Extreme Temperature Bearings

Miniature bearings Corrosion-resistant bearings

CARBON STEEL DEEP GROOVE BALL BEARINGS

Bearing material is carbon steel, bright metallic luster, longer service life and higher precision.

- High temperature and corrosion resistance
- High speeds
- Smooth surface
- Long service life
- Low noise

www.gmw-bearings.com

Versions: 2025

Product Tables

The tables in the following pages show dimensions and performance data for the GMW range of radial and thrust ball bearings.Technical drawings are available to download from our website.

“ The information in this catalogue has been thoroughly checked. However, no responsibility for errors or omissions can be assumed. In addition, we reserve the right to alter specifications without notice. This catalogue is the property of GMW Viet Nam Ltd and may not be reproduced without permission.”

Intro Product

The micro bearings with their compact size and exceptional performance characteristics make them essential components in many industries. They are used in applications as varied as gyros, anemometers, flow meters, miniature gearboxes, small motors app Uav, fan cool for computer and radio controlled models...

Specialists

Chrome-plated steel bearings cannot withstand temperatures up to 120°C in continuous use. They also cannot be used continuously at temperatures up to 150°C. At temperatures above a certain level, the strength of chrome-plated steel bearings decreases and their dimensions vary more than stainless steel

GMW offers miniature ball bearings for Metric and Inch series as below:

- Flanged miniature ball bearings in Chrome steel
- Stainless Steel Miniature Bearings for high precision
- Stainless Steel Miniature Flange Bearings

GMW offers material:

- SAE52100 / SUJ2 / GCr15 steel or equivalent
- 440C (alternatively 304 or 420D) stainless steel

GMW offers lubricant solution:

- High temperature grease up to 150°C with base-oil Lithium
- High temperature grease up to 200°C with base-oil Polyete perflorua

Tolerances class: Grade P0, P6, P5, P4

1. SERIES

No prefix	Metric series
F	Flanged metric series, Thrust series, Taper OD series
FR	Flanged inch series
FRW	Flanged extended inner series
MF	Flanged metric miniature series
MR	Metric miniature series
R	Inch series
RW	Extended inner series

2. CLOSURE TYPE

No suffix	Open bearing
2RS	Contact rubber seals
2RSV	Contact Viton seal
ZZ	Metal shield

MATERIAL TABLES

Chemical composition of bearing steel

	Steel	C %	Si %	Mn %	P %	S %	Cr %	Mo %	Ni %	Hard-ness
Chrome steel	SAE52100 SUJ2 GCr15	0.95~ 1.10	0.15~ 0.35	0.50 max	0.025 max	0.025 max	1.30~ 1.60	0.08 max		64 Hrc max
Stainless steel	AISI440C SUS440C	0.95~ 1.20	1.00 max	1.00 max	0.04 max	0.03 max	16.0~ 18.0	0.75 max		60 Hrc max
	SUS440C	0.60~ 0.75	1.00 max	1.00 max	0.03 max	0.02 max	11.5~ 13.0	0.3 max		58 Hrc max
	AISI420 SUS420	0.26~ 0.35	1.00 max	1.50 max	0.04 max	0.03 max	12.0~ 14.0			55 Hrc max
	AISI304 SUS304	0.08 max	0.75 max	2.00 max	0.045 max	0.03 max	18.0~ 20.0		8.0~ 10.5	39 Hrc max

Material of components

Component	Chrome steel bearings	Stainless steel bearings
Inner / Outer rings	SAE52100 / SUJ2 / GCr15	AISI440C / SUS440C
Balls	SAE52100 / SUJ2 / GCr15	AISI440C / SUS440C
Shields	Steel sheet	AISI304 / SUS304
Cage	Steel strip	AISI304 / SUS304 / or SUS420

CAGE TABLES

Metal Crown/Ribbon retainer

These standard retainers are manufactured from carbon steel for chrome bearings and AISI304, AISI-316 or AISI420 grade stainless steel for stainless bearings. The crown cage is mainly used on thinner bearings where space is limited. Steel cages are preferred for arduous operating conditions and high levels of vibration.

- ☺ Good for low to medium speeds
- ☺ Wide temperature range depending on grade of steel
- ☹ Not suitable for very high speeds

Polyamide Crown Retainer (TW)

A high speed retainer made from fibreglass reinforced nylon with better sliding characteristics than a steel cage, producing fewer fluctuations in running torque. It can increase maximum speeds by up to 60% and has good low noise properties.

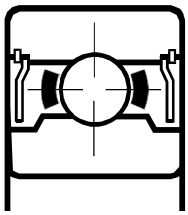
- ☺ High speed and low noise
- 😐 Temperature range -30°C to +120°C (lower speed at high temperature)

Full Complement (F/B)

A full complement bearing contains extra balls and has no retainer. It has greater radial load capacity but axial load capacity is very small. These are for low speed use as bearing torque is increased due to ball to ball friction.

- ☺ Higher radial load capacity
- ☹ Much lower speed than caged type
- ☹ Low axial load

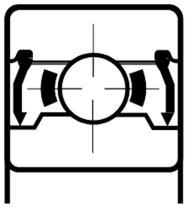
SEAL TABLES



Shields (ZZ)

Shields are designed to prevent larger particles from entering the bearing and also to keep grease inside the bearing. As the shields make no contact with the inner ring, they do not increase starting or running torque. Shields on stainless steel bearings are generally made from AISI 304 grade stainless steel.

Contact Seals (2RS)



The standard bearing seal consists of nitrile/BUNA-N rubber bonded to a metal washer or Viton seals (up to 230°C). The inner lip of the seal rubs against the bearing inner ring to provide an effective seal against smaller particles such as dust and moisture while preventing lubricant leakage. Contact seals produce much higher frictional torque levels than shields and reduce the maximum speed of a bearing. Below -40°C nitrile rubber and viton will stiffen and provide a less effective seal so PTFE seals or metal shields should be considered for very low temperatures.

- Temp. range –40°C/+110°C for nitrile rubber (NBR)
- Temp. range –40°C/+230°C for Viton
- Temp. range –190°C/+250°C for PTFE

GREASES TABLES

Code	Product Manufacturer	Base oil	Thickener	Temp range C (F)	Comments
AG5	Aeroshell 5 (Shell Oil)	Mineral	Microgel	-40/+177 (-40/+350)	High load
AG7	Aeroshell 7 (Shell Oil)	Diester	Microgel	-73/+149 (-100/+300)	Good water-resistance, high load, wide temp. range
AG22	Aeroshell 22 (Shell Oil)	Hydro-carbon	Microgel	-65/+204 (-85/+400)	Good water-resistance, high load/speed, wide temp. range
AG33	Aeroshell 33 (Shell Oil)	Diester	Microgel	-73/+121 (-100/+251)	Good water-resistance, high load, low temp.
B325	Beacon 325 (Mobil/Exxon)	Diester	Lithium	-55/+120 (-67/+248)	Low torque, quiet running
B601	Braycote 601 (Castrol)	Perfluor	Tetrafluoro-ethylene	-80/+204 (-112/+400)	Chemically inert, instrument & aerospace vacuum grease
B803	Braycote 803 (Castrol)	Perfluor	Tetrafluoro-ethylene	-62/+260 (-80/+500)	Chemically inert, instrument & aerospace vacuum grease
BQ7272	Kluberquiet BQ72-72 (Kluber)	Ester	Polyurea	-45/+180 (-49/+356)	Very low noise, wide temp. range

Code	Product Manufacturer	Base oil	Thickener	Temp range C (F)	Comments
TOP2	TOP-2 (Cogelsa)	Fluoro-carbon	PFPE	-30/+260 (-22/+500)	High temp., chemically inert, plastic/elastomer safe, food grade
GPL207	Krytox GPL207 (Du Pont)	Fluoro-carbon	PFPE	-34/+288 (-29/+550)	High temp., chemically inert, plastic/elastomer safe, food grade
HT-2	Beslux HT2 (Brugarolas)	Fluoro-carbon	PFPE	-25/+295 (-13/+563)	High temp., chemically inert, plastic/elastomer safe, food grade
L55/2	Barrierta L55/2 (Kluber)	Fluoro-carbon	PFPE	-40/+260 (-40/+500)	High temp., chemically inert, plastic/elastomer safe, food grade
N758G	Nyogel 758G (Fuchs)	Ester	Lithium	-40/+150 (-40/+302)	Electrically conductive
HT2S	Beslux HT2S (Brugarolas)	Mineral	Polyurea	-30/+220 (-22/+428)	Good water resistance, wide temp. range, low noise
PS2	Multemp PS2 (Kyodo Yushi)	Diester	Lithium	-55/+130 (-67/+266)	Low torque, low temp.
R374C	Rheolube 374C (Nye)	Polyalpha -olefin	Lithium	-40/+150 (-40/+302)	High speed, non migratory, good for vertical shaft use
SRI-2	Chevron SRI-2 (Caltex)	Mineral	Urea	-30/+175 (-22/+347)	Good water resistance, wide temp range
SRL	Multemp SRL (Kyodo Yushi)	Ester	Lithium	-50/+150 (-58/+302)	Low torque, quiet running, wide temp. range

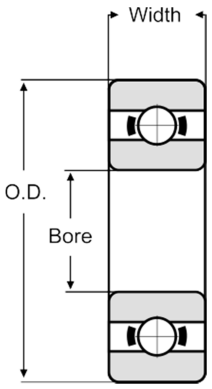
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 30% for 2RS types.*

Metric Miniature

Miniature bearings

These are sometimes referred to as instrument bearings or micro bearings. We provide miniature bearings for applications as varied as gyros, anemometers, miniature gearboxes, small motors and radio controlled models. These bearings are supplied in chrome steel.



CHROME STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
1.5	4	1.2	681X			11	3	120
	4	2		681XZZ		11	3	120
	5	2	691X			24	7	100
	5	2.6		691XZZ		24	7	100
	6	2.5	601X			33	10	90
	6	3		601XZZ		33	10	90
2	5	1.5	682			17	5	100
	5	2.3		682ZZ		17	5	100
	5	2	MR52			17	5	100
	5	2.5		MR52ZZ		17	5	100
	6	2.3	692	692ZZW23		33	10	75
	6	3		692ZZ		33	10	90
	6	2.5	MR62	MR62ZZ		33	10	90
	7	2.5	MR72			38	13	75
	7	3		MR72ZZ		38	13	75
	7	2.8	602			38	13	71
	7	3.5		602ZZ		38	13	71
2.5	6	1.8	682X			21	7	80
	6	2.6		682XZZ		21	7	80
	7	2.5	692X			39	13	75
	7	3.5		692XZZ		39	13	75
	8	2.8	602X	602XZZW28		55	18	59
	8	4		602XZZ		55	18	69

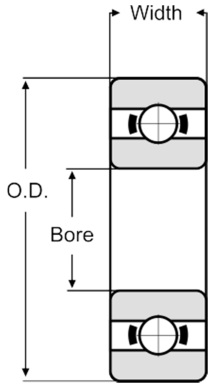
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 30% for 2RS types.*

Metric Miniature

Miniature bearings

These are sometimes referred to as instrument bearings or micro bearings. We provide miniature bearings for applications as varied as gyros, anemometers, miniature gearboxes, small motors and radio controlled models. These bearings are supplied in chrome steel.



CHROME STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
3	6	2	MR63			21	7	80
	6	2.5		MR63ZZ		21	7	80
	7	2	683			31	11	75
	7	3		683ZZ	683-2RS	31	11	75
	8	2.5	MR83			40	14	67
	8	3		MR83ZZ		40	14	67
	8	3	693			55	18	67
	8	4		693ZZ	693-2RS	55	18	67
	9	2.5	MR93			58	19	67
	9	4		MR93ZZ		58	19	67
	9	3	603			58	19	67
	9	5		603ZZ		58	19	67
	10	4	623	623ZZ	623-2RS	63	22	60
	13	5	633	633ZZ	633-2RS	130	49	45
4	7	2	MR74			31	11	67
	7	2.5		MR74ZZ		31	11	67
	8	2	MR84			39	14	67
	8	3		MR84ZZ	MR84-2RS	39	14	67
	9	2.5	684			65	22	62
	9	3.5		684ZZW35		65	22	55
	10	3	MR104			71	27	54
	10	4		MR104ZZ		71	27	54
	11	4	694	694ZZ	694-2RS	95	34	54
	12	4	604	604ZZ	604-2RS	95	34	54
	13	5	624	624ZZ	624-2RS	130	49	50
	16	5	634	634ZZ	634-2RS	134	52	41

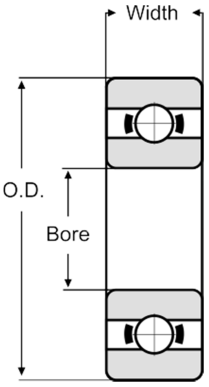
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 30% for 2RS types.*

Metric Miniature

Miniature bearings

These are sometimes referred to as instrument bearings or micro bearings. We provide miniature bearings for applications as varied as gyros, anemometers, miniature gearboxes, small motors and radio controlled models. These bearings are supplied in chrome steel.



CHROME STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
5	8	2	MR85			29	11	63
	8	2.5		MR85ZZ	MR85-2RS	29	11	63
	9	2.5	MR95			42	16	60
	9	3		MR95ZZ	MR95-2RS	42	16	60
	10	3	MR105			42	16	60
	10	4		MR105ZZ	MR105-2RS	42	16	60
	11	3	685			71	28	54
	11	4		MR115ZZ	MR115-2RS	71	28	54
	11	5		685ZZ	685-2RS	71	28	54
	13	4	695	695ZZ	695-2RS	102	41	48
	13	5		695ZZW5		102	41	42
	14	5	605	605ZZ	605-2RS	129	48	48
	16	5	625	625ZZ	625-2RS	168	64	43
	19	6	635	635ZZ	635-2RS	234	90	38
6	10	2.5	MR106			48	20	52
	10	3		MR106ZZ	MR106-2RS	48	20	52
	12	3	MR126			69	27	49
	12	4		MR126ZZ	MR126-2RS	69	27	49
	13	3.5	686			102	41	49
	13	4.5		686ZZW45	686-2RSW45	102	41	42
	13	5		686ZZ	686-2RS	102	41	49
	15	5	696	696ZZ	696-2RS	134	52	45
	16	5		696AZZ	696A-2RS	134	52	40
	17	6	606	606ZZ	606-2RS	226	84	45
	19	5.15			626-2RSW515	233	89	32
	19	6	626	626ZZ	626-2RS	233	89	40
	19	8		626ZZW8		233	89	32
	22	7	636	636ZZ	636-2RS	333	140	35

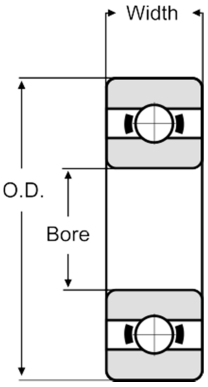
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 30% for 2RS types.*

Metric Miniature

Miniature bearings

These are sometimes referred to as instrument bearings or micro bearings. We provide miniature bearings for applications as varied as gyros, anemometers, miniature gearboxes, small motors and radio controlled models. These bearings are supplied in chrome steel.



CHROME STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
	11	2.5	MR117			45	20	50
	11	3		MR117ZZ	MR117-2RS	45	20	50
	13	3	MR137			54	27	48
	13	4		MR137ZZ	MR137-2RS	54	27	48
	14	3.5	687			117	51	50
7	14	4	687W4			117	51	50
	14	5		687ZZ	687-2RS	117	51	50
	17	5	697	697ZZ	697-2RS	160	71	43
	19	6	607	607ZZ	607-2RS	228	87	43
	22	7	627	627ZZ	627-2RS	328	137	36
	26	9	637	637ZZ	637-2RS	456	198	32
	12	2.5	MR128			54	27	48
	12	3.5		MR128ZZ	MR128-2RS	54	27	48
	14	3.5	MR148			81	38	45
	14	4		MR148ZZ	MR148-2RS	81	38	45
	16	4	688	688ZZW4	688-2RSW4	125	59	36
	16	5		688ZZ	688-2RS	125	59	43
8	16	6		688ZZW6	688-2RSW6	125	59	36
	19	6	698	698ZZ	698-2RS	221	89	43
	22	6	608W6			327	136	39
	22	7	608	608ZZ	608-2RS	327	136	39
	22	11			608-2RSW11	327	136	23
	24	8	628	628ZZ	628-2RS	330	138	34
	28	9	638	638ZZ	638-2RS	451	197	32

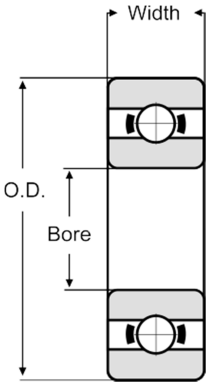
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 30% for 2RS types.*

Metric Miniature

Miniature bearings

These are sometimes referred to as instrument bearings or micro bearings. We provide miniature bearings for applications as varied as gyros, anemometers, miniature gearboxes, small motors and radio controlled models. These bearings are supplied in chrome steel.



CHROME STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
	14	3	**679**			91	47	42
	14	4.5		**679ZZ**		91	47	42
	17	4	**689**			132	67	43
	17	5		**689ZZ**	**689-2RS**	132	67	43
9	17	6		**689ZZW6**	**689-2RSW6**	132	67	36
	20	6	**699**	**699ZZ**	**699-2RS**	246	108	40
	24	7	**609**	**609ZZ**	**609-2RS**	329	140	38
	26	8	**629**	**629ZZ**	**629-2RS**	457	198	34
	30	10	**639**	**639ZZ**	**639-2RS**	465	208	30

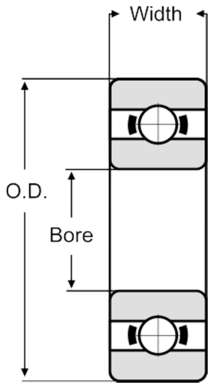
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 30% for 2RS types.*

Metric Stainless Steel Miniature

Corrosion resistant miniature bearings

These miniature bearings are designed for use in mildly corrosive conditions or for high temperature use. We provide stainless steel miniature bearings for a wide range of applications. These bearings are supplied in 440 grade stainless steel.



STAINLESS STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
0.6	2.5	1	**S68/0.6**			5	1	160
	3	1	**S681**			8	2	150
1	3	1.5	**SMR31**			8	2	150
	4	1.6	**S691**			11	3	120
	4	1.8	**SMR41X**			9	2	130
	4	2.5		**SMR41XZZ**		9	2	130
	4	1.2	**S681X**			9	2	115
	4	2		**S681XZZ**		9	2	115
1.5	5	2	**S691X**			19	6	100
	5	2.6		**S691XZZ**		19	6	100
	6	2.5	**S601X**			28	8	90
	6	3		**S601XZZ**		28	8	90
	4	1.2	**S672**			10	3	104
	4	2		**S672ZZ**		10	3	104
	5	1.5	**S682**			15	4	100
	5	2.3		**S682ZZ**		15	4	100
	5	2	**SMR52**			15	4	100
	5	2.5		**SMR52ZZ**		15	4	100
2	6	2.3	**S692**	**S692ZZW23**		27	8	75
	6	3		**S692ZZ**		27	8	90
	6	2.5	**SMR62**	**SMR62ZZ**		27	8	90
	7	2.5	**SMR72**			32	10	75
	7	3		**SMR72ZZ**		32	10	75
	7	2.8	**S602**			32	10	71
	7	3.5		**S602ZZ**		32	10	71

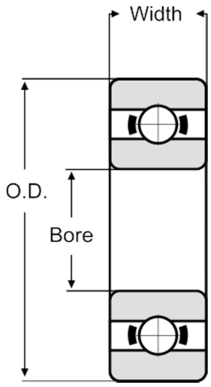
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 30% for 2RS types.*

Metric Stainless Steel Miniature

Corrosion resistant miniature bearings

These miniature bearings are designed for use in mildly corrosive conditions or for high temperature use. We provide stainless steel miniature bearings for a wide range of applications. These bearings are supplied in 440 grade stainless steel.



STAINLESS STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
2.5	6	1.8	S682X			18	6	80
	6	2.6		S682XZZ		18	6	80
	7	2.5	S692X			33	11	75
	7	3.5		S692XZZ		33	11	75
	8	2.5	SMR82X			48	14	69
	8	2.8	S602X	S602XZZW28		48	14	59
	8	4		S602XZZ		48	14	69
3	6	2	SMR63			18	6	80
	6	2.5		SMR63ZZ		18	6	80
	6	3		SMR63ZZW3		18	6	71
	7	2	S683			26	9	75
	7	3		S683ZZ	S683-2RS	26	9	75
	8	2.5	SMR83			34	11	67
	8	3	S693	SMR83ZZ		34	11	67
	8	4		S693ZZ	S693-2RS	46	14	67
	9	2.5	SMR93			48	15	67
	9	3	S603			48	15	67
	9	4		SMR93ZZ		48	15	67
	9	5		S603ZZ		48	15	67
	10	4	S623	S623ZZ	S623-2RS	52	18	60
	13	5	S633	S633ZZ	S633-2RS	110	42	45

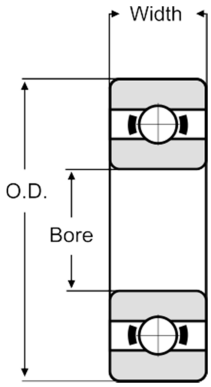
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 30% for 2RS types.*

Metric Stainless Steel Miniature

Corrosion resistant miniature bearings

These miniature bearings are designed for use in mildly corrosive conditions or for high temperature use. We provide stainless steel miniature bearings for a wide range of applications. These bearings are supplied in 440 grade stainless steel.



STAINLESS STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
	7	2	SMR74			25	9	67
	7	2.5		SMR74ZZ		25	9	67
	8	2	SMR84			31	11	67
	8	3		SMR84ZZ	SMR84-2RS	31	11	67
	9	2.5	S684			52	18	55
	9	3.5		S684ZZW35		52	18	62
4	9	4		S684ZZ	S684-2RS	52	18	62
	10	3	SMR104			60	23	54
	10	4		SMR104ZZ	SMR104-2RS	60	23	54
	11	4	S694	S694ZZ	S694-2RS	81	29	54
	12	4	S604	S604ZZ	S604-2RS	81	29	54
	13	5	S624	S624ZZ	S624-2RS	108	40	50
	16	5	S634	S634ZZ	S634-2RS	111	42	41
	8	2	SMR85			23	8	63
	8	2.5		SMR85ZZ		23	8	63
	8	3		SMR85ZZW3		23	8	53
	9	2.5	SMR95			36	13	60
	9	3		SMR95ZZ		36	13	60
	10	3	SMR105			36	13	60
	10	4		SMR105ZZ	SMR105-2RS	36	13	60
5	11	3	S685			61	23	54
	11	4		SMR115ZZ	SMR115-2RS	61	23	54
	11	5		S685ZZ	S685-2RS	61	23	54
	13	4	S695	S695ZZ	S695-2RS	87	33	48
	13	5		S695ZZW5	S695-2RSW5	87	33	42
	14	5	S605	S605ZZ	S605-2RS	110	41	48
	16	5	S625	S625ZZ	S625-2RS	142	54	43
	19	6	S635	S635ZZ	S635-2RS	198	72	38

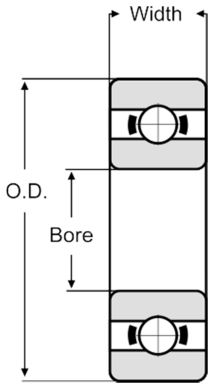
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 30% for 2RS types.*

Metric Stainless Steel Miniature

Corrosion resistant miniature bearings

These miniature bearings are designed for use in mildly corrosive conditions or for high temperature use. We provide stainless steel miniature bearings for a wide range of applications. These bearings are supplied in 440 grade stainless steel.



STAINLESS STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
6	10	2.5	SMR106			41	16	52
	10	3		SMR106ZZ	SMR106-2RS	41	16	52
	12	3	SMR126			59	23	49
	12	4		SMR126ZZ	SMR126-2RS	59	23	49
	13	3.5	S686			87	33	42
	13	4.5		S686ZZW45	S686-2RSW45	87	33	49
	13	5		S686ZZ	S686-2RS	87	33	49
	15	5	S696	S696ZZ	S696-2RS	114	42	45
	16	5		S696AZZ	S696A-2RS	114	42	40
	17	6	S606	S606ZZ	S606-2RS	192	67	45
	19	6	S626	S626ZZ	S626-2RS	197	71	40
	22	7	S636	S636ZZ	S636-2RS	279	111	35
7	11	2.5	SMR117			37	16	50
	11	3		SMR117ZZ		37	16	50
	13	3	SMR137			46	21	48
	13	4		SMR137ZZ		46	21	48
	14	4	S687			98	41	50
	14	5		S687ZZ	S687-2RS	98	41	50
	17	5	S697	S697ZZ	S697-2RS	136	57	43
	19	6	S607	S607ZZ	S607-2RS	193	69	43
	22	7	S627	S627ZZ	S627-2RS	278	109	36

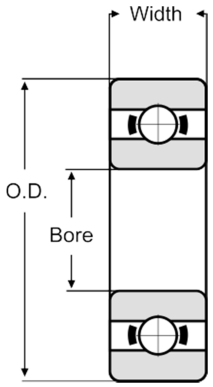
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 30% for 2RS types.*

Metric Stainless Steel Miniature

Corrosion resistant miniature bearings

These miniature bearings are designed for use in mildly corrosive conditions or for high temperature use. We provide stainless steel miniature bearings for a wide range of applications. These bearings are supplied in 440 grade stainless steel.



STAINLESS STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
8	12	2.5	SMR128			46	21	48
	12	4		SMR128ZZ	SMR128-2RS	46	21	48
	14	3.5	SMR148			68	30	45
	14	4		SMR148ZZ	SMR148-2RS	68	30	45
	16	4	S688	S688ZZW4	S688-2RSW4	105	47	36
	16	5		S688ZZ	S688-2RS	105	47	43
	16	6		S688ZZW6	S688-2RSW6	105	47	36
	19	6	S698	S698ZZ	S698-2RS	188	71	43
	22	7	S608	S608ZZ	S608-2RS	278	109	39
	24	8	S628	S628ZZ	S628-2RS	281	111	34
9	14	3	S679			79	38	42
	14	5		S679ZZ		79	38	42
	17	4	S689			112	54	43
	17	5		S689ZZ	S689-2RS	112	54	43
	17	6		S689ZZW6	S689-2RSW6	112	54	36
	20	6	S699	S699ZZ	S699-2RS	209	84	40
	24	7	S609	S609ZZ	S609-2RS	288	115	38
	26	8	S629	S629ZZ	S629-2RS	388	158	34

** Some types may be available with non-contact seals or teflon seals*

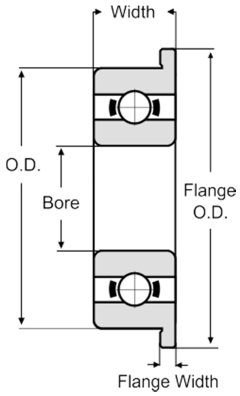
*** Reduce maximum Rpm by 30% for 2RS types.*

Metric Flanged Miniature

Flanged miniature bearings

The flange allows easier location in a housing. The smaller sizes are sometimes referred to as instrument bearings or micro bearings. These bearings are supplied in chrome steel.

For load/speed ratings, refer to non-flanged.



CHROME STEEL

Dimensions in mm unless otherwise specified

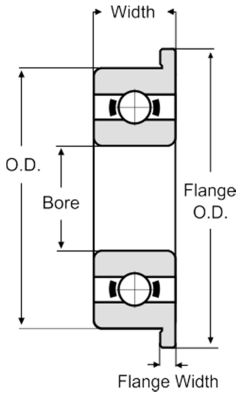
Bore	O.D.	Width	Flange O.D.	Flange Width	Open Bearing	Shielded Bearing	Sealed Bearing
	5	2	6.1	0.5	**F682**		
	5	2.3	6.1	0.6		**F682ZZ**	
	5	2	6.2	0.6	**MF52**		
	5	3	6.2	0.6		**MF52ZZ**	
	6	2.3	7.5	0.6	**F692**	**F692ZZW23**	
2	6	3	7.5	0.8		**F692ZZ**	
	6	2.5	7.2	0.6	**MF62**	**MF62ZZ**	
	7	2.5	8.2	0.6	**MF72**		
	7	3	8.2	0.6		**MF72ZZ**	
	7	2.8	8.5	0.7	**F602**		
	7	3.5	8.5	0.9		**F602ZZ**	
	6	1.8	7.1	0.5	**F682X**		
	6	3	7.1	0.8		**F682XZZ**	
	7	2.5	8.5	0.7	**F692X**		
2.5	7	4	8.5	0.9		**F692XZZ**	
	8	3	9.2	0.6	**MF82X**		
	8	2.8	9.5	0.7	**F602X**		
	8	4.0	9.5	0.9		**F602XZZ**	

Metric Flanged Miniature

Flanged miniature bearings

The flange allows easier location in a housing. The smaller sizes are sometimes referred to as instrument bearings or micro bearings. These bearings are supplied in chrome steel.

For load/speed ratings, refer to non-flanged.



CHROME STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Flange O.D.	Flange Width	Open Bearing	Shielded Bearing	Sealed Bearing *
3	6	2	7.2	0.6	**MF63**		
	6	2.5	7.2	0.6		**MF63ZZ**	
	7	2	8.1	0.5	**F683**		
	7	3	8.1	0.8		**F683ZZ**	
	8	2.5	9.2	0.6	**MF83**		
	8	3	9.5	0.7	**F693**		
	8	4	9.5	0.9		**F693ZZ**	
	9	2.5	10.2	0.6	**MF93**		
	9	4	10.6	0.8		**MF93ZZ**	
	9	3	10.5	0.7	**F603**		
	9	5	10.5	1		**F603ZZ**	
	10	4	11.5	1	**F623**	**F623ZZ**	**F623-2RS**
4	7	2	8.2	0.6	**MF74**		
	7	2.5	8.2	0.6		**MF74ZZ**	
	8	2	9.2	0.6	**MF84**		
	8	3	9.2	0.6		**MF84ZZ**	
	9	3.5	10.3	1		**F684ZZW35**	
	9	2.5	10.3	0.6	**F684**		
	9	4	10.3	1		**F684ZZ**	**F684-2RS**
	10	3	11.2	0.6	**MF104**		
	10	4	11.6	0.8		**MF104ZZ**	**MF104-2RS**
	11	4	12.5	1	**F694**	**F694ZZ**	**F694-2RS**
	12	4	13.5	1	**F604**	**F604ZZ**	**F604-2RS**
	13	5	15	1	**F624**	**F624ZZ**	**F624-2RS**
	16	5	18	1	F634	F634ZZ	F634-2RS

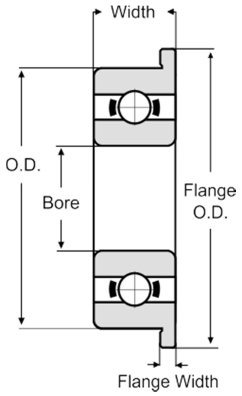
* *Some types may be available with non-contact seals or teflon seals*

Metric Flanged Miniature

Flanged miniature bearings

The flange allows easier location in a housing. The smaller sizes are sometimes referred to as instrument bearings or micro bearings. These bearings are supplied in chrome steel.

For load/speed ratings, refer to non-flanged.



CHROME STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Flange O.D.	Flange Width	Open Bearing	Shielded Bearing	Sealed Bearing *
	8	2	9.2	0.6	**MF85**		
	8	2.5	9.2	0.6		**MF85ZZ**	
	9	2.5	10.2	0.6	**MF95**		
	9	3	10.2	0.6		**MF95ZZ**	
	10	3	11.2	0.6	**MF105**		
	10	4	11.6	0.8		**MF105ZZ**	**MF105-2RS**
5	11	3	12.5	0.8	**F685**		
	11	4	12.6	0.8		**MF115ZZ**	**MF115-2RS**
	11	5	12.5	1		**F685ZZ**	**F685-2RS**
	13	4	15	1	**F695**	**F695ZZ**	**F695-2RS**
	14	5	16	1	**F605**	**F605ZZ**	**F605-2RS**
	16	5	18	1	**F625**	**F625ZZ**	**F625-2RS**
	19	6	22	1.5	**F635**	**F635ZZ**	**F635-2RS**
	10	2.5	11.2	0.6	**MF106**		
	10	3	11.2	0.6		**MF106ZZ**	**MF106-2RS**
	12	3	13.2	0.6	**MF126**		
	12	4	13.6	0.8		**MF126ZZ**	**MF126-2RS**
	13	3.5	15	1	**F686**		
6	13	4.5	15	1.1		**F686ZZW45**	**F686-2RSW45**
	13	5	15	1.1		**F686ZZ**	**F686-2RS**
	15	5	17	1.2	**F696**	**F696ZZ**	**F696-2RS**
	17	6	19	1.2	**F606**	**F606ZZ**	**F606-2RS**
	19	6	22	1.5	**F626**	**F626ZZ**	**F626-2RS**

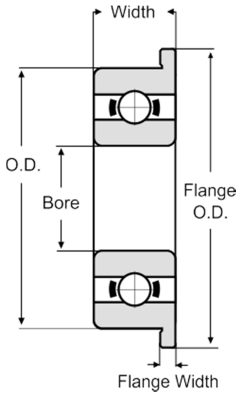
** Some types may be available with non-contact seals or teflon seals*

Metric Flanged Miniature

Flanged miniature bearings

The flange allows easier location in a housing. The smaller sizes are sometimes referred to as instrument bearings or micro bearings. These bearings are supplied in chrome steel.

For load/speed ratings, refer to non-flanged.



CHROME STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Flange O.D.	Flange Width	Open Bearing	Shielded Bearing	Sealed Bearing *
	11	3	12.2	0.6	**MF117**		
	11	3	12.2	0.6		**MF117ZZ**	
	13	3	14.2	0.6	**MF137**		
	13	4	14.6	0.8		**MF137ZZ**	
7	14	4	16	1	**F687**		
	14	5	16	1.1		**F687ZZ**	**F687-2RS**
	17	5	19	1.2	**F697**	**F697ZZ**	**F697-2RS**
	19	6	22	1.5	**F607**	**F607ZZ**	**F607-2RS**
	22	7	25	1.5	**F627**	**F627ZZ**	**F627-2RS**
	12	2.5	13	0.6	**MF128**		
	12	3.5	14	0.8		**MF128ZZ**	**MF128-2RS**
	14	4	16	0.8	**MF148**		
	14	4	16	0.8		**MF148ZZ**	**MF148-2RS**
8	16	4	18	1	**F688**		
	16	5	18	1.1		**F688ZZ**	**F688-2RS**
	16	6	18	1.3		**F688ZZW6**	**F688-2RSW6**
	19	6	22	1.5	**F698**	**F698ZZ**	**F698-2RS**
	22	7	25	1.5	**F608**	**F608ZZ**	**F608-2RS**
	17	4	19	1	**F689**		
9	17	5	19	1.1		**F689ZZ**	**F689-2RS**
	17	6	19	1.1		**F689ZZW6**	**F689-2RSW6**
	20	6	23	1.5	**F699**	**F699ZZ**	**F699-2RS**

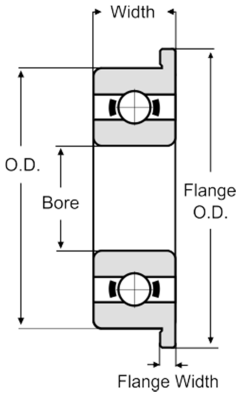
* *Some types may be available with non-contact seals or teflon seals*

Metric Stainless Steel Flanged Miniature

Corrosion resistant flanged miniature bearings

For use in mildly corrosive conditions or for high temperatures. The flange allows easier location in a housing. These bearings are supplied in 440 grade stainless steel.

For load/speed ratings, refer to non-flanged



STAINLESS STEEL

Dimensions in mm unless otherwise specified

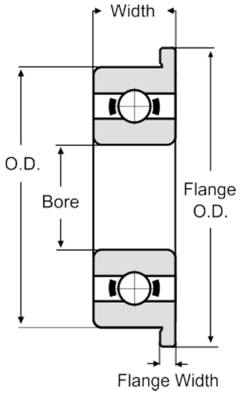
Bore	O.D.	Width	Flange O.D.	Flange Width	Open Bearing	Shielded Bearing	Sealed Bearing
1	3	1	3.8	0.3	SF681		
	4	1.6	5	0.5	SF691		
1.5	4	1.2	5	0.4	SF681X		
	4	2	5	0.6		SF681XZZ	
	5	2	6.5	0.6	SF691X		
	5	2.6	6.5	0.8		SF691XZZ	
	6	3	7.5	0.6	SF601X		
	6	3	7.5	0.8		SF601XZZ	
2	5	1.5	6.1	0.5	SF682		
	5	2.3	6	0.6		SF682ZZ	
	5	2	6	0.6	SMF52		
	5	3	6	0.6		SMF52ZZ	
	6	2	8	0.6	SF692	SF692ZZW23	
	6	3	7.5	0.8		SF692ZZ	
	7	3	8.5	0.7	SF602		
	7	4	8.5	0.9		SF602ZZ	
2.5	6	2	7.1	0.5	SF682X		
	6	2.6	7	0.8		SF682XZZ	
	7	2.5	9	0.7	SF692X		
	7	4	9	0.9		SF692XZZ	
	8	3	10	0.7	SF602X		
	8	4	10	0.9		SF602XZZ	

Metric Stainless Steel Flanged Miniature

Corrosion resistant flanged miniature bearings

For use in mildly corrosive conditions or for high temperatures. The flange allows easier location in a housing. These bearings are supplied in 440 grade stainless steel.

For load/speed ratings, refer to non-flanged



STAINLESS STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Flange O.D.	Flange Width	Open Bearing	Shielded Bearing	Sealed Bearing *
	6	2	7.2	0.6	SMF63		
	6	2.5	7	0.6		SMF63ZZ	
	7	2.0	8	0.5	SF683		
	7	3	8.1	0.8		SF683ZZ	
	8	3	9.2	0.6	SMF83		
	8	3	9.2	0.7		SMF83ZZ	
3	8	3	9.5	0.7	SF693		
	8	4	9.5	0.9		SF693ZZ	
	9	2.5	10.2	0.6	SMF93		
	9	4	11	0.8		SMF93ZZ	
	9	3	11	0.7	SF603		
	9	5	11	1		SF603ZZ	
	10	4	12	1	SF623	SF623ZZ	SF623-2RS
	7	2	8.2	0.6	SMF74		
	7	3	8.2	0.6		SMF74ZZ	
	8	2	9.2	0.6	SMF84		
	8	3	9.2	0.6		SMF84ZZ	
	9	2.5	10	0.6	SF684		
	9	3.5	10	1		SF684ZZW35	
4	9	4	10	1		SF684ZZ	SF684-2RS
	10	3	11	0.6	SMF104		
	10	4	12	0.8		SMF104ZZ	SMF104-2RS
	11	4	13	1	SF694	SF694ZZ	SF694-2RS
	12	4	13.5	1	SF604	SF604ZZ	SF604-2RS
	13	5	15	1	SF624	SF624ZZ	SF624-2RS
	16	5	18	1	SF634	SF634ZZ	SF634-2RS

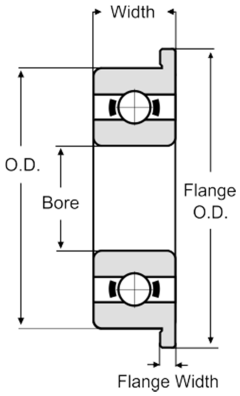
* *Some types may be available with non-contact seals or teflon seals*

Metric Stainless Steel Flanged Miniature

Corrosion resistant flanged miniature bearings

For use in mildly corrosive conditions or for high temperatures. The flange allows easier location in a housing. These bearings are supplied in 440 grade stainless steel.

For load/speed ratings, refer to non-flanged



STAINLESS STEEL

Dimensions in mm unless otherwise specified

Bore	O.D.	Width	Flange O.D.	Flange Width	Open Bearing	Shielded Bearing	Sealed Bearing *
5	8	2	9.2	0.6	SMF85		
	8	2.5	9.2	0.6		SMF85ZZ	
	9	2.5	10.2	0.6	SMF95		
	9	3	10.2	0.6		SMF95ZZ	
	10	3	11.2	0.6	SMF105		
	10	4	11.6	0.8		SMF105ZZ	SMF105-2RS
	11	3	12.5	0.8	SF685		
	11	4	12.6	0.8		SMF115ZZ	SMF115-2RS
	11	5	12.5	1		SF685ZZ	SF685-2RS
	13	4	15	1	SF695	SF695ZZ	SF695-2RS
	14	5	16	1	SF605	SF605ZZ	SF605-2RS
	16	5	18	1	SF625	SF625ZZ	SF625-2RS
	19	6	22	1.5	SF635	SF635ZZ	SF635-2RS
6	10	2.5	11.2	0.6	SMF106		
	10	3	11.2	0.6		SMF106ZZ	SMF106-2RS
	12	3	13.2	0.6	SMF126		
	12	4	13.6	0.8		SMF126ZZ	SMF126-2RS
	13	3.5	15	1	SF686		
	13	4.5	15	1.1		SF686ZZW45	SF686-2RSW45
	13	5	15	1.1		SF686ZZ	SF686-2RS
	15	5	17	1.2	SF696	SF696ZZ	SF696-2RS
	17	6	19	1.2	SF606	SF606ZZ	SF606-2RS
	19	6	22	1.5	SF626	SF626ZZ	SF626-2RS

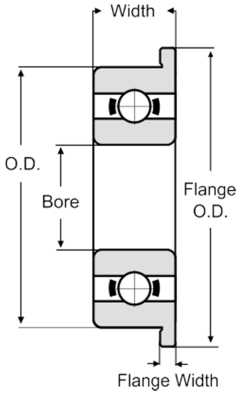
** Some types may be available with non-contact seals or teflon seals*

Metric Stainless Steel Flanged Miniature

Corrosion resistant flanged miniature bearings

For use in mildly corrosive conditions or for high temperatures. The flange allows easier location in a housing. These bearings are supplied in 440 grade stainless steel.

For load/speed ratings, refer to non-flanged



STAINLESS STEEL

Dimensions in mm unless otherwise specified

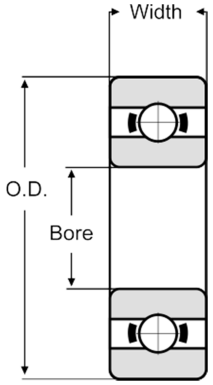
Bore	O.D.	Width	Flange O.D.	Flange Width	Open Bearing	Shielded Bearing	Sealed Bearing *
7	11	3	12.2	0.6	SMF117		
	11	3	12.2	0.6		SMF117ZZ	
	13	3	14.2	0.6	SMF137		
	13	4	14.6	0.8		SMF137ZZ	
	14	4	16	1	SF687		
	14	5	16	1.1		SF687ZZ	SF687-2RS
	17	5	19	1.2	SF697	SF697ZZ	SF697-2RS
	19	6	22	1.5	SF607	SF607ZZ	SF607-2RS
8	12	2.5	13.2	0.6	SMF128		
	12	3.5	14	0.8		SMF128ZZ	SMF128-2RS
	14	3.5	16	0.8	SMF148		
	14	4	16	0.8		SMF148ZZ	SMF148-2RS
	16	4	18	1	SF688		
	16	5	18	1.1		SF688ZZ	SF688-2RS
	16	6	18	1.3		SF688ZZW6	SF688-2RSW6
	19	6	22	1.5	SF698	SF698ZZ	SF698-2RS
	22	7	25	1.5	SF608	SF608ZZ	SF608-2RS
9	17	4	19	1	SF689		
	17	5	19	1.1		SF689ZZ	SF689-2RS
	17	6	19	1.1		SF689ZZW6	SF689-2RSW6
	20	6	23	1.5	SF699	SF699ZZ	SF699-2RS

* *Some types may be available with non-contact seals or teflon seals*

Inch Miniature

Miniature bearings

These are sometimes referred to as instrument bearings or micro bearings. We provide miniature bearings for applications as varied as gyros, anemometers, miniature gearboxes, small motors and radio controlled models. These bearings are supplied in chrome steel.



CHROME STEEL

Dimensions in inches unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
0.0937	0.1875	0.0625	**R133**			19	6	95
	0.1875	0.0937		**R133ZZ**		19	6	95
0.125	0.25	0.0937	**R144**			28	10	80
	0.25	0.1094		**R144ZZ**		28	10	80
	0.3125	0.1094	**R2-5**	**R2-5ZZ**		56	18	67
	0.3125	0.1406				56	18	67
	0.375	0.1094	**R2-6**			64	23	63
	0.375	0.1406		**R2-6ZZ**		64	23	63
	0.375	0.1562	**R2**	**R2ZZ**	**R2-2RS**	63	22	67
	0.5	0.1719	**R2A**	**R2AZZ**	**R2A-2RS**	64	28	63
0.1562	0.3125	0.1094	**R155**			36	15	63
	0.3125	0.125		**R155ZZ**		36	15	63
0.1875	0.3125	0.1094	**R156**			36	15	63
	0.3125	0.125		**R156ZZ**		36	15	63
	0.375	0.125	**R166**	**R166ZZ**	**R166-2RS**	71	27	60
	0.5	0.1562	**R3**			130	49	53
	0.5	0.196		**R3ZZ**	**R3-2RS**	130	49	53
	0.625	0.196	**R3A**	**R3AZZ**	**R3A-2RS**	148	62	45
	0.6875	0.25	**1601**	**1601ZZ**		153	64	43
	0.6875	0.3125			**1601-2RS**	153	64	26
0.25	0.375	0.125	**R168**	**R168ZZ**	**R168-2RS**	37	17	56
	0.5	0.125	**R188**			108	44	50
	0.5	0.1875		**R188ZZ**	**R188-2RS**	108	44	50
	0.625	0.196	**R4**	**R4ZZ**	**R4-2RS**	148	62	45
	0.6875	0.25	**1602**	**1602ZZ**		171	78	42
	0.6875	0.3125			**1602-2RS**	171	78	25
	0.75	0.2188	**R4A**			234	90	43
	0.75	0.2812		**R4AZZ**	**R4A-2RS**	234	90	43

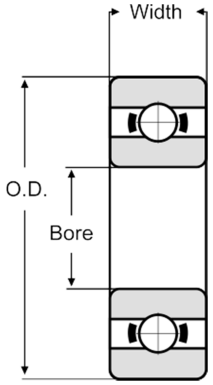
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 40% for 2RS types.*

Inch Miniature

Miniature bearings

These are sometimes referred to as instrument bearings or micro bearings. We provide miniature bearings for applications as varied as gyros, anemometers, miniature gearboxes, small motors and radio controlled models. These bearings are supplied in chrome steel.



CHROME STEEL

Dimensions in inches unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
0.3125	0.5	0.1562	R1810	R1810ZZ	R1810-2RS	54	28	48
	0.875	0.2812	1603	1603ZZ		317	135	37
	0.875	0.3438			1603-2RS	317	135	22
	0.9062	0.3125	1605	1605ZZ	1605-2RS	317	135	37
0.375	0.625	0.1562	R1038	R1038ZZ	R1038-2RS	85	42	33
	0.875	0.2188	R6		R6-2RSW21	333	142	23
	0.875	0.2812		R6ZZ	R6-2RS	333	142	38
	0.875	0.2812	1604	1604ZZ		322	139	36
	0.875	0.3438			1604-2RS	322	139	22
	0.9062	0.3125	1606	1606ZZ	1606-2RS	322	139	36
	1.125	0.3750	1614	1614ZZ	1614-2RS	468	219	32
0.4375	0.9062	0.3125	1607	1607ZZ	1607-2RS	244	122	34
	1.125	0.3750	1615	1615ZZ	1615-2RS	468	219	32
	1.375	0.4375	1620	1620ZZ	1620-2RS	742	316	24
0.5	0.75	0.1562	R1212	R1212ZZ	R1212-2RS	78	45	27
	1.125	0.25	R8			511	241	32
	1.125	0.3125		R8ZZ	R8-2RS	511	241	32
	1.125	0.375	1616	1616ZZ	1616-2RS	498	231	30
	1.375	0.4375	1621	1621ZZ	1621-2RS	718	346	24
0.5625	1.375	0.4375	1622	1622ZZ	1622-2RS	718	346	24
0.625	1.375	0.2812	R10			599	329	25
	1.375	0.3438		R10ZZ	R10-2RS	599	329	25
	1.375	0.4375	1623	1623ZZ	1623-2RS	588	312	22
	1.625	0.5	1628	1628ZZ	1628-2RS	886	412	18
0.75	1.625	0.3125	R12			938	506	21
	1.625	0.4375		R12ZZ	R12-2RS	938	506	21
	1.625	0.5	1630	1630ZZ	1630-2RS	780	428	20

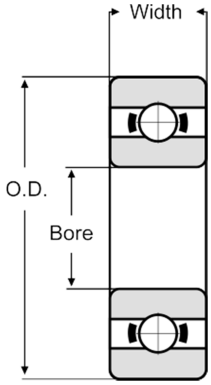
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 40% for 2RS types.*

Inch Miniature

Miniature bearings

These are sometimes referred to as instrument bearings or micro bearings. We provide miniature bearings for applications as varied as gyros, anemometers, miniature gearboxes, small motors and radio controlled models. These bearings are supplied in chrome steel.



CHROME STEEL

Dimensions in inches unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
0.875	1.875	0.375	R14			1080	576	18
	1.875	0.5		R14ZZ	R14-2RS	1080	576	18
1	2	0.375	R16			1150	700	16
	2	0.5		R16ZZ	R16-2RS	1150	700	16

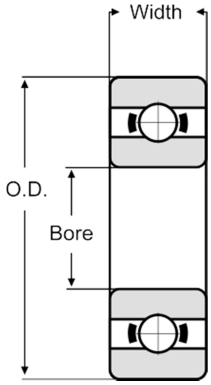
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 40% for 2RS types.*

Inch Stainless Steel Miniature

Corrosion resistant miniature bearings

These miniature bearings are designed for use in mildly corrosive conditions or for high temperatures with a suitable lubricant. We provide stainless steel miniature bearings for a wide range of applications. These bearings are supplied in 440 grade stainless steel.



STAINLESS STEEL ***Dimensions in inches unless otherwise specified***

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
0.04	0.125	0.0469	**SR09**			8	2	150
0.0469	0.1562	0.0625	**SR0**			9	3	130
	0.1562	0.0937		**SR0ZZ**		9	3	130
0.055	0.1875	0.0781	**SR1**			19	5	110
	0.1875	0.1094		**SR1ZZ**		19	5	110
0.0781	0.25	0.0937	**SR1-4**			23	7	80
	0.25	0.1406		**SR1-4ZZ**		23	7	80
0.0937	0.1875	0.0625	**SR133**			15	5	95
	0.1875	0.0937		**SR133ZZ**		15	5	95
	0.3125	0.1094	**SR1-5**			44	14	71
	0.3125	0.1406		**SR1-5ZZ**		44	14	71
0.125	0.25	0.0937	**SR144**	**SR144ZZW09**		23	8	80
	0.25	0.1094		**SR144ZZ**		23	8	67
	0.3125	0.1094	**SR2-5**	**SR2-5ZZW10**		45	14	67
	0.3125	0.1406		**SR2-5ZZ**		45	14	60
	0.375	0.1094	**SR2-6**	**SR2-6ZZW10**		51	17	63
	0.375	0.1406		**SR2-6ZZ**		51	17	53
	0.375	0.1562	**SR2**	**SR2ZZ**	**SR2-2RS**	50	17	67
	0.5	0.1094	**SR184**	**SR184ZZ**		52	17	67
	0.5	0.1719	**SR2A**	**SR2AZZ**	**SR2A-2RS**	51	21	63
0.1562	0.3125	0.1094	**SR155**			29	11	63
	0.3125	0.125		**SR155ZZ**		29	11	63
0.1875	0.3125	0.1094	**SR156**			29	11	63
	0.3125	0.125		**SR156ZZ**		29	11	63
	0.375	0.125	**SR166**	**SR166ZZ**	**SR166-2RS**	57	20	60
	0.5	0.1562	**SR3**	**SR3ZZW15**	**SR3-2RS**	104	37	53
	0.5	0.196		**SR3ZZ**	**SR3-2RSW15**	104	37	43

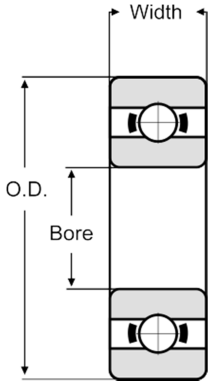
** Some types may be available with non-contact seals or teflon seals*

*** Reduce maximum Rpm by 40% for 2RS types.*

Inch Stainless Steel Miniature

Corrosion resistant miniature bearings

These miniature bearings are designed for use in mildly corrosive conditions or for high temperatures with a suitable lubricant. We provide stainless steel miniature bearings for a wide range of applications. These bearings are supplied in 440 grade stainless steel.



STAINLESS STEEL

Dimensions in inches unless otherwise specified

Bore	O.D.	Width	Open Bearing	Shielded Bearing	Sealed Bearing *	Max Load (kgf) Dyn	Max Load (kgf) Stat	Rpm ** (x1000)
0.25	0.375	0.125	SR168	SR168ZZ	SR168-2RS	31	14	56
	0.5	0.125	SR188	SR188ZZW12		86	33	50
	0.5	0.1875		SR188ZZ SR4ZZ	SR188-2RS	86	33	40
	0.625	0.196	SR4		SR4-2RS	118	47	45
	0.75	0.2188	SR4A	SR4AZZ		187	68	43
	0.75	0.2812			SR4A-2RS	187	68	43
0.3125	0.5	0.1562	SR1810	SR1810ZZ	SR1810-2RS	43	21	48
0.375	0.625	0.1562	SR1038	SR1038ZZ	SR1038-2RS	72	37	33
	0.875	0.2188	SR6			266	107	38
	0.875	0.2812		SR6ZZ	SR6-2RS	266	107	38
0.5	0.75	0.1562	SR1212	SR1212ZZ	SR1212-2RS	62	34	27
	0.75	0.196		SR1212ZZW19		62	34	23
	0.875	0.2188	SR6-1/2			232	93	36
	0.875	0.2812		SR6ZZ-1/2		232	93	36
	1.125	0.25	SR8			409	181	32
	1.125	0.3125		SR8ZZ	SR8-2RS	409	181	32
0.625	0.875	0.1562	SR1458	SR1458ZZ	SR1458-2RS	82	50	23
	1.375	0.2812	SR10			479	247	25
	1.375	0.3438		SR10ZZ	SR10-2RS	479	247	25
0.75	1	0.1562	SR1634	SR1634ZZ	SR1634-2RS	86	55	20
	1.625	0.3125	SR12			750	380	21
	1.625	0.4375		SR12ZZ	SR12-2RS	750	380	21
0.875	1.875	0.375	SR14			864	432	18
	1.875	0.5		SR14ZZ	SR14-2RS	864	432	18
1	2	0.375	SR16			920	525	16
	2	0.5		SR16ZZ	SR16-2RS	920	525	16

** Some types may be available with non-contact seals or teflon seals*

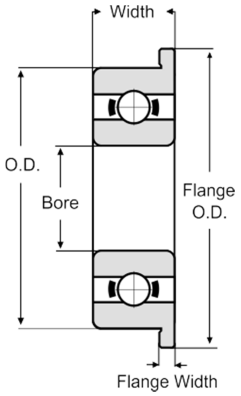
*** Reduce maximum Rpm by 30% for 2RS types.*

Inch Flanged Miniature

Flanged miniature bearings

The flange allows easier location in a housing. The smaller sizes are sometimes referred to as instrument bearings or micro bearings. These bearings are supplied in chrome steel.

For load/speed ratings, refer to non-flanged.



CHROME STEEL

Dimensions in inches unless otherwise specified

Bore	O.D.	Width	Flange O.D.	Flange Width	Open Bearing	Shielded Bearing	Sealed Bearing **
0.125	0.375	0.1562	0.44	0.03	**FR2**	**FR2ZZ**	**FR2-2RS**
0.1875	0.3125	0.1094	0.359	0.023	**FR156**		
	0.3125	0.125	0.359	0.036		**FR156ZZ**	
	0.5	0.1562	0.565	0.042	**FR3**		
	0.5	0.196	0.565	0.042		**FR3ZZ**	**FR3-2RS**
0.25	0.375	0.125	0.422	0.023	**FR168**	**FR168ZZ**	
	0.5	0.125	0.547	0.023	**FR188**		
	0.5	0.1875	0.547	0.045		**FR188ZZ**	
	0.625	0.196	0.69	0.042	**FR4**	**FR4ZZ**	**FR4-2RS**
0.375	0.875	0.2188	0.969	0.062	**FR6**		
	0.875	0.2812	0.969	0.062		**FR6ZZ**	**FR6-2RS**
0.5	1.125	0.25	1.225	0.062	**FR8**		
	1.125	0.3125	1.225	0.062		**FR8ZZ**	**FR8-2RS**
0.625	1.375	0.2812	1.49	0.0687	**FR10**		
	1.375	0.3438	1.49	0.0687		**FR10ZZ**	**FR10-2RS**

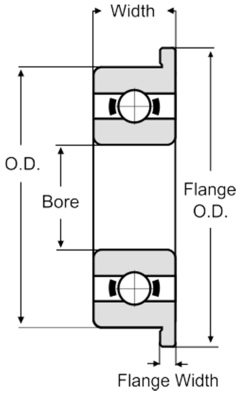
* *Some sizes may be available with non-contact seals or teflon seals*

Inch Stainless Steel Flanged Miniature

Corrosion resistant flanged miniature

For use in mildly corrosive conditions or for high temperatures. The flange allows easier location in a housing. These bearings are supplied in 440 grade stainless steel.

For load/speed ratings, refer to non-flanged



STAINLESS STEEL

Dimensions in inches unless otherwise specified

Bore	O.D.	Width	Flange O.D.	Flange Width	Open Bearing	Shielded Bearing	Sealed Bearing **
0.04	0.125	0.0469	0.171	0.013	**SFR09**		
0.0469	0.1562	0.6250	0.203	0.013	**SFR0**		
	0.1562	0.0937	0.203	0.031		**SFR0ZZ**	
0.055	0.1875	0.0781	0.234	0.023	**SFR1**		
	0.1875	0.1094	0.234	0.031		**SFR1ZZ**	
0.0781	0.25	0.0937	0.296	0.023	**SFR1-4**		
	0.25	0.1406	0.296	0.031		**SFR1-4ZZ**	
0.0937	0.1875	0.0625	0.234	0.018	**SFR133**		
	0.1875	0.0937	0.234	0.031		**SFR133ZZ**	
	0.3125	0.1094	0.359	0.023	**SFR1-5**		
	0.3125	0.1406	0.359	0.031		**SFR1-5ZZ**	
0.125	0.25	0.0937	0.296	0.023	**SFR144**		
	0.25	0.1094	0.296	0.031		**SFR144ZZ**	
	0.3125	0.1094	0.359	0.023	**SFR2-5**		
	0.3125	0.1406	0.359	0.031		**SFR2-5ZZ**	
	0.375	0.1094	0.422	0.023	**SFR2-6**		
	0.375	0.1406	0.422	0.031		**SFR2-6ZZ**	
	0.375	0.1562	0.44	0.030	**SFR2**	**SFR2ZZ**	**SFR2-2RS**
0.1562	0.3125	0.1094	0.359	0.023	**SFR155**		
	0.3125	0.125	0.359	0.036		**SFR155ZZ**	
0.1875	0.3125	0.1094	0.359	0.023	**SFR156**		
	0.3125	0.125	0.359	0.036		**SFR156ZZ**	
	0.375	0.125	0.422	0.023	**SFR166**		
	0.375	0.125	0.422	0.031		**SFR166ZZ**	**SFR166-2RS**
	0.5	0.1562	0.565	0.042	**SFR3**		
	0.5	0.196	0.565	0.042	**SFR3W19**	**SFR3ZZ**	**SFR3-2RS**

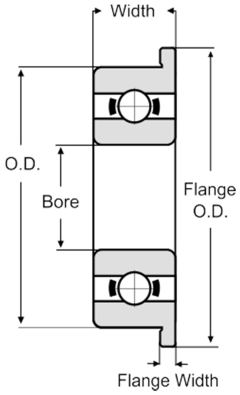
* *Some sizes may be available with non-contact seals or teflon seals*

Inch Stainless Steel Flanged Miniature

Corrosion resistant flanged miniature

For use in mildly corrosive conditions or for high temperatures. The flange allows easier location in a housing. These bearings are supplied in 440 grade stainless steel.

For load/speed ratings, refer to non-flanged



STAINLESS STEEL

Dimensions in inches unless otherwise specified

Bore	O.D.	Width	Flange O.D.	Flange Width	Open Bearing	Shielded Bearing	Sealed Bearing **
0.25	0.375	0.125	0.422	0.023	SFR168		
	0.375	0.125	0.422	0.036		SFR168ZZ	SFR168-2RS
	0.5	0.125	0.547	0.023	SFR188		
	0.5	0.1875	0.547	0.045		SFR188ZZ	SFR188-2RS
	0.625	0.196	0.69	0.042	SFR4	SFR4ZZ	SFR4-2RS
0.3125	0.5	0.1562	0.547	0.031	SFR1810	SFR1810ZZ	SFR1810-2RS
0.375	0.875	0.2188	0.969	0.062	SFR6		
	0.875	0.2812	0.969	0.062		SFR6ZZ	SFR6-2RS
0.5	1.125	0.25	1.225	0.062	SFR8		
	1.125	0.3125	1.225	0.062		SFR8ZZ	SFR8-2RS

* *Some sizes may be available with non-contact seals or teflon seal*

Tel: +84 965 226 155

Email: gmw@gmw-bearings.com

https://gmw-bearings.com