



Westfield Fasteners Product Specification:

DIN 1587 - Dome Nuts

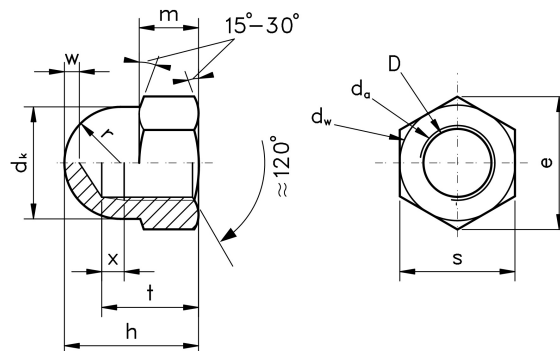
This product guide contains the specification for metric threaded Dome Nuts, a series of standard parts available from Westfield Fasteners. The basis of this specification is the DIN standard DIN 1587.

Product Description

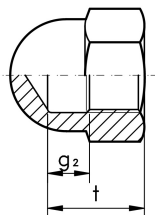
A popular nut used in applications where aesthetics are important, giving an attractive look. The domed top also ensures a smooth snag-free finish protecting both the fixing and any foreign body that may come into contact. Also known as an Acorn Nut, a version incorporating a nylon insert is also available, manufactured to DIN 986.

Scope of the DIN standard.

DIN 1587 specifies the dimensions and tolerances for coarse and fine pitch threads for hexagon domed cap nuts, with nominal diameters from M4 up to and including M24. Table 1 below defines these dimensions and tolerances. DIN 1587 covers steel, stainless steel and brass materials.



The useful thread length is given by t (thread height). x (thread run-out).



Alternative form with a thread undercut. The useful thread length is given by t (thread height). g_2 (length of thread undercut)

Figure 1: Dome Nut

Variations from DIN 1587

Please note that due to manufacturing limitations, all nylon variants of these items are only "similar to" and not "in absolute accordance with" this specification and the DIN 1587 standard upon which it is based.

Table 1: Dimensions & Tolerances according to DIN 1587 (mm)

Thread, D		M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	
p		0.7	0.8	1	1.25	1.5	1.75	2	2	2.5	2.5	2.5	3	
d _a	max	4.60	5.75	6.75	8.75	10.80	13.00	15.10	17.30	19.50	21.60	23.70	25.90	
	min	4.00	5.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00	24.00	
d _k	max	6.5	7.5	9.5	12.5	15.0	17.0	20.0	23.0	26.0	28.0	33.0	34.0	
d _w	min	5.9	6.9	8.9	11.6	14.6	16.6	19.6	22.5	24.9	27.7	31.4	33.3	
e	Product Grade A	min	7.66	8.79	11.05	14.38	17.77	20.03	23.35	26.75	30.14	33.53	37.72	39.92
	Product Grade B	max	7.50	8.63	10.89	14.20	17.59	19.85	22.78	26.17	29.56	32.95	37.29	39.55
x	max	1.4	1.6	2.0	2.5	3.0	3.5	4.0	4.0	5.0	5.0	5.0	6.0	
g ₂	max	2.75	3	3.7	4.9	5.6	6.4	7.3	7.3	9.3	9.3	9.3	10.7	
	nom=max	8	10	12	15	18	22	25	28	32	34	39	42	
h	Product Grade A	min	7.64	9.64	11.57	14.57	17.57	21.48	24.48	27.48	31.38	33.38	38.38	41.38
	Product Grade B	min	7.42	9.42	11.30	14.30	17.30	21.16	24.16	27.16	31.00	33.00	38.00	41.00
m	min	3.20	4.00	5.00	6.50	8.00	10.00	11.00	13.00	15.00	16.00	18.00	19.00	
	max	2.90	3.70	4.70	6.14	7.64	9.64	10.30	12.30	14.30	14.90	16.90	17.70	
r	(auxiliary dimensions)	3.25	3.75	4.75	6.24	7.50	8.50	10.00	11.50	13.00	14.00	16.50	17.00	
	nom=max	7	8	10	13	16	18	21	24	27	30	34	36	
s	Product Grade A	min	6.78	7.78	9.78	12.73	15.73	17.73	20.67	23.67	26.67	29.67	33.38	35.38
	Product Grade B	min	6.64	7.64	9.64	12.57	15.57	17.57	20.16	23.16	26.16	29.16	33.00	35.00
t	max	5.74	7.79	8.29	11.35	13.35	16.35	18.35	21.42	25.42	26.42	29.42	31.50	
	min	5.26	7.21	7.71	10.65	12.65	15.65	17.65	20.58	24.58	25.58	28.58	30.50	
w	min	2	2	2	2	2	3	4	4	5	5	5	6	

Table 1 Continued

Thread, Dxp		M8x1	M10x1.25, M10x1	M12x1.5, M12x1.25	M14x1,5	M16x1.5	M18x2, M18x1.5	M20x2, M20x1.5	M22x2, M22x1.5	M24x2	
d _a	max	8.75	10.80	13.00	15.10	17.30	19.50	21.60	23.70	25.90	
	min	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00	24.00	
d _k	min	12.5	15.0	17.0	20.0	23.0	26.0	28.0	33.0	34.0	
d _w	min	11.6	14.6	16.6	19.6	22.5	24.9	27.7	31.4	33.3	
e	Product Grade A	min	14.38	17.77	20.03	23.35	26.75	30.14	33.53	37.72	39.98
	Product Grade B	min	14.20	17.59	19.85	22.78	26.17	29.56	32.95	37.29	39.55
x	max	2.0	2.5	3.0	3.0	3.0	4.0	4.0	4.0	4.0	
g ₂	max	3.7	4.9	5.6	5.6	5.6	7.3	7.3	7.3	7.3	
h	nom=max	15	18	22	25	28	32	34	39	42	
	Product Grade A	min	14.57	17.57	21.48	24.48	27.48	31.38	33.38	38.38	41.38
	Product Grade B	min	14.30	17.30	21.16	24.16	27.16	31.00	33.00	38.00	41.00
m	max	6.50	8.00	10.00	11.00	13.00	15.00	16.00	18.00	19.00	
	min	6.14	7.64	9.64	10.30	12.30	14.30	14.90	16.90	17.70	
r	(auxiliary dimensions)	6.25	7.50	8.50	10.00	11.50	13.00	14.00	16.50	17.00	
s	nom=max	13	16	18	21	24	27	30	34	36	
	Product Grade A	min	12.73	15.73	17.73	20.67	23.67	26.67	29.67	33.38	35.38
	Product Grade B	min	12.57	15.57	17.57	20.16	23.16	26.16	29.16	33.00	35.00
t	max	11.35	13.35	16.35	18.35	21.42	25.42	26.42	29.42	31.50	
	min	10.5	12.65	15.65	17.65	20.58	24.58	25.58	28.58	30.50	
w	min	2	2	3	4	4	5	5	5	6	

For further details, please refer to the ISO/DIN standard document for this item.