



Order example

MGRA – **60** – **55** – **N**

Model
MGRA : Screw lock




Table width


MGRA	(mm)
30	30
40	40
60	60
80	80
100	100
145	145

Table length
25~610 mm
(next table)

Material
– : Standard



B : Black coating



N : Antirust



S : Corrosion resisting




Table length

Table width	Table length (mm)
30	25, 35, 45, 55, 65, 75, 85
40	35, 50, 65, 80, 95, 110, 125
60	55, 80, 105, 130, 155, 180, 205
80	85, 125, 165, 205, 245, 285, 325
100	110, 160, 210, 260, 310, 360, 410
145	210, 310, 410, 510, 610

Material

Indicate Model	Table	Rail	Retainer	Roller
MGRA	Aluminum alloy+ Black anodized	SUJ2	SUS304	SUJ2
MGRA-N	S50C+Ni	SUJ2+Ni	SUS304	SUJ2
MGRA-B	S50C+Phosphate	SUJ2	SUS304	SUJ2
MGRA-S	SUS440C+Ni	SUS304	SUS304	SUS440C

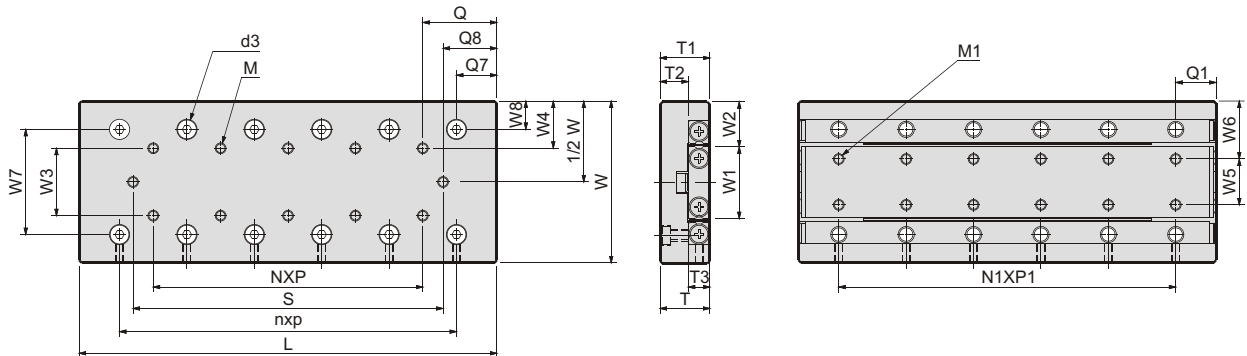
- **MGRA-N / MGRA-S** no finished to V-groove surface of the rail.
- **MGRA-S** table and rail are in one unit in this series.

- Table in **N** series, is antirust, apply to clean room environment.
- Table in **S** series, is antirust apply to corrosion-resisting, apply to clean room environment.
- Table in **B** series, is antirust, apply to clean room environment.
- All parts are cryogenic finished to increase 30% durability (refer to O-69) .

MGRA / MGRA-B / MGRA-N Dimensions



SLIDE TABLE

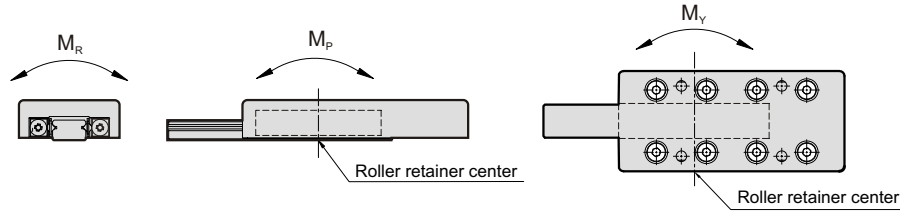


(mm)

Model	Max. stroke	Roller dia.	Main dimensions		Table mounting dimensions													
			W	T	W ₃	W ₄	W ₇	W ₈	Q	Q ₇	Q ₈	N×P	M	n×p	S	d ₃	T ₁	T ₂
MGRA-30-25	12	φ 1.5	30 ^{±0.1}	11 ^{±0.1}	10	10	18.4	5.8	12.5	7.5	2.5	—	M2	1×10	20	4.1	11	7
MGRA-30-35	18										4.5	1×10		2×10	26			
MGRA-30-45	25										6	2×10		3×10	33			
MGRA-30-55	32										7.5	3×10		4×10	40			
MGRA-30-65	40										8.5	4×10		5×10	48			
MGRA-30-75	45										11	5×10		6×10	53			
MGRA-30-85	50										13.5	6×10		7×10	58			
MGRA-40-35	18	φ 2.0	40 ^{±0.1}	14 ^{±0.1}	15	12.5	25.5	7.25	17.5	10	3	—	M3	1×15	29	7.5	15.5	7
MGRA-40-50	30	12.5									4.5	1×15		41				
MGRA-40-65	40	20									7	2×15		51				
MGRA-40-80	50	15									9.5	3×15		61				
MGRA-40-95	60	22.5									12	4×15		71				
MGRA-40-100	70	17.5									14.5	5×15		81				
MGRA-40-125	80	25									17	6×15		91				
MGRA-60-55	30	φ 3.0	60 ^{±0.1}	18.5 ^{±0.1}	25	17.5	39	10.5	27.5	15	5.5	—	M4	1×25	44	7.5	18.5	10.5
MGRA-60-80	45										10.5	1×25		2×25	59			
MGRA-60-105	60										15.5	2×25		3×25	74			
MGRA-60-130	75										20.5	3×25		4×25	89			
MGRA-60-155	90										25.5	4×25		5×25	104			
MGRA-60-180	105										30.5	5×25		6×25	119			
MGRA-60-205	130										30.5	6×25		7×25	144			
MGRA-80-85	50	φ 4.0	80 ^{±0.1}	24 ^{±0.1}	40	20	53	13.5	42.5	22.5	10.5	—	M5	1×40	64	9.5	24	13
MGRA-80-125	75										18	1×40		2×40	89			
MGRA-80-165	105										23	2×40		3×40	119			
MGRA-80-205	135										28	3×40		4×40	149			
MGRA-80-245	155										38	4×40		5×40	169			
MGRA-80-285	185										43	5×40		6×40	199			
MGRA-80-325	215										48	6×40		7×40	229			
MGRA-100-110	60	φ 6.0	100 ^{±0.1}	31 ^{±0.1}	50	25	64	18	55	30	16.5	—	M6	1×50	77	11	31	16
MGRA-100-160	95										23.5	1×50		2×50	113			
MGRA-100-210	130										31	2×50		3×50	148			
MGRA-100-260	165										38.5	3×50		4×50	183			
MGRA-100-310	200										46	4×50		5×50	218			
MGRA-100-360	235										53.5	5×50		6×50	253			
MGRA-100-410	265										63.5	6×50		7×50	283			
MGRA-145-210	130	φ 9.0	145 ^{±0.1}	42.5 ^{±0.1}	80	30	98	23.5	105	55	27	—	M8	1×100	156	14	43	21
MGRA-145-310	180										52	1×100		2×100	206			
MGRA-145-410	350										17	2×100		3×100	376			
MGRA-145-510	450											3×100		4×100	476			
MGRA-145-610	550											4×100		5×100	576			



SLIDE TABLE

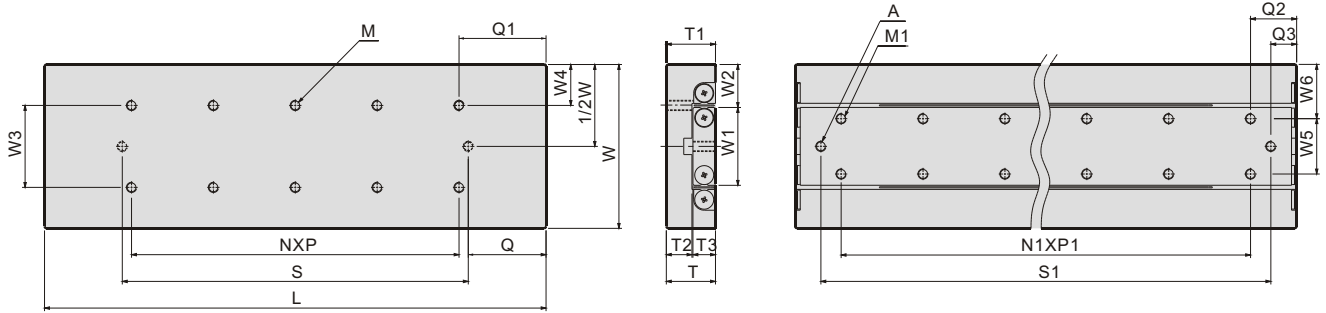


• Each of load and torque changes oppositely in stroke variation.

Base mounting dimensions (mm)								Basic dynamic load rating C(N)	Basic static load rating Co(N)	Allowable load Fu(N)	Static rated moment			Weight (kg)		Table moving accuracy (μm)	
T ₃	W ₁	W ₂	W ₅	W ₆	N ₁ × P ₁	Q ₁	M ₁				M _R (N.m)	M _P (N.m)	M _Y (N.m)	Standard	Antirust	Center parallelism	Side parallelism
4	12.8	8.6	—	15	1 × 10	7.5	M2	379	576	192	2.6	1.2	1.4	0.03	0.05	2	4
					2 × 10			523	865	288	3.9	2.6	3.0	0.04	0.08		
					3 × 10			657	1,153	384	5.2	4.6	5.2	0.05	0.10		
					4 × 10			783	1,441	480	6.5	7.2	7.9	0.06	0.12		
					5 × 10			903	1,729	576	7.8	10.4	11.2	0.07	0.15		
					6 × 10			1,131	2,306	769	10.4	18.4	17.3	0.09	0.17		
					7 × 10			1,240	2,594	865	11.7	23.3	22.0	0.10	0.19		
6	17	11.5	—	20	1 × 15	10	M3	895	1,170	390	7.0	3.1	3.9	0.07	0.13	2	4
8	13.1	13.5			1 × 25	17.5		2,901	4,567	1,522	42.6	22.8	26.6	0.13	0.21		
					1 × 25	17.5		2,901	4,567	1,522	42.6	22.8	19.0	0.14	0.25		
					2 × 25	10		4,338	7,611	2,537	71.0	63.4	57.1	0.20	0.33		
					2 × 25	17.5		3,640	6,089	2,030	56.8	40.6	45.7	0.21	0.36		
					3 × 25	17.5		5,005	9,133	3,044	85.2	91.3	98.9	0.27	0.45		
					3 × 25	25		5,005	9,133	3,044	85.2	91.3	83.7	0.28	0.48		
8	26.6	16.7	17	21.5	1 × 25	15	M4	2,901	4,567	1,522	42.6	22.8	26.6	0.23	0.43	2	5
					2 × 25			4,338	7,611	2,537	71.0	63.4	57.1	0.34	0.62		
					3 × 25			5,646	10,655	3,552	99.5	124.3	115.4	0.45	0.82		
					4 × 25			6,268	12,178	4,059	113.7	162.4	172.5	0.57	1.02		
					5 × 25			7,462	15,222	5,074	142.1	253.7	266.4	0.66	1.21		
					6 × 25			8,603	18,266	6,089	170.5	365.3	350.1	0.77	1.41		
					7 × 25			9,157	19,789	6,596	184.7	428.8	445.2	0.87	1.60		
11	38	21	27	26.5	1 × 40	22.5	M5	6,617	9,357	3,119	124.8	87.3	76.4	0.64	1.17	3	6
					2 × 40			9,097	14,035	4,678	187.1	196.5	180.1	0.95	1.72		
					3 × 40			10,264	16,375	5,458	218.3	267.5	286.6	1.25	2.27		
					4 × 40			12,496	21,053	7,018	280.7	442.1	466.7	1.56	2.83		
					5 × 40			14,612	25,732	8,577	343.1	660.4	690.5	1.87	3.39		
					6 × 40			16,646	30,410	10,137	405.5	922.4	957.9	2.18	3.94		
					7 × 40			18,612	35,089	11,696	467.8	1228.1	1187.2	2.49	4.50		
15	42	29	26	37	1 × 50	30	M6	13,923	21,053	7,018	315.8	2526.6	221.1	1.31	2.39	3	6
					2 × 50			16,592	26,316	8,772	394.7	394.7	434.2	1.93	3.50		
					3 × 50			21,592	36,842	12,281	552.6	773.7	828.9	2.56	4.61		
					4 × 50			26,285	47,369	15,790	710.5	1279.0	1207.9	3.16	5.70		
					5 × 50			30,744	57,895	19,298	868.4	1910.5	1823.7	3.78	6.81		
					6 × 50			35,024	68,421	22,807	1026.3	2668.4	2565.8	4.41	7.93		
					7 × 50			39,160	78,948	26,316	1184.2	3552.6	3434.2	5.03	9.04		
21	68.4	38.3	46	49.5	1 × 100	55	M8	46,991	72,741	24,247	1745.8	1697.3	1527.6	5.35	9.30	3	7
					2 × 100			61,165	101,838	33,946	2444.1	3326.7	3564.3	7.96	13.79		
					3 × 100			67,898	116,386	38,795	2793.3	4345.1	4073.5	10.47	18.18		
					4 × 100			80,829	145,482	48,494	3491.3	6789.2	6449.7	13.06	22.66		
					5 × 100			93,191	158,400	52,800	2640.0	8870.4	8500.8	15.65	27.14		

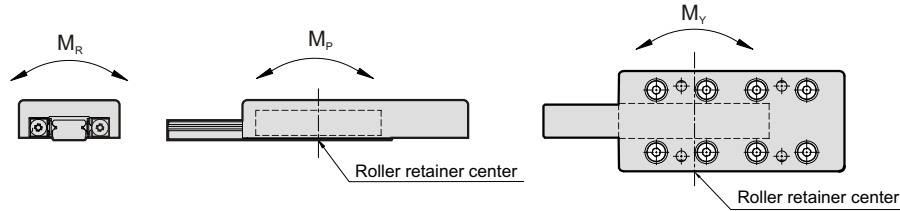
SLIDE TABLE

mindman



(mm)

Model	Max. stroke	Roller dia.	Main dimensions			Mounting dimensions									
			W	T	L	W_3	W_4	Q	S	$N \times P$	M	Q_1	T_1	T_2	T_3
MGRA-30-25-S	12	φ 1.5	$30^{±0.1}$	$8^{±0.1}$	25	10	10	12.5	2.5	—	M2	20	11	7	4
MGRA-30-35-S	18				35				4.5	1×10		26			
MGRA-30-45-S	25				45				6	2×10		33			
MGRA-30-55-S	32				55				7.5	3×10		40			
MGRA-30-65-S	40				65				8.5	4×10		48			
MGRA-30-75-S	45				75				11	5×10		53			
MGRA-30-85-S	50				85				13.5	6×10		58			
MGRA-40-35-S	18	φ 2.0	$40^{±0.1}$	$14^{±0.1}$	35	15	12.5	17.5	3	—	M3	29	14	8	6
MGRA-40-50-S	30				50				4.5	1×15		41			
MGRA-40-65-S	40	φ 3.0	$40^{±0.1}$	$15^{±0.1}$	65	15	12.5	17.5	7	2×15	M3	51	15	7	8
MGRA-40-80-S	50				80				9.5	3×15		61			
MGRA-40-95-S	60				95				12	4×15		71			
MGRA-40-110-S	70				110				14.5	5×15		81			
MGRA-40-125-S	80				125				1.7	6×15		91			
MGRA-60-55-S	30	φ 3.0	$60^{±0.1}$	$18.5^{±0.1}$	55	25	17.5	27.5	5.5	—	M4	44	18.5	10.5	8
MGRA-60-80-S	45				80				10.8	1×25		59			
MGRA-60-105-S	60				105				15.5	2×25		74			
MGRA-60-130-S	75				130				20.8	3×35		89			
MGRA-60-155-S	90				155				25.5	4×25		104			
MGRA-60-180-S	105				180				30.5	5×25		119			
MGRA-60-205-S	130				205				30.5	6×25		144			
MGRA-80-85-S	50	φ 4.0	$80^{±0.1}$	$24^{±0.1}$	85	40	20	42.5	10.5	—	M4	64	24	13	11
MGRA-80-125-S	75				125				18	1×40		89			
MGRA-80-165-S	105				165				23	2×40		119			
MGRA-80-205-S	135				205				28	3×40		149			
MGRA-80-245-S	135				245				38	4×40		169			
MGRA-80-285-S	185				285				43	5×40		199			
MGRA-80-325-S	215				325				48	6×40		229			
MGRA-100-110-S	60	φ 6.0	$100^{±0.1}$	$31^{±0.1}$	110	50	25	55	16.5	—	M6	77	31	16	15
MGRA-100-160-S	95				160				23.5	1×50		113			
MGRA-100-210-S	130				210				31	2×50		148			
MGRA-100-260-S	165				260				38.5	3×50		183			
MGRA-100-310-S	200				310				46	4×50		218			
MGRA-100-360-S	235				360				53.5	5×50		253			
MGRA-100-410-S	265				410				63.5	6×50		283			
MGRA-100-510-S	340	510	81	7×50	348										
MGRA-145-210-S	130	φ 9.0	$145^{±0.1}$	$42.5^{±0.1}$	210	85	30	105	27	—	M8	156	43	21	21
MGRA-145-310-S	180				310				52	1×100		206			
MGRA-145-410-S	350				410				12	2×100		376			
MGRA-145-510-S	450				510				17	3×100		476			
MGRA-145-610-S	550				610				17	4×100		576			



• Each of load and torque changes oppositely in stroke variation.

Mounting dimensions (mm)											Basic dynamic load rating C(N)	Basic static load rating Co(N)	Allowable load Fu (N)	Static rated moment			Weight (kg)	Table moving accuracy (μm)	
W ₁	W ₂	W ₅	W ₆	N ₁ ×P ₁	Q ₂	Q ₃	S ₁	M	A	M _R (N.m)				M _P (N.m)	M _Y (N.m)	Center parallelism		Side parallelism	
12.8	8.6	—	15	1×10	7.5	—	—	M2	—	379	576	192	2.6	1.2	1.4	0.09	2	4	
				2×10						523	865	288	3.9	2.6	3.0	0.12			
				3×10						657	1,153	384	5.2	4.6	5.2	0.16			
				4×10						783	1,441	480	6.5	7.2	7.9	0.19			
				5×10						903	1,729	576	7.8	10.4	11.2	0.23			
				6×10						1,131	2,306	769	10.4	18.4	17.3	0.26			
				7×10						1,240	2,594	865	11.7	23.3	22.0	0.30			
17	11.5	13.1	13.5	—	20	1×15	10	—	M3	—	895	1,170	390	7.0	3.1	3.9	0.20	2	4
2×15	2,901					4,567					1,522	42.6	22.8	26.6	0.29				
2×15	2,901					4,567					1,522	42.6	22.8	19.0	0.36				
4×15	4,338					7,611					2,591	71.0	63.4	57.1	0.46				
4×15	3,640					6,089					2,030	56.8	40.6	45.7	0.52				
5×15	5,005					9,133					3,044	85.2	91.3	98.9	0.63				
5×15	5,005					9,133					3,044	85.2	91.3	83.7	0.69				
26.6	16.7	17	21.5	15	10	—	M4	—	35	2,901	4,563	1,522	42.6	22.8	26.6	0.65	2	5	
									60	4,338	7,611	2,537	71.0	63.4	57.1	0.95			
									85	5,646	10,655	3,552	99.5	124.3	115.4	1.25			
									110	6,268	12,178	4,059	113.7	162.4	172.5	1.55			
									135	7,462	15,222	5,074	142.1	253.7	266.4	1.85			
									160	8,603	18,266	6,089	170.5	365.3	350.1	2.15			
									185	9,157	19,789	6,596	184.7	428.8	445.2	2.45			
									35	6,617	9,357	3,119	124.8	87.3	76.4	1.14			
38	21	27	26.5	22.5	15	M5	5 ^{+0.02} ₀	55	9,097	14,035	4,678	187.1	196.5	180.1	1.68	3	6		
								95	10,264	16,375	5,458	218.3	267.5	286.6	2.22				
								135	12,492	21,053	7,018	280.7	442.1	466.7	2.76				
								175	14,612	25,732	8,577	343.1	660.4	690.5	3.30				
								215	16,646	30,410	10,137	405.5	922.4	957.9	3.84				
								255	18,612	35,089	11,696	467.8	1228.1	1187.2	4.38				
								295	13,923	21,053	7,018	315.8	252.6	221.1	2.33				
								70	16,592	26,316	8,772	394.7	394.7	434.2	3.42				
42	29	26	37	30	20	M6	5 ^{+0.02} ₀	120	21,596	36,842	12,281	552.6	773.7	828.9	4.51	3	6		
								170	26,285	47,369	15,790	710.5	1279.0	1207.9	5.57				
								220	30,744	57,895	19,298	868.4	1910.5	1823.7	6.66				
								270	35,024	68,421	22,807	1026.3	2668.4	2565.8	7.75				
								320	39,160	78,948	26,316	1184.2	3552.6	3434.2	8.84				
								370	47,576	100,001	33,334	1500.0	5194.7	5044.7	11.02				
								470	46,991	72,741	24,247	1745.8	1697.3	1527.6	9.08				
								150	61,165	101,838	33,946	2444.1	3326.7	3564.3	13.46				
68.4	38.3	46	49.5	55	30	M8	5 ^{+0.02} ₀	250	67,898	116,386	38,795	2793.3	4345.1	4073.5	17.74	3	7		
								350	80,829	145,482	48,494	3491.6	6789.2	6449.7	22.11				
								450	46,991	72,741	24,247	1745.8	1697.3	1527.6	9.08				
								550	61,165	101,838	33,946	2444.1	3326.7	3564.3	13.46				
								550	87,073	160,031	53,344	3840.7	8214.9	8588.3	26.47				