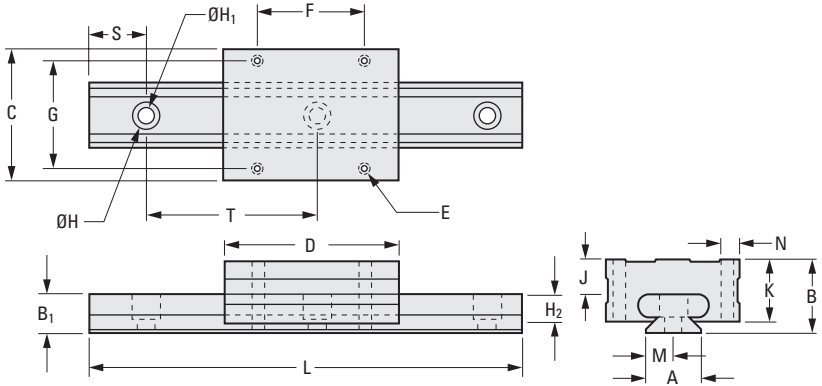
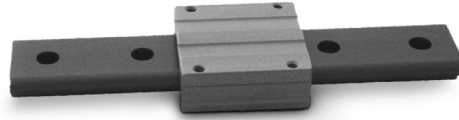
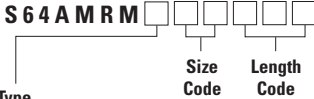


QUIET RUNNING
 SELF-LUBRICATING
 TOLERATES SHOCK LOADS
 CORROSION-RESISTANT
 DAMPENS VIBRATION



METRIC COMPONENT CATALOG NUMBER



A – Precision 0.025 – 0.051 running clearance. FrelonGOLD® material on HRC70 ceramic-coated aluminum
B – Compensated Precision 0.064 – 0.089 running clearance. FrelonGOLD® material on HRC70 ceramic-coated aluminum

Size Code	Length Code (Length in mm)						
	040	070	085	100	130	–	–
07	40	70	85	100	130	–	–
09	055	075	095	115	155	195	275
	55	75	95	115	155	195	275
12	120	170	220	270	320	370	470
	120	170	220	270	320	370	470
15	150	230	310	430	470	670	–
	150	230	310	430	470	670	–
20	220	280	340	460	640	880	–
	220	280	340	460	640	880	–

Size Code (Ref.)	A	B	B ₁	C	D	E	F	G	H	H ₁	H ₂	K	J	M	N	S	T
07	7	8	6.1	17	24	M2	8	12	4.2	2.4	2.3	6.2	1.7	3.5	2.3	5	15
09	9	10	7.1	20	30	M3	13	15	4.5	2.6	3	8	2.4	4.5	2.5	7.5	20
12	12	13	8	27	34	M3	15	20	6	3.5	3.5	10.7	4.6	6	3.5	10	25
15	15	16	9.2	32	42	M3	20	25	6	3.5	4.5	14.1	6.3	7.5	3.5	15	40
20	20	25	13.4	46	62	M4	38	38	9.5	6	8.5	21.2	11.2	10	4	20	60

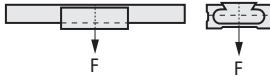
NOTES: 1. Longer lengths are available on special order (maximum length 3600 mm)
 2. If more than one carriage is needed per track, contact our engineering department.



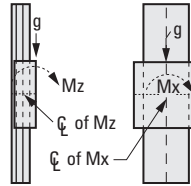
Size	Force N (lb.)	Max. Static Load N (lb.)
7	445 (100.04)	734 (165.00)
9	667 (149.94)	1557 (350.01)
12	1334 (299.88)	1957 (439.93)
15	2224 (499.96)	3114 (700.03)
20	3559 (800.06)	6005 (1349.92)



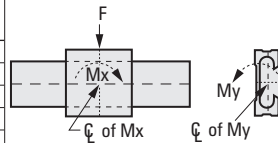
Size	Force N (lb.)
7	89 (20.01)
9	125 (28.10)
12	222 (49.91)
15	356 (80.03)
20	578 (129.93)



Size	Mx N • m (lb. in.)	My N • m (lb. in.)	Mz N • m (lb. in.)
7	2.3 (20.36)	1.8 (15.93)	1.8 (15.93)
9	5 (44.25)	3.2 (28.32)	3.2 (28.32)
12	9 (79.66)	5.6 (49.56)	5.6 (49.56)
15	15.1 (133.65)	9 (79.66)	9 (79.66)
20	24.9 (220.38)	14.7 (130.11)	14.7 (130.11)



Size	Force N (lb.)	Mx N • m (lb. in.)	My N • m (lb. in.)	Mz N • m (lb. in.)
7	133 (29.90)	2.3 (20.36)	1.8 (15.93)	1.8 (15.93)
9	222 (49.91)	5 (44.25)	3.2 (28.32)	3.2 (28.32)
12	400 (89.92)	9 (79.66)	5.6 (49.56)	5.6 (49.56)
15	667 (149.94)	15.1 (133.65)	9 (79.66)	9 (79.66)
20	1112 (249.98)	24.9 (220.38)	14.7 (130.11)	14.7 (130.11)

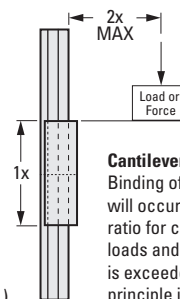


Plane bearings are rated by their limiting PV, which is a combination of load over a given surface area and the velocity.

Bearing Material	Max. "PV"	Max. "P"	Max. "V" (No Lubrication)
FrelonGOLD®	20000 (psi x ft./min)	3000 psi	300 ft./min.
	430 (kgf/cm ² x m/min)	210.9 kgf/cm ²	91.44 m/min.
FrelonJ™	10000 (psi x ft./min)	1500 psi	140 ft./min.
	215 (kgf/cm ² x m/min)	105.45 kgf/cm ²	42.66 m/min.

PV = The performance measurement of plane bearings
 PV = P x V where P = pressure (load) in psi (kgf/cm²), V = velocity (speed) in ft./min. (m/min.)

NOTE: All three parameters must be met by an application for the bearing to perform properly.



Cantilevered Loads
 Binding of the carriage will occur if the 2:1 ratio for cantilevered loads and drive forces is exceeded. This principle is not load or force dependent. It is a product of the coefficient of frictions associated with plane bearings.

- I
- R
- T
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- A