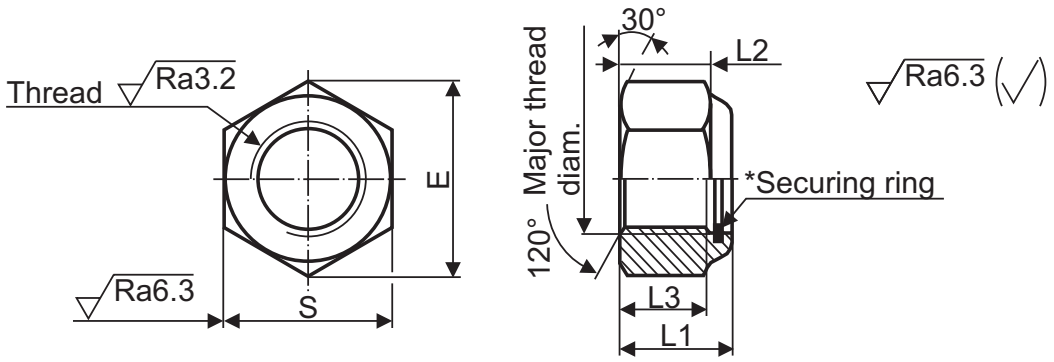
EN89D-E

MAN Energy Solutions

Self-locking hexagon nuts

Approved:	Amended:	Replaced by:	Replaces:	Page No.:
19800630	20200824		Partly EN89D-E	1 (2)

For designations 4.07, 5.08, 6.1, 8.125, 10.15, 12.175, 14.2, 16.2, 20.25, 24.3, 30.35 and 36.4 see EN89D-E in SC-B.



This standard is in accordance with DIN EN ISO 10511 (2013-05)

Dimensions in ( ) should be avoided.
Designations in (( )) are company required sizes.
Except for specific dimensions these do otherwise follow the stated external norms.

References:	EN48H, EN21F and EN4V (Basic-standards)
Materials:	S52R for EN89D and SCr18N8 for EN89E
Suface treatment:	According to ISO 4042 (2018-08), coating designation A2K
Property class: Property class:	8 for EN89D, acc. to DIN EN ISO 898-2 (2012-08) A4-80 for EN89E, acc. to DIN EN ISO 3506-2 (2020-08)
Locking properties: *Securing ring, matr.:	Acc. to DIN EN ISO 2320 (2016-05) ~ Polyamide (max. temp. 100°C)
Tolerances:	Thread ~ EN48H, pages 10. and 21. (6H). Thread, M20x2-6H and M24x2-6H ~ DIN 13-21 (2005-08) S ~ EN4V Other dimensions EN21F-m Dimensions and geometrical tolerances DIN EN ISO 4759-1 (2001-04), prod grade A for nuts ≤ M16 and prod. grade B > M16
Designation:	A self-locking nut with M4 thread and height L1 = 5 mm made of S52R, is specified: EN89D4.075

Dimensions in mm

Desig-nation	Thread ISO-M	L1 max.	L1 min.	L2 min.	L3 min	S max.	E min.
4.075	M4	5	4.52	1.95	1.56	7	7.66
5.085	M5	5	4.52	2.45	1.96	8	8.79
6.15	M6	6	5.52	2.90	2.32	10	11.05
8.126	M8	6.76	6.18	3.70	2.96	13	14.38
10.155	M10	8.56	7.98	4.70	3.76	16	17.77
12.176	M12	10.23	9.53	5.70	4.56	18	20.03
(14.25)	M14	11.32	10.22	6.42	5.14	21	23.35
((16.15))	M16x1.5	16	15.3	10.5	8.8	24	26.75
16.25	M16	12.42	11.32	7.42	5.94	24	26.75
*((18.25))	M18	18.5	17.66	13	9.9	27	29.56
((20.15))	M20x1.5	20	18.7	14	11.0	30	32.95
((20.2))	M20x2	20	18.7	14	11.0	30	32.95
20.255	M20	14.90	13.10	9.10	7.28	30	32.95
((24.15))	M24x1.5	24	22.7	15	13.2	36	39.55
((24.2))	M24x2	24	22.7	15	13.2	36	39.55
24.35	M24	17.80	16.00	10.90	8.72	36	39.55
*((27.3))	M27	27	25.7	17	14.8	41	45.2
((30.2))	M30x2	30	28.7	19	16.5	46	50.85
30.355	M30	22.20	20.10	13.90	11.12	46	50.85
*((33.2))	M33x2	33	31.4	22	18.2	50	55.37
*((33.35))	M33	33	31.4	22	18.2	50	55.37
36.45	M36	25.5	23.40	16.90	13.52	55	60.79
*((39.4))	M39	39	37.4	27	21.5	60	66.44
*((42.45))	M42	42	40.4	29	23.1	65	72.09
*((45.3))	M45x3	45	43.4	32	24.8	70	76.95
*((45.45))	M45	45	43.4	32	24.8	70	76.95
*((48.5))	M48	48	46.4	36	26.5	75	82.2

* Reff. DIN 985 (1987-05) withdrawn 1998-02 and not replaced in DIN EN ISO 10511.

Designation: See example page 1.