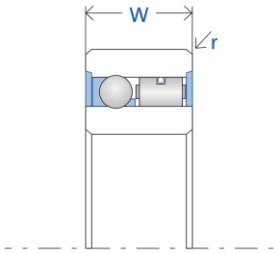
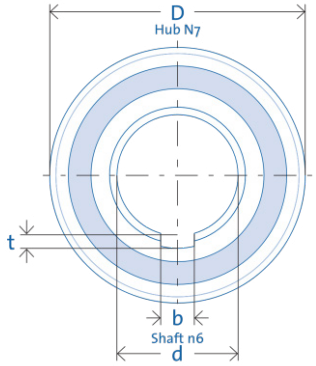
GMN BEARING USA

Data Sheet
Freewheel Clutches





Part Number	**FKN 6203**
Type	Ball Bearing Freewheel Clutch Unit
Spring	Z (Tension)
Sealed	Optional (None or RS)
Lubrication	Oil[1]
Inner Ring Keyway	Yes
Outer Ring Keyway	No
Integrated Ball Bearing	Yes
Integrated Roller Bearing	No

Shaft & Housing Tolerances

Shaft Tolerance	n6
Housing Tolerance	N7
Shaft & Housing Chamfer	1mm x 15°

Geometrical Data

Bore Diameter	d [mm]	17
Outer Diameter	D [mm]	40
Width	W	12
Edge Radius	r [mm]	1.0
Inner Ring Keyway Width	b [mm]	5
Inner Ring Keyway Depth	t [mm]	12.0
Weight	[kg]	0.07

Ratings

Nominal Torque	[Nm]	53
Nominal Torque	[ft-lb]	39.1
Max. Static Radial Load	[N]	3,441
Max. Dynamic Radial Load	[N]	6,245
Max. Indexing Frequency	[Hz]	10
Max. Speed Unsealed[3]	[rpm]	10,800
Max. Speed Sealed	[rpm]	3,700
Max. Temp. Unsealed[4]	[°C]	140
Max. Temp. Sealed	[°C]	110

Notes:

1. Standard lubrication is oil for unsealed clutches and grease for sealed clutches. Lubrication requirements are specific for proper sprag clutch function. Please consult catalog and/or GMN USA engineers.
2. The stated speed and torque ratings are contingent on utilizing specified tolerances, correct installation techniques, and operating temperature and load conditions below the specified maximums. If specific applications differ, please consult GMN USA engineers.
3. The stated RPM value is for the maximum freewheel rotational speed for the sprags, not the shaft or housing. High freewheel rotational speeds can produce centrifugal forces that can cause the sprags to lift off from frictional contact, therefore creating an opportunity for improper engagement and potential slip. The sprag RPM must be below the listed value before engagement occurs. The actual sprag freewheel speed is difficult to determine because the sprags are driven by frictional forces from the race(s) and lubrication. Theoretically there is no maximum rotational speed in the driving direction; the inner race, sprags, and outer race rotate as one unit unaffected by centrifugal forces. Please consult GMN USA engineers with high RPM applications that approach or exceed the stated RPM rating.
4. The stated temperature rating is for an injection molded cage. The maximum temperature rating is 170°C for a steel cage.

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