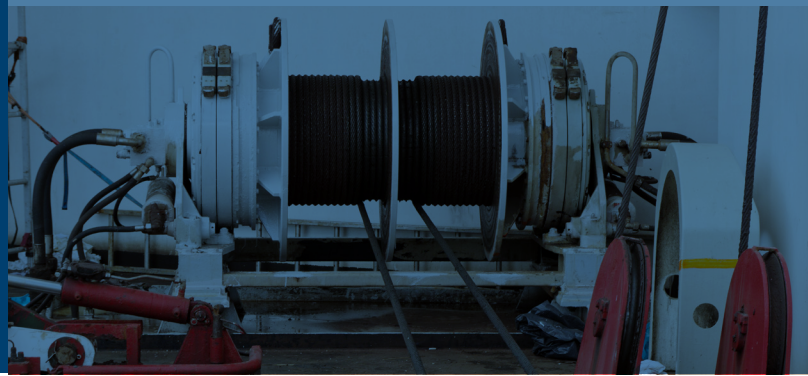


GMN FE 8000 Series Sprag Clutch

No RPM Limits with a
High Torque Capacity



GMN FE 8000 Series Sprag Clutch: Specs At-A-Glance

No RPM Limits & High Torque Capacity

The FE 8000 series is our GMN **unicorn product**. No other product can boast a no RPM limit **and** large torque capacity.

The sprag profile is a “non lift-off design,” which means that at high rotation speeds centrifugal force will produce a pressing torque on the sprags causing the sprags to engage no matter how fast the spooling speed.

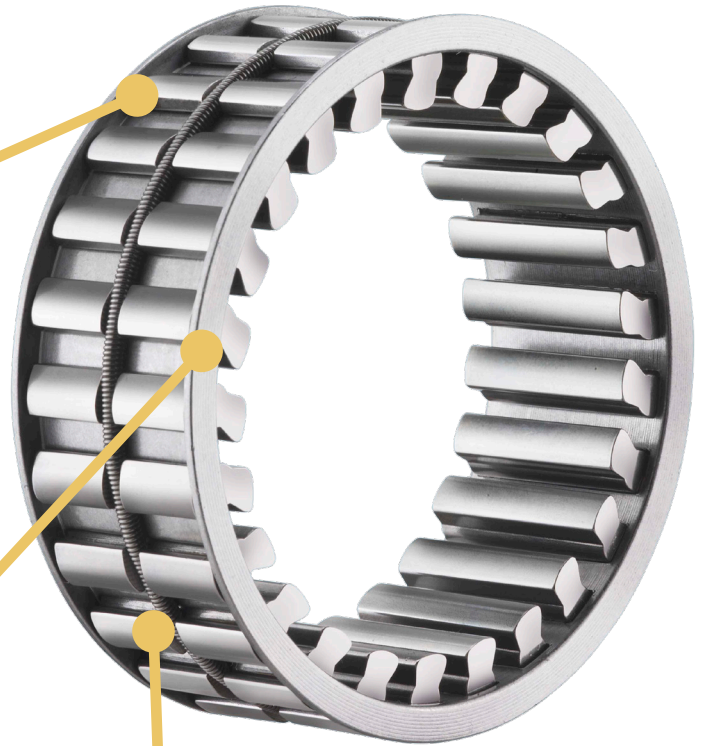
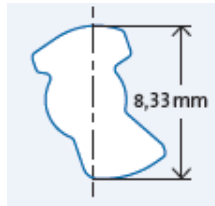
Sprag Information

Sprag height: 8.33 mm

Clamping curve geometry:
Compound circles

Clamping angle:
Increasing

Sprag characteristic:
Press towards inner ring at
high speed



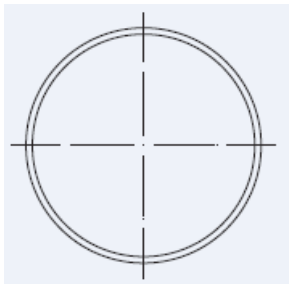
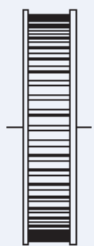
Steel Sprag Cage

The sprags are evenly spaced around the circumference of the sprag cage. The cage doesn't come into contact with the inner or outer races. It remains load free under any application.

Width:

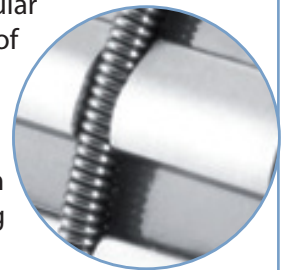
16 mm | 19 mm | 25 mm

Max operating temperature: 170°C



Tension Spring

Our tension spring is a circular spring that envelopes all of the sprags and provides them with a collective spring force. The result is a longer lifespan when idling. The max. indexing frequency is 5 Hz.



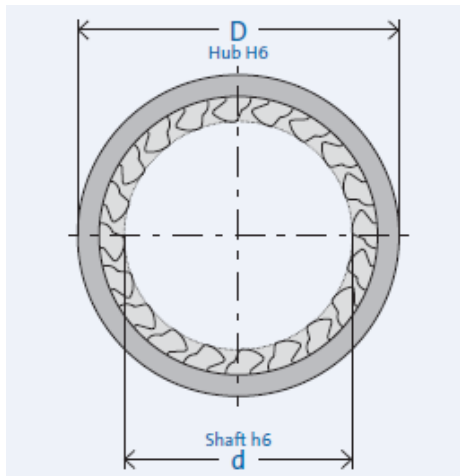
GMN FE 8000 Product Details

Lubrication: Oil or Grease (no EP additives) (product shipped in corrosion protection oil) • **Installation**

tolerances: Shaft h6; hub H6 • **Inner ring:** steel, HRC 60+4 (HV 700+100); Ehd ≥ 1.3 mm; Rz ≤ 2.5 μm • **Outer ring:** steel, HRC 60+4 (HV 700+100); Ehd ≥ 1.3 mm; Rz ≤ 2.5 μm • **Constraints:** Axial constraints needed on both sides; external bearing support is needed

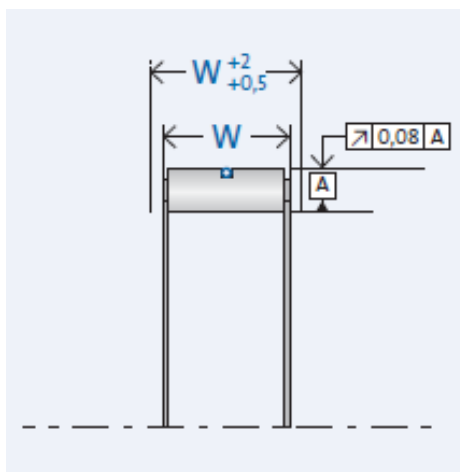
We can customize ID or OD sizes to meet your needs.

Most custom orders need a minimum order quantity of ten.



Drawing Legend

d = Inner diameter
D = Outer diameter
W = Width
T = Torque



Product No.	Bore (d) (mm)	D (mm)	W (mm)	T _{nom} (Nm)
FE 8038 Z 16	38.09	54.75	16	609
FE 8038 Z 19	38.09	54.75	19	801
FE 8040 Z 16	40.00	56.66	16	668
FE 8040 Z 19	40.00	56.66	19	880
FE 8044 Z 16	44.45	61.11	16	799
FE 8044 Z 19	44.45	61.11	19	1,052
FE 8049 Z 16	49.72	66.38	16	923
FE 8049 Z 19	49.72	66.38	19	1,201
FE 8050 Z 16	50.00	66.66	16	942
FE 8050 Z 25	50.00	66.66	19	1,237
FE 8054 Z 16	54.76	71.42	16	1,080
FE 8054 Z 19	54.76	71.42	19	1,424
FE 8054 Z 25	54.76	71.42	25	2,015
FE 8060 Z 16	60.00	76.66	16	1,243
FE 8060 Z 19	60.00	76.66	19	1,560
FE 8060 Z 25	60.00	76.66	25	2,111
FE 8072 Z 16	72.21	88.87	16	1,740
FE 8072 Z 19	72.21	88.87	19	2,145
FE 8072 Z 25	72.21	88.87	25	2,918
FE 8079 Z 25	79.69	96.36	25	3,295
FE 8080 Z 16	80.00	96.66	16	1,848
FE 8080 Z 19	80.00	96.66	19	2,278
FE 8080 Z 25	80.00	96.66	25	3,101
FE 8083 Z 25	83.34	100.00	25	3,640
FE 8100 Z 16	100.00	116.66	16	2,632
FE 8100 Z 19	100.00	116.66	19	3,303
FE 8100 Z 25	100.00	116.66	25	4,535
FE 8103 Z 16	103.23	119.89	16	2,887
FE 8103 Z 19	103.23	119.89	19	3,582
FE 8103 Z 25	103.23	119.89	25	4,920
FES 8123 Z 25	123.34	140.00	25	6,600
FE 8123 Z 25	123.88	140.54	25	6,604
FE 8126 Z 25	126.22	142.88	25	6,744
FE 8140 Z 25	140.00	156.66	25	7,388
FE 8150 Z 25	150.00	166.66	25	8,272
FE 8160 Z 25	160.00	176.66	25	9,096
FE 8180 Z 25	180.00	196.66	25	10,463
FE 8220 Z 25	220.00	236.66	25	14,060



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