

TOPLINE

Deep-groove ball bearings developed
exclusively for extreme applications

NTN® **SNR**®

www.ntn-snr.com



With You

INNOVATION DRIVING YOUR PRODUCTION

Movement is constantly changing. It is analysed, brought under control, guided and mastered with the aim of deriving maximum benefit. It is more than a simple concept. It is the very essence of our commitment, namely designing and innovating to deliver the perfect solutions to the issues and constraints of today and tomorrow.

There are thousands of us around the world masterminding and developing solutions to raise the bar on your production performance. Among the world-leading brands (NTN, BCA, BOWER and SNR) are marketed worldwide and deliver the best-fit solutions for working together and building a more environmentally-friendly society. Follow our lead and use interaction, anticipation and adaptation as the keys to guiding and shaping the future of the manufacturing, automotive and aviation markets.

5,4 MILLIARDS €

in FY2019

24 199

employees in 2019

The local service of an international partner



118

sales offices

73

production sites

15

R&D centres

TOPLINE

COMMITMENTS

AVAILABILITY

We believe that service forms the backbone of any customer relationship, our TOPLINE bearings come with fast delivery times, even though they are technically advanced products.

RELIABILITY

The trust that you place in our products is vitally important, our components and lubricants are approved under real operating conditions at our European test centre in Annecy, France.

TECHNICAL EXPERTISE

We are committed to providing everyday support and guidance, our teams of experts are on hand to recommend the most suitable TOPLINE products and thereby guarantee the best performance.

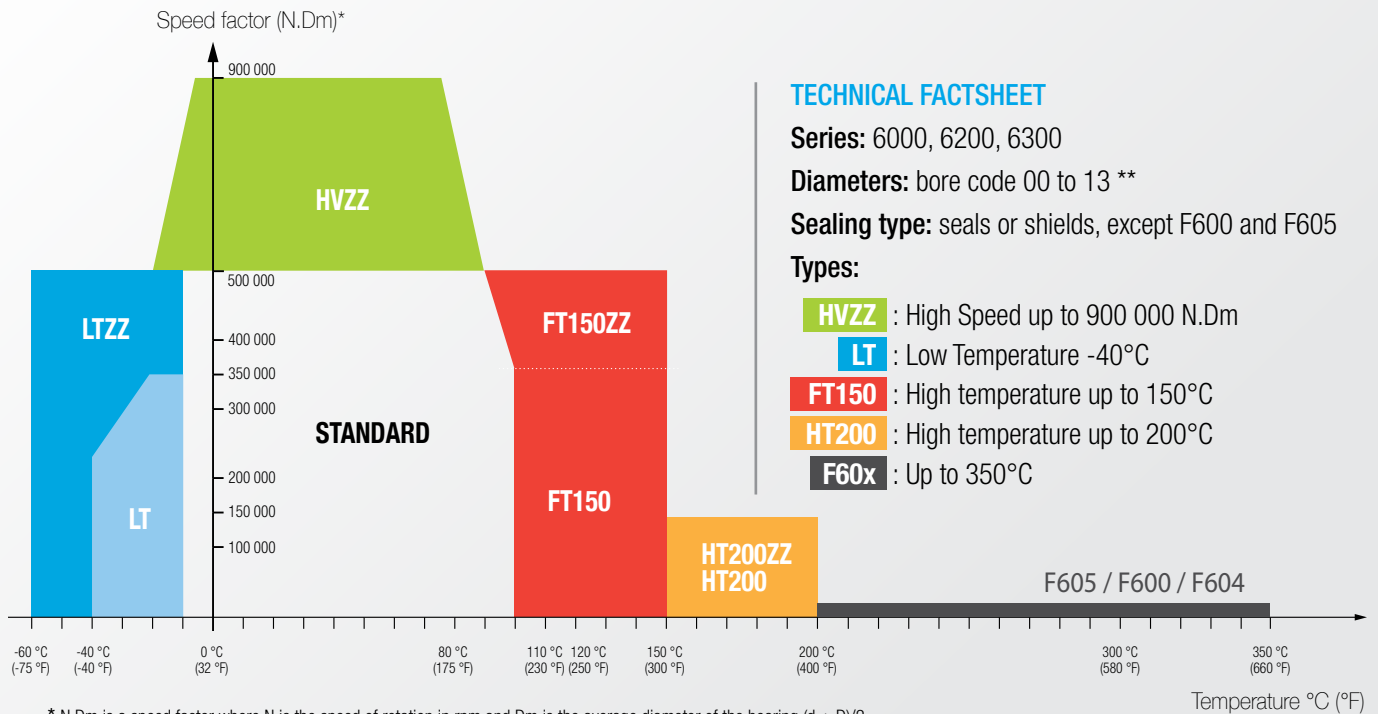
Ask for advice from your local sales representative.

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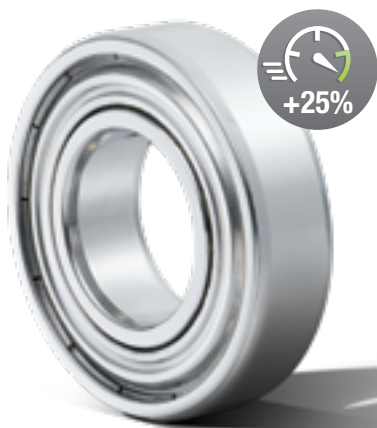
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TOPLINE: THE SOLUTION

Our TOPLINE products are designed to meet the extreme speed or temperature requirements for your applications.



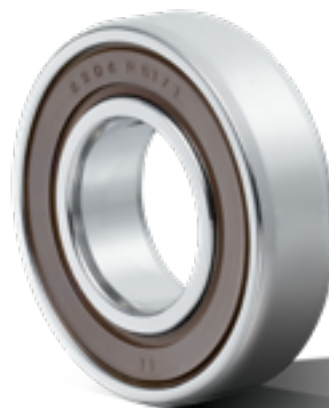
Example: bearing 6206, $d = 30 \text{ mm} / D = 62 \text{ mm}$
 $N.Dm = 46 \text{ mm} \times 10,000 \text{ RPM} = 460,000 \text{ N.Dm}$



HIGH SPEED • HVZZ

These low-torque bearings are perfectly suited to high-speed applications and effectively reduce electricity use.

WOODWORKING MACHINES, ELECTRIC MOTORS, WIRE ROLLING MILLS.



LOW TEMPERATURE • LT

With its specially adapted grease, this product family is ideal for low-temperature applications and also boasts resistance to humidity.

COLD STORES, CABLE TRANSPORT SYSTEMS.

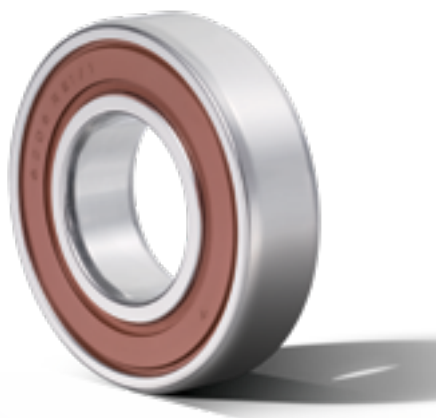




HIGH TEMPERATURE UP TO +150°C • FT150

We are dedicated to offering ever greater performance and satisfaction. We have reduced the noise output of our bearings by a factor of four, offering a real benefit for your applications!

INDUSTRIAL FANS, ELECTRIC MOTORS, CONVEYOR SYSTEMS.



HIGH TEMPERATURE UP TO +200°C • HT200

This product range can withstand temperatures up to +200°C.

PACKAGING MACHINES, DRYERS, FOOD OVENS.



VERY HIGH TEMPERATURE UP TO +350°C • F60x

To broaden the potential applications for these bearings, we have increased the rotational speed up to 140 RPM.

KILN CARS, MANUFACTURE OF CONSTRUCTION MATERIALS, STEELMAKING.



TECHNICAL CHARACTERISTICS

We use the best technologies available, so that each product is ideally geared towards your needs.

Products	Cage	Internal clearance	Grease	Sealing	Other	Temperature range
HVZZ	Glass fibre reinforced polyamide 6.6	C3	Superior quality. Lithium thickener + synthetic base oil	Steel shields	Precision P6, P5. High-precision balls (<= Class 10)	-20°C to +120°C
LT LTZZ	Steel	C3	Suited to low temperatures + presence of humidity. Lithium thickener + synthetic base oil	Nitrile rubber seals (NBR) or steel shields	-	LT: -40°C to +100°C LTZZ: -60°C to +120°C
FT150 FT150ZZ	Steel	C3	Adapted to high temperatures. Polyurea thickener + synthetic base oil	Fluoroelastomer seals (FKM) or steel shields	-	-30°C to +150°C
HT200 HT200ZZ	Steel	C4	Adapted to high temperatures. PTFE solid lubricant and PFPE oil	Fluoroelastomer seals (FKM) or steel shields	Specific heat treatment	-40°C to +200°C
F605	Steel	Multiple of C5*	**	-	Brand is stamped	Temperature range between +200°C and +350°C (continuous or cyclic)
F600	Steel	Multiple of C5*		-	Specific surface treatment (phosphatisation + MoS2 deposition)***	
F604	Steel	Multiple of C5*	Suitable for very high temperatures. Polyalkylene glycol base oil + solid additive	Steel shields	Brand is stamped	

For more information about the temperature ranges, please contact us.



* Significantly increased internal clearance to offset the material's expansion effects.

** In case of F600 and F605, if additional lubrication is required, an appropriate amount of grease may be introduced into the bearing. Contact NTN-SNR for more information.

*** Surface treatment for greater oxidation resistance and improved lubrication. Caution: F600 and F604 products must be used with care in damp environments, since MoS2 may react with water to produce sulphuric acid.

READ OUR DATA TABLES

CLASSIFICATION BY SERIES IN ASCENDING ORDER

Enter the table arranged by series and bore code in ascending order.

Example: Series 6000 of code 00 to 10 and then series 6200 of code 00 to 10, and so on

HT200 & HT200ZZ

Temperatures up to +200°C

Reference	Dimensions (mm)			Basic capacity (kN)		Speed (rpm)		Shoulders and fillets (mm)				Weight	
	d	D	B	Cr	Cor	Thermal reference	Limiting speed	ra max (mm)	Da max (mm)	da min (mm)	da max (mm)	kg	lbs
6004HT200	20	42	12	9,2	5,00	-	10 000	0,6	38,0	24,0	27,5	0,07	0,15
6008HT200	40	68	15	16,4	11,50	-	5 900	1,0	63,0	45,0	48,9	0,19	0,42
6204HT200	20	47	14	12,6	6,60	-	11 000	1,0	42,0	25,0	25,9	0,11	0,24
6205HT200	25	52	15	13,8	7,90	-	9 000	1,0	47,0	30,0	31,8	0,13	0,28
6206HT200	30	62	16	19,2	11,30	-	7 600	1,0	57,0	35,0	37,9	0,20	0,44
6207HT200	35	72	17	25,3	15,30	-	6 500	1,0	65,5	41,5	44,0	0,29	0,63
6208HT200	40	80	18	28,7	17,90	-	5 700	1,0	73,5	46,5	50,3	0,36	0,80
6209HT200	45	85	19	32,2	20,40	-	5 300	1,0	78,5	51,5	54,5	0,40	0,89
6210HT200	50	90	20	34,5	23,20	-	4 800	1,0	83,5	56,5	59,6	0,45	1,00
6304HT200	20	52	15	15,8	7,90	-	9 500	1,0	45,5	26,5	30,0	0,15	0,32
6305HT200	25	62	17	23,5	12,10	-	8 500	1,0	55,5	31,5	33,9	0,23	0,50

ARTICLE DESIGNATION

Each TOPLINE range has its own identifier code, which can be found at the end of our references for quick and easy identification.

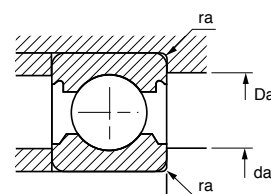
Example:

6008HT200 => version 6008 High Temperature up to +200°C

MAIN TECHNICAL DATA

The main technical characteristics of our products are then presented:

- Product dimensions
- Load capacities
- Speeds
- Shoulders
- Weight



For further information for each article,

Visit our E-Shop
Scan me!



TOPLINE: THE RANGES



HVZZ • HIGH SPEED Up to 900,000 N.Dm

For woodworking machines, electric motors, wire rolling mills...



Reference	Dimensions (mm)			Basic capacity (kN)		Speed (rpm)		Shoulders and fillets (mm)				Weight	
	d	D	B	Cr	Cor	Thermal reference	Limiting speed	ra max (mm)	Da max (mm)	da min (mm)	da max (mm)	kg	lbs
6000HVZZ	10	26	8	4,5	2,0	28 000	51 000	0,3	24,0	12,0	14,7	0,02	0,04
6001HVZZ	12	28	8	5,0	2,4	24 000	46 000	0,3	26,0	14,0	17,2	0,02	0,05
6002HVZZ	15	32	9	5,4	2,9	22 000	39 000	0,3	30,0	17,0	20,5	0,03	0,07
6003HVZZ	17	35	10	5,8	3,3	20 000	35 000	0,3	33,0	19,0	22,8	0,04	0,09
6004HVZZ	20	42	12	9,2	5,0	18 000	29 000	0,6	38,0	24,0	27,5	0,07	0,15
6005HVZZ	25	47	12	9,8	5,8	15 000	26 000	0,6	43,0	29,0	31,6	0,08	0,17
6006HVZZ	30	55	13	13,0	8,3	13 000	21 000	1,0	50,0	35,0	38,2	0,12	0,26
6007HVZZ	35	62	14	15,7	10,3	12 000	19 000	1,0	57,0	40,0	43,5	0,15	0,34
6008HVZZ	40	68	15	16,4	11,5	11 000	17 000	1,0	63,0	45,0	48,9	0,19	0,42
6009HVZZ	45	75	16	20,5	15,1	9 700	15 000	1,0	70,0	50,0	54,2	0,24	0,54
6010HVZZ	50	80	16	21,1	16,6	8 900	14 000	1,0	75,0	55,0	59,7	0,27	0,59
6011HVZZ	55	90	18	27,5	21,3	8 300	12 000	1,0	83,5	61,5	65,7	0,39	0,85
6201HVZZ	12	32	10	6,8	3,1	22 000	38 000	0,6	28,0	16,0	18,3	0,04	0,08
6202HVZZ	15	35	11	7,7	3,8	20 000	33 000	0,6	31,0	19,0	21,1	0,05	0,10
6203HVZZ	17	40	12	9,4	4,8	18 000	30 000	0,6	36,0	21,0	24,1	0,07	0,15
6204HVZZ	20	47	14	12,6	6,6	16 000	25 000	1,0	42,0	25,0	25,9	0,11	0,24
6205HVZZ	25	52	15	13,8	7,9	14 000	22 000	1,0	47,0	30,0	31,8	0,13	0,28
6206HVZZ	30	62	16	19,2	11,3	12 000	18 000	1,0	57,0	35,0	37,9	0,20	0,44
6207HVZZ	35	72	17	25,3	15,3	10 000	16 000	1,0	65,5	41,5	44,0	0,29	0,63
6208HVZZ	40	80	18	28,7	17,9	9 300	14 000	1,0	73,5	46,5	50,3	0,36	0,80
6209HVZZ	45	85	19	32,2	20,4	8 700	13 000	1,0	78,5	51,5	54,5	0,40	0,89
6210HVZZ	50	90	20	34,5	23,2	8 200	12 000	1,0	83,5	56,5	59,6	0,45	1,00
6308HVZZ	40	90	23	40,3	24,0	9 000	13 000	1,5	82,0	48,0	51,9	0,61	1,35

LT & LTZZ • LOW TEMPERATURE

Down to -60°C

For cold stores, cable transport systems...



Reference	Dimensions (mm)			Basic capacity (kN)		Speed (rpm)		Shoulders and fillets (mm)				Weight	
	d	D	B	Cr	Cor	Thermal reference	Limiting speed	ra max (mm)	Da max (mm)	da min (mm)	da max (mm)	kg	lbs
6002LT	15	32	9	5,4	2,9	-	14000	0,3	30,0	17,0	20,5	0,03	0,07
6003LT	17	35	10	5,8	3,3	-	13000	0,3	33,0	19,0	22,8	0,04	0,09
6004LT	20	42	12	9,2	5,0	-	10000	0,6	38,0	24,0	27,5	0,07	0,15
6005LT	25	47	12	9,8	5,8	-	9100	0,6	43,0	29,0	31,6	0,08	0,17
6200LT	10	30	9	5,9	2,6	-	18000	0,6	26,0	14,0	16,0	0,03	0,07
6202LT	15	35	11	7,7	3,8	-	14000	0,6	31,0	19,0	21,1	0,05	0,10
6203LT	17	40	12	9,4	4,8	-	12000	0,6	36,0	21,0	24,1	0,07	0,15
6204LT	20	47	14	12,6	6,6	-	11000	1,0	42,0	25,0	25,9	0,11	0,24
6205LT	25	52	15	13,8	7,9	-	8700	1,0	47,0	30,0	31,8	0,13	0,28
6206LT	30	62	16	19,2	11,3	-	7300	1,0	57,0	35,0	37,9	0,20	0,44
6003LTZZ	17	35	10	5,8	3,3	20 000	15000	0,3	33,0	19,0	22,8	0,04	0,09
6004LTZZ	20	42	12	9,2	5,0	18 000	13000	0,6	38,0	24,0	27,5	0,07	0,15
6005LTZZ	25	47	12	9,8	5,8	15 000	11000	0,6	43,0	29,0	31,6	0,08	0,17
6006LTZZ	30	55	13	13,0	8,3	13 000	9300	1,0	50,0	35,0	38,2	0,12	0,26
6007LTZZ	35	62	14	15,7	10,3	12 000	8100	1,0	57,0	40,0	43,5	0,15	0,34
6200LTZZ	10	30	9	5,9	2,6	23 000	20000	0,6	26,0	14,0	16,0	0,03	0,07
6204LTZZ	20	47	14	12,6	6,6	16 000	12000	1,0	42,0	25,0	25,9	0,11	0,24
6205LTZZ	25	52	15	13,8	7,9	14 000	10000	1,0	47,0	30,0	31,8	0,13	0,28
6206LTZZ	30	62	16	19,2	11,3	12 000	8600	1,0	57,0	35,0	37,9	0,20	0,44
6304LTZZ	20	52	15	15,8	7,9	14 000	11000	1,0	45,5	26,5	30,0	0,14	0,30

NTN-SNR offers an additional range of bearing inserts for low-temperature applications (suffix T04 for the SNR brand and suffix CT1 for the NTN brand)

FT150 & FT150ZZ • HIGH TEMPERATURE

Up to +150°C

For industrial fans, electric motors, conveyor systems...



Reference	Dimensions (mm)			Basic capacity (kN)		Speed (rpm)		Shoulders and fillets (mm)				Weight	
	d	D	B	Cr	Cor	Thermal reference	Limiting speed	ra max (mm)	Da max (mm)	da min (mm)	da max (mm)	kg	lbs
6000FT150	10	26	8	4,5	2,0	-	20000	0,3	24,0	12,0	14,7	0,02	0,04
6001FT150	12	28	8	5,0	2,4	-	17000	0,3	26,0	14,0	17,2	0,21	0,46
6002FT150	15	32	9	5,4	2,9	-	14000	0,3	30,0	17,0	20,5	0,03	0,07
6003FT150	17	35	10	5,8	3,3	-	13000	0,3	33,0	19,0	22,8	0,04	0,09
6004FT150	20	42	12	9,2	5,0	-	10000	0,6	38,0	24,0	27,5	0,07	0,15
6005FT150	25	47	12	9,8	5,8	-	9100	0,6	43,0	29,0	31,6	0,08	0,17
6006FT150	30	55	13	13,0	8,3	-	7500	1,0	50,0	35,0	38,2	0,12	0,26
6007FT150	35	62	14	15,7	10,3	-	6600	1,0	57,0	40,0	43,5	0,15	0,34
6008FT150	40	68	15	16,4	11,5	-	5900	1,0	63,0	45,0	48,9	0,19	0,42
6009FT150	45	75	16	20,5	15,1	-	5300	1,0	70,0	50,0	54,2	0,24	0,54
6010FT150	50	80	16	21,1	16,6	-	4800	1,0	75,0	55,0	59,7	0,27	0,59
6013FT150	65	100	18	29,6	25,2	-	3800	1,0	93,5	71,5	75,2	0,43	0,95
6200FT150	10	30	9	5,9	2,6	-	18000	0,6	26,0	14,0	16,0	0,03	0,07
6201FT150	12	32	10	6,8	3,1	-	16000	0,6	28,0	16,0	18,3	0,04	0,08
6202FT150	15	35	11	7,7	3,8	-	14000	0,6	31,0	19,0	21,1	0,45	0,99
6203FT150	17	40	12	9,4	4,8	-	12000	0,6	36,0	21,0	24,1	0,07	0,15
6204FT150	20	47	14	12,6	6,6	-	10000	1,0	42,0	25,0	25,9	0,11	0,24
6205FT150	25	52	15	13,8	7,9	-	8400	1,0	47,0	30,0	31,8	0,13	0,28
6206FT150	30	62	16	19,2	11,3	-	7300	1,0	57,0	35,0	37,9	0,20	0,44
6207FT150	35	72	17	25,3	15,3	-	6300	1,0	65,5	41,5	44,0	0,29	0,63
6208FT150	40	80	18	28,7	17,9	-	5500	1,0	73,5	46,5	50,3	0,37	0,82
6209FT150	45	85	19	32,2	20,4	-	5100	1,0	78,5	51,5	54,5	0,40	0,89
6210FT150	50	90	20	34,5	23,2	-	4700	1,0	83,5	56,5	59,6	0,45	1,00
6213FT150	65	120	23	56,1	40,1	-	3600	1,5	112,0	73,0	77,5	0,99	2,18
6303FT150	17	47	14	13,5	6,6	-	10000	1,0	42,0	22,0	27,5	0,11	0,25
6304FT150	20	52	15	15,8	7,9	-	9500	1,0	45,5	26,5	30,0	0,15	0,32
6305FT150	25	62	17	23,5	12,1	-	8200	1,0	55,5	31,5	33,9	0,23	0,50
6306FT150	30	72	19	27,9	15,9	-	6600	1,0	65,5	36,5	42,4	0,35	0,76
6307FT150	35	80	21	33,0	19,2	-	6000	1,5	72,0	43,0	45,5	0,45	0,98
6308FT150	40	90	23	40,3	24,0	-	5300	1,5	82,0	48,0	51,9	0,61	1,35
6309FT150	45	100	25	52,3	31,7	-	4800	1,5	92,0	53,0	59,3	0,83	1,82
6310FT150	50	110	27	61,3	38,3	-	4200	2,0	101,0	59,0	64,7	1,07	2,36



Reference	Dimensions (mm)			Basic capacity (kN)		Speed (rpm)		Shoulders and fillets (mm)				Weight	
	d	D	B	Cr	Cor	Thermal reference	Limiting speed	ra max (mm)	Da max (mm)	da min (mm)	da max (mm)	kg	lbs
6000FT150ZZ	10	26	8	4,5	2,0	28000	28000	0,3	24,0	12,0	14,7	0,02	0,04
6001FT150ZZ	12	28	8	5,0	2,4	24000	25000	0,3	26,0	14,0	17,2	0,21	0,46
6002FT150ZZ	15	32	9	5,4	2,9	22000	21000	0,3	30,0	17,0	20,5	0,03	0,07
6003FT150ZZ	17	35	10	5,8	3,3	20000	19000	0,3	33,0	19,0	22,8	0,04	0,09
6004FT150ZZ	20	42	12	9,2	5,0	18000	16000	0,6	38,0	24,0	27,5	0,07	0,15
6005FT150ZZ	25	47	12	9,8	5,8	15000	14000	0,6	43,0	29,0	31,6	0,08	0,17
6006FT150ZZ	30	55	13	13,0	8,3	13000	12000	1,0	50,0	35,0	38,2	0,12	0,26
6007FT150ZZ	35	62	14	15,7	10,3	12000	10000	1,0	57,0	40,0	43,5	0,15	0,34
6008FT150ZZ	40	68	15	16,4	11,5	11000	9100	1,0	63,0	45,0	48,9	0,19	0,42
6009FT150ZZ	45	75	16	20,5	15,1	9700	8200	1,0	70,0	50,0	54,2	0,24	0,54
6010FT150ZZ	50	80	16	21,1	16,6	8900	7500	1,0	75,0	55,0	59,7	0,27	0,59
6200FT150ZZ	10	30	9	5,9	2,6	23000	25000	0,6	26,0	14,0	16,0	0,03	0,07
6201FT150ZZ	12	32	10	6,8	3,1	22000	23000	0,6	28,0	16,0	18,3	0,04	0,08
6202FT150ZZ	15	35	11	7,7	3,8	20000	20000	0,6	31,0	19,0	21,1	0,04	0,09
6203FT150ZZ	17	40	12	9,4	4,8	18000	17000	0,6	36,0	21,0	24,1	0,07	0,15
6204FT150ZZ	20	47	14	12,6	6,6	16000	15000	1,0	42,0	25,0	25,9	0,11	0,24
6205FT150ZZ	25	52	15	13,8	7,9	14000	13000	1,0	47,0	30,0	31,8	0,13	0,28
6206FT150ZZ	30	62	16	19,2	11,3	12000	11000	1,0	57,0	35,0	37,9	0,20	0,44
6207FT150ZZ	35	72	17	25,3	15,3	10000	9200	1,0	65,5	41,5	44,0	0,29	0,63
6208FT150ZZ	40	80	18	28,7	17,9	9300	8200	1,0	73,5	46,5	50,3	0,36	0,80
6209FT150ZZ	45	85	19	32,2	20,4	8700	7600	1,0	78,5	51,5	54,5	0,40	0,89
6210FT150ZZ	50	90	20	34,5	23,2	8200	7000	1,0	83,5	56,5	59,6	0,45	1,00
6300FT150ZZ	10	35	11	8,1	3,5	21000	22000	0,6	31,0	14,0	15,4	0,05	0,12
6301FT150ZZ	12	37	12	9,7	4,2	20000	20000	1,0	32,0	17,0	19,3	0,06	0,13
6302FT150ZZ	15	42	13	11,2	5,3	18000	17000	1,0	37,0	20,0	23,2	0,08	0,18
6303FT150ZZ	17	47	14	13,5	6,6	16000	15000	1,0	42,0	22,0	27,5	0,11	0,25
6304FT150ZZ	20	52	15	15,8	7,9	14000	14000	1,0	45,5	26,5	30,0	0,15	0,32
6305FT150ZZ	25	62	17	23,5	12,1	12000	11000	1,0	55,5	31,5	33,9	0,23	0,50
6306FT150ZZ	30	72	19	27,9	15,9	11000	9500	1,0	65,5	36,5	42,4	0,35	0,76
6307FT150ZZ	35	80	21	33,0	19,2	9900	8500	1,5	72,0	43,0	45,5	0,45	0,98
6308FT150ZZ	40	90	23	40,3	24,0	9000	7600	1,5	82,0	48,0	51,9	0,61	1,35
6309FT150ZZ	45	100	25	52,3	31,7	8300	6800	1,5	92,0	53,0	59,3	0,83	1,82



HT200 & HT200ZZ • HIGH TEMPERATURE

Up to +200°C

For packaging machines, dryers, food ovens...



Reference	Dimensions (mm)			Basic capacity (kN)		Speed (rpm)		Shoulders and fillets (mm)				Weight	
	d	D	B	Cr	Cor	Thermal reference	Limiting speed	ra max (mm)	Da max (mm)	da min (mm)	da max (mm)	kg	lbs
6004HT200	20	42	12	9,2	5,00	-	7700	0,6	38,0	24,0	27,5	0,07	0,15
6008HT200	40	68	15	16,4	11,50	-	4400	1,0	63,0	45,0	48,9	0,19	0,42
6204HT200	20	47	14	12,6	6,60	-	7200	1,0	42,0	25,0	25,9	0,11	0,24
6205HT200	25	52	15	13,8	7,90	-	6100	1,0	47,0	30,0	31,8	0,13	0,28
6206HT200	30	62	16	19,2	11,30	-	5200	1,0	57,0	35,0	37,9	0,20	0,44
6207HT200	35	72	17	25,3	15,30	-	4500	1,0	65,5	41,5	44,0	0,29	0,63
6208HT200	40	80	18	28,7	17,90	-	4000	1,0	73,5	46,5	50,3	0,36	0,80
6209HT200	45	85	19	32,2	20,40	-	3700	1,0	78,5	51,5	54,5	0,40	0,89
6210HT200	50	90	20	34,5	23,20	-	3400	1,0	83,5	56,5	59,6	0,45	1,00
6304HT200	20	52	15	15,8	7,90	-	6700	1,0	45,5	26,5	30,0	0,15	0,32
6305HT200	25	62	17	23,5	12,10	-	5500	1,0	55,5	31,5	33,9	0,23	0,50
6306HT200	30	72	19	27,9	15,90	-	4600	1,0	65,5	36,5	42,4	0,35	0,76
6308HT200	40	90	23	40,3	24,00	-	3700	1,5	82,0	48,0	51,9	0,61	1,35
6310HT200	50	110	27	61,3	38,30	-	3000	2,0	101,0	59,0	64,7	1,07	2,36
6005HT200ZZ	25	47	12	9,8	5,8	15000	6700	0,6	43,0	29,0	31,6	0,08	0,18
6201HT200ZZ	12	32	10	6,8	3,10	22000	11000	0,6	28,0	16,0	18,3	0,04	0,08
6202HT200ZZ	15	35	11	7,7	3,75	20000	9400	0,6	31,0	19,0	21,1	0,05	0,10
6203HT200ZZ	17	40	12	9,4	4,75	18000	8400	0,6	36,0	21,0	24,1	0,07	0,15
6204HT200ZZ	20	47	14	12,6	6,60	16000	7100	1,0	42,0	25,0	25,9	0,11	0,24
6205HT200ZZ	25	52	15	13,8	7,90	14000	6100	1,0	47,0	30,0	31,8	0,13	0,28
6206HT200ZZ	30	62	16	19,2	11,30	12000	5200	1,0	57,0	35,0	37,9	0,20	0,44
6207HT200ZZ	35	72	17	25,3	15,30	10000	4400	1,0	65,5	41,5	44,0	0,29	0,63
6208HT200ZZ	40	80	18	28,7	17,90	9300	3900	1,0	73,5	46,5	50,3	0,36	0,80
6209HT200ZZ	45	85	19	32,2	20,40	8700	3600	1,0	78,5	51,5	54,5	0,40	0,89
6210HT200ZZ	50	90	20	34,5	23,20	8200	3400	1,0	83,5	56,5	59,6	0,45	1,00
6304HT200ZZ	20	52	15	15,8	7,90	14000	6600	1,0	45,5	26,5	30,0	0,15	0,32
6305HT200ZZ	25	62	17	23,5	12,10	12000	5500	1,0	55,5	31,5	33,9	0,23	0,50
6306HT200ZZ	30	72	19	27,9	15,90	11000	4600	1,0	65,5	36,5	42,4	0,35	0,76
6307HT200ZZ	35	80	21	33,0	19,20	9900	4100	1,5	72,0	43,0	45,5	0,45	0,98
6308HT200ZZ	40	90	23	40,3	24,00	9000	3600	1,5	82,0	48,0	51,9	0,61	1,35
6309HT200ZZ	45	100	25	52,3	31,70	8300	3200	1,5	92,0	53,0	59,3	0,83	1,82
6310HT200ZZ	50	110	27	61,3	38,30	7700	2900	2,0	101,0	59,0	64,7	1,07	2,36

NTN-SNR offers an additional range of bearing inserts for temperatures up to +200°C (suffix T20 for the SNR brand and suffix HT2 for the NTN brand)

F605, F600 & F604 • VERY HIGH TEMPERATURE

Up to +350°C

For kiln cars, manufacture of construction materials, steelmaking...



Reference				Quantity of lubricant (g)	Dimensions (mm)			Limiting speed (rpm)	Shoulders and fillets (mm)			Weight		Maximum permitted load recommended per bearing (kN)							
					d	D	B		ra max (mm)	Da max (mm)	da min (mm)	kg	lbs	Idler (2 bearings per wheel)				Axle on two bearings (one bearing per wheel)			
F605	F600	F604	200°		250°	300°	350°		200°	250°	300°	350°									
6004	X	X	X	1,4	20	42	12	140	0,6	38,0	24,0	0,07	0,15	1,7	1,5	1,3	1,0	2,4	2,3	2,0	1,6
6005			X	1,4	25	47	12	120	0,6	43,0	29,0	0,08	0,18	1,9	1,7	1,5	1,2	2,8	2,6	2,3	1,9
6007	X	X	X	3,2	35	62	14	90	1,0	57,0	40,0	0,15	0,33	3,4	3,1	2,6	2,1	4,9	4,6	4,1	3,3
6008	X	X	X	3,9	40	68	15	80	1,0	63,0	45,0	0,19	0,41	3,8	3,5	2,9	2,3	5,5	5,2	4,6	3,7
6201			X	1,0	12	32	10	200	0,6	28,0	16,0	0,04	0,09	1,0	0,9	0,8	0,6	1,5	1,4	1,2	1,0
6204	X	X	X	2,3	20	47	14	130	1,0	42,0	25,0	0,10	0,23	2,2	2,0	1,7	1,3	3,2	3,0	2,6	2,1
6205	X	X	X	2,7	25	52	15	110	1,0	47,0	30,0	0,13	0,28	2,6	2,4	2,0	1,6	3,8	3,6	3,2	2,5
6206	X	X	X	4,0	30	62	16	100	1,0	57,0	35,0	0,19	0,43	3,7	3,4	2,8	2,3	5,4	5,1	4,5	3,6
6207	X	X	X	5,7	35	72	17	80	1,0	65,5	41,5	0,27	0,60	5,0	4,6	3,8	3,1	7,3	6,9	6,1	4,9
6208	X	X	X	7,6	40	80	18	70	1,0	73,5	46,5	0,35	0,78	5,9	5,4	4,5	3,6	8,6	8,1	7,2	5,7
6209	X	X	X	9,3	45	85	19	70	1,0	78,5	51,5	0,39	0,87	6,8	6,2	5,1	4,1	9,8	9,2	8,2	6,6
6210	X	X	X	10,8	50	90	20	60	1,0	83,5	56,5	0,44	0,97	7,7	7,0	5,8	4,6	11,1	10,4	9,3	7,4
6211	X	X	X	13,5	55	100	21	60	1,5	92,0	63,0	0,58	1,29	9,6	8,7	7,3	5,8	13,9	13,1	11,6	9,3
6212	X	X	X	17,7	60	110	22	50	1,5	102,0	68,0	0,73	1,61	11,9	10,8	9,0	7,2	17,3	16,2	14,4	11,5
6213	X	X	X	20,4	65	120	23	50	1,5	112,0	73,0	0,94	2,08	13,2	12,0	10,0	8,0	19,2	18,0	16,0	12,8
6214	X	X	X	24,5	70	125	24	40	1,5	117,0	78,0	1,03	2,27	14,5	13,2	11,0	8,8	21,1	19,8	17,6	14,1
6217		X		-	85	150	28	40	2,0	139,0	96,0	1,79	3,96	21,1	19,2	16,0	12,8	30,7	28,8	25,6	20,5
6305	X	X	X	5,1	25	62	17	100	1,0	55,5	31,5	0,24	0,52	4,0	3,7	3,1	2,4	5,9	5,5	4,9	3,9
6306	X	X	X	6,9	30	72	19	90	1,0	65,5	36,5	0,35	0,76	5,2	4,7	4,0	3,2	7,6	7,1	6,3	5,1
6307	X	X		-	35	80	21	80	1,5	72,0	43,0	0,45	0,99	6,4	5,8	4,8	3,8	9,2	8,6	7,7	6,1
6309	X	X	X	18,9	45	100	25	60	1,5	92,0	53,0	0,83	1,83	10,4	9,5	7,9	6,3	15,1	14,2	12,6	10,1
6310	X			-	50	110	27	50	2,0	101,0	59,0	1,07	2,36	12,5	11,4	9,5	7,6	18,2	17,1	15,2	12,2
6311	X	X	X	31,1	55	120	29	50	2,0	111,0	64,0	1,35	2,98	14,7	13,4	11,1	8,9	21,4	20,0	17,8	14,2
6312	X			-	60	130	31	50	2,0	119,0	71,0	1,68	3,70	17,2	15,6	13,0	10,4	25,0	23,4	20,8	16,6

OUR COMPLEMENTARY TECHNICAL RANGES

Whatever your operating constraints, we have the solution!



SOLID GREASE BEARINGS **LP03**

- Through-hardened steel or stainless steel
- **Ideal for oscillating applications**
- **Suited to restrictive environments:**
no contamination or grease leaks
- Temperatures from 0°C to +80°C



HIGH-TEMPERATURE INSERT BEARINGS **T20**

- Identifiable with the T20 suffix
- **Ideal for temperatures up to +200°C**



INSULATED BEARINGS MEGAOHM®

CUSTOMER BENEFITS

- **Superior protection** against current leakage
- **Robust design** with the machined brass cage
- **Guaranteed interchangeability**
- **Stock availability** for the most frequently used products (62xx and 63xx series deep-groove ball bearings)



**How can you identify them in our range?
With the 7MC3 prefix!**

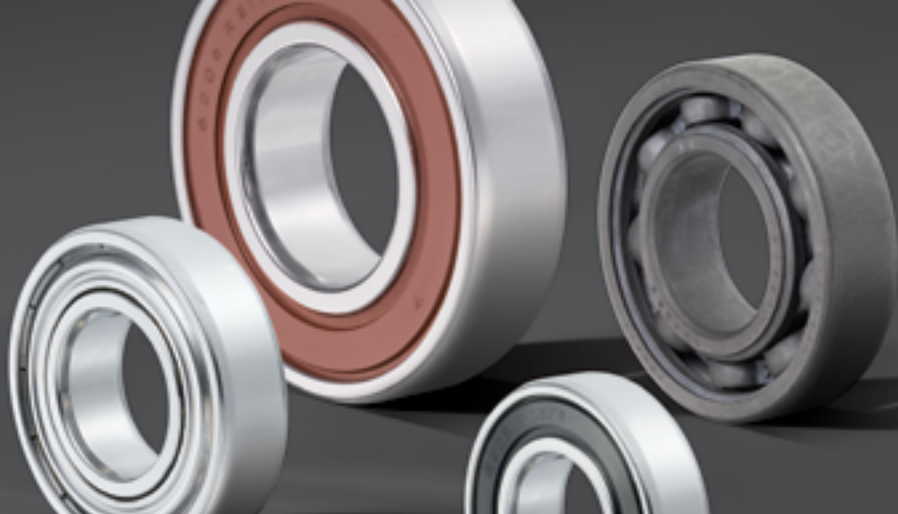
TECHNICAL CHARACTERISTICS

- **Machined brass cage available in stock (suffix L1B)** and steel cage on request (no suffix)
- **C3 internal clearance available in stock** and C4 on request
- Resistance up to **3,000 VDC**
- **Ceramic layer on the outer ring** (thickness of 200 µm)
- **Compliant** with ISO 492, DIN 620 and JIS 1514

RANGE OVERVIEW

Series	Bore diameter code												
	10	12	14	15	16	17	18	19	20	22	24	28	30
7MC3-62XXL1BC3													
7MC3-63XXL1BC3													
7MC3-63XXL1BC4													

Reference example: 7MC3-6316L1BC3



TOPLINE

Deep-groove ball bearings developed
exclusively for extreme applications

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NTN-SNR ROULEMENTS - 1 rue des Usines - 74000 Annecy
RCS ANNECY B 325 821 072 - Code APE 2815Z - Code NACE 28.15
www.ntn-snr.com



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