

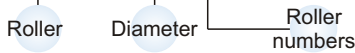
Guide code, EX: MGR-0206, MGR=roller (MGB=ball), 02=diameter, 06= roller numbers.

Model	Retainer dimensions (mm)					Basic dynamic load rating C N	Basic static load rating Co N	Material standard/Antirust		Material corrosion-resisting	
	φ D	P1	P2	T (thickness)	W (width)			Retainer	Roller	Retainer	Roller
MGR-01	φ 1.5	1.9	3	0.2	3.75	125	144	SUS304	SUJ2	SUS304	SUS440C
MGR-02	φ 2.0	2.8	4	0.3	5.50	293	292				
MGR-03	φ 3.0	3.2	5	0.4	7.50	638	761				
MGR-04	φ 4.0	4.3	7	0.5	9.80	1230	1170				
MGR-06	φ 6.0	5.4	9	0.8	14.00	2570	2632				
MGR-09	φ 9.0	9.0	14	1.0	20.50	7190	7274				
MGR-12	φ 12.0	11.0	18	1.2	26.50	14700	13187				

Model	Retainer dimensions (mm)							Rail length	Model	Retainer dimensions (mm)							Rail length
	φ D	P1	P2	T (thickness)	W (width)	L3 (length)	R3 (roller qty)			φ D	P1	P2	T (thickness)	W (width)	L3 (length)	R3 (roller qty)	
MGR-0105	φ 1.5	1.9	3	0.2	3.75	15.8	5	MGRV-01-20	MGR-0408	φ 4	4.3	7	0.5	9.8	57.6	8	MGRV-04-80
MGR-0107						21.8	7	MGRV-01-30	MGR-0411						78.6	11	MGRV-04-120
MGR-0109						27.8	9	MGRV-01-40	MGR-0414						99.6	14	MGRV-04-160
MGR-0111						33.8	11	MGRV-01-50	MGR-0418						127.6	18	MGRV-04-200
MGR-0113						39.8	13	MGRV-01-60	MGR-0421						148.6	21	MGRV-04-240
MGR-0115						45.8	15	MGRV-01-70	MGR-0424						169.6	24	MGRV-04-280
MGR-0117						51.8	17	MGRV-01-80	MGR-0428						197.6	28	MGRV-04-320
MGR-0205	φ 2	2.8	4	0.3	5.5	21.6	5	MGRV-02-30	MGR-0431	φ 6	5.4	9	0.8	14	218.6	31	MGRV-04-360
MGR-0208						33.6	8	MGRV-02-45	MGR-0434						239.6	34	MGRV-04-400
MGR-0210						41.6	10	MGRV-02-60	MGR-0438						267.6	38	MGRV-04-440
MGR-0212						49.6	12	MGRV-02-75	MGR-0441						288.6	41	MGRV-04-480
MGR-0214						57.6	14	MGRV-02-90	MGR-0607						64.8	7	MGRV-06-100
MGR-0216						65.6	16	MGRV-02-105	MGR-0611						100.8	11	MGRV-06-150
MGR-0218						73.6	18	MGRV-02-120	MGR-0614						127.8	14	MGRV-06-200
MGR-0221	85.6	21	MGRV-02-135	MGR-0617	154.8	17	MGRV-06-250										
MGR-0223	93.6	23	MGRV-02-150	MGR-0620	181.8	20	MGRV-06-300										
MGR-0225	101.6	25	MGRV-02-165	MGR-0624	217.8	24	MGRV-06-350										
MGR-0227	109.6	27	MGRV-02-180	MGR-0627	244.8	27	MGRV-06-400										
MGR-0307	φ 3	3.2	5	0.4	7.5	36.4	7	MGRV-03-50	MGR-0630	φ 9	9	14	1	20.5	271.8	30	MGRV-06-450
MGR-0310						51.4	10	MGRV-03-75	MGR-0633						298.8	33	MGRV-06-500
MGR-0313						66.4	13	MGRV-03-100	MGR-0636						325.8	36	MGRV-06-550
MGR-0315						76.4	15	MGRV-03-125	MGR-0640						361.8	40	MGRV-06-600
MGR-0318						91.4	18	MGRV-03-150	MGR-0909						130	9	MGRV-09-200
MGR-0321						106.4	21	MGRV-03-175	MGR-0913						186	13	MGRV-09-300
MGR-0324						121.4	24	MGRV-03-200	MGR-0918						256	18	MGRV-09-400
MGR-0327	136.4	27	MGRV-03-225	MGR-0922	312	22	MGRV-09-500										
MGR-0330	151.4	30	MGRV-03-250	MGR-0926	368	26	MGRV-09-600										
MGR-0333	166.4	33	MGRV-03-275	MGR-1270	130	7	MGRV-12-200										
MGR-0336	181.4	36	MGRV-03-300	MGR-1211	202	11	MGRV-12-300										
								MGR-1214	φ 12	11	18	1.2	26.5	256	14	MGRV-12-400	
								MGR-1217						310	17	MGRV-12-500	
								MGR-1220						364	20	MGRV-12-600	

Order example

MGR-0206

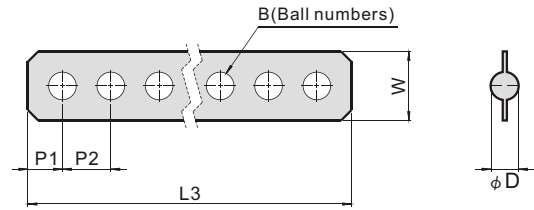


MGR-S-0206



MGR type	03 Dia	12 Roller(ball)qty	S Roller(ball)material
MGR:Roller MGB:Ball	01= φ 1.5	Per request	S:SUS440C
	02= φ 2		
	03= φ 3		
	04= φ 4		
	06= φ 6		
	09= φ 9		
	12= φ 12		

※ Customized specification, purchasement per appoint roller quantity with the standard ball diameter.



Guide code,EX:MGR-0310 MGB=ball (MGB=roller), 03=diameter, 10= ball numbers

Model	Retainer dimenions (mm)					Basic dynamic load rating	Basic static load rating	Material standard	
	ϕD	P1	P2	T (thickness)	W (width)	C N	Co N	Retainer	Ball
MGR-01	$\phi 1.5$	1.75	3	0.2	3.5	7.6	21.0	Phosphoy bronze (C5191)	SUJ2
MGR-02	$\phi 2.0$	2.30	4	0.3	5.0	12.0	37.0		
MGR-03	$\phi 3.0$	2.86	5	0.4	7.0	26.5	84.0		
MGR-04	$\phi 4.0$	3.90	7	0.5	9.0	43.0	148.0		
MGR-06	$\phi 6.0$	4.80	9	0.6	13.5	92.0	330.0		
MGR-09	$\phi 9.0$	8.50	14	1.0	19.0	207.0	750.0		
MGR-12	$\phi 12.0$	12.50	20	1.0	25.0	300.0	1320.0		

Model	Retainer dimenions (mm)							Rail length	Model	Retainer dimenions (mm)							Rail length
	ϕD	P1	P2	T (thickness)	W (width)	L3 (length)	B (ball qty)			ϕD	P1	P2	T (thickness)	W (width)	L3 (length)	B (ball qty)	
MGB-0105	$\phi 1.5$	1.75	3	0.2	3.5	15.5	5	MGBV-01-20	MGB-0408	$\phi 4$	3.9	7	0.5	9	56.8	8	MGBV-04-80
MGB-0107						21.5	7	MGBV-01-30	MGB-0411						77.8	11	MGBV-04-120
MGB-0109						27.5	9	MGBV-01-40	MGB-0414						98.8	14	MGBV-04-160
MGB-0111						33.5	11	MGBV-01-50	MGB-0418						126.8	18	MGBV-04-200
MGB-0113						39.5	13	MGBV-01-60	MGB-0421						147.8	21	MGBV-04-240
MGB-0115						45.5	15	MGBV-01-70	MGB-0424						168.8	24	MGBV-04-280
MGB-0117						51.5	17	MGBV-01-80	MGB-0428						196.8	28	MGBV-04-320
MGB-0205	$\phi 2$	2.3	4	0.3	5	20.6	5	MGBV-02-30	MGB-0431	$\phi 6$	4.8	9	0.6	13.5	217.8	31	MGBV-04-360
MGB-0208						32.6	8	MGBV-02-45	MGB-0434						238.8	34	MGBV-04-400
MGB-0210						40.6	10	MGBV-02-60	MGB-0438						266.8	38	MGBV-04-440
MGB-0212						48.6	12	MGBV-02-75	MGB-0441						287.8	41	MGBV-04-480
MGB-0214						56.6	14	MGBV-02-90	MGB-0607						63.6	7	MGBV-06-100
MGB-0216						64.6	16	MGBV-02-105	MGB-0611						99.6	11	MGBV-06-150
MGB-0218						72.6	18	MGBV-02-120	MGB-0614						126.6	14	MGBV-06-200
MGB-0221	84.6	21	MGBV-02-135	MGB-0617	153.6	17	MGBV-06-250										
MGB-0223	92.6	23	MGBV-02-150	MGB-0620	180.6	20	MGBV-06-300										
MGB-0225	100.6	25	MGBV-02-165	MGB-0624	216.6	24	MGBV-06-350										
MGB-0227	108.6	27	MGBV-02-180	MGB-0627	243.6	27	MGBV-06-400										
MGB-0307	$\phi 3$	2.86	5	0.4	7	35.7	7	MGBV-03-50	MGB-0630	$\phi 9$	8.5	14	1	19	270.6	30	MGBV-06-450
MGB-0310						50.7	10	MGBV-03-75	MGB-0633						297.6	33	MGBV-06-500
MGB-0313						65.7	13	MGBV-03-100	MGB-0636						324.6	36	MGBV-06-550
MGB-0315						75.7	15	MGBV-03-125	MGB-0640						360.6	40	MGBV-06-600
MGB-0318						90.7	18	MGBV-03-150	MGB-0909						129	9	MGBV-09-200
MGB-0321						105.7	21	MGBV-03-175	MGB-0913						185	13	MGBV-09-300
MGB-0324						120.7	24	MGBV-03-200	MGB-0918						255	18	MGBV-09-400
MGB-0327	135.7	27	MGBV-03-225	MGB-0922	311	22	MGBV-09-500										
MGB-0330	150.7	30	MGBV-03-250	MGB-0926	367	26	MGBV-09-600										
MGB-0333	165.7	33	MGBV-03-275	MGB-1207	145	7	MGBV12-200										
MGB-0336	180.7	36	MGBV-03-300	MGB-1210	205	10	MGBV12-300										
								MGB-1213	$\phi 12$	12.5	20	1.2	25	265	13	MGBV12-400	
								MGB-1215						305	15	MGBV12-500	
								MGB-1218						365	18	MGBV12-600	

Order example

MGB-0310

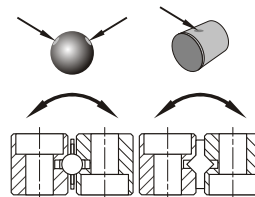
Ball Dia. Ball qty

※ Customized specification, purchasement per appoint roller quantity with the standard ball diameter.

Character comparison of roller & ball

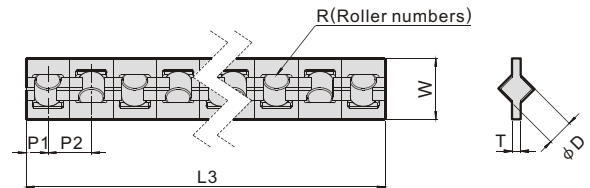
Suggestion

- Ball type : Usually in light load, high speed, retainer is made of bronze alloy.
- Roller type : Usually in mid-high load, high speed, retainer is made per enviornment request.
- Running inertial, temperature rise, and environment shall be all taken into account while using.



Item	Roller	Ball
Rigidity	⊙⊙⊙⊙	⊙⊙
Load	⊙⊙⊙⊙	⊙⊙
Accuracy	⊙⊙⊙⊙	⊙⊙⊙
Life	⊙⊙⊙⊙	⊙⊙⊙
Friction	⊙⊙	⊙⊙⊙⊙
Speed		⊙⊙⊙⊙

⊙: Normal ⊙⊙: Good
 ⊙⊙⊙: Better ⊙⊙⊙⊙: Best

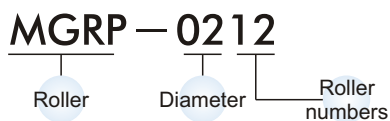


Guide code, EX: MGRP-0206 MGR=roller (MGB=ball), 02=diameter, 06= roller numbers

Model	Retainer dimensions (mm)					Basic dynamic load rating	Basic static load rating	Material standard	
	ϕD	P1	P2	T (thickness)	W (width)	C N	Co N	Retainer	Roller
MGRP-01	$\phi 1.5$	1.9	3	0.5	3.8	125	144	POM	SUJ2
MGRP-02	$\phi 2.0$	2.8	4	0.8	5	293	292		
MGRP-03	$\phi 3.0$	3.2	5	0.9	7	638	761		
MGRP-04	$\phi 4.0$	4.3	7	1.4	9.8	1230	1170		
MGRP-06	$\phi 6.0$	5.4	9	1.9	14	2570	2632		

Model	Retainer dimensions (mm)							Rail length	Model	Retainer dimensions (mm)							Rail length
	ϕD	P1	P2	T (thickness)	W (width)	L3 (length)	R3 (roller qty)			ϕD	P1	P2	T (thickness)	W (width)	L3 (length)	R3 (roller qty)	
MGRP-0105	$\phi 1.5$	1.9	3	0.5	3.8	15.8	5	MGRVP-01-20	MGRP-0408	$\phi 4$	4.3	7	1.4	9.8	57.6	8	MGRVP-04-80
MGRP-0107						21.8	7	MGRVP-01-30	MGRP-0411						78.6	11	MGRVP-04-120
MGRP-0109						27.8	9	MGRVP-01-40	MGRP-0414						99.6	14	MGRVP-04-160
MGRP-0111						33.8	11	MGRVP-01-50	MGRP-0418						127.6	18	MGRVP-04-200
MGRP-0113						39.8	13	MGRVP-01-60	MGRP-0421						148.6	21	MGRVP-04-240
MGRP-0115						45.8	15	MGRVP-01-70	MGRP-0424						169.6	24	MGRVP-04-280
MGRP-0117						51.8	17	MGRVP-01-80	MGRP-0428						197.6	28	MGRVP-04-320
MGRP-0205	$\phi 2$	2.8	4	0.8	5	21.6	5	MGRVP-02-30	MGRP-0431	$\phi 6$	5.4	9	1.9	14	218.6	31	MGRVP-04-360
MGRP-0208						33.6	8	MGRVP-02-45	MGRP-0434						239.6	34	MGRVP-04-400
MGRP-0210						41.6	10	MGRVP-02-60	MGRP-0438						267.6	38	MGRVP-04-440
MGRP-0212						49.6	12	MGRVP-02-75	MGRP-0441						288.6	41	MGRVP-04-480
MGRP-0214						57.6	14	MGRVP-02-90	MGRP-0607						64.8	7	MGRVP-06-100
MGRP-0216						65.6	16	MGRVP-02-105	MGRP-0611						100.8	11	MGRVP-06-150
MGRP-0218						73.6	18	MGRVP-02-120	MGRP-0614						127.8	14	MGRVP-06-200
MGRP-0221	85.6	21	MGRVP-02-135	MGRP-0617	154.8	17	MGRVP-06-250										
MGRP-0223	93.6	23	MGRVP-02-150	MGRP-0620	181.8	20	MGRVP-06-300										
MGRP-0225	101.6	25	MGRVP-02-165	MGRP-0624	217.8	24	MGRVP-06-350										
MGRP-0227	109.6	27	MGRVP-02-180	MGRP-0627	244.8	27	MGRVP-06-400										
MGRP-0307	$\phi 3$	3.2	5	0.9	7	36.4	7	MGRVP-03-50	MGRP-0630	$\phi 6$	5.4	9	1.9	14	271.8	30	MGRVP-06-450
MGRP-0310						51.4	10	MGRVP-03-75	MGRP-0633						298.8	33	MGRVP-06-500
MGRP-0313						66.4	13	MGRVP-03-100	MGRP-0636						325.8	36	MGRVP-06-550
MGRP-0315						76.4	15	MGRVP-03-125	MGRP-0640						361.8	40	MGRVP-06-600
MGRP-0318						91.4	18	MGRVP-03-150									
MGRP-0321						106.4	21	MGRVP-03-175									
MGRP-0324						121.4	24	MGRVP-03-200									
MGRP-0327						136.4	27	MGRVP-03-225									
MGRP-0330						151.4	30	MGRVP-03-250									
MGRP-0333						166.4	33	MGRVP-03-275									
MGRP-0336						181.4	36	MGRVP-03-300									

Order example



※ Customized specification, purchasement per appoint roller quantity with the standard ball diameter.