.12	17.0	0,-0.15	P6207-GB	P6207-SB	215.6	-	55 g

Kunststofflager (POM) / Plastic Bearings



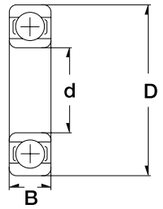


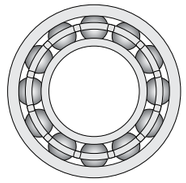


standard or flanged	Dimension (mm) d	d Tolerance	D	D Tolerance	B	B Tolerance	Designation/Type Glass Balls	Stainless Steel Balls	Load Rating C, dyn. N	C, stat. N	Weight (g)
standard	40.0	0,+0.12	80.0	0,-0.12	18.0	0,-0.15	P6208-GB	P6208-SB	245.0	-	70 g
standard	10.0	0,+0.12	35.0	0,-0.12	11.0	0,-0.15	P6300-GB	P6300-SB	137.2	-	10 g
standard	12.0	0,+0.12	37.0	0,-0.12	12.0	0,-0.15	P6301-GB	P6301-SB	156.8	-	12 g
standard	15.0	0,+0.12	42.0	0,-0.12	13.0	0,-0.15	P6302-GB	P6302-SB	176.4	-	16 g
standard	17.0	0,+0.12	47.0	0,-0.12	14.0	0,-0.15	P6303-GB	P6303-SB	196.0	-	22 g
standard	20.0	0,+0.12	52.0	0,-0.12	15.0	0,-0.15	P6304-GB	P6304-SB	225.4	-	28 g
standard	25.0	0,+0.12	62.0	0,-0.12	17.0	0,-0.15	P6305-GB	P6305-SB	254.8	-	45 g
standard	30.0	0,+0.12	72.0	0,-0.12	19.0	0,-0.15	P6306-GB	P6306-SB	274.4	-	66 g
standard	35.0	0,+0.12	80.0	0,-0.12	21.0	0,-0.15	P6307-GB	P6307-SB	313.6	-	89 g
standard	40.0	0,+0.12	90.0	0,-0.12	23.0	0,-0.15	P6308-GB	P6308-SB	343.0	-	120 g
standard	8.0	0,+0.12	19.0	0,-0.12	6.0	0,-0.15	P698-GB	P698-SB	78.4	-	2 g
standard	9.0	0,+0.12	20.0	0,-0.12	6.0	0,-0.15	P699-GB	P699-SB	78.4	-	2 g
standard	10.0	0,+0.12	22.0	0,-0.12	6.0	0,-0.15	P6900-GB	P6900-SB	78.4	-	2 g
standard	12.0	0,+0.12	24.0	0,-0.12	6.0	0,-0.15	P6901-GB	P6901-SB	88.2	-	2 g
standard	15.0	0,+0.12	28.0	0,-0.12	7.0	0,-0.15	P6902-GB	P6902-SB	98.0	-	3 g
standard	17.0	0,+0.12	30.0	0,-0.12	7.0	0,-0.15	P6903-GB	P6903-SB	107.8	-	4 g
standard	20.0	0,+0.12	37.0	0,-0.12	9.0	0,-0.15	P6904-GB	P6904-SB	117.6	-	7 g
standard	25.0	0,+0.12	42.0	0,-0.12	9.0	0,-0.15	P6905-GB	P6905-SB	137.2	-	10 g
standard	30.0	0,+0.12	47.0	0,-0.12	9.0	0,-0.15	P6906-GB	P6906-SB	147.0	-	10 g
standard	35.0	0,+0.12	55.0	0,-0.12	10.0	0,-0.15	P6907-GB	P6907-SB	166.6	-	14 g
standard	40.0	0,+0.12	62.0	0,-0.12	12.0	0,-0.15	P6908-GB	P6908-SB	186.2	-	22 g

Sondermasse / Special Dimension Bearings







standard or flanged	Dimension (mm) d	D	B	Dimension (inch) d	Designation/Type Chrome Steel 2Z	2RS/2TS	* Load Rating C, dyn. N	C, stat. N	* Limiting Speed x1000 rpm Grease	Weight (g) approx.
standard	6.000	21.00	6.00	-	626/21-2Z	-	2336	896	32.0	8 g
standard	8.000	22.00	6.00	-	608-2ZW6	-	3293	1379	34.0	12 g
standard	8.000	24.00	7.00	-	608/24-2Z	-	3293	1379	34.0	14 g
standard	8.000	26.00	7.00	-	608/26-2Z	-	3293	1379	34.0	15 g
standard	10.000	35.00	11.00	-	6200/35-2Z	-	5100	2390	24.0	45 g
standard	12.700	32.00	10.00	0.500 (1/2)	6201-2Z1/2	6201-2RS1/2*	6800	3050	22.0	37 g
standard	13.000	32.00	10.00	-	6201-2Z/13	-	6800	3050	22.0	37 g
standard	15.875	35.00	11.00	0.625 (5/8)	6202-2Z5/8	6202-2RS5/8*	7650	3750	20.0	45 g
standard	16.000	35.00	11.00	-	6202-2Z/16	-	7650	3750	20.0	45 g
standard	15.000	47.00	11.00	-	6202/47-2Z	6202/47-2RS*	7650	3750	20.0	100 g
standard	15.875	40.00	12.00	0.625 (5/8)	6203-2Z5/8	6203-2RS5/8*	9550	4800	17.0	67 g
standard	16.000	40.00	12.00	-	6203-2Z/16	-	9550	4800	17.0	67 g
standard	19.050	40.00	12.00	-	6203-2Z3/4	6203-2RS3/4*	9550	4800	17.0	67 g
standard	19.050	47.00	12.00	0.750 (3/4)	6204-2Z3/4	-	12800	6600	15.0	107 g
standard	22.225	47.00	14.00	0.750 (3/4)	6204-2Z7/8	-	12800	6600	15.0	107 g



Produktfocus / Product focus

ZEN™

Kunststofflager (POM)
Plastic Bearings

- ✓ Hervorragende chemische Beständigkeit
  Excellent Chemical Resistance
- ✓ Korrosionsbeständig
  Corrosion Resistant
- ✓ Nicht magnetisch
  Non-Magnetic
- ✓ Gutes elektrisches Isolationsvermögen
  Good Electrical Insulation
- ✓ Keine Schmierung erforderlich
  Lubrication Free
- ✓ Leichtbauweise
  Lightweight

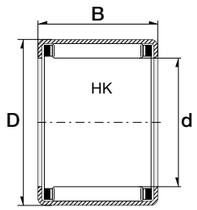
MANUFACTURED TO FDA STANDARDS

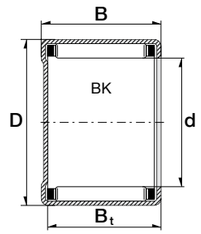
ZEN- Kunststofflager sind geeignet für die Anwendung in der Getränke- und Nahrungsmittelindustrie.
In Verbindung mit rostarmen, Glas- oder Keramikkugeln sind ZEN-Kunststofflager die ideale Lösung für Anwendungen in korrosiven und chemisch aggressiven Medien

Zen Plastic bearings are widely used in the food processing industry and are FDA approved.
When combined with stainless, glass or ceramic balls, ZEN Plastic Bearings are ideally suited to corrosive and aggressive chemical environments.

SIEHE SEITE 78 / SEE PAGE 78







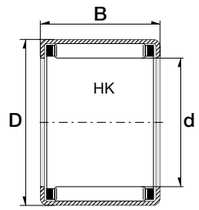
Needle Roller Bearings
HK series with open ends

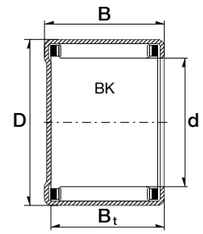
Drawn Cup
Needle Roller Bearings
BK series with closed end

Designation/Type		Dimension (mm)				* Load Rating		Limiting speed x1000rpm
with open ends	with closed end	d	D	B Tol.-0.3	B_t min. only BK	C, dyn. N	C, stat. N	
HK 0608	-	6	10	8	-	1980	1540	34.0
HK 0609	BK 0609	6	10	9	7.4	2650	2400	35.0
HK 0709	BK 0709	7	11	9	7.4	2850	2750	30.0
HK 0808	BK 0808	8	12	8	6.4	2550	2400	27.0
HK 0810	BK 0810	8	12	10	8.4	3500	3650	27.0
HK 0908	-	9	13	8	-	3300	3500	26.0
HK 0910	BK 0910	9	13	10	8.4	4000	4300	26.0
HK 0912	BK 0912	9	13	12	10.4	5000	5900	26.0
HK 1010	BK 1010	10	14	10	8.4	4100	4700	22.0
HK 1012	BK 1012	10	14	12	10.4	5100	6300	22.5
HK 1015	BK 1015	10	14	15	13.4	6300	8200	22.0
HK 1210	BK 1210	12	16	10	8.4	4600	5800	21.0
HK 1212	BK 1212	12	18	12	9.3	6000	6800	19.5
HK 1312	BK 1312	13	19	12	9.3	6300	7300	18.5
HK 1412	BK 1412	14	20	12	9.3	6600	7900	15.0
HK 1512	BK 1512	15	21	12	9.3	7300	8700	15.0
HK 1516	BK 1516	15	21	16	13.3	9800	13400	15.5
HK 1612	BK 1612	16	22	12	9.3	7100	9000	15.0
HK 1616	BK 1616	16	22	16	13.3	10100	14200	15.0
HK 1712	-	17	23	12	-	7300	5600	13.5
HK 1812	BK 1812	18	24	12	9.3	7500	10100	13.0
HK 1816	BK 1816	18	24	16	13.3	10800	16000	14.0
HK 2010	-	20	26	10	-	6000	7600	11.5
HK 2012	-	20	26	12	-	8000	11200	12.0
HK 2016	BK 2016	20	26	16	13.3	12000	19000	12.5

Nadellager / Needle Roller Bearings







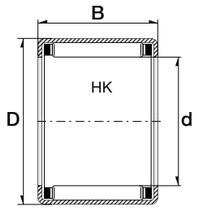
Needle Roller Bearings
HK series with open ends

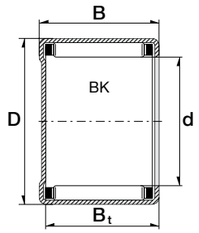
Drawn Cup
Needle Roller Bearings
BK series with closed end

Designation/Type		Dimension (mm)				* Load Rating		Limiting speed x1000rpm
with open ends	with closed end	d	D	B Tol.-0.3	B_t min. only BK	C, dyn. N	C, stat. N	
HK 2020	BK 2020	20	26	20	17.3	15500	24000	12.0
HK 2210	-	22	28	10	-	7000	10000	11.5
HK 2212	BK 2212	22	28	12	9.3	8500	12500	11.5
HK 2216	BK 2216	22	28	16	13.3	12500	20500	11.5
HK 2220	-	22	28	20	-	15000	27000	11.5
HK 2512	-	25	32	12	-	10000	15000	9.5
HK 2516	-	25	32	16	-	14500	22000	10.0
HK 2520	BK 2520	25	32	20	17.3	18500	30000	10.0
HK 2526	BK 2526	25	32	26	23.3	23500	42000	10.0
HK 2816	-	28	35	16	-	15000	24500	8.5
HK 2820	-	28	35	20	-	20000	33500	8.5
HK 3012	BK 3012	30	37	12	9.3	11000	17000	8.5
HK 3016	BK 3016	30	37	16	13.3	16000	27000	8.5
HK 3020	BK 3020	30	37	20	17.3	21000	37000	8.5
HK 3026	BK 3026	30	37	26	23.3	26000	50000	8.5
HK 3512	-	35	42	12	-	12000	20000	7.0

Nadellager / Needle Roller Bearings







Needle Roller Bearings
HK series with open ends

Drawn Cup
Needle Roller Bearings
BK series with closed end

Designation/Type		Dimension (mm)				* Load Rating		Limiting speed x1000rpm
with open ends	with closed end	d	D	B Tol.-0.3	B_t min. only BK	C, dyn. N	C, stat. N	
HK 3516	-	35	42	16	-	18500	31000	7.0
HK 3520	BK 3520	35	42	20	17.3	22000	43000	7.5
HK 4012	-	40	47	12	-	13000	22600	6.0
HK 4016	-	40	47	16	-	18600	36000	6.0
HK 4020	BK 4020	40	47	20	17.3	24000	50000	6.0
HK 4512	-	45	52	12	-	14000	25500	5.5
HK 4516	-	45	52	16	-	20000	40500	5.5
HK 4520	BK 4520	45	52	20	17.3	25000	54500	5.5
HK 5020	-	50	58	20	-	29000	58500	5.0
HK 5025	-	50	58	25	-	35800	78000	4.8
HK 5520	-	55	63	20	-	29500	62300	4.6
HK 5528	-	55	63	28	-	41000	95800	4.6
HK 6012	-	60	68	12	-	16200	30000	4.1
HK 6020	-	60	68	20	-	31000	70000	4.4
HK 6032	-	60	68	32	-	49500	125500	4.4



Produktfocus / Product focus

ZON™

Keramiklager
Solid Ceramic Bearings

- ✓ Spannungsisolierte Elektromotoren
  Voltage isolated electrical motors
- ✓ Gasturbinen
  Gas turbine engines
- ✓ Anwendungen in chemisch aggressiven Medien
  Chemically resistant applications
- ✓ Anwendungen in nassen Medien
  Wet environments
- ✓ Vacuumpumpen
  Vacuum process equipment
- ✓ Elektrische Ausrüstungen
  Electro equipment
- ✓ Öfen
  Furnaces

Vollkeramische Lager können noch dort verwendet werden, wo herkömmliche Lager nicht mehr eingesetzt werden können. Keramik ist extrem korrosionsbeständig, nicht magnetisch, nicht leitend und hitzebeständig.

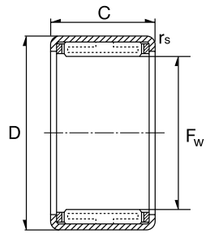
Full Ceramic bearings are normally used in extreme operating environments where standard bearings fail.

The advantage of solid Ceramic Bearings is that they are corrosion resistant, non magnetic, non conductive and can withstand extreme heat.

SIEHE SEITE 30 / SEE PAGE 30

Hülsenfreilauf / HF One-way Clutch Bearing





Dimension (mm)			Designation/Type		Permissible Torque Md / Nm	*Limiting Speed x1000rpm		Suitable Drawn Cup Bearing	Mass (g) approx.
F_w	D	C	Plastic Springs	Steel Springs		Rotating Shaft Min^{-1}	Rotating Outer ring Min^{-1}		
4.0	8.0	6.0	HF0406KF	--	0.34	34000	8000	HK0408TN	1
4.0	8.0	6.0	HF0406KFR	--	0.1	34000	8000	HD0408TN	1
6.0	10.0	12.0	HF0612KF	HF0612	1.76	23000	13000	HK0608	3
6.0	10.0	12.0	HF0612KFR	HF0612R	0.5	23000	13000	HK0608	3
8.0	12.0	12.0	HF0812KF	HF0812	3.15	17000	12000	HK0808	3.5
8.0	12.0	12.0	HF0812KFR	HF0812R	1	17000	12000	HK0808	3.5
10.0	14.0	12.0	HF1012KF	HF1012	5.3	14000	11000	HK1010	4
10.0	14.0	12.0	HF1012KFR	HF1012R	1.5	14000	11000	HK1010	4
12.0	18.0	16.0	--	HF1216	12.2	11000	8000	HK1212	11
14.0	20.0	16.0	--	HF1416	17.3	9500	8000	HK1412	13
16.0	22.0	16.0	--	HF1616	20.5	8500	7500	HK1612	14
18.0	24.0	16.0	--	HF1816	24.1	7500	7500	HK1812	16
20.0	26.0	16.0	--	HF2016	28.5	7000	6500	HK2010	17
25.0	32.0	20.0	--	HF2520	66	5500	5500	HK2512	30
30.0	37.0	20.0	--	HF3020	90	4500	4500	HK3012	36
35.0	42.0	20.0	--	HF3520	121	3900	3900	HK3512	40

*Grenzdrehzahl gilt für Fett- und Ölschmierung
*The limiting speeds are valid for both grease and oil lubrication.

HF..R mit Stahlfeder und Rändelung
HF..R with steel spring and

HF..KF mit Kunststofffeder
HF..KF with plastic springs

HF..KFR mit Kunststofffeder und Rändelung
HF..KFR with additional knurling

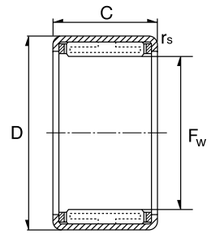
HFL..R mit Stahlfeder und Rändelung
HFL..R with steel spring and knurling

HFL..KF mit Kunststofffeder
HFL..KF with plastic springs

HFL..KFR mit Kunststofffeder und Rändelung
HFL..KFR with additional knurling

Hülsenfreilauf / HF One-way Clutch Bearing





Dimension (mm)			Designation/Type		Permissible Torque Md / Nm	*Limiting Speed x1000rpm		Basic Load Rating		Mass (g) approx.
F_w	D	C	Plastic Springs	Steel Springs		Rotating Shaft Min^{-1}	Rotating Outer ring Min^{-1}	C	Co	
								KN		
6.0	10.0	15.0	HFL0615KF	HFL0615	1.76	23000	13000	--	--	4
6.0	10.0	15.0	HFL0615KFR	HFL0615R	0.5	23000	13000	--	--	4
8.0	12.0	22.0	HFL0822KF	HFL0822	3.15	17000	12000	4.05	4.15	7
8.0	12.0	22.0	HFL0822KFR	HFL0822R	1	17000	12000	--	--	7
10.0	14.0	22.0	HFL1022KF	HFL1022	5.3	14000	11000	4.3	4.65	8
10.0	14.0	22.0	HFL1022KFR	HFL1022R	1.5	14000	11000	--	--	8
12.0	18.0	26.0	--	HFL1226	12.2	11000	8000	6.3	6.5	18
14.0	20.0	26.0	--	HFL1426	17.3	9500	8000	7.1	7.7	20
16.0	22.0	26.0	--	HFL1626	20.5	8500	7500	7.7	9	22
18.0	24.0	26.0	--	HFL1826	24.1	7500	7500	8.3	10.3	25
20.0	26.0	26.0	--	HFL2026	28.5	7000	6500	8.9	11.5	27
25.0	32.0	30.0	--	HFL2530	66	5500	5500	10.9	14.1	44
30.0	37.0	30.0	--	HFL3030	90	4500	4500	12.6	17.6	51
35.0	42.0	30.0	--	HFL3530	121	3900	3900	13	19.3	58

*Grenzdrehzahl gilt für Fett- und Ölschmierung
*The limiting speeds are valid for both grease and oil lubrication.

HF..R mit Stahlfeder und Rändelung
HF..R with steel spring and knurling

HF..KF mit Kunststofffeder
HF..KF with plastic springs

HF..KFR mit Kunststofffeder und Rändelung
HF..KFR with additional knurling

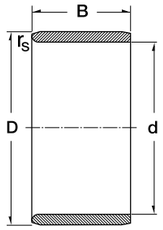
HFL..R mit Stahlfeder und Rändelung
HFL..R with steel spring and knurling

HFL..KF mit Kunststofffeder
HFL..KF with plastic springs

HFL..KFR mit Kunststofffeder und Rändelung
HFL..KFR with additional knurling

IR Innenringe / IR Inner Ring Series

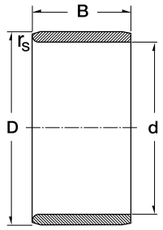




Dimension (mm)			Designation/Type	Shaft Diameter (mm)	Mass (g) approx.
d	D	B			
7.0	10.0	12.0	IR 7X10X12	7.0	4 g
8.0	12.0	12.5	IR 8X12X12.5	8.0	6 g
10.0	13.0	12.5	IR 10X13X12.5	10.0	5 g
12.0	15.0	12.5	IR 12X15X12.5	12.0	6 g
12.0	16.0	12.0	IR 12X16X12	12.0	8 g
15.0	18.0	16.5	IR 15X18X16.5	15.0	10 g
15.0	20.0	23.0	IR 15X20X23	15.0	25 g
17.0	20.0	16.0	IR 17X20X16	17.0	11 g
17.0	20.0	20.0	IR 17X20X20	17.0	14 g
17.0	21.0	20.0	IR 17X21X20	17.0	19 g
17.0	22.0	13.0	IR 17X22X13	17.0	15 g
20.0	24.0	20.0	IR 20X24X20	20.0	21 g
20.0	25.0	12.5	LR 20X25X12.5	20.0	17 g
20.0	25.0	20.5	LR 20X25X20.5	20.0	28 g
22.0	28.0	20.5	IR 22X28X20.5	22.0	36 g
25.0	30.0	12.5	IR 25X30X12.5	25.0	20 g
25.0	30.0	20.0	IR 25X30X20	25.0	33 g
25.0	30.0	32.0	IR 25X30X32	25.0	54 g
30.0	35.0	16.0	IR 30X35X16	30.0	31 g
30.0	35.0	20.5	IR 30X35X20.5	30.0	39 g
30.0	35.0	30.0	IR 30X35X30	30.0	59 g
35.0	40.0	17.0	IR 35X40X17	35.0	39 g
35.0	40.0	20.0	IR 35X40X20	35.0	46 g
35.0	40.0	30.0	IR 35X40X30	35.0	68 g
40.0	45.0	10.0	IR 40X45X10	40.0	26 g
40.0	45.0	20.0	IR 40X45X20	40.0	51 g
40.0	45.0	30.0	IR 40X45X30	40.0	77 g
45.0	50.0	20.0	IR 45X50X20	45.0	57 g
45.0	50.0	35.0	IR 45X50X35	45.0	101 g
45.0	52.0	22.0	IR 45X52X22	45.0	88 g

IR Innenringe / IR Inner Ring Series

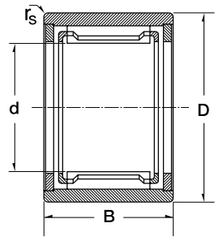




Dimension (mm)			Designation/Type	Shaft Diameter (mm)	Mass (g) approx.
d	D	B			
50.0	55.0	20.0	IR 50X55X20	50.0	63 g
50.0	55.0	35.0	IR 50X55X35	50.0	112 g
50.0	58.0	22.0	IR 50X58X22	50.0	115 g
50.0	58.0	40.0	IR 50X58X40	50.0	209 g
50.0	60.0	25.0	IR 50X60X25	50.0	163 g
50.0	60.0	28.0	IR 50X60X28	50.0	183 g
55.0	60.0	35.0	IR 55X60X35	55.0	121 g
60.0	68.0	45.0	IR 60X68X45	60.0	275 g
60.0	70.0	25.0	IR 60X70X25	60.0	195 g
60.0	70.0	60.0	IR 60X70X60	60.0	463 g
65.0	72.0	45.0	IR 65X72X45	65.0	259 g
65.0	75.0	28.0	IR 65X75X28	65.0	236 g
70.0	80.0	25.0	IR 70X80X25	70.0	224 g
70.0	80.0	54.0	IR 70X80X54	70.0	480 g
80.0	90.0	35.0	IR 80X90X35	80.0	355 g

NK Nadellager / NK Needle Roller

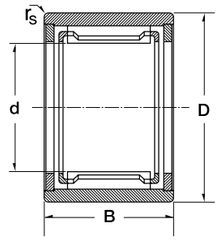




Dimension (mm)				Designation/Type	Shaft Diameter mm	*Basic Load Rating KN		*Limiting Speed x1000rpm		Mass (g) approx.
d	D	B	r_s	GD		C	Co	Grease	Oil	
5.0	10.0	10.0	0.15	NK 5/10B.TN	5	2.35	1.92	24.0	39.0	3 g
5.0	10.0	12.0	0.15	NK 5/12TN	5	3	2.65	24.0	39.0	4 g
6.0	12.0	10.0	0.15	NK 6/10	6	2.6	2.28	22.0	36.0	5 g
6.0	12.0	12.0	0.15	NK 6/12TN	6	2.9	2.8	22.0	36.0	6 g
7.0	14.0	10.0	0.3	NK 7/10TN	7	2.65	2.5	20.0	34.0	7 g
7.0	14.0	12.0	0.3	NK 7/12TN	7	3.25	3.25	20.0	34.0	8 g
8.0	15.0	12.0	0.3	NK 8/12	8	3.95	4.1	19.0	32.0	8 g
8.0	15.0	16.0	0.3	NK 8/16	8	5.1	5.8	19.0	32.0	12 g
9.0	16.0	12.0	0.3	NK 9/12	9	4.05	4.75	18.0	30.0	10 g
9.0	16.0	16.0	0.3	NK 9/16	9	5.9	7.1	18.0	30.0	13 g
10.0	17.0	12.0	0.3	NK 10/12	10	4.75	5.5	17.0	28.0	10 g
10.0	17.0	16.0	0.3	NK 10/16	10	5.6	7.35	17.0	28.0	13 g
12.0	19.0	12.0	0.3	NK 12/12	12	5.7	6.55	16.0	26.0	12 g
12.0	19.0	16.0	0.3	NK 12/16	12	6.4	9.15	16.0	26.0	16 g
14.0	22.0	13.0	0.3	RNA 4900	14	8.5	9.2	15.0	25.0	16 g
14.0	22.0	16.0	0.3	NK 14/16	14	10.1	11.5	15.0	25.0	21 g
14.0	22.0	20.0	0.3	NK 14/20	14	12.8	15.6	15.0	25.0	25 g
15.0	23.0	16.0	0.3	NK 15/16	15	10.7	12.7	14.4	24.0	21 g
15.0	23.0	20.0	0.3	NK 15/20	15	13.6	17.2	14.4	24.0	27 g
16.0	24.0	13.0	0.3	RNA 4901	16	9.4	10.9	14.0	23.0	17 g
16.0	24.0	16.0	0.3	NK 16/16	16	11.3	13.9	14.0	23.0	22 g
16.0	24.0	20.0	0.3	NK 16/20	16	14.4	18.8	14.0	23.0	28 g
16.0	24.0	22.0	0.3	RNA 6901	16	14.3	20	14.0	23.0	31 g
17.0	25.0	16.0	0.3	NK 17/16	17	11.9	15	14.0	23.0	24 g
17.0	25.0	20.0	0.3	NK 17/20	17	13.7	19	14.0	23.0	30 g
18.0	26.0	16.0	0.3	NK 18/16	18	12.5	16.2	14.0	22.0	25 g
18.0	26.0	20.0	0.3	NK 18/20	18	14.3	20.4	14.0	22.0	31 g
19.0	27.0	16.0	0.3	NK 19/16	19	13	17.4	14.0	22.0	26 g
19.0	27.0	20.0	0.3	NK 19/20	19	15	22	14.0	22.0	32 g
20.0	28.0	13.0	0.3	RNA 4902	20	10.6	13.6	13.0	20.0	22 g

NK Nadellager / NK Needle Roller

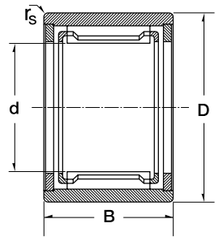




Dimension (mm)				Designation/Type	Shaft Diameter mm	*Basic Load Rating KN		*Limiting Speed x1000rpm		Mass (g) approx.
d	D	B	r_s	GD		C	Co	Grease	Oil	
20.0	28.0	16.0	0.3	NK 20/16	20	13	17.5	13.0	20.0	27 g
20.0	28.0	20.0	0.3	NK 20/20	20	16.4	20.8	13.0	20.0	34 g
20.0	28.0	23.0	0.3	RNA 6902	20	17.3	25.5	13.0	20.0	40 g
20.0	32.0	20.0	0.6	NKS 20	20	23	25	13.0	20.0	49 g
21.0	29.0	16.0	0.3	NK 21/16	21	13.5	18.7	13.0	20.0	28 g
21.0	29.0	20.0	0.3	NK 21/20	21	17.1	25.5	13.0	20.0	35 g
22.0	30.0	13.0	0.3	RNA 4903	22	11	14.6	12.0	19.0	22 g
22.0	30.0	16.0	0.3	NK 22/16	22	14	19.9	12.0	19.0	30 g
22.0	30.0	20.0	0.3	NK 22/20	22	16	25	12.0	19.0	37 g
22.0	30.0	23.0	0.3	RNA 6903	22	18	29	12.0	19.0	42 g
22.0	35.0	20.0	0.6	NKS 22	22	20.8	25.5	12.0	19.0	61 g
24.0	32.0	16.0	0.3	NK 24/16	24	15	22.3	10.0	17.0	32 g
24.0	32.0	20.0	0.3	NK 24/20	24	17.3	28.5	10.0	17.0	40 g
24.0	37.0	20.0	0.6	NKS 24	24	26	31	10.0	17.0	65 g
25.0	33.0	16.0	0.3	NK 25/16	25	14.9	22.4	10.0	17.0	33 g
25.0	33.0	20.0	0.3	NK 25/20	25	17	28.5	10.0	17.0	42 g
25.0	37.0	17.0	0.3	RNA 4904	25	19	23.6	10.0	17.0	52 g
25.0	37.0	30.0	0.3	RNA 6904	25	33.5	49	10.0	17.0	100 g
25.0	38.0	20.0	0.6	NKS 25	25	27.5	33.5	10.0	17.0	68 g
26.0	34.0	16.0	0.3	NK 26/16	26	14.6	23.6	9.5	16.0	34 g
26.0	34.0	20.0	0.3	NK 26/20	26	17.6	30	9.5	16.0	42 g
28.0	37.0	20.0	0.3	NK 28/20	28	20	32	9.0	15.0	52 g
28.0	37.0	30.0	0.3	NK 28/30ASR1	28	26.5	52	9.0	15.0	82 g
28.0	39.0	17.0	0.3	RNA 49/22	28	20.8	27.5	9.0	15.0	50 g
28.0	39.0	30.0	0.3	RNA 69/22	28	36	51	9.0	15.0	98 g
28.0	42.0	20.0	0.3	NKS 28	28	28.5	36.5	9.0	15.0	84 g
29.0	38.0	20.0	0.3	NK 29/20	29	21.9	34	8.5	14.0	54 g
29.0	38.0	30.0	0.3	NK 29/30	29	32.5	57	8.5	14.0	84 g
30.0	40.0	20.0	0.3	NK 30/20	30	22.6	36	8.5	14.0	65 g
30.0	40.0	30.0	0.3	NK 30/30	30	33.5	60	8.5	14.0	98 g

NK Nadellager / NK Needle Roller

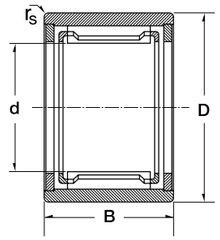




Dimension (mm)				Designation/Type	Shaft Diameter mm	*Basic Load Rating KN		*Limiting Speed x1000rpm		Mass (g) approx.
d	D	B	r_s	GD		C	Co	Grease	Oil	
30.0	42.0	17.0	0.3	RNA 4905	30	23.6	31.5	8.5	14.0	61 g
30.0	42.0	30.0	0.3	RNA 6905	30	39	59	8.5	14.0	112 g
30.0	45.0	22.0	0.6	NKS 30	30	32	40	8.5	14.0	104 g
32.0	42.0	20.0	0.3	NK 32/20	32	23.1	37.5	8.0	13.0	68 g
32.0	42.0	30.0	0.3	NK 32/30	32	32.5	62	8.0	13.0	102 g
32.0	45.0	17.0	0.3	RNA 49/28	32	22.4	31.5	8.0	13.0	73 g
32.0	45.0	30.0	0.3	RNA 69/28	32	40	60	8.0	13.0	135 g
32.0	47.0	22.0	0.6	NKS 32	32	33.5	43.5	8.0	13.0	110 g
35.0	45.0	20.0	0.3	NK 35/20	35	24.3	41.5	7.5	12.0	74 g
35.0	45.0	30.0	0.3	NK 35/30	35	34	68	7.5	12.0	122 g
35.0	47.0	17.0	0.3	RNA 4906	35	23.2	33.5	7.5	12.0	69 g
35.0	47.0	30.0	0.3	RNA 6906	35	39	65.5	7.5	12.0	126 g
35.0	50.0	22.0	0.6	NKS 35	35	34	47.5	7.5	12.0	118 g
37.0	47.0	20.0	0.3	NK 37/20	37	23.6	43	7.0	11.0	77 g
37.0	47.0	30.0	0.3	NK 37/30	37	34.5	71	7.0	11.0	113 g
37.0	52.0	22.0	0.6	NKS 37	37	35.5	50	7.0	11.0	123 g
38.0	48.0	20.0	0.3	NK 38/20B.ASR1	38	20.8	41.5	7.0	11.0	79 g
38.0	48.0	30.0	0.3	NK 38/30ASR1	38	30.5	68	7.0	11.0	116 g
40.0	50.0	20.0	0.3	NK 40/20	40	25	47	6.7	10.0	83 g
40.0	50.0	30.0	0.3	NK 40/30	40	36.5	76.5	6.7	10.0	125 g
40.0	52.0	20.0	0.6	RNA 49/32	40	28.5	46.5	6.7	10.0	89 g
40.0	52.0	36.0	0.6	RNA 69/32	40	43	78	6.7	10.0	162 g
40.0	55.0	22.0	0.6	NKS 40	40	36.5	54	6.7	10.0	129 g
42.0	52.0	20.0	0.3	NK 42/20	42	26.5	49	6.7	10.0	86 g
42.0	52.0	30.0	0.3	NK 42/30	42	37.5	80	6.7	10.0	130 g
42.0	55.0	20.0	0.6	RNA 4907	42	29	49	6.7	10.0	107 g
42.0	55.0	36.0	0.6	RNA 6907	42	44	83	6.7	10.0	193 g
43.0	53.0	20.0	0.3	NK 43/20	43	26	51	6.3	9.5	86 g
43.0	53.0	30.0	0.3	NK 43/30	43	38	83	6.3	9.5	133 g
43.0	58.0	22.0	0.6	NKS 43	43	37.5	57	6.3	9.5	139 g

NK Nadellager / NK Needle Roller

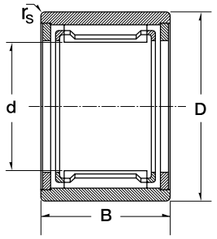




Dimension (mm)				Designation/Type	Shaft Diameter mm	*Basic Load Rating KN		*Limiting Speed x1000rpm		Mass (g) approx.
d	D	B	r_s	GD		C	Co	Grease	Oil	
45.0	55.0	20.0	0.3	NK 45/20	45	26.5	53	6.3	9.5	91 g
45.0	55.0	30.0	0.3	NK 45/30	45	39	86	6.3	9.5	139 g
45.0	60.0	22.0	0.6	NKS 45	45	40.5	60	6.0	9.0	145 g
47.0	57.0	20.0	0.3	NK 47/20	47	27	55	6.0	9.0	94 g
47.0	57.0	30.0	0.3	NK 47/30	47	39	90	6.0	9.0	142 g
48.0	62.0	22.0	0.6	RNA 4908	48	40	64	5.6	8.5	140 g
48.0	62.0	40.0	0.6	RNA 6908	48	64	116	5.6	8.5	256 g
50.0	62.0	25.0	0.6	NK 50/25	50	38	74	5.6	8.5	158 g
50.0	62.0	35.0	0.6	NK 50/35	50	50	106	5.6	8.5	221 g
50.0	65.0	22.0	1.0	NKS 50	50	42.5	67	5.6	8.5	157 g
52.0	68.0	22.0	0.6	RNA 4909	52	41.5	69.5	5.3	8.0	182 g
52.0	68.0	40.0	0.6	RNA 6909	52	65.5	125	5.3	8.0	338 g
55.0	68.0	25.0	0.6	NK 55/25	55	40	82	5.0	7.5	180 g
55.0	68.0	35.0	0.6	NK 55/35	55	53	118	5.0	7.5	250 g
55.0	72.0	22.0	1.0	NKS 55	55	42.5	72	5.0	7.5	221 g
58.0	72.0	22.0	0.6	RNA 4910	58	43	76.5	4.8	7.0	163 g
58.0	72.0	40.0	0.6	RNA 6910	58	67	132	4.8	7.0	310 g
60.0	72.0	25.0	0.6	NK 60/25	60	40	88	4.8	7.0	185 g
60.0	72.0	35.0	0.6	NK 60/35	60	55	130	4.8	7.0	258 g
60.0	80.0	28.0	1.1	NKS 60	60	60	98	4.8	7.0	335 g
63.0	80.0	25.0	1.0	RNA 4911	63	58	100	4.5	6.7	255 g
63.0	80.0	45.0	1.0	RNA 6911	63	83	160	4.5	6.7	470 g
65.0	78.0	25.0	0.6	NK 65/25	65	43	91.5	4.5	6.3	221 g
65.0	78.0	35.0	0.6	NK 65/35	65	60	137	4.3	6.3	310 g
65.0	85.0	28.0	1.1	NKS 65	65	64	108	4.3	6.0	365 g
68.0	82.0	25.0	0.6	NK 68/25	68	43.5	89	4.0	6.0	241 g
68.0	82.0	35.0	0.6	NK 68/35	68	62	139	4.0	6.0	338 g
68.0	85.0	25.0	1.0	RNA 4912	68	60	108	4.0	6.0	275 g
68.0	85.0	45.0	1.0	RNA 6912	68	71	176	4.0	6.0	488 g
70.0	85.0	25.0	0.6	NK 70/25A SR1	70	41.5	90	4.0	6.0	260 g

NK Nadellager / NK Needle Roller





Dimension (mm)				Designation/Type	Shaft Diameter mm	*Basic Load Rating KN		*Limiting Speed x1000rpm		Mass (g) approx.
d	D	B	r_s	GD		C	Co	Grease	Oil	
70.0	85.0	35.0	0.6	NK 70/35A SR1	70	58.5	140	4.0	6.0	370 g
70.0	90.0	28.0	1.1	NKS 70	70	68	113	4.0	6.0	380 g
72.0	90.0	25.0	1.0	RNA 4913	72	61	112	4.0	6.0	312 g
72.0	90.0	45.0	1.0	RNA 6913	72	95	196	4.0	6.0	580 g
73.0	90.0	25.0	0.6	NK 73/25	73	53	100	3.8	5.6	302 g
73.0	90.0	35.0	0.6	NK 73/35	73	75	156	3.8	5.6	428 g



Produktfocus / Product focus

ZON™

Nadellager
Needle Roller Bearings

- ✓ Automobilindustrie
  Automotive Industry
- ✓ Pumpen und Kompressoren
  Pumps and Compressors
- ✓ Automatische und manuelle Getriebe
  Automatic and Manual Transmissions
- ✓ Marine
  Marine Applications
- ✓ Elektrowerkzeuge und Industriemaschinen
  Power Tools and Industrial Machinery

Nadellager haben einen sehr kleinen Aussendurchmesser im Verhältnis zum Bohrung. Daher bieten sich Nadellager als Lösung an, wenn andere Wälzlager aus Platzmangel nicht verbaut werden können. In Verbindung mit käfiggeführten Nadeln sind zudem hohe Drehzahlen möglich. Durch ihre zusätzlich hohe Tragzahl eignen sich Nadellager auch bei Konstruktionen mit hohen Lasten

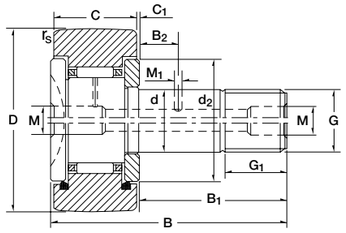
Needle bearings have much smaller cylindrical rollers for a given bore size. This gives the advantage of a much higher speed capacity.

Needle bearings are not as wide as standard types, but their load carrying capacity is much higher which makes them suitable for applications where the load is high and the radial space is limited.

SIEHE SEITE 82 / SEE PAGE 82

KR Kurvenrollen / KR Track Roller



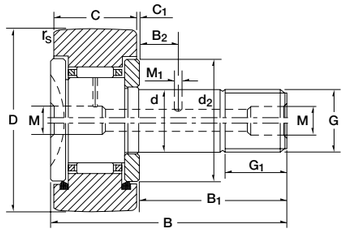


Dimensions (mm)				Outside Diameter (mm)	Designation /Type	Weight (g) approx.	With Eccentric Collar	Weight (g) approx.	Dimensions (mm)				
d	D	B	C						rs min	B1	B2	G	G1
6.0	16.0	28.0	11.0	16.0	KR 16	18 g	KRE 16	20 g	0.15	16	-	M6	8
6.0	16.0	28.0	11.0	16.0	KR 16PP	18 g	KRE 16PP	20 g	0.15	16	-	M6	8
6.0	16.0	28.0	11.0	16.0	KRV 16	20 g	KRV 16	22 g	0.15	16	-	M6	8
6.0	16.0	28.0	11.0	16.0	KRV 16PP	20 g	KRVE 16PP	22 g	0.15	16	-	M6	8
8.0	19.0	32.0	11.0	19.0	KR 19	28 g	KRE 19	31 g	0.15	20	-	M8	10
8.0	19.0	32.0	11.0	19.0	KR 19PP	28 g	KRE 19PP	31 g	0.15	20	-	M8	10
8.0	19.0	32.0	11.0	19.0	KRV 19	32 g	KRVE 19	35 g	0.15	20	-	M8	10
8.0	19.0	32.0	11.0	19.0	KRV 19PP	32 g	KRVE 19PP	35 g	0.15	20	-	M8	10
10.0	22.0	36.0	12.0	22.0	KR 22	44 g	KRE 22	48 g	0.3	23	-	M10X1	12
10.0	22.0	36.0	12.0	22.0	KR 22PP	44 g	KRE 22PP	48 g	0.3	23	-	M10X1	12
10.0	22.0	36.0	12.0	22.0	KRV 22	45 g	KRVE 22	49 g	0.3	23	-	M10X1	12
10.0	22.0	36.0	12.0	22.0	KRV 22PP	45 g	KRVE 22PP	49 g	0.3	23	-	M10X1	12
10.0	26.0	36.0	12.0	26.0	KR 26	58 g	KRE 26	62 g	0.3	23	-	M10X1	12
10.0	26.0	36.0	12.0	26.0	KR 26PP	58 g	KRE 26PP	62 g	0.3	23	-	M10X1	12
10.0	26.0	36.0	12.0	26.0	KRV 26	61 g	KRVE 26	65 g	0.3	23	-	M10X1	12
10.0	26.0	36.0	12.0	26.0	KRV 26PP	61 g	KRVE 26PP	65 g	0.3	23	-	M10X1	12
12.0	30.0	40.0	14.0	30.0	KR 30	87 g	KRE 30	93 g	0.6	25	6	M12X1.5	13
12.0	30.0	40.0	14.0	30.0	KR 30PP	87 g	KRE 30PP	93 g	0.6	25	6	M12X1.5	13
12.0	30.0	40.0	14.0	30.0	KRV 30	89 g	KRVE 30	95 g	0.6	25	6	M12X1.5	13
12.0	30.0	40.0	14.0	30.0	KRV 30PP	89 g	KRVE 30PP	95 g	0.6	25	6	M12X1.5	13
12.0	32.0	40.0	14.0	32.0	KR 32	98 g	KRE 32	104 g	0.6	25	6	M12X1.5	13
12.0	32.0	40.0	14.0	32.0	KR 32PP	98 g	KRE 32PP	104 g	0.6	25	6	M12X1.5	13
12.0	32.0	40.0	14.0	32.0	KRV 32	100 g	KRVE 32	106 g	0.6	25	6	M12X1.5	13
12.0	32.0	40.0	14.0	32.0	KRV 32PP	100 g	KRVE 32PP	106 g	0.6	25	6	M12X1.5	13
16.0	35.0	52.0	18.0	35.0	KR 35	169 g	KRE 35	182 g	0.6	32.5	8	M16X1.5	17
16.0	35.0	52.0	18.0	35.0	KR 35PP	169 g	KRE 35PP	182 g	0.6	32.5	8	M16X1.5	17
16.0	35.0	52.0	18.0	35.0	KRV 35	171 g	KRVE 35	184 g	0.6	32.5	8	M16X1.5	17
16.0	35.0	52.0	18.0	35.0	KRV 35PP	171 g	KRVE 35PP	184 g	0.6	32.5	8	M16X1.5	17
16.0	35.0	52.0	18.0	35.0	NUKR 35	164 g	NUKRE 35	177 g	0.6	32.5[4]	8	M16X1.5	17
18.0	40.0	58.0	20.0	40.0	KR 40	274 g	KRE 40	263 g	1	36.5	8	M18X1.5	19

Dimensions (mm)							Nut Tightening Torque Ma Nm	Basic Load Ratings						Limiting Speed x1000 rpm
				Eccentric Collar				Stud Type Track Roller						
M	M1	C1	D	h9	B1	e		C N	Co N	Cw N	Cow N	Fr perm	For perm	
4[5]	-	0.6	12	9	7	0.5	3	3800	3750	3150	3300	-	-	22.0
4[5]	-	0.6	12	9	7	0.5	3	3800	3750	3150	3300	-	-	16.0
4[5]	-	0.6	12	9	7	0.5	3	6400	8500	4850	6500	-	-	8.5
4[5]	-	0.6	12	9	7	0.5	3	6400	8500	4850	6500	-	-	8.5
4[5]	-	0.6	14	11	9	0.5	8	4250	4600	3500	3900	-	-	20.0
4[5]	-	0.6	14	11	9	0.5	8	4250	4600	3500	3900	-	-	14.0
4[5]	-	0.6	14	11	9	0.5	8	7300	10800	5500	7900	-	-	7.0
4[5]	-	0.6	14	11	9	0.5	8	7300	10800	5500	7900	-	-	7.0
4	-	0.6	17	13	10	0.5	15	5700	6500	4450	5200	-	-	16.0
4	-	0.6	17	13	10	0.5	15	5700	6500	4450	5200	-	-	11.0
4	-	0.6	17	13	10	0.5	15	8600	12900	6300	9100	-	-	6.0
4	-	0.6	17	13	10	0.5	15	8600	12900	6300	9100	-	-	6.0
4	3	0.6	17	13	10	0.5	15	5700	6500	5100	6300	-	-	16.0
4	3	0.6	17	13	10	0.5	15	5700	6500	5100	6300	-	-	11.0
4	3	0.6	17	13	10	0.5	15	8600	12900	7300	11300	-	-	6.0
4	3	0.6	17	13	10	0.5	15	8600	12900	7300	11300	-	-	6.0
6	3	0.6	23	15	11	0.5	22	8100	9700	6800	8400	-	-	11.0
6	3	0.6	23	15	11	0.5	22	8100	9700	6800	8400	-	-	8.3
6	3	0.6	23	15	11	0.5	22	12200	19000	9500	14600	-	-	4.5
6	3	0.6	23	15	11	0.5	22	12200	19000	9500	14600	-	-	4.5
6	3	0.8	27	15	11	0.5	22	8100	9700	7100	9000	-	-	11.0
6	3	0.8	27	15	11	0.5	22	8100	9700	7100	9000	-	-	8.3
6	3	0.8	27	15	11	0.5	22	12200	19000	10000	15800	-	-	4.5
6	3	0.8	27	15	11	0.5	22	12200	19000	10000	15800	-	-	4.5
6	3	0.8	27	20	14	1	58	12900	19000	9700	14100	-	-	7.0
6	3	0.8	27	20	14	1	58	12900	19000	9700	14100	-	-	7.0
6	3	0.8	27	20	14	1	58	18300	35000	12800	23000	-	-	3.4
6	3	0.8	27	20	14	1	58	18300	35000	12800	23000	-	-	3.4
6	3	0.8[4]	21[4]	20	14	1	58	23000	27000	16000	18300	8300	16400	6.5
6	3	0.8	32	22	16	1	87	14200	20400	10900	15500	-	-	6.0

KR Kurvenrollen / KR Track Roller





Dimensions (mm)				Outside Diameter (mm)	Designation /Type	Weight (g) approx.	With Eccentric Collar	Weight (g) approx.	Dimensions (mm)				
d	D	B	C						rs min	B1	B2	G	G1
18.0	40.0	58.0	20.0	40.0	KR 40PP	247 g	KRE 40PP	263 g	1	36.5	8	M18X1.5	19
18.0	40.0	58.0	20.0	40.0	KRV 40	249 g	KRVE 40	265 g	1	36.5	8	M18X1.5	19
18.0	40.0	58.0	20.0	40.0	KRV 40PP	249 g	KRVE 40PP	265 g	1	36.5	8	M18X1.5	19
18.0	40.0	58.0	20.0	40.0	NUKR 40	242 g	NUKRE 40	258 g	1	36.5[4]	8	M18X1.5	19

Dimensions (mm)							Nut Tightening Torque Ma Nm	Basic Load Ratings						Limiting Speed x1000 rpm
				Eccentric Collar				Stud Type Track Roller						
M	M1	C1	D	h9	B1	e		C N	Co N	Cw N	Cow N	Fr perm	For perm	
6	3	0.8	32	22	16	1	87	14200	20400	10900	15500	-	-	6.0
6	3	0.8	32	22	16	1	87	21000	39500	14800	26500	-	-	2.9
6	3	0.8	32	22	16	1	87	21000	39500	14800	26500	-	-	2.9
6	3	0.8[4]	23[4]	22	16	1	87	24800	31000	18500	22800	13200	22800	5.5

The suffix ‘X’ indicates a cylindrical outside surface, e.g. KR16X.

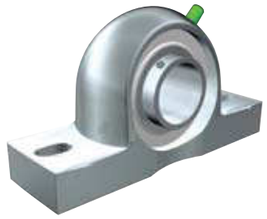
The basic load ratings ‘C’ and ‘Cow’ apply if the bearing out ring (with cylindrical outside surface) is mounted in a housing bore. When used as a track roller, the load ratings Cw and Cow apply

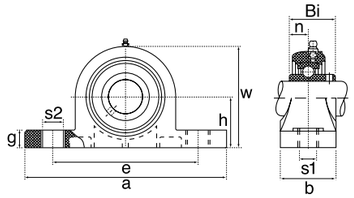
For oil lubrication, the speed can be increased by approximately 30%, except for sealed executions

NUKRE 35 B=31.5; C=1.8; D=24
NUKRE 40 B=35.5; C=1.8; D=26”

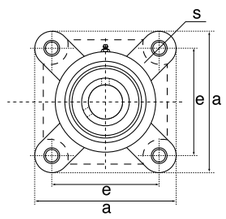
Lubrication hole is in the end face at the ribbed end of the stud only.

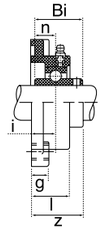
Rostfreie Gehäuse / Stainless Steel Pillow Blocks



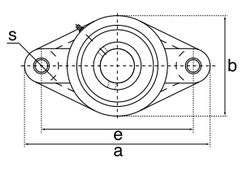


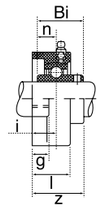
Ref.										Weight	
Type	Da	h	a	e	b	S1	S2	g	w	(kg)	Bearing
SP204	47	33.3	126	95.0	38	11.0	17.5	15.1	65.1	0.69	SUC204
SP205	52	36.5	140	105.0	38	12.5	17.5	16.0	70.0	0.74	SUC205
SP206	62	42.9	165	121.0	48	14.3	21.0	18.0	83.0	1.29	SUC206
SP207	72	47.6	167	127.0	48	14.3	22.0	19.0	94.0	1.42	SUC207
SP208	80	49.2	184	136.5	54	14.3	22.0	19.0	100.0	1.82	SUC208
SP209	85	54.0	190	146.0	54	15.0	22.0	20.0	109.0	2.09	SUC209
SP210	90	57.2	206	159.0	60	18.0	24.0	22.0	114.0	2.38	SUC210
SP211	100	63.5	219	171.0	60	20.0	25.0	23.0	126.0	2.55	SUC211
SP212	110	69.8	241	184.0	70	20.0	25.0	25.0	138.0	3.40	SUC212





Ref.								Weight	
Type	Da	a	e	i	l	g	s	(kg)	Bearing
SF204	47	86.0	63.5	15.1	25.4	12.0	11.0	0.47	SUC204
SF205	52	95.0	70.0	15.9	27.0	14.0	11.5	0.65	SUC205
SF206	62	108.0	82.5	17.9	30.0	14.0	13.1	0.85	SUC206
SF207	72	117.5	92.0	19.1	33.0	14.3	13.1	1.03	SUC207
SF208	80	130.0	101.6	21.0	36.0	14.3	14.0	1.38	SUC208
SF209	85	137.0	104.8	21.8	37.0	14.3	16.0	1.50	SUC209
SF210	90	143.0	111.0	21.8	38.0	15.1	16.0	1.63	SUC210
SF211	100	162.0	130.0	25.0	43.0	19.5	19.0	3.25	SUC211
SF212	110	175.0	143.0	29.0	48.0	19.5	19.0	4.20	SUC212

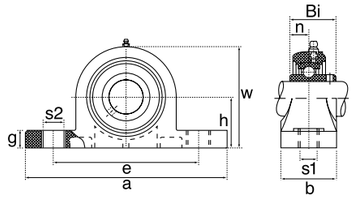




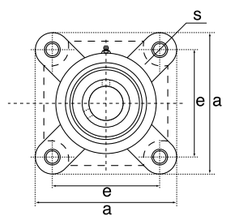
Ref.									Weight	
Type	Da	a	e	i	b	l	g	s	(kg)	Bearing
SFL204	47	112.0	89.7	15.1	60	25.4	11.5	11	0.32	SUC204
SFL205	52	125.0	98.8	15.9	68	27.0	13.0	12	0.44	SUC205
SFL206	62	141.0	116.7	17.9	80	30.0	13.0	12	0.58	SUC206
SFL207	72	155.5	130.2	19.1	90	33.0	14.3	13	0.74	SUC207
SFL208	80	171.5	143.7	21.0	100	36.0	14.3	13	0.99	SUC208
SFL209	85	179.0	148.4	21.8	108	37.0	14.3	16	1.16	SUC209
SFL210	90	189.0	157.0	21.8	115	38.0	15.1	16	1.36	SUC210
SFL211	100	224.0	184.0	25.0	130	43.0	16.0	19	2.20	SUC211
SFL212	110	250.0	202.0	29.0	140	48.0	18.0	23	2.65	SUC212

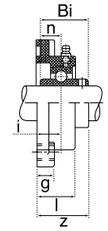
Thermoplastische Gehäuse / Thermoplastic Pillow Blocks



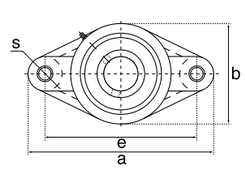


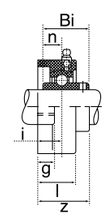
Ref.											Weight	
Type	h	a	e	b	S1	S2	g	w	Bi	n	(kg)	Bearing
TP201	33.3	127.0	95	38	11	14	14.2	65.0	31.0	12.7	0.12	SUC201
TP202	33.3	127.0	95	38	11	14	14.2	65.0	31.0	12.7	0.12	SUC202
TP203	33.3	127.0	95	38	11	14	14.2	65.0	31.0	12.7	0.12	SUC203
TP204	33.3	127.0	95	38	11	14	14.2	69.5	31.0	12.7	0.12	SUC204
TP205	36.5	140.6	105	38	11	14	14.5	71.0	34.0	14.3	0.14	SUC205
TP206	42.9	163.0	118	46	14	18	17.8	84.0	38.1	15.9	0.20	SUC206
TP207	47.6	168.0	127	48	14	18	18.0	94.5	42.9	17.5	0.25	SUC207
TP208	49.2	184.0	137	54	14	18	19.5	99.0	49.2	19.0	0.35	SUC208
TP209	54.0	192.0	146	54	17	20	23.0	106.0	49.2	19.0	0.45	SUC209
TP210	57.2	206.0	159	60	17	20	23.0	114.0	51.6	19.0	0.55	SUC210
TP211	63.5	219.0	171	60	20	23	23.0	125.0	55.6	22.2	1.38	SUC211
TP212	69.5	241.0	184	70	20	23	25.0	138.0	65.1	25.4	1.52	SUC212





Ref.										Weight	
Type	a	e	g	l	s	z	i	Bi	n	(kg)	Bearing
TF201	86	63.5	13.4	27.8	11	36.3	18.0	31.0	12.7	0.12	SUC201
TF202	86	63.5	13.4	27.8	11	36.3	18.0	31.0	12.7	0.12	SUC202
TF203	86	63.5	13.4	27.8	11	36.3	18.0	31.0	12.7	0.12	SUC203
TF204	86	63.5	13.4	27.8	11	36.3	18.0	31.0	12.7	0.12	SUC204
TF205	95	70.0	14.0	28.0	11	36.7	17.0	34.0	14.3	0.15	SUC205
TF206	107	83.0	14.3	31.5	11	41.4	19.2	38.1	15.9	0.18	SUC206
TF207	118	92.0	15.5	34.8	13	46.9	21.5	42.9	17.5	0.26	SUC207
TF208	130	102.0	17.0	37.5	14	53.2	23.0	49.2	19.0	0.33	SUC208
TF209	137	105.0	19.0	41.0	17	54.2	24.0	49.2	19.0	0.42	SUC209
TF210	143	111.0	21.0	43.0	17	57.6	25.0	51.6	19.0	0.51	SUC210
TF211	162	130.0	20.0	43.0	19	58.4	25.0	55.6	22.2	1.40	SUC211
TF212	175	143.0	20.0	48.0	19	68.7	29.0	65.1	25.4	1.60	SUC212

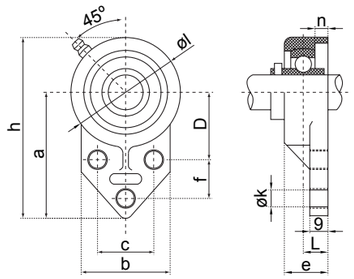




Ref.										Weight	
Type	a	e	b	g	l	s	z	i	Bi	n	(kg)	Bearing
TFL201	113	90	64.0	11.4	26.5	11	33.7	15.4	31.0	12.7	0.08	SUC201
TFL202	113	90	64.0	11.4	26.5	11	33.7	15.4	31.0	12.7	0.08	SUC202
TFL203	113	90	64.0	11.4	26.5	11	33.7	15.4	31.0	12.7	0.08	SUC203
TFL204	113	90	64.0	11.4	26.5	11	33.7	15.4	31.0	12.7	0.08	SUC204
TFL205	131	99	69.6	13.5	29.1	11	36.7	17.0	34.0	14.3	0.10	SUC205
TFL206	148	117	80.0	13.3	30.5	11	41.2	19.0	38.1	15.9	0.13	SUC206
TFL207	164	130	90.0	16.1	32.9	13	43.4	19.0	42.9	17.5	0.16	SUC207
TFL208	176	144	100.0	20.0	37.5	14	51.7	21.5	49.2	19.0	0.24	SUC208
TFL209	188	148	108.0	21.0	41.0	17	54.2	24.0	49.2	19.0	0.32	SUC209
TFL210	197	157	115.0	21.0	43.0	17	57.6	25.0	51.6	19.0	0.42	SUC210
TFL211	224	184	130.0	18.0	43.0	19	58.4	25.0	55.6	22.2	1.40	SUC211
TFL212	250	202	140.0	18.0	48.0	19	68.7	29.0	65.1	25.4	1.60	SUC212

Thermoplastische Gehäuse / Thermoplastic Pillow Blocks

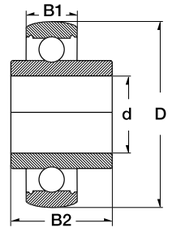




Ref.														Weight
Type	Da	a	b	c	D	e	f	g	h	i	k	n		(kg)
FBL201	12	76.2	62	38.1	42.9	33.7	22.2	11.4	108	63.5	10.7	12.7		0.08
FBL202	15	76.2	62	38.1	42.9	33.7	22.2	11.4	108	63.5	10.7	12.7		0.08
FBL203	17	76.2	62	38.1	42.9	33.7	22.2	11.4	108	63.5	10.7	12.7		0.08
FBL204	20	76.2	62	38.1	42.9	33.7	22.2	11.4	108	63.5	10.7	12.7		0.08
FBL205	25	85.7	63.5	41.3	46	41.2	28.6	11.4	120.6	70	10.7	14.3		0.11
FBL206	35	96.5	76	47.6	52.4	41.5	31.8	13.3	138.5	83	10.7	15.9		0.16
FBL207	35	109.5	89	50.8	60.3	47.1	31.8	16.1	157	95	13.1	17.5		0.23

Rostfreie Lagereinsätze / Stainless Steel Inserts





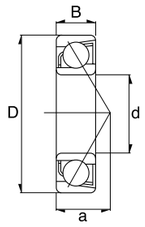
MANUFACTURED TO FDA STANDARDS

Dimension (mm)				Designation/Type	* Load Rating	
d	D	B1	B2		C, dyn. N	C, stat. N
12.0	47.0	17.0	31.0	SUC 201	7500	4500
15.0	47.0	17.0	31.0	SUC 202	7500	4500
17.0	47.0	17.0	31.0	SUC 203	7500	4500
20.0	47.0	17.0	31.0	SUC 204	10000	6300
25.0	52.0	17.0	34.1	SUC 205	11000	7100
30.0	62.0	19.0	38.1	SUC 206	15200	10200
35.0	72.0	20.0	42.9	SUC 207	20100	18100
40.0	80.0	21.0	49.2	SUC 208	23000	18100
45.0	85.0	22.0	49.2	SUC 209	25600	18100
50.0	90.0	23.0	31.6	SUC 210	27500	20200
55.0	100.0	25.0	55.6	SUC 211	33500	29200
60.0	110.0	27.0	65.1	SUC 212	36800	32800

Dimension (mm)				Designation/Type	* Load Rating	
d	D	B1	B2		C, dyn. N	C, stat. N
20.0	52.0	17.0	34.1	SUCX04	13900	7800
25.0	62.0	19.0	38.1	SUCX05	15400	10200
30.0	72.0	20.0	42.9	SUCX06	20300	14000
35.0	80.0	21.0	49.2	SUCX07	23000	16000
40.0	85.0	22.0	49.2	SUCX08	25600	18100
45.0	90.0	24.0	51.6	SUCX09	27500	20200
50.0	100.0	25.0	55.6	SUCX10	34000	25500

Einreihige Schrägkugellager / Single Row Angular Contact Bearings

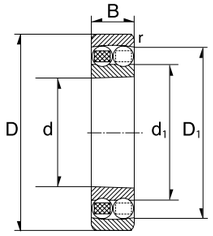




Dimension (mm)			Designation/Type				* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open)		Weight (g) approx.
			Open		2RS						
d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil	
10.0	30.0	9.0	7200B	S7200B	7200B-2RS	avail. / lieferb.	6350	2720	11.9	23.5	30 g
12.0	32.0	10.0	7201B	S7201B	7201B-2RS	avail. / lieferb.	8050	3740	17.5	23.5	30 g
15.0	35.0	11.0	7202B	S7202B	7202B-2RS	avail. / lieferb.	8700	4360	16.0	21.5	40 g
17.0	40.0	12.0	7203B	S7203B	7203B-2RS	avail. / lieferb.	10700	5550	14.2	19.0	60 g
20.0	47.0	14.0	7204B	S7204B	7204B-2RS	avail. / lieferb.	15400	8200	12.4	17.0	100 g
25.0	52.0	15.0	7205B	S7205B	7205B-2RS	avail. / lieferb.	16400	9350	11.0	14.9	120 g
30.0	62.0	16.0	7206B	S7206B	7206B-2RS	avail. / lieferb.	23400	14300	9.4	12.7	190 g
35.0	72.0	17.0	7207B	S7207B	7207B-2RS	avail. / lieferb.	30300	19100	8.2	11.0	260 g
40.0	80.0	18.0	7208B	S7208B	7208B-2RS	avail. / lieferb.	35500	23000	7.3	9.9	350 g
45.0	85.0	19.0	7209B	S7209B	7209B-2RS	avail. / lieferb.	37200	25400	6.8	9.1	400 g
50.0	90.0	20.0	7210B	S7210B	7210B-2RS	avail. / lieferb.	38800	27800	6.3	8.5	440 g
10.0	35.0	11.0	7300B	S7300B	7300B-2RS	avail. / lieferb.	9150	3840	10.8	21.5	60 g
12.0	37.0	12.0	7301B	S7301B	7301B-2RS	avail. / lieferb.	10900	4960	16.0	22.0	60 g
15.0	42.0	13.0	7302B	S7302B	7302B-2RS	avail. / lieferb.	13100	6100	14.2	19.0	80 g
17.0	47.0	14.0	7303B	S7303B	7303B-2RS	avail. / lieferb.	16600	8300	12.9	17.5	110 g
20.0	52.0	15.0	7304B	S7304B	7304B-2RS	avail. / lieferb.	19300	9900	11.7	16.0	150 g
25.0	62.0	17.0	7305B	S7305B	7305B-2RS	avail. / lieferb.	25000	13400	9.9	13.3	220 g
30.0	72.0	19.0	7306B	S7306B	7306B-2RS	avail. / lieferb.	33700	19400	8.5	11.5	330 g
35.0	80.0	21.0	7307B	S7307B	7307B-2RS	avail. / lieferb.	37400	22200	7.6	10.3	430 g
40.0	90.0	23.0	7308B	S7308B	7308B-2RS	avail. / lieferb.	49300	29900	6.8	9.1	600 g
45.0	100.0	25.0	7309B	S7309B	7309B-2RS	avail. / lieferb.	60500	38800	6.1	8.2	810 g
50.0	110.0	27.0	7310B	S7310B	7310B-2RS	avail. / lieferb.	72000	47100	5.5	7.4	1050 g

Pendelkugellager / Double Row Self Aligning Bearings

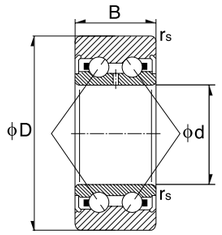




Dimension (mm)			Designation/Type				* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open)		Weight (g) approx.
			Open		2RS						
d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil	
10.0	30.0	9.0	1200	S1200	1200-2RS	S1200-2RS	4050	1290	22.0	-	34 g
12.0	32.0	10.0	1201	S1201	1201-2RS	S1201-2RS	4600	1400	21.0	-	40 g
15.0	35.0	11.0	1202	S1202	1202-2RS	S1202-2RS	5600	1960	18.5	-	49 g
17.0	40.0	12.0	1203	S1203	1203-2RS	S1203-2RS	5900	2300	17.5	-	73 g
20.0	47.0	14.0	1204	S1204	1204-2RS	S1204-2RS	7500	2950	14.5	-	120 g
25.0	52.0	15.0	1205	S1205	1205-2RS	S1205-2RS	9150	3900	12.0	-	140 g
30.0	62.0	16.0	1206	S1206	1206-2RS	S1206-2RS	11000	5500	10.0	-	220 g
10.0	30.0	14.0	2200	S2200	2200-2RS	S2200-2RS	5300	1530	22.0	28.0	47 g
12.0	32.0	14.0	2201	S2201	2201-2RS	S2201-2RS	6000	1960	20.0	25.0	53 g
15.0	35.0	14.0	2202	S2202	2202-2RS	S2202-2RS	6000	2190	18.0	22.0	60 g
17.0	40.0	16.0	2203	S2203	2203-2RS	S2203-2RS	7900	2800	16.0	19.0	88 g
20.0	47.0	18.0	2204	S2204	2204-2RS	S2204-2RS	9800	3950	13.0	16.0	140 g
25.0	52.0	18.0	2205	S2205	2205-2RS	S2205-2RS	9800	4350	12.0	14.0	165 g
30.0	62.0	20.0	2206	S2206	2206-2RS	S2206-2RS	12200	6800	10.0	12.0	260 g
35.0	72.0	23.0	2207	S2207	2207-2RS	S2207-2RS	17100	8400	8.5	10.0	405 g
40.0	80.0	23.0	2208	S2208	2208-2RS	S2208-2RS	17700	9650	7.5	9.0	505 g
45.0	85.0	23.0	2209	S2209	2209-2RS	S2209-2RS	18400	10900	7.1	8.5	545 g
50.0	90.0	23.0	2210	S2210	2210-2RS	S2210-2RS	18400	11500	6.3	8.0	590 g

Schrägkugellager / Double Row Angular Contact Ball Bearings

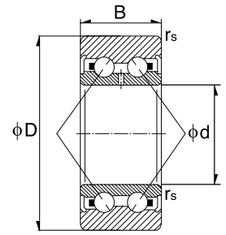




Dimension (mm)			Designation/Type				* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open)		Weight (g) approx.
			Open		2RS						
d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil	
10.0	30.0	14.0	3200	S3200	3200-2RS	S3200-2RS	7600	5850	16.0	20.0	50 g
12.0	32.0	15.9	3201	S3201	3201-2RS	S3201-2RS	8750	6500	15.0	19.0	60 g
15.0	35.0	15.9	3202	S3202	3202-2RS	S3202-2RS	11100	9100	13.0	17.0	70 g
17.0	40.0	17.5	3203	S3203	3203-2RS	S3203-2RS	14400	8650	10.0	15.0	103 g
20.0	47.0	20.6	3204	S3204	3204-2RS	S3204-2RS	19300	12000	9.0	13.0	168 g
25.0	52.0	20.6	3205	S3205	3205-2RS	S3205-2RS	20900	14100	8.0	11.0	194 g
30.0	62.0	23.8	3206	S3206	3206-2RS	S3206-2RS	29100	20100	7.1	9.0	316 g
35.0	72.0	27.0	3207	S3207	3207-2RS	S3207-2RS	38400	27400	5.6	7.1	484 g
40.0	80.0	30.2	3208	S3208	3208-2RS	S3208-2RS	47400	34600	5.0	6.3	654 g
45.0	85.0	30.2	3209	S3209	3209-2RS	S3209-2RS	47500	35400	4.5	5.4	709 g
50.0	90.0	30.2	3210	S3210	3210-2RS	S3210-2RS	50700	40200	4.0	4.6	764 g
17.0	47.0	22.2	3303	S3303	3303-2RS	S3303-2RS	20900	11900	9.5	14.0	190 g
20.0	52.0	22.2	3304	S3304	3304-2RS	S3304-2RS	23100	14500	8.5	12.0	230 g
25.0	62.0	25.4	3305	S3305	3305-2RS	S3305-2RS	29500	19100	7.5	10.0	369 g
30.0	72.0	30.2	3306	S3306	3306-2RS	S3306-2RS	41000	27400	6.2	7.9	585 g
35.0	80.0	34.9	3307	S3307	3307-2RS	S3307-2RS	51200	33200	5.1	6.5	816 g
40.0	90.0	36.5	3308	S3308	3308-2RS	S3308-2RS	61900	43400	4.7	5.8	1070 g
45.0	100.0	38.7	3309	S3309	3309-2RS	S3309-2RS	89000	79300	4.5	6.0	1420 g
50.0	110.0	44.4	3310	S3310	3310-2RS	S3310-2RS	107000	96300	4.0	5.3	1930 g
17.0	40.0	17.5	5203	S5203	5203-2RS	S5203-2RS	14600	9050	11.0	16.0	96 g
20.0	47.0	20.0	5204	S5204	5204-2RS	S5204-2RS	19600	12400	10.0	15.0	160 g
25.0	52.0	20.6	5205	S5205	5205-2RS	S5205-2RS	21300	14700	8.5	11.0	180 g
30.0	62.0	23.8	5206	S5206	5206-2RS	S5206-2RS	25600	21100	7.1	9.5	290 g

Schrägkugellager / Double Row Angular Contact Ball Bearings

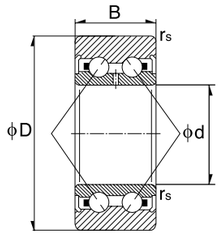




Dimension (mm)			Designation/Type				* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open)		Weight (g) approx.
			Open		2RS						
d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil	
35.0	72.0	27.0	5207	S5207	5207-2RS	S5207-2RS	39000	28700	6.3	8.0	440 g
40.0	80.0	30.2	5208	S5208	5208-2RS	S5208-2RS	44000	33500	5.6	7.5	580 g
45.0	85.0	30.2	5209	S5209	5209-2RS	S5209-2RS	49500	38000	5.0	6.7	630 g
50.0	90.0	30.2	5210	S5210	5210-2RS	S5210-2RS	53000	43500	4.8	6.3	660 g
17.0	47.0	22.2	5303	S5303	5303-2RS	S5303-2RS	21000	12600	10.0	14.0	180 g
20.0	52.0	22.2	5304	S5304	5304-2RS	S5304-2RS	24600	16000	9.0	12.0	220 g
25.0	62.0	25.4	5305	S5305	5305-2RS	S5305-2RS	32500	20700	7.5	10.0	350 g
30.0	72.0	30.2	5306	S5306	5306-2RS	S5306-2RS	40500	28100	6.3	8.5	530 g
35.0	80.0	34.9	5307	S5307	5307-2RS	S5307-2RS	51000	36000	5.6	7.5	730 g
40.0	90.0	36.5	5308	S5308	5308-2RS	S5308-2RS	56500	41000	5.3	6.7	950 g
45.0	100.0	38.7	5309	S5309	5309-2RS	S5309-2RS	68500	51000	4.5	6.0	1400 g
50.0	110.0	44.4	5310	S5310	5310-2RS	S5310-2RS	81800	62200	3.6	5.3	1950 g

Zweireihige Kugellager / Double Row Bearings

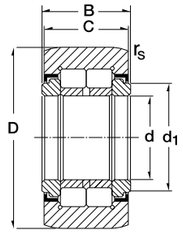




Dimension (mm)			Designation/Type				* Load Rating (only 100 Cr6)		* Limiting Speed x1000rpm (open)		Weight (g) approx.
			Open		2RS						
d	D	B	Chrome Steel	Stainless	Chrome Steel	Stainless	C, dyn. N	C, stat. N	Grease	Oil	
10.0	30.0	14.0	4200	S4200	4200-2RS	S4200-2RS	6400	5100	18.0	22.0	54 g
12.0	32.0	14.0	4201	S4201	4201-2RS	S4201-2RS	7100	5700	17.0	20.0	60 g
15.0	35.0	14.0	4202	S4202	4202-2RS	S4202-2RS	7800	6800	14.0	17.0	80 g
17.0	40.0	16.0	4203	S4203	4203-2RS	S4203-2RS	11700	10400	10.0	14.2	100 g
20.0	47.0	18.0	4204	S4204	4204-2RS	S4204-2RS	16400	16000	9.0	12.4	159 g
25.0	52.0	18.0	4205	S4205	4205-2RS	S4205-2RS	16300	16900	7.5	11.0	181 g
30.0	62.0	20.0	4206	S4206	4206-2RS	S4206-2RS	22000	24700	6.4	9.5	277 g
35.0	72.0	23.0	4207	S4207	4207-2RS	S4207-2RS	26400	30700	5.6	8.2	463 g
40.0	80.0	23.0	4208	S4208	4208-2RS	S4208-2RS	33200	42400	4.7	7.3	553 g
45.0	85.0	23.0	4209	S4209	4209-2RS	S4209-2RS	31800	43900	4.6	6.8	621 g
50.0	90.0	28.0	4210	S4210	4210-2RS	S4210-2RS	31400	44600	4.2	6.3	635 g

NUTR Stützrollen / NUTR Track Roller



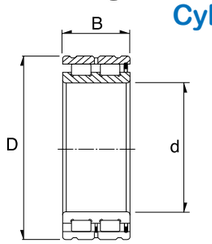


Dimension (mm)						Designation/Type	*Basic Load Rating		*Limiting Speed x1000rpm Grease	Mass (g) approx.
d	D	B	C	r_s	$d_1$min		C N	Co N		
15.0	35.0	19.0	18.0	0.6	20.0	NUTR 15	23000	27000	6.5	99 g
17.0	40.0	21.0	20.0	1.0	22.0	NUTR 17	24800	31000	5.5	147 g
15.0	42.0	19.0	18.0	0.6	20.0	NUTR 15 42	23000	27000	6.5	158 g
17.0	47.0	21.0	20.0	1.0	22.0	NUTR 17 47	24800	31000	5.5	220 g
20.0	47.0	25.0	24.0	1.0	27.0	NUTR 20	39000	50000	4.2	245 g
20.0	52.0	25.0	24.0	1.0	27.0	NUTR 20 52	39000	50000	4.2	321 g
25.0	52.0	25.0	24.0	1.0	31.0	NUTR 25	43500	60000	3.4	281 g
25.0	62.0	25.0	24.0	1.0	31.0	NUTR 25 62	43500	60000	3.4	450 g
30.0	62.0	29.0	28.0	1.0	38.0	NUTR 30	59000	79000	2.6	465 g
30.0	72.0	29.0	28.0	1.0	38.0	NUTR 30 72	59000	79000	2.6	697 g
35.0	72.0	29.0	28.0	1.1	44.0	NUTR 35	65000	93000	2.1	630 g
35.0	80.0	29.0	28.0	1.1	44.0	NUTR 35 80	65000	93000	2.1	836 g
40.0	80.0	32.0	30.0	1.1	51.0	NUTR 40	90000	134000	1.6	816 g
45.0	85.0	32.0	30.0	1.1	55.0	NUTR 45	95000	147000	1.4	883 g
40.0	90.0	32.0	30.0	1.1	51.0	NUTR 40 90	90000	134000	1.6	1129 g
50.0	90.0	32.0	30.0	1.1	60.0	NUTR 50	100000	161000	1.3	950 g
45.0	100.0	32.0	30.0	1.1	55.0	NUTR 45 100	95000	147000	1.4	1396 g
50.0	110.0	32.0	30.0	1.1	60.0	NUTR 50 110	100000	161000	1.3	1690 g

Alle Referenzen können mit zylindrischen Aussenring geliefert werden
All references can be supplied with cylindrical outer ring

Vollrollige Zylinderrollenlager / NNF Double Row Full Compliment Cylindrical Roller

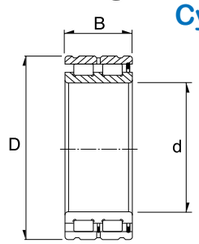




Dimension (mm)			Designation/Type	Alternative Designation/Type	Basic Load Rating kN		Limiting Speed x1000rpm	Weight (kg)
d	D	B			Cr	Co		
40	68	38	NNF 5008PP	SL04 5008 PP 2NR	79.5	116	2500	0.552
45	75	40	NNF 5009PP	SL04 5009 PP 2NR	95.5	144	2200	0.688
50	80	40	NNF 5010PP	SL04 5010 PP 2NR	100	158	2000	0.752
55	90	46	NNF 5011PP	SL04 5011 PP 2NR	118	193	1800	1.12
60	95	46	NNF 5012PP	SL04 5012 PP 2NR	123	208	1700	1.20
65	100	46	NNF 5013PP	SL04 5013 PP 2NR	128	224	1500	1.27
70	110	54	NNF 5014PP	SL04 5014 PP 2NR	171	285	1400	1.87
75	115	54	NNF 5015PP	SL04 5015 PP 2NR	197	325	1300	1.97
80	125	60	NNF 5016PP	SL04 5016 PP 2NR	205	350	1300	2.66
85	130	60	NNF 5017PP	SL04 5017 PP 2NR	214	380	1200	2.79
90	140	67	NNF 5018PP	SL04 5018 PP 2NR	305	540	1100	3.71
95	145	67	NNF 5019PP	SL04 5019 PP 2NR	310	560	1100	3.87
100	150	67	NNF 5020PP	SL04 5020 PP 2NR	330	580	1000	4.03
110	170	80	NNF 5022PP	SL04 5022 PP 2NR	385	695	910	7.00
120	180	80	NNF 5024PP	SL04 5024 PP 2NR	400	750	830	7.50
130	200	95	NNF 5026PP	SL04 5026 PP 2NR	535	1000	770	11.4
140	210	95	NNF 5028PP	SL04 5028 PP 2NR	600	1120	710	12.1
155	225	100	NNF 5030PP	SL04 5030 PP 2NR	690	1290	670	14.6
160	240	109	NNF 5032PP	SL04 5032 PP 2NR	720	1390	630	18.2
170	260	122	NNF 5034PP	SL04 5034 PP 2NR	925	1790	590	24.6
180	280	136	NNF 5036PP	SL04 5036 PP 2NR	1090	2140	560	32.3
190	290	136	NNF 5038PP	SL04 5038 PP 2NR	1120	2230	530	33.7
200	310	150	NNF 5040PP	SL04 5040 PP 2NR	1310	2650	500	43.5
220	340	160	NNF 5044PP	SL04 5044 PP 2NR	1640	3300	450	55.5
240	360	160	NNF 5048PP	SL04 5048 PP 2NR	1710	3550	420	59.5
260	400	190	NNF 5052PP	SL04 5052 PP 2NR	2130	4500	380	90.7
280	420	190	NNF 5056PP	SL04 5056 PP 2NR	2170	4700	360	96.2
300	460	218	NNF 5060PP	SL04 5060 PP 2NR	2670	5850	330	137
320	480	218	NNF 5064PP	SL04 5064 PP 2NR	2720	6100	310	144
340	520	243	NNF 5068PP	SL04 5068 PP 2NR	3650	8000	290	194

Vollrollige Zylinderrollenlager / NCF Double Row Full Compliment Cylindrical Roller

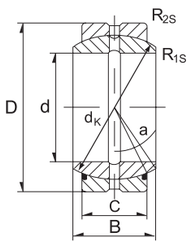




Dimension (mm)			Designation/Type	Alternative Designation/Type	Basic Load Rating kN		Limiting Speed x1000rpm	Weight (kg)
d	D	B			Cr	Co		
20	42	30	NCF 5004-2LSV	SL18 5004 LSV	47.5	53	9000	0.2
25	47	30	NCF 5005-2LSV	SL18 5005 PP	54	65	7500	0.23
30	55	34	NCF 5006-2LSV	SL18 5006 PP	70	86	6500	0.35
35	62	36	NCF 5007-2LSV	SL18 5007 PP	85	109	5500	0.46
40	68	38	NCF 5008-2LSV	SL18 5008 PP	101	136	5000	0.56
45	75	40	NCF 5009-2LSV	SL18 5009 PP	108	151	4600	0.71
50	80	40	NCF 5010-2LSV	SL18 5010 PP	131	184	4300	0.76
55	90	46	NCF 5011-2LSV	SL18 5011 PP	179	270	3700	1.16
60	85	25	NCF 4912-2LSV	SL18 4912 PP	67	115	3700	0.48
60	95	46	NCF 5012-2LSV	SL18 5012 PP	184	280	3500	1.24
65	100	46	NCF 5013-2LSV	SL18 5013 PP	194	310	3200	1.32
70	100	30	NCF 4914-2LSV	SL18 4914 PP	103	178	3200	0.78
70	110	54	NCF 5014-2LSV	SL18 5014 PP	229	340	3100	1.85
75	115	54	NCF 5015-2LSV	SL18 5015 PP	242	375	2800	1.93
80	110	30	NCF 4916-2LSV	SL18 4916 PP	109	199	2900	0.88
80	125	60	NCF 5016-2LSV	SL18 5016 PP	295	450	2600	2.59
85	130	60	NCF 5017-2LSV	SL18 5017 PP	305	470	2500	2.72
90	125	35	NCF 4918-2LSV	SL18 4918 PP	149	280	2500	1.35
90	140	67	NCF 5018-2LSV	SL18 5018 PP	355	560	2300	3.62
100	140	40	NCF 4920-2LSV	SL18 4920 PP	191	370	2200	1.95
100	150	67	NCF 5020-2LSV	SL18 5020 PP	375	610	2200	3.94
110	150	40	NCF 4922-2LSV	SL18 4922 PP	198	400	2100	2.15
110	170	80	NCF 5022-2LSV	SL18 5022 PP	490	790	2000	6.32
120	165	45	NCF 4924-2LSV	SL18 4924 PP	222	440	1900	2.95
120	180	80	NCF 5024-2LSV	SL18 5024 PP	520	870	1800	6.77

Gelenklager (GE-ES & GE-ES-2RS) / Spherical Plain Bearing Series





Dimension (mm)							a	Designation/Type		Load Rating KN		Weight (kg)
d	D	B	C	dk	rls	r2s				C	Co	
15	26	12	9	22	0.3	0.3	8	GE15ES	GE15ES-2RS	16	84	0.027
16	30	14	10	25	0.3	0.3	10	GE16ES	GE16ES2RS	21	106	0.041
17	30	14	10	25	0.3	0.3	10	GE17ES	GE17ES-2RS	21	106	0.041
20	35	16	12	29	0.3	0.3	9	GE20ES	GE20ES-2RS	30	146	0.066
25	42	20	16	35.5	0.6	0.6	7	GE25ES	GE25ES-2RS	48	240	0.119
30	47	22	18	40.7	0.6	0.6	6	GE30ES	GE30ES-2RS	62	310	0.153
35	55	25	20	47	0.6	1	6	GE35ES	GE35ES-2RS	79	399	0.233
40	62	28	22	53	0.6	1	7	GE40ES	GE40ES-2RS	99	495	0.306
45	68	32	25	60	0.6	1	7	GE45ES	GE45ES-2RS	127	637	0.427
50	75	35	28	66	0.6	1	6	GE50ES	GE50ES-2RS	156	780	0.546
60	90	44	36	80	1	1	6	GE60ES	GE60ES-2RS	245	1220	1.04
70	105	49	40	92	1	1	6	GE70ES	GE70ES-2RS	313	1560	1.55
80	120	55	45	105	1	1	6	GE80ES	GE80ES-2RS	400	2000	2.31
90	130	60	50	115	1	1	5	GE90ES	GE90ES-2RS	488	2440	2.75
100	150	70	55	130	1	1	7	GE100ES	GE100ES-2RS	607	3030	4.45
110	160	70	55	140	1	1	6	GE110ES	GE110ES-2RS	654	3270	4.82

Notizen / Notes

Umschlüsselung anderer Hersteller / Conversion Tables

Offene Ausführung (metrisch) / Open Type (metric series)

mm	inch	ZEN	ADR	FAG	GRW	RMB	BARDEN	MPB	NMB	NTN	SKF
1	0.0394	681	AX1		681	UL103			L-310		681
		MR31							L-310W51		
		691			691				R-410		691
1.2	0.0472	MR41X							R-412	BC1,2-4	
1.5	0.0591	681X	AX1.5		68/1.5	UL154			R-415	68/1.5	
		691X	619/1.5	MR69/1.5	69/1.5	R1550	19M1-5Y1	EL1.5C	R-515	69/1.5	
	601X							R-615	60/1.5		
2	0.0787	682	BX2	MR682	682	UL205		UL20C	L-520		682
		MR52							L-520W02	BC2.5	
		692	AX2	MR619/2	692	R2060	19M2Y1	EL2C	R-620		692
		MR62							R-620W52	BC2-6	
		MR72							R-720Y52	BC2-7	
		602							R-720		602
2.5	0.0984	682X	AX2.5		68/2.5	UL256	18M2-5		L-625	68/2.5	
		692X	X2.5		69/2.5		19M2-5Y1		R-725	69/2.5	
		MR82X							R-825Y52	BC2.5-8	
		602X	60/2.5	MR60/2.5	60/2.5	R2580			R-825Y52	60/2.5	
3	0.1181	MR63	617/3						L-630		673
		683	AX3	MR618/3	683	UL307		UL30C	L-730		683
		MR83	X3		693/003				R-830Y52	BC3-8	
		693	619/3		693				R-830Y52		693
		MR93							R-930Y52	BC3-9	
		603							R-930		603
		623	623	MR623	623	R3100	2M3Y1	EL-3R	R-1030		623
		633									633
4	0.1575	MR74	617/4						L-740		674
		MR84							L-840	BC4-8	
		684	AX4	MR618/4	684	UL409		UL40C	L-940		684
		MR104	X4						L-1040	BC4-10	
		694	AY4		694				R-1140		694
		604	604		604				R-1240		604
		624	624	MR624	624	R4130	2M4	EL4R	R-1340		624
		634	634	MR634	634	R4160	34		R-1640		634
5	0.1969	MR85	617/5						L-850		675
		MR95							L-950	BC5-9	
		MR105							L-1050	BC5-10	
		685	X5	MR618/5	685	UL511	UL50C	UL50C	L-1150		685
		695	AY5		695				R-1350		695
		605			605				R-1450		605
		625	625	MR625	625	R5160	34-5	EL5R	R-1650		625
		635	635	MR635	635	R5190	35		R-1950		635
6	0.2362	MR106	617/6						L-1060		676
		MR126	X6						L-1280	BC6-12	
		686	AX6	MR618/6	686	UL613		UL60C	L-1380		686
		696	AY6		696				R-1580		696
		606							R-1760		606
		626	626	MR628	626	R6190	38	EL6R	R1960		626
7	0.2756	MR117	617/7						L-1170		677
		MR137							L-1370	BC7-13	
		687	AX7	618/7	687	UL714		UL70C	L-1470		687
		697	AY7		697						697
		607	607	MR607	607			EL7R	R-1970		607
		627	627	MR627	627	R7220	37		R-2270		627
8	0.315	MR128	617/8						L-1280		678
		MR148							L-1480	BCB-14	
		688	X8	MR618/8	688	UL816			L-1680		688
		698	AY8		698		19M8		R-1980		698
		608	608	MR608	608	R8220	38	EL8R	R-2280		608
		628									628
9	0.3543	689	X9		689	UL917			L-1790		689
		699	AY9		699		19M9		L-2090		699
		609	609	609	609	609					609
		629	629	MR629	629		39				629
Niro Stainless Steel		S	S	W	S	X	S	S	DD	W	S

Geschlossene Ausführung (metrisch) / Shielded Type (metric series)

mm	inch	ZEN	ADR	FAG	GRW	RMB	BARDEN	MPB	NMB	NTN
1.5	0.0591	681XZZ	AX1.5ZZ		68/1.52Z	ULZ154		UL15CHH	L-4152Z	W68/1.5ZZA
		691XZZ	X1.5ZZ		69/1.52Z				R515ZZ	W69/1.5ZZA
		601XZZS							R-615ZZ	W60/1.5ZZA
2	0.0787	6822ZZS	BX2ZZ		682-2Z	ULZ205	38M2SS	UL20CHH	L-520ZZ	W682ZZA
		MR52ZZ							L-520ZZW52	WBC2-5ZZA
		692ZZ	AX2ZZ						R-620ZZ	W692ZZA
		MR62ZZ							R-620ZZY52	
		MR72ZZ							R-720ZZY03	WBC2-7ZZA
		602ZZS							R-720ZZ	W602ZZA
2.5	0.0984	682XZZS	AX2.5ZZ		68/2.5ZZ	ULZ256	38M2-5SS		L-625ZZ	W68/2.5ZZA
		692XZZ			69/2.5ZZ				R-725ZZ	W69/2.5ZZA
		602XZZS							R-825ZZ	W60/2.5ZZA
3	0.1181	MR63ZZ							L-630ZZ	WA673ZZA
		683ZZ	AX3ZZ		683-2Z	UL7307	38M3SS	UL30CHH	L-730ZZ	W683ZZA
		693ZZ			693-2Z				R-830ZZ	W693ZZA
		MR93ZZ							R-930ZZY04	WBC3-9ZZA
		623ZZ	623ZZ	623ZZ	623-ZZ	RF310	2M3SSY1	EL3RHH	R-1030ZZ	623ZZ
		633ZZ								633ZZ
4	0.1575	MR74ZZ							L-740X2ZZ	WA674ZZA
		MR84ZZ							L-840ZZ	WBC4-8ZZA
		684ZZ	638/4ZZ		684-2Z	ULZ409	38M455	UL40CHH	L-940ZZ	W684ZZA
		MR104ZZ	X4ZZ						L-1040ZZ	WBC4-10ZZA
		694ZZ	AY4ZZ		694-2Z				R-1140ZZ	694ZZ
		604ZZ	604ZZ		604-2Z				R-1240ZZ	604ZZ
		624ZZ	624ZZ	624ZZ	624-2Z	RF413	2M4SS	EL4RHH	R-1340ZZ	624ZZ
		634ZZ	634ZZ	MR634ZZ	634-2Z	RV416	34SS	34RHH	R-1640ZZ	634ZZ
5	0.1969	MR85ZZ							L-850ZZ	WA675ZZA
		MR95ZZA							L-950X2ZZ	WBC5-9ZZA
		MR105ZZ							L-1050ZZ	WBC5-10ZZA
		685ZZ	638/5ZZ		685-2Z	ULZ511		UL50CHH	L-1150ZZ	W685ZZ
		695ZZ	AY5ZZ		695-2Z				R-1350ZZ	895ZZ
		605ZZ			605-2Z				R-1450ZZ	605ZZ
		625ZZ	625ZZ	625ZZ	625-2Z	RV516	34.5SS	EL5RHH	R-1650ZZ	625ZZ
		635ZZ	635ZZ	MR635ZZ	635-2Z	RV519	35SS		R-1950ZZ	635ZZ
6	0.2362	MR106ZZS							L-1060ZZ	WA676ZZA
		MR126ZZ	X6ZZ						L-1260ZZ	WBC6-12ZZA
		686ZZ	628/6ZZ		686-2Z	ULZ613		UL60CHH	L-1360ZZ	W686ZZ
		696ZZ	ZY6ZZ		696-2Z				R-1560ZZ	696ZZ
		606ZZ							R-1760ZZ	606ZZ
		626ZZ	626ZZ	MR626ZZ	626-2Z	RV619	36SS	EL6RHH	R-1960ZZ	626ZZ
7	0.2756	MR117ZZS							L-1170ZZ	WA67ZZA
		MR137ZZS							L-1370ZZ	WBC7-13ZZA
		687ZZ	AX7ZZ		687-2Z	ULZ714		UL70CH	L-1470ZZ	W687ZZ
		697ZZ	AY7ZZ		697-2Z					697ZZ
		607ZZ	607ZZ	607ZZ	607-2Z			EL7RHH	R-1970ZZ	607ZZ
		627ZZ	627ZZ	MR627ZZ	627-2Z	RV722	37SS		R-2270ZZ	627ZZ
8	0.315	MR128ZZS	637/8ZZ						L-1280ZZ	W678ZZA
		MR148ZZA							L-1480ZZ	WBC8-14ZZA
		688ZZ	X8ZZ			ULZ816			L-1680ZZ	W688ZZ
		698ZZ	AY8ZZ		698-2Z		19M8SS		R-1980ZZ	698ZZ
		608ZZ	608ZZ	MR608ZZ	608-2Z	RV822	38SS	EL8RHH	R-2280ZZ	608ZZ
		628ZZ								628ZZ
9	0.3543	689ZZ	X9ZZ			ULZ917			L-1790ZZ	W689ZZ
		699ZZ	AY9ZZ		699-2Z		19M9SS		L-2090ZZ	699ZZ
		609ZZ	609ZZ	609ZZ						609ZZ
		629ZZ	629ZZ	MR629ZZ	629-2Z		39SS			629ZZ
Niro Stainless Steel		S	S	W	S	X	S	S	DD	W

Offene Ausführung (zöllig) / Open Type (inch type)

mm	inch	ZEN	ADR	FAG	GRW	RMB	BARDEN	MPB	NMB	NTN
1.016	0.04	R09	RO9	RO308	1016	UL1304		2C	R1-2	R01
1.191	0.0469	RO	X3/64	R0310	1191	UL1505	RO	21/2C	R1-21/2	RO
1.397	0.055	R1	R1	R0412	1397	R1706	R1	3C	R1-3	R1
1.984	0.0781	R1-4	X5/64	R0516	BR5/64	R2508	R1-4	4C	R1-4	R1-4
2.38	0.0937	R133	AX3/32	RO612	2380	UL3008	R133	3332C	R1-3332	R133
		R1-5	X3/32	R620	BR3/32	R3010	R1-5	5C	R1-5	R1-5
3.175	0.125	R144	AX1/8	R0816	3175	UL4008	R144	418C	R1-418	R144
		R2-5	X1/8	R820	BR1/8A	R4010	R2-5	518C	R1-518	R2-5
		R2-6		R824	BR1/8A/6		R2-6	618C	R1-618	R2-6
		R2	R2	R2	BR1/6B	R4012	R2	R2C	R-2	R2
		R2A	R2A	R2A	BR1/8B/083		R2A	R2AC		RA2
3.967	0.1562	R155	X5/32	R1020	3967	UL5010	R155	5532C	RI-5532	R155
4.762	0.1875	R156	AX3/16	R1220	4763A	UL6010	R156	5632C	RI-5632	R156
		R166	X3/16	R1224	4763B	UL6012	R166	6316C	RI-6632	R166
		R3	Y3/16	R3	BR3/16	R6016	R3	R3C	R-3	R3
6.35	0.25	R168	X1/4	R1624	6350A	UL8012	R168	614C	RI-614	R168
		R188	R188	R1632	6350B	UL8016	R188	814C	RI-814	R188
		R4	Y1/4	R4	BR1/4A	R8020	R4	R4C	R-4	R4
		R4A	R4A	R4A	BR1/4A		R4A	R4AR	RI-1214	
7.938	0.3125	R1810		R2032	7938		R1810	8516C	RI-8516	
9.525	0.375	R6	Y3/8	R620	BR3/8		R6	R6R	RI-1438	
Niro Stainless Steel		S	S	W	S	X	S	S	DD	W

Geschlossene Ausführung (zöllig) / Shielded Type (inch type)

mm	inch	ZEN	ADR	FAG	GRW	RMB	BARDEN	MPB	NMB	NTN
1.191	0.0469	ROZZS	X3/64ZZ	R0310.2Z	1191-2Z	ULZ1505	21/2CHH	RI-21/2ZZ	RAOZZA	
1.397	0.055	R1ZZ	R1ZZ	RO412.2Z	1397-2Z	RF1706	R1S	3CHH	RI-3ZZ	RA1ZZ1
1.984	0.0781	R1-4ZZS	X5-64ZZ	R0516.2Z	BR5/64-2Z	RF2508	R1-4SS	4CHH	R1-4ZZ	RA1-4ZZ1
2.38	0.0937	R133ZZS	AX3/32ZZ	RO612.2Z	2380-2Z	ULZ3006	R133SS	3332CHH	R1-3332ZZ	RA133ZZA
3.175	0.125	R144ZZ	AX1/8ZZ	RO816.2Z	3175-2Z	ULZ4008	R144SS	418CHH	R1-418ZZ	RA144ZZA
		R2-5ZZ	X1/8ZZ	R820.2Z	BR1/8A-2Z	RF4010	R2-5SS	518CHH	R1-518ZZ	RA2-5ZZA
		R2-6ZZS		R824.2Z	BR1/8A/6-2Z		R2-6SS	618CHH	R1-618ZZ	RA2-6ZZA
		R2ZZ	R2ZZ	R2.2Z	BR1/8B-2Z	RF4012	R2SS	R2CHH	R-2ZZ	R2ZZA
		R2AZZ	R2AZZ	R2A.2Z	BR1/8B/083-2Z		R2ASS	R2ACHH	RA2ZZA	
3.967	0.1562	R155ZZS	X5/32ZZ	R1020.2Z	3967-2Z	ULZ5010	R155SS	5532CHH	R1-5532ZZ	RA155ZZA
4.762	0.1875	R156ZZS	AX3/16ZZ	R1220.2Z	4763A-2Z	ULZ6010	R156SS	5632CHH	R1-5632ZZ	RA156ZZA
		R166ZZ	X3/16ZZ	R1224.2Z	4763B-2Z	ULZ6012	R166SS	6316CHH	R1-6632ZZ	R166ZZA
		R3ZZ	Y3/16ZZ	R3.2Z	BR3/16-2Z	RF6016	R3SS	R3CHH	R-3ZZ	RA3ZZ
6.35	0.25	R168ZZS	X1/4ZZ	R1624.2Z	6350A-2Z	ULZ8012	R168SS	614CHH	R1-614ZZ	R168ZZA
		R188ZZ	R188ZZ	R1632.2Z	6350B-2Z	ULZ8016	R188SS	814CHH	R1-814ZZ	RA188ZZA
		R4ZZ	Y1/4ZZ	R4.2Z	BR1/4A-2Z	RF8020	R4SS	R4CHH	R-4ZZ	R4ZZ
		R4AZZ	R4AZZ	R4A.2Z	BR1/4..2Z		R4ASS	R4ARHH	R1-1214ZZ	R4AZZ
7.938	0.3125	R1810ZZS		R2032.2Z	7938-2Z		R1810SS	8516CHH	R1-8516ZZ	
9.525	0.375	R6ZZ	Y3/8ZZ	R6.2Z	BR3/6-2Z		R6SS	R6RHH	R1-1438ZZ	R6ZZ
Niro Stainless Steel		S	S	W	S	X	S	S	DD	W

Geschlossene Flanschlager (zöllig) / Flanged Shielded Type (inch series)

inch	ZEN	ADR	FAG	GRW	RMB	BARDEN	MPB	NMB	NTN
0.0469	FR0ZZS	FX3/64ZZ	RF0310.2Z	F1191-2Z	ULKZ1505	FR0SS	21/2FCHH	RIF-21/2ZZ	FLRAOZZA
0.055	FR1ZZ	FR1ZZ	RF0412.2Z	F1397-2Z	RKF-1706	FR1SS	3FCHH	RIF-3ZZ	FLRA1ZZA
0.0781	FR1-4ZZS	FX5/64ZZ	RF0516.2Z	R6/64-2Z	RKF2508	FR1-4SS	4FCHH	RIF-4ZZ	FLRA1-4ZZA
0.0937	FR133ZZS	FAX3/32ZZ	RF0612.2Z	F2380-2Z	ULKZ3006	FR133SS	3332FCHH	RIF-3332ZZ	FLRA133ZZA
	FR1-5ZZS	FX3/32ZZ	RF620.2Z	F3/32-2Z	RKF3010	FR1-5SS	5FCHH	RIF-5ZZ	FLRA1-5ZZA
0.125	FR144ZZ	FAX1/8ZZ	RF0816.2Z	F3175-2Z	ULKZ4008	FR144SS	418FCHH	RIF-418ZZ	FLRA144ZZA
	FR2-5ZZ	FX1/8ZZ	RF820.2Z	F1/8A-2Z	RKF4010	FR2-5SS	518FCHH	RIF-518ZZ	FLRA2-5ZZA
	FR2-6ZZS		RF824.2Z	F1/8A/6-2Z		FR2-6SS	618FCHH	RIF-618ZZ	FLRA2-6ZZA
	FR2ZZ	FR2ZZ	RF2.2Z	F1/8B-2Z	RKF4012	FR2SS	R2FCHH	RF-2ZZ	FLR2ZZA
0.1562	RF155ZZS	FX5/32ZZ	RF1020.2Z	F3967-2Z	ULKZ5010	FR155SS	5532FCHH	RIF-5532ZZ	FLRA155ZZA
0.1875	FR156ZZS	FAX3/16ZZ	RF1220.2Z	F4763A-2Z	ULKZ6010	FR156SS	5632FCHH	RIF-5632ZZ	FLRA156ZZA
	FR166ZZ	FX3/16ZZ	RF1224.2Z	F4763B-2Z	ULKZ6012	FR166SS	6316FCHH	RIF-6632ZZ	FLRA166ZZA
	FR3ZZ	FY3/16ZZ	RF3.2Z	F3/16-2Z	RKF6016	FR3SS	R3FCHH	RF-3ZZ	FLRA3ZZ
0.25	FR168ZZS	FX1/4ZZ	RF1624.2Z	F6350A-2Z	ULKZ8012	FR168SS	614CHH	RIF-614ZZ	FLRA166ZZA
	FR188ZZ	FR188ZZ	RF1632.2Z	F6350B-2Z	ULKZ8016	FR188SS	814FCHH	RIF-814ZZ	FLRA188ZZA
	FR4ZZ	FY1/4ZZ	RF4.2Z	F1/4A-2Z	RKF8020	FR4SS	R4FCHH	RF-4ZZ	FLR4ZZ
0.3125	FR1810ZZS		RF2032.2Z	F7938-2Z		FR1810SS	8516FCHH	RIF-8516ZZ	
0.375	FR6ZZ	FY3/8ZZ	RF6.2Z			FR6SS	R6FRHH	RIF-1438ZZ	FLR6ZZ

Geschlossene Flanschlager (metrisch) / Flanged Shielded Type (metric series)

mm	inch	ZEN	ADR	GRW	RMB	BARDEN	MPB	NMB	NTN
1.5	0.591	F691XZZ	FX1.5ZZ	F69/1.5-2Z				RF-515ZZ	FLW69/1.5ZZA
		F601XZZS						RF-615ZZ	FLW60/1.5ZZA
2	0.0787	F682ZZ	FBX2ZZ	F682-2Z	ULKZ205	F682SS	UL20FCHH	LF-520ZZ	FLW682ZZA
		F692ZZ	FAX2ZZ			F692SS		RF-620ZZ	FLW692ZZA
		MF72ZZ						RF-720ZZY03	FLW8C2-7ZZA
		F602ZZS						RF-720ZZ	FLW602ZZA
2.5	0.0984	F682XZZS	FAX2.5ZZ	F68/2.5-2Z	ULKZ256	F68/2.5SS		LF-625ZZ	FLW68/2.5ZZA
		F692XZZ	FX2.5ZZ	F69/2.5-2Z		F69/2.5SS		RF-725ZZ	FLW69/2.5ZZA
		F602XZZS						RF-825ZZ	FLW60/2.5ZZA
3	0.1181	MF63ZZS						FL630ZZ	FLWA67ZZA
		F683ZZ	FAX3ZZ	F683-2Z	ULKZ307	F683SS	UL30FCHH	LF-730ZZ	FLW683ZZA
		F693ZZ	FX3ZZ	F693-2Z	RKF308			RF-830ZZ	FLW693ZZA
		MF93ZZ						RF-930ZZY04	FLWBC3-9ZZA
		F623ZZ	F623ZZ	F623-2Z	RKF310	F623SS		RF-1030ZZ	FL623ZZA
4	0.1575	MF74ZZ						LF-740ZZ	FLWA674ZZA
		MF84ZZ						LF-840ZZ	FLWBC4-8ZZA
		F684ZZ	F683/4ZZ	F684-2Z	ULKZ409	F684SS	UL40FCHH	LF-940ZZ	FLW684ZZA
		MF 104ZZ						LF-1040ZZ	FLAWBC4-10ZZA
		F694ZZ		F694-2Z		F694SS		RF-1140ZZ	FL694ZZA
		F604ZZ						RF-1240ZZ	FL604ZZ
		F624ZZ	F624ZZ	F624-2Z		F624SS		RF-1340ZZF	L624ZZ
		F634ZZ		F634-2Z		F634SS		RF-1640ZZ	FL634ZZ
5	0.1969	MF85ZZ						LF-850ZZ	FLWA675ZZA
		MF95ZZ						LF-950ZZ	FLWBC5-9ZZA
		MF105ZZ						LF-1050ZZ	FLAWBC5-10ZZA
		F685ZZ	F638/5ZZ	F685-2Z	ULKZ511	F685SS	UL50FCHH	LF-1150ZZ	FLW685ZZA
		F695ZZ		F695-2Z		F695SS		RF-1350ZZ	FL695ZZ
		F605ZZ		F605-2Z				RF-1450ZZ	FL605ZZ
		F625ZZ		F625-2Z		F625SS		RF-1850ZZ	FL625ZZ
		F635ZZ		F635-2Z		F635SS		RF1950ZZ	FL635ZZ
6	0.2362	MF106ZZ						RF-1650ZZ	FLWA676ZZA
		MF126ZZ						UF-1260ZZ	FLAWBC6-12ZZA
		F686ZZ	F628/6ZZ	F686-2Z	ULKZ613	F686SS	UL60FCHH	LF-1360ZZ	FLW686ZZA
		F696ZZ		F696-2Z		F696SS		RF-1560ZZ	FL696ZZ
		F606ZZ						RF-1760ZZ	FL606ZZ
		F626ZZ		F626-2Z		F626SS			FL626ZZ
7	0.2756	MF117ZZS						LF-1170ZZ	FLWA677ZZA
		MF137ZZS						LF-1370ZZ	FLAWBC7-13ZZA
		F687ZZ	FAX7ZZ	F687-2Z	ULKZ714	F687SS	UL70FCHH	LF-1470ZZ	FLW687ZZA
		F697ZZ		F697-2Z		F697SS			FL697ZZ
		F607ZZ	F607ZZ	F607-2Z		F607SS			FL607ZZ
		F627ZZ		F627-2Z		F627SS		RF-2270ZZ	FL627ZZ
8	0.315	MF128ZZ						LF-1280ZZ	FLAW678ZZA
		MF148ZZ						UF-1480ZZ	FLWBC8-14ZZA
		F688ZZ				F688SS		UF-1680ZZ	FLW688ZZ
		F698ZZ		F698-2Z		F698SS			FL698ZZ
		F608-ZZ	F608ZZ	F608-2Z		F608SS		RF-2280ZZ	FL608ZZ
9		F689ZZ				F689SS		FL-1790ZZ	FLW689ZZ
		F699ZZ							FL699ZZ
Niro Stainless Steel		S	S	S	X	S	S	DD	W

Zoll-mm Umrechnungstabelle / Inch to mm Conversion

Fraction	Inch	mm	Fraction	Inch	mm	Fraction	Inch	mm
1/64	0.0156	0.3969		0.2883	7.3228	11/16	0.6875	17.4625
	0.0250	0.6350	19/64	0.2969	7.5406	45/64	0.7031	17.8594
1/32	0.0312	0.7937	5/16	0.3125	7.9375		0.7087	18.0000
	0.0394	**1.0000**		0.3150	**8.0000**	23/32	0.7187	18.2562
	0.0400	1.0160	21/64	0.3281	8.3344	47/64	0.7344	18.6532
3/64	0.0469	1.1906	11/32	0.3437	8.7312		0.7435	18.8849
	0.0472	1.2000		0.3543	**9.0000**		0.7480	**19.0000**
	0.0550	1.3970	23/64	0.3594	9.1281	**3/4**	0.7500	19.0500
	0.0591	**1.5000**	**3/8**	0.3750	9.5250	49/64	0.7656	19.4469
1/16	0.0625	1.5875	25/64	0.3906	9.2919		0.7717	19.6012
	0.0709	1.8000		0.3937	**10.0000**	25/32	0.7812	19.8433
5/64	0.0781	1.9844	13/32	0.4062	10.3187		0.7874	**20.0000**
	0.0787	**2.0000**		0.4100	10.4140	51/64	0.7969	20.2402
	0.0906	2.3012	27/64	0.4219	10.7156	13/16	0.8125	20.6375
3/32	0.0937	2.3812		0.4250	10.7950		0.8268	**21.0000**
	0.0984	**2.5000**		0.4331	**11.0000**	53/64	0.8281	21.0344
	0.1000	2.5400	7/16	0.4375	11.1125	27/32	0.8437	21.4312
	0.1024	2.6000	29/64	0.4531	11.5094	55/64	0.8594	21.8281
7/64	0.1094	2.7781		0.4600	11.6840		0.8661	**22.0000**
	0.1100	2.7940	15/32	0.4687	11.9062	**7/8**	0.8750	22.2250
	0.1102	2.8000		0.4724	**12.0000**	57/64	0.8906	22.6219
	0.1181	**3.0000**	31/64	0.4844	12.3031		0.9055	**23.0000**
1/8	0.1250	3.1750	**1/2**	0.5000	12.7000	29/32	0.9062	23.0187
	0.1256	3.1902		0.5118	**13.0000**	59/64	0.9219	23.4156
	0.1378	3.5000	33/64	0.5156	13.0968	15/16	0.9375	23.8125
9/64	0.1406	3.5719	17/32	0.5312	13.4937		0.9449	**24.0000**
5/32	0.1562	3.9687	35/64	0.5469	13.8906	61/64	0.9531	24.2094
	0.1575	**4.0000**		0.5512	**14.0000**	31/32	0.9687	24.6062
11/64	0.1719	4.3656	9/16	0.5625	14.2875		0.9843	**25.0000**
3/16	0.1875	4.7625	37/64	0.5781	14.6844	63/64	0.9844	25.0031
	0.1892	4.8057		0.5906	**15.0000**		1.0000	25.4000
	0.1969	**5.0000**	19/32	0.5937	15.0812		1.0236	**26.0000**
13/64	0.2031	5.1594	39/64	0.6094	15.4781		1.0415	26.4541
	0.2165	5.4991	**5/8**	0.6250	15.8750		1.0480	26.6192
7/32	0.2187	5.5562		0.6299	**16.0000**	1-1/16	1.0625	26.9875
15/64	0.2344	5.9531	41/64	0.6406	16.2719		1.0630	**27.0000**
	0.2362	**6.0000**		0.6500	16.5100		1.1025	**28.0000**
1/4	0.2500	6.3500	21/32	0.6562	16.6687	**1-1/8**	1.1250	28.5750
17/64	0.2656	6.7469		0.6620	16.8148		1.1417	**29.0000**
	0.2756	**7.0000**		0.6693	**17.0000**		1.1812	**30.0000**
9/32	0.2812	7.1437	43/64	0.6719	17.0656	1-3/16	1.1875	30.1625
						1-1/4	1.2500	31.7500
						1-1/2	1.5000	38.1000

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v.10 / 12

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