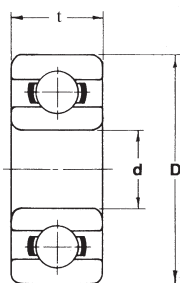


MR Series* Open

Miniature Ball Bearings

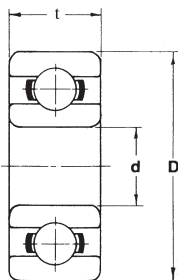


Bearing Number	Equivalent Number	Dimensions (mm)			Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	C _r	C _{or}	Grease	Oil	
MR31	L-310W51	1.0	3.0	1.5	74	20	130	150	0.05
MR41X	R-412	1.2	4.0	1.8	108	34	110	130	0.10
MR52	L-520W02	2.0	5.0	2.0	167	49	85	100	0.14
MR62	R-620W52	2.0	6.0	2.5	334	98	75	90	0.28
MR72	R-720Y52	2.0	7.0	2.5	383	128	63	75	0.43
MR82X	R-825Y52	2.5	8.0	2.5	559	177	60	67	0.52
MR63	L-630	3.0	6.0	2.0	206	74	71	80	0.20
MR83	R-830Y52	3.0	8.0	2.5	392	137	60	67	0.51
MR93	R-930Y52	3.0	9.0	2.5	569	186	56	67	0.75
MR74	L-740	4.0	7.0	2.0	314	118	60	67	0.23
MR84	L-840	4.0	8.0	2.0	392	137	56	67	0.39
MR104	L-1040	4.0	10.0	3.0	589	206	48	56	0.95
MR85	L-850	5.0	8.0	2.0	304	118	53	63	0.25
MR95	L-950	5.0	9.0	2.5	432	167	50	60	0.54
MR105	L-1050	5.0	10.0	3.0	432	167	50	60	0.91
MR106	L-1060	6.0	10.0	2.5	500	216	45	53	0.55
MR126	L-1260	6.0	12.0	3.0	716	294	43	50	1.25
MR117	L-1170	7.0	11.0	2.5	451	206	43	50	0.59
MR137	L-1370	7.0	13.0	3.0	540	275	40	48	1.52
MR128	L-1280	8.0	12.0	2.5	540	275	40	48	0.70
MR148	L-1480	8.0	14.0	3.5	814	383	38	45	1.90

* All Bearings are available with stainless steel 440C, add prefix "SS"

Miniature Ball Bearings

600 Series* Open



Ball / Roller Bearing

Bearing Number	Equivalent Number	Dimensions (mm)			Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	C _r	C _{or}	Grease	Oil	
601X	R-615	1.5	6	2.5	334	98	75	90	0.31
602	R-725	2.0	7	2.8	383	128	60	71	0.50
602X	R-825	2.5	8	2.8	549	177	60	71	0.61
603	R-930	3.0	9	3.0	569	186	56	67	0.84
604	R-1240	4.0	12	4.0	961	353	48	56	2.19
605	R-1450	5.0	14	5.0	1334	510	40	50	3.46
606	R-1760	6.0	17	6.0	2266	844	38	45	5.94
607	R-1970	7.0	19	6.0	2335	893	36	43	7.80
608	R-2280	8.0	22	7.0	3296	1383	34	40	11.80
609	—	9.0	24	7.0	3335	1422	32	38	14.70

* All Bearings are available with stainless steel 440C, add prefix "SS"

Miniature Ball Bearings

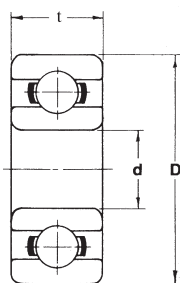
620 Series* Open

Bearing Number	Equivalent Number	Dimensions (mm)			Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	C _r	C _{or}	Grease	Oil	
623	R-1030	3	10	4	627.8	215.8	50	60	1.45
624	R-1340	4	13	5	1305	490.5	40	48	3.10
625	R-1650	5	16	5	1727	676.9	36	43	4.95
626	R-1960	6	19	6	2335	892.7	32	40	8.12
627	R-2270	7	22	7	3286	1383	30	36	12.70
628	—	8	24	8	3335	1422	28	34	17.10
629	R-2690	9	26	8	4571	1982	28	34	19.00

* All Bearings are available with stainless steel 440C, add prefix "SS"

630 Series* Open

Miniature Ball Bearings



Bearing Number	Equivalent Number	Dimensions (mm)			Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	C _r	C _{or}	Grease	Oil	
633	–	3	13	5	1305	490.5	40	48	3.27
634	R-1640	4	16	5	1344	519.9	36	43	5.24
635	–	5	19	6	2335	892.7	32	40	8.50
636	–	6	22	7	3335	1422	30	36	13.90
637	–	7	26	9	4571	1982	28	34	24.20
638	–	8	28	9	4571	1982	28	34	28.10
639	–	9	30	10	4660	2080	24	30	36.20

* All Bearings are available with stainless steel 440C, add prefix "SS"

680 Series* Open

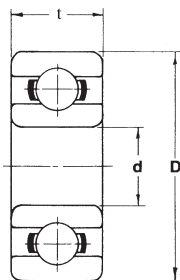
Miniature Ball Bearings

Bearing Number	Equivalent Number	Dimensions (mm)			Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	C _r	C _{or}	Grease	Oil	
681	L-310	1.0	3	1.0	74	20	130	150	0.03
681X	L-415	1.5	4	1.2	108	34	100	120	0.10
682	L-520	2.0	5	1.5	167	49	85	100	0.15
682X	L-625	2.5	6	1.8	186	59	71	80	0.20
683	L-730	3.0	7	2.0	314	108	63	75	0.32
684	L-940	4.0	9	2.5	638	226	53	63	0.65
685	L-1150	5.0	11	3.0	716	294	45	53	1.16
686	L-1360	6.0	13	3.5	1079	441	40	50	1.87
687	L-1470	7.0	14	3.5	1177	510	40	50	2.03
688	L-1680	8.0	16	4.0	1256	589	36	43	3.11
689	L-1790	9.0	17	4.0	1324	667	36	43	3.41

* All Bearings are available with stainless steel 440C, add prefix "SS"

Miniature Ball Bearings

690 Series* Open



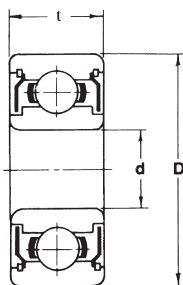
Ball / Roller Bearing

Bearing Number	Equivalent Number	Dimensions (mm)			Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	C _r	C _{or}	Grease	Oil	
691	R-410	1.0	4	1.6	137	39.2	100	120	0.11
691X	R-515	1.5	5	2.0	167	49.1	85	100	0.20
692	R-620	2.0	6	2.3	334	98.1	75	90	0.28
692X	R-725	2.5	7	2.5	383	128	63	75	0.40
693	R-830	3.0	8	3.0	559	177	60	67	0.60
694	R-1140	4.0	11	4.0	961	353	48	56	1.69
695	R-1350	5.0	13	4.0	1079	432	43	50	2.39
696	R-1560	6.0	15	5.0	1344	520	40	45	3.85
697	–	7.0	17	5.0	1609	716	36	43	5.26
698	–	8.0	19	6.0	2237	922	36	43	7.12
699	L-2090	9.0	20	6.0	2472	1079	34	40	3.38

* All Bearings are available with stainless steel 440C, add prefix "SS"

MR Series* Double Shielded

Miniature Ball Bearings



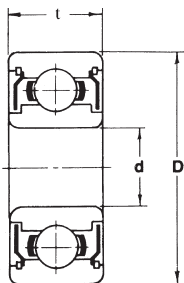
Ball / Roller Bearing

Bearing Number	Equivalent Number	Dimensions (mm)			Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	C _r	C _{or}	Grease	Oil	
MR41XZZ	–	1.2	4	2.5	108	34	110	130	0.14
MR52ZZ	L-520ZZW52	2.0	5	2.5	167	49	85	100	0.20
MR62ZZ	R-620ZZY52	2.0	6	2.5	334	98	75	90	0.33
MR72ZZ	R-720ZZY03	2.0	7	3.0	383	128	63	75	0.53
MR63ZZ	L-630ZZ	3.0	6	2.5	206	74	71	80	0.28
MR83ZZ	–	3.0	8	3.0	392	137	60	67	0.67
MR93ZZ	R-930ZZY04	3.0	9	4.0	569	186	56	67	1.15
MR74ZZ	L-740ZZ	4.0	7	2.5	255	108	60	67	0.33
MR84ZZ	L-840ZZ	4.0	8	3.0	392	137	56	67	0.56
MR104ZZ	L-1040ZZ	4.0	10	4.0	589	206	48	56	1.33
MR85ZZ	L-850ZZ	5.0	8	2.5	216	88	53	63	0.34
MR95ZZ	L-950ZZ	5.0	9	3.0	432	167	50	60	0.58
MR105ZZ	L-1050ZZ	5.0	10	4.0	432	167	50	60	1.26
MR115ZZ	–	5.0	11	4.0	716	294	45	53	0.62
MR106ZZ	L-1060ZZ	6.0	10	3.0	500	216	45	53	0.70
MR126ZZ	L-1260ZZ	6.0	12	4.0	716	294	43	50	1.66
MR117ZZ	L-1170ZZ	7.0	11	3.0	451	206	43	50	0.71
MR137ZZ	L-1370ZZ	7.0	13	4.0	540	275	40	48	2.01
MR128ZZ	L-1280ZZ	8.0	12	3.5	540	275	40	48	0.99
MR148ZZ	L-1480ZZ	8.0	14	4.0	814	383	38	45	2.19

* All Bearings are available with stainless steel 440C, add prefix "SS"

Miniature Ball Bearings

600 Series* Double Shielded



Bearing Number	Equivalent Number	Dimensions (mm)			Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	C _r	C _{or}	Grease	Oil	
601XZZ	R-615ZZ	1.5	6	3.0	334	98	75	90	0.40
602ZZ	R-720ZZ	2.0	7	3.5	383	128	60	71	0.60
620XZZ	R-825ZZ	2.5	8	4.0	549	177	60	71	0.85
603ZZ	R-930ZZ	3.0	9	5.0	569	186	56	67	1.43
604ZZ	R-1240ZZ	4.0	12	4.0	961	353	48	56	2.34
605ZZ	R-1450ZZ	5.0	14	5.0	1334	510	40	50	3.75
606ZZ	R-1760ZZ	6.0	17	6.0	2266	844	38	45	6.89
607ZZ	R-1970ZZ	7.0	19	6.0	2335	893	36	43	8.24
608ZZ	R-2280ZZ	8.0	22	7.0	3296	1383	34	40	12.90
609ZZ	—	9.0	24	7.0	3335	1422	32	38	16.00

* All Bearings are available with stainless steel 440C, add prefix "SS"

Please indicate '-2RS' behind the basic number, instead of 'ZZ' if you are looking for both side rubber seal bearing.

Miniature Ball Bearings

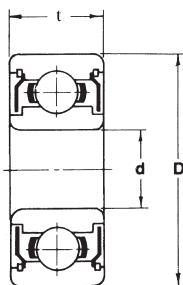
620 Series* Double Shielded

Bearing Number	Equivalent Number	Dimensions (mm)			Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	C _r	C _{or}	Grease	Oil	
623ZZ	R-1030ZZ	3	10	4	628	216	50	60	1.65
624ZZ	R-1340ZZ	4	13	5	1305	491	40	48	3.20
625ZZ	R-1650ZZ	5	16	5	1727	677	36	43	5.10
626ZZ	R-1960ZZ	6	19	6	2335	893	32	40	8.65
627ZZ	R-2270ZZ	7	22	7	3286	1383	30	36	13.10
628ZZ	—	8	24	8	3335	1422	28	34	18.50
629ZZ	R-2690ZZ	9	26	8	4571	1982	28	34	21.80

* All Bearings are available with stainless steel 440C, add prefix "SS"

Please indicate '-2RS' behind the basic number, instead of 'ZZ' if you are looking for both side rubber seal bearing.

630 Series* Double Shielded



Miniature Ball Bearings

Bearing Number	Equivalent Number	Dimensions (mm)			Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	C _r	C _{or}	Grease	Oil	
633ZZ	–	3	13	5	1305	491	40	48	3.43
634ZZ	R-1640ZZ	4	16	5	1344	520	36	43	5.44
635ZZ	–	5	19	6	2335	893	32	40	8.89
636ZZ	–	6	22	7	3335	1422	30	36	14.50
637ZZ	–	7	26	9	4571	1982	28	34	25.80
638ZZ	–	8	28	9	4571	1982	28	34	30.30
639ZZ	–	9	30	10	4660	2080	24	30	37.10

Please indicate '-2RS' behind the basic number, instead of 'ZZ' if you are looking for both side rubber seal bearing.

680 Series* Double Shielded

Miniature Ball Bearings

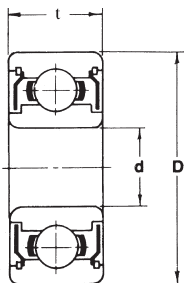
Bearing Number	Equivalent Number	Dimensions (mm)			Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	C _r	C _{or}	Grease	Oil	
681XZZ	L-415ZZ	1.5	4	2.0	108	34	100	120	0.14
682ZZ	L-520ZZ	2.0	5	2.3	167	49	85	100	0.20
682XZZ	L-625ZZ	2.5	6	2.6	186	59	71	80	0.35
683ZZ	L-730ZZ	3.0	7	3.0	314	108	63	75	0.45
684ZZ	L-940ZZ	4.0	9	4.0	638	226	53	63	1.00
685ZZ	L-1150ZZ	5.0	11	5.0	716	294	45	53	1.93
686ZZ	L-1360ZZ	6.0	13	5.0	1079	441	40	50	2.68
687ZZ	L-1470ZZ	7.0	14	5.0	1177	510	40	50	2.95
688ZZ	L-1680ZZ	8.0	16	5.0	1256	589	36	43	4.05
689ZZ	L-1790ZZ	9.0	17	5.0	1324	667	36	43	4.38

* All Bearings are available with stainless steel 440C, add prefix "SS"

Please indicate '-2RS' behind the basic number, instead of 'ZZ' if you are looking for both side rubber seal bearing.

Miniature Ball Bearings

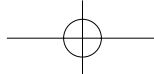
690 Series* Double Shielded



Bearing Number	Equivalent Number	Dimensions (mm)			Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	C _r	C _{or}	Grease	Oil	
691XZZ	R-515ZZ	1.5	5	2.6	167	49	85	100	0.25
692ZZ	R-620ZZ	2.0	6	3.0	334	98	75	90	0.35
692XZZ	R-725ZZ	2.5	7	3.5	383	128	63	75	0.55
693ZZ	R-830ZZ	3.0	8	4.0	559	177	60	67	0.80
694ZZ	R-1140ZZ	4.0	11	4.0	961	353	48	56	1.75
695ZZ	R-1350ZZ	5.0	13	4.0	1079	432	43	50	2.31
696ZZ	R-1560ZZ	6.0	15	5.0	1344	520	40	45	3.65
697ZZ	–	7.0	17	5.0	1609	716	36	43	5.01
698ZZ	–	8.0	19	6.0	2237	922	36	43	7.57
699ZZ	L-2090ZZ	9.0	20	6.0	2472	1079	34	40	8.54

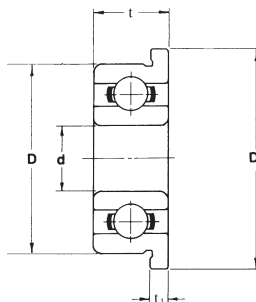
* All Bearings are available with stainless steel 440C, add prefix "SS"

Please indicate '-2RS' behind the basic number, instead of 'ZZ' if you are looking for both side rubber seal bearing.



MF Series* Flanged, Open

Miniature Ball Bearings

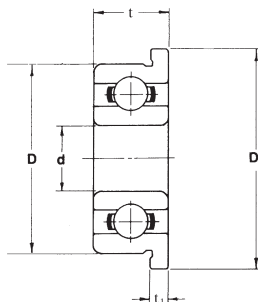


Bearing Number	Equivalent Number	Dimensions (mm)					Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	Flange Dia. D ₁	Flange Width t ₁	C _r	C _{or}	Grease	Oil	
MF41X	—	1.2	4	1.8	4.8	0.4	108	34	110	130	0.12
MF52	LF-520W02	2.0	5	2.0	6.2	0.6	167	49	85	100	0.19
MF62	RF-620W52	2.0	6	2.5	7.2	0.6	334	98	75	90	0.34
MF72	RF-720Y52	2.0	7	2.5	8.2	0.6	383	128	63	75	0.50
MF82X	RF-825Y52	2.5	8	2.5	9.2	0.6	559	177	60	67	0.60
MF63	LF-630	3.0	6	2.0	7.2	0.6	206	74	71	80	0.26
MF83	RF-830Y52	3.0	8	2.5	9.2	0.6	392	137	60	67	0.59
MF93	RF-930Y52	3.0	9	2.5	10.6	0.6	569	186	56	67	0.83
MF74	LF-740	4.0	7	2.0	8.2	0.6	314	118	60	67	0.30
MF84	LF-840	4.0	8	2.0	9.2	0.6	392	137	56	67	0.47
MF104	LF-1040	4.0	10	3.0	11.2	0.6	589	206	48	56	1.04
MF85	LF-850	5.0	8	2.0	9.2	0.6	304	118	53	63	0.33
MF95	LF-950	5.0	9	2.5	10.2	0.6	432	167	50	60	0.62
MF105	LF-1050	5.0	10	3.0	11.6	0.6	431	167	50	60	1.00
MF106	LF-1060	6.0	10	2.5	11.2	0.6	500	216	45	53	0.64
MF126	LF-1260	6.0	12	3.0	13.6	0.6	716	294	43	50	1.44
MF117	LF-1170	7.0	11	2.5	12.2	0.6	451	206	43	50	0.69
MF137	LF-1370	7.0	13	3.0	14.2	0.6	540	275	40	48	1.64
MF128	LF-1280	8.0	12	2.5	13.6	0.6	540	275	40	48	0.81
MF148	LF-1480	8.0	14	3.5	15.6	0.8	814	383	38	45	2.13

* All Bearings are available with stainless steel 440C, add prefix "SS"

Miniature Ball Bearings

600 Series* Flanged, Open



Bearing Number	Equivalent Number	Dimensions (mm)					Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	Flange Dia. D ₁	Flange Width t ₁	C _r	C _{or}	Grease	Oil	
F601X	RF-615	1.5	6	2.5	7.5	0.6	334	98	75	90	0.38
F602	RF-720	2.0	7	2.8	8.5	0.7	383	128	60	71	0.60
F602X	RF-825	2.5	8	2.8	9.5	0.7	549	177	60	71	0.72
F603	RF-930	3.0	9	3.0	10.5	0.7	569	186	56	67	0.96
F604	RF-1240	4.0	12	4.0	13.5	1.0	961	353	48	56	2.42
F605	RF-1450	5.0	14	5.0	16.0	1.0	1334	510	40	50	3.83
F606	RF-1760	6.0	17	6.0	19.0	1.2	2266	844	38	45	6.47
F607	RF-1970	7.0	19	6.0	22.0	1.5	2335	893	36	43	8.93
F608	RF-2280	8.0	22	7.0	25.0	1.5	3296	1383	34	40	13.10
F609	—	9.0	24	7.0	27.0	1.5	3335	1422	32	38	16.10

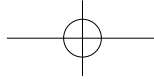
* All Bearings are available with stainless steel 440C, add prefix "SS"

Miniature Ball Bearings

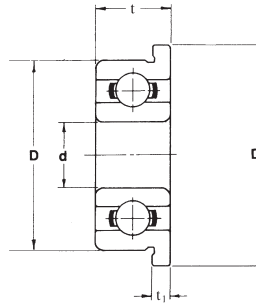
620 Series* Flanged, Open

Bearing Number	Equivalent Number	Dimensions (mm)					Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	Flange Dia. D ₁	Flange Width t ₁	C _r	C _{or}	Grease	Oil	
F623	RF-1030	3	10	4	11.5	1.0	628	216	50	60	1.65
F624	RF-1340	4	13	5	15.0	1.0	1305	491	40	48	3.44
F625	RF-1650	5	16	5	18.0	1.0	1727	677	36	43	5.37
F626	RF-1960	6	19	6	22.0	1.5	2335	893	32	40	9.25
F627	RF-2270	7	22	7	25.0	1.5	3286	1383	30	36	14.00

* All Bearings are available with stainless steel 440C, add prefix "SS"



630 Series* Flanged, Open



Miniature Ball Bearings

Ball / Roller Bearing

Bearing Number	Equivalent Number	Dimensions (mm)					Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	Flange Dia. D ₁	Flange Width t ₁	C _r	C _{or}	Grease	Oil	
F634	RF-1640	4	16	5	18	1.0	1344	520	36	43	5.66
F635	—	5	19	6	22	1.5	2335	893	32	40	9.26

* All Bearings are available with stainless steel 440C, add prefix "SS"

680 Series* Flanged, Open

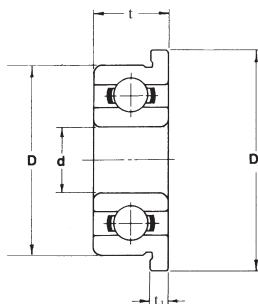
Miniature Ball Bearings

Bearing Number	Equivalent Number	Dimensions (mm)					Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	Flange Dia. D ₁	Flange Width t ₁	C _r	C _{or}	Grease	Oil	
F681	LF-310	1.0	3	1.0	3.8	0.3	74	20	130	150	0.04
F681X	LF-415	1.5	4	1.2	5.0	0.4	108	34	100	120	0.12
F682	LF-520	2.0	5	1.5	6.1	0.5	167	49	85	100	0.19
F682X	LF-625	2.5	6	1.8	7.1	0.5	186	59	71	80	0.24
F683	LF-730	3.0	7	2.0	8.1	0.5	314	108	63	75	0.37
F684	LF-940	4.0	9	2.5	10.3	0.6	638	226	53	63	0.74
F685	LF-1150	5.0	11	3.0	12.5	0.8	716	284	45	53	1.33
F686	LF-1360	6.0	13	3.5	15.0	1.0	1079	441	40	50	2.21
F687	LF-1470	7.0	14	3.5	16.0	1.0	1177	510	40	50	2.40
F688	LF-1680	8.0	16	4.0	18.0	1.0	1256	589	36	43	3.53
F689	LF-1790	9.0	17	4.0	19.0	1.0	1324	667	36	43	3.85

* All Bearings are available with stainless steel 440C, add prefix "SS"

Miniature Ball Bearings

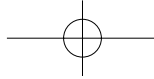
690 Series* Flanged, Open



Ball / Roller Bearing

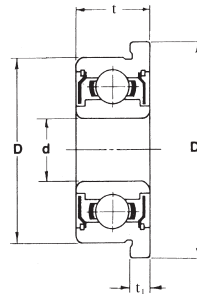
Bearing Number	Equivalent Number	Dimensions (mm)					Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	Flange Dia. D ₁	Flange Width t ₁	C _r	C _{or}	Grease	Oil	
F691	RF-410	1.0	4	1.6	5.0	0.5	137	39	100	120	0.14
F691X	RF-515	1.5	5	2.0	6.5	0.6	167	49	85	100	0.26
F692	RF-620	2.0	6	2.3	7.5	0.6	334	98	75	90	0.35
F692X	RF-725	2.5	7	2.5	8.5	0.7	383	128	63	75	0.50
F693	RF-830	3.0	8	3.0	9.5	0.7	559	177	60	67	0.71
F694	RF-1140	4.0	11	4.0	12.5	1.0	961	353	48	56	1.91
F695	RF-1350	5.0	13	4.0	15.0	1.0	1079	432	43	50	2.73
F696	RF-1560	6.0	15	5.0	17.0	1.2	1344	520	40	45	4.24
F697	–	7.0	17	5.0	19.0	1.2	1609	716	36	43	5.79
F698	–	8.0	19	6.0	22.0	1.5	2237	922	36	43	8.25
F699	LF-2090	9.0	20	6.0	23.0	1.5	2472	1079	34	40	9.57

* All Bearings are available with stainless steel 440C, add prefix "SS"



MF Series* Flanged, Double Shielded

Miniature Ball Bearings

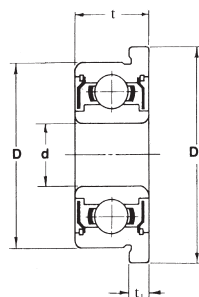


Ball / Roller Bearing

Bearing Number	Equivalent Number	Dimensions (mm)					Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	Flange Dia. D ₁	Flange Width t ₁	C _r	C _{or}	Grease	Oil	
MF52ZZ	LF-520ZZW52	2	5	2.5	6.2	0.6	167	49	85	100	0.25
MF72ZZ	RF-720ZZY03	2	7	3.0	8.2	0.6	383	128	63	75	0.60
MF63ZZ	LF-630ZZ	3	6	2.5	7.2	0.6	206	74	71	80	0.34
MF93ZZ	RFR-930ZZY04	3	9	4.0	10.6	0.8	569	186	56	67	1.30
MF74ZZ	LF-740ZZ	4	7	2.5	8.2	0.6	255	108	60	67	0.40
MF84ZZ	LF-840ZZ	4	8	3.0	9.2	0.6	392	137	56	67	0.64
MF104ZZ	LF-1040ZZ	4	10	4.0	11.6	0.8	589	206	48	56	1.50
MF85ZZ	LF-850ZZ	5	8	2.5	9.2	0.6	216	88	53	63	0.42
MF95ZZ	LF-950ZZ	5	9	3.0	10.2	0.6	432	167	50	60	0.66
MF105ZZ	LF-1050ZZ	5	10	4.0	11.6	0.8	432	167	50	60	1.38
MF115ZZ	—	5	11	4.0	12.6	0.8	716	284	45	53	0.81
MF106ZZ	LF-1060ZZ	6	10	3.0	11.2	0.6	500	216	45	53	0.79
MF126ZZ	LF-1260ZZ	6	12	4.0	13.6	0.8	716	294	43	50	1.86
MF117ZZ	LF-1170ZZ	7	11	3.0	12.2	0.6	451	206	43	50	0.81
MF137ZZ	LF-1370ZZ	7	13	4.0	14.6	0.8	540	275	40	48	2.17
MF128ZZ	LF-1280ZZ	8	12	3.5	13.6	0.8	540	275	40	48	1.14
MF148ZZ	LF-1480ZZ	8	14	4.0	15.6	0.8	814	383	38	45	2.42

* All Bearings are available with stainless steel 440C, add prefix "SS"

Miniature Ball Bearings



600 Series* Flanged, Double Shielded

Bearing Number	Equivalent Number	Dimensions (mm)					Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	Flange Dia. D ₁	Flange Width t ₁	C _r	C _{or}	Grease	Oil	
F601XZZ	RF-615ZZ	1.5	6	3.0	7.5	0.8	334	98	75	90	0.50
F602ZZ	RF-720ZZ	2.0	7	3.5	8.5	0.9	383	128	60	71	0.73
F602XZZ	RF-825ZZ	2.5	8	4.0	9.5	0.9	549	177	60	71	0.99
F603ZZ	RF-930ZZ	3.0	9	5.0	10.5	1.0	569	186	56	67	1.61
F604ZZ	RF-1240ZZ	4.0	12	4.0	13.5	1.0	961	353	48	56	2.57
F605ZZ	RF-1450ZZ	5.0	14	5.0	16.0	1.0	1334	510	40	50	4.12
F606ZZ	RF-1760ZZ	6.0	17	6.0	19.0	1.2	2266	844	38	45	7.42
F607ZZ	RF-1970ZZ	7.0	19	6.0	22.0	1.5	2335	893	36	43	9.37
F608ZZ	RF-2280ZZ	8.0	22	7.0	25.0	1.5	3296	1383	34	40	14.20
F609ZZ	—	9.0	24	7.0	27.0	1.5	3335	1422	32	38	17.40

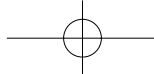
* All Bearings are available with stainless steel 440C, add prefix "SS"

Miniature Ball Bearings

620 Series* Flanged, Double Shielded

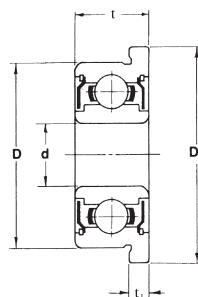
Bearing Number	Equivalent Number	Dimensions (mm)					Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	Flange Dia. D ₁	Flange Width t ₁	C _r	C _{or}	Grease	Oil	
F623ZZ	RF-1030ZZ	3	10	4	11.5	1.0	628	216	50	60	1.85
F624ZZ	RF-1340ZZ	4	13	5	15.0	1.0	1305	491	40	48	3.54
F625ZZ	RF-1650ZZ	5	16	5	18.0	1.0	1727	677	36	43	5.52
F626ZZ	RF-1960ZZ	6	19	6	22.0	1.5	2335	893	32	40	9.78
F627ZZ	RF-2270ZZ	7	22	7	25.0	1.5	3286	1383	30	36	14.40

* All Bearings are available with stainless steel 440C, add prefix "SS"



630 Series* Flanged, Double Shielded

Miniature Ball Bearings



Bearing Number	Equivalent Number	Dimensions (mm)					Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	Flange Dia. D ₁	Flange Width t ₁	C _r	C _{or}	Grease	Oil	
F634ZZ	RF-1640ZZ	4	16	5	18	1.0	1344	520	36	43	5.86
F635ZZ	—	5	19	6	22	1.5	2335	893	32	40	9.65

* All Bearings are available with stainless steel 440C, add prefix "SS"

680 Series* Flanged, Double Shielded

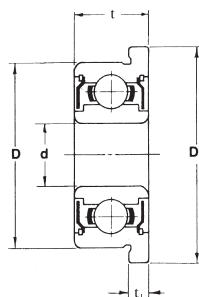
Miniature Ball Bearings

Bearing Number	Equivalent Number	Dimensions (mm)					Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	Flange Dia. D ₁	Flange Width t ₁	C _r	C _{or}	Grease	Oil	
F681XZZ	LF-415ZZ	1.5	4	2.0	5.0	0.6	108	34	100	120	0.17
F682ZZ	LF-520ZZ	2.0	5	2.3	6.1	0.6	167	49	85	100	0.24
F682XZZ	LF-625ZZ	2.5	6	2.6	7.1	0.8	186	59	71	80	0.42
F683ZZ	LF-730ZZ	3.0	7	3.0	8.1	0.8	314	108	63	75	0.53
F684ZZ	LF-940ZZ	4.0	9	4.0	10.3	1.0	638	226	53	63	1.15
F685ZZ	LF-1150ZZ	5.0	11	5.0	12.5	1.0	716	284	45	53	2.15
F686ZZ	LF-1360ZZ	6.0	13	5.0	15.0	1.1	1079	441	40	50	3.06
F687ZZ	LF-1470ZZ	7.0	14	5.0	16.0	1.1	1177	510	40	50	3.35
F688ZZ	LF-1680ZZ	8.0	16	5.0	18.0	1.1	1256	589	36	43	4.51
F689ZZ	—	9.0	17	5.0	19.0	1.1	1324	667	36	43	4.87

* All Bearings are available with stainless steel 440C, add prefix "SS"

Miniature Ball Bearings

690 Series* Flanged, Double Shielded



Ball / Roller Bearing

Bearing Number	Equivalent Number	Dimensions (mm)					Basic Load Ratings (N)		Limiting Speeds X 10 ³ (rev/min)		Weight (g)
		Bore d	OD D	Width t	Flange Dia. D ₁	Flange Width t ₁	C _r	C _{or}	Grease	Oil	
F691XZZ	RF-515ZZ	1.5	5	2.6	6.5	0.8	167	49	85	100	0.33
F692ZZ	RF-620ZZ	2.0	6	3.0	7.5	0.8	334	98	75	90	0.45
F692XZZ	RF-725ZZ	2.5	7	3.5	8.5	0.9	383	128	63	75	0.68
F693ZZ	RF-830ZZ	3.0	8	4.0	9.5	0.9	559	177	60	67	0.94
F694ZZ	RF-1140ZZ	4.0	11	4.0	12.5	1.0	961	353	48	56	1.97
F695ZZ	RF-1350ZZ	5.0	13	4.0	15.0	1.0	1079	432	43	50	2.65
F696ZZ	RF-1560ZZ	6.0	15	5.0	17.0	1.2	1344	520	40	45	4.04
F697ZZ	—	7.0	17	5.0	19.0	1.2	1609	716	36	43	5.54
F698ZZ	—	8.0	19	6.0	22.0	1.5	2237	922	36	43	8.70
F699ZZ	LF-2090ZZ	9.0	20	5.0	23.0	1.5	2472	1079	34	40	9.73

* All Bearings are available with stainless steel 440C, add prefix "SS"