

Insert Element FE 8000 Z

with tension spring



Components

Freewheel

- Spring
- Cage
- Sprags

Insert element FE 8000 Z

Tension spring (Z)
Stamped steel / drawn steel
Hardened bearing steel
Start gap height $h_0 = 8.33$ mm

- | | |
|------------------|---|
| - Thrust rings | - |
| - Ball bearing | - |
| - Roller bearing | - |
| - Lubrication | - |
| - Seal | - |

Characteristics

Width

16 / 19 / 25 mm

Operating temperature

max. 170°C

Indexing frequency

max. 5 Hz

Lubrication

Oil or grease lubrication (Pg. 60–61)

Delivered with corrosion protection.

Pre-greased on request.

Installation

Installation tolerances

Shaft h6; hub H6

Inner ring/shaft

steel, HRC 60⁺⁴ (HV 700⁺¹⁰⁰); Ehd ≥ 1.3 mm; Rz ≤ 2.5 μm

Outer ring/housing

steel, HRC 60⁺⁴ (HV 700⁺¹⁰⁰); Ehd ≥ 1.3 mm; Rz ≤ 2.5 μm

Constraints

The freewheel clutch insert element requires axial constraints on both sides.

Connecting parts

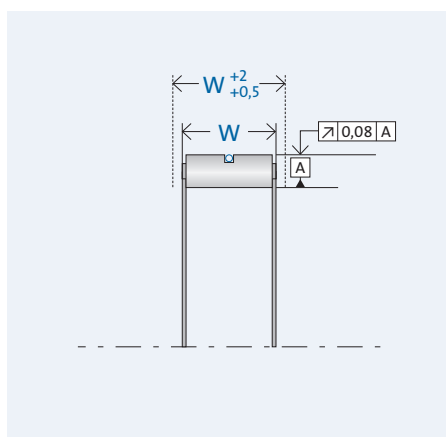
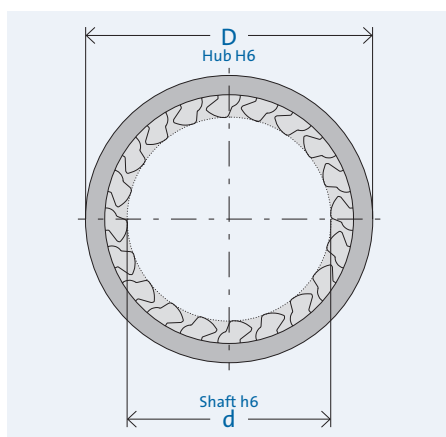
Hardening and grinding of the mating parts is necessary. Chamfered shafts and hubs ease installation (Pg. 58).

Bearing

Freewheel clutch insert elements are not self-centering. External bearing support to define the gap between mating parts (Shaft and housing) is necessary.



Data



Drawing legend

d = inner diameter
D = outer diameter
W = width
T = torque

Designation	d [mm]	D [mm]	W [mm]	T _{nom} [Nm]	Weight [kg]	Item no.
FE 8038 Z 16	38.09	54.75	16	609	0.082	300527
FE 8038 Z 19	38.09	54.75	19	801	0.096	300528
FE 8040 Z 16	40.00	56.66	16	668	0.084	300530
FE 8040 Z 19	40.00	56.66	19	880	0.102	300531
FE 8044 Z 16	44.45	61.11	16	799	0.091	300535
FE 8044 Z 19	44.45	61.11	19	1.052	0.112	300536
FE 8049 Z 16	49.72	66.38	16	923	0.100	300538
FE 8049 Z 19	49.72	66.38	19	1.201	0.118	300539
FE 8050 Z 16	50.00	66.66	16	942	0.100	306637
FE 8050 Z 25	50.00	66.66	19	1,237	0.123	306638
FE 8054 Z 16	54.76	71.42	16	1,080	0.107	300541
FE 8054 Z 19	54.76	71.42	19	1,424	0.128	300542
FE 8054 Z 25	54.76	71.42	25	2,015	0.172	300543
FE 8060 Z 16	60.00	76.66	16	1,243	0.113	306639
FE 8060 Z 19	60.00	76.66	19	1,560	0.141	306640
FE 8060 Z 25	60.00	76.66	25	2,111	0.188	306641
FE 8072 Z 16	72.21	88.87	16	1,740	0.135	300548
FE 8072 Z 19	72.21	88.87	19	2,145	0.163	300549
FE 8072 Z 25	72.21	88.87	25	2,918	0.220	300550
FE 8079 Z 25	79.69	96.36	25	3,295	0.227	300551
FE 8080 Z 16	80.00	96.66	16	1,848	0.141	306642
FE 8080 Z 19	80.00	96.66	19	2,278	0.176	306643
FE 8080 Z 25	80.00	96.66	25	3,101	0.235	306644
FE 8083 Z 25	83.34	100.00	25	3,640	0.245	300553
FE 8100 Z 16	100.00	116.66	16	2,632	0.188	306645
FE 8100 Z 19	100.00	116.66	19	3,303	0.228	306646
FE 8100 Z 25	100.00	116.66	25	4,535	0.306	306647
FE 8103 Z 16	103.23	119.89	16	2,887	0.184	300556
FE 8103 Z 19	103.23	119.89	19	3,582	0.290	300557
FE 8103 Z 25	103.23	119.89	25	4,920	0.300	300558
FES 8123 Z 25	123.34	140.00	25	6,600	0.370	300561
FE 8123 Z 25	123.88	140.54	25	6,604	0.370	300559
FE 8126 Z 25	126.22	142.88	25	6,744	0.375	300562
FE 8140 Z 25	140.00	156.66	25	7,388	0.410	300565
FE 8150 Z 25	150.00	166.66	25	8,272	0.440	300567
FE 8160 Z 25	160.00	176.66	25	9,096	0.470	306344
FE 8180 Z 25	180.00	196.66	25	10,463	0.520	306274
FE 8220 Z 25	220.00	236.66	25	14,060	0.640	306148

The specified nominal torque is based on sufficient stiffness of mating parts. (Pg. 22)