Insert Element FE 400 M

with meander spring

Components

Freewheel	Insert element FE 400 M
· Spring	Meander spring (M)
· Cage	Stamped steel
· Sprags	Hardened bearing steel
	Start gap height h_0 = 4 mm
- Thrust rings	-
- Ball bearing	-
- Roller bearing	-
- Lubrication	-
- Seal	-

Characteristics

Installed width
12 mm

Operating temperature
max. 170°C

Indexing frequency
max. 60 Hz

Lubrication

Oil or grease lubrication *(Pg. 60–61)*
Delivered with corrosion protection.
Pre-greased on request.

Installation

Installation tolerances
Shaft h5; hub H6

Inner ring/shaft
steel, HRC 60^{+4} (HV 700^{+100}); Ehd ≥ 1.3 mm; Rz ≤ 2.5 µm

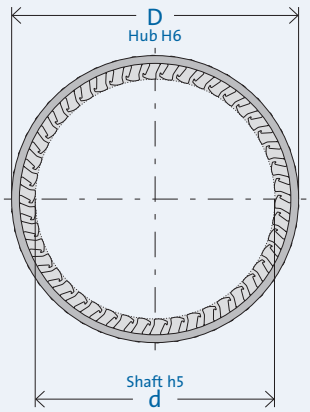
Outer ring/housing
steel, HRC 60^{+4} (HV 700^{+100}); Ehd ≥ 1.3 mm; Rz ≤ 2.5 µm

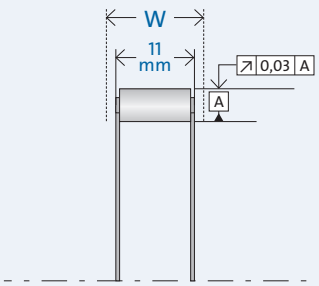
Constraints
The freewheel clutch insert element requires axial constraints on both sides.

Mating 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
n = rotation speed

Designation	d [mm]	D [mm]	W [mm]	T_{nom} [Nm]	n_{max} [rpm]	Weight [kg]	Item no.
FE 422 M	14	22	12	59	10,100	0.011	300404
FE 423 M	15	23	12	66	9,200	0.012	300409
FE 425 M	17	25	12	79	8,100	0.013	300414
FE 427 M	19	27	12	92	7,400	0.014	300421
FE 428 M	20	28	12	99	7,500	0.014	300428
FE 430 M	22	30	12	114	6,300	0.016	300434
FE 432 M	24	32	12	128	5,900	0.016	300438
FE 433 M	25	33	12	140	6,000	0.017	300444
FE 435 M	27	35	12	153	5,100	0.018	300447
FE 437 M	29	37	12	169	4,800	0.019	300451
FE 438 M	30	38	12	178	4,900	0.020	300459
FE 442 M	34	42	12	213	4,200	0.022	300462
FE 443 M	35	43	12	224	4,300	0.023	300468
FE 448 M	40	48	12	271	4,300	0.025	300473
FE 453 M	45	53	12	321	3,400	0.028	300481
FE 458 M	50	58	12	372	3,400	0.031	300488
FE 459 M	51	59	12	381	3,000	0.032	300492
FE 463 M	55	63	12	426	2,900	0.035	300495
FE 468 M	60	68	12	481	2,700	0.036	300500
FE 470 M	62	70	12	505	2,600	0.037	300503
FE 473 M	65	73	12	538	2,500	0.040	300506
FE 478 M	70	78	12	596	2,600	0.043	300510
FE 488 M	80	88	12	715	2,100	0.048	300515

The specified nominal torque is based on sufficient stiffness of mating parts. *(Pg. 22)*
Rotation speed n = insert element's inherent speed *(Pg. 57)*