

Hexagon Bolts
without Hexagon Nut - with Hexagon Nut
Type G

DIN

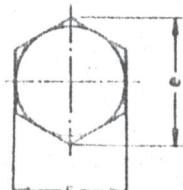
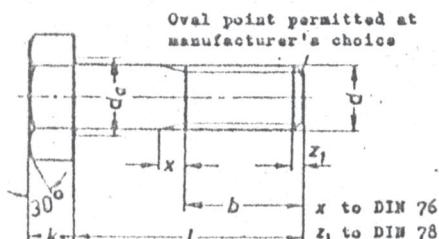
601

粗制六角螺栓

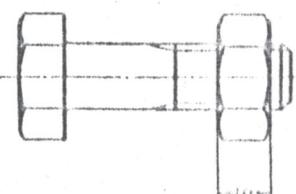
Sechskantschrauben ohne Sechskantmutter - mit Sechskantmutter, Ausführung G

For connection with ISO Recommendations, see Explanations

Dimensions in mm

without hexagon nut

with hexagon nut
according to DIN 558¹⁾

Designation of a hexagon bolt with thread
 $d = M 10$, length $l = 70$ mm, without nut:

Hexagon bolt M 10 × 70 DIN 601

Designation of a hexagon bolt with thread
 $d = M 10$, length $l = 70$ mm, with hexagon nut (nut):

Hexagon bolt M 10 × 70 Mu DIN 601

d	M 5	M 6	M 8	M 10	M 12	M 14	M 20	M 24	(M 27)	M 30	(M 33)	M 36	(M 39)	M 42	(M 45)	M 48	(M 52)		
2)	16	18	22	26	30	38	46	54	60	66	72	78	84	90	96	102	—		
b 3)	—	—	28	32	36	44	52	60	66	72	78	84	90	96	102	108	116		
4)	—	—	—	—	—	57	65	73	79	85	91	97	103	109	115	121	129		
d_a max.	6	7,2	10,2	12,2	15,2	19,2	24,4	28,4	32,4	35,4	38,4	42,4	45,4	48,6	52,6	56,6	63		
a min.	8,63	10,89	14,20	18,72	20,88	26,17	32,95	39,55	45,20	50,85	55,37	60,79	66,44	72,09	77,74	83,39	89,04		
k	3,5	4	5,5	7	8	10	13	15	17	19	21	23	25	26	28	30	33		
m	4	5	6,5	8	10	13	16	19	22	24	26	29	31	34	36	38	42		
x	8	10	13	17	19	24	30	36	41	46	50	55	60	65	70	75	83		
^{1) 4)}																			
Weight with nut (7,85 kg/dm ³) kg/1000 pieces																			
16	4,48	7,43	15,9	32,1															
20	5,98	8,12	17,1	34,1	48,9														
25	6,60	8,97	18,7	36,6	52,9														
30	7,37	10,1	20,7	39,1	56,1	107	186												
35	8,04	11,2	22,7	42,2	59,7	114	198												
40	8,81	12,3	24,7	45,3	64,1	121	207	347											
45	9,58	13,4	26,7	48,4	68,5	128	217	352											
50	10,3	14,5	28,7	51,5	72,9	138	227	377											
55	11,0	15,6	30,7	54,6	77,3	144	238	392											
60	11,7	17,7	32,7	57,7	81,7	152	251	407	570										
65	12,5	18,7	34,7	60,8	85,1	160	264	422	589										
70	13,3	19,7	36,7	63,9	90,5	168	277	440	608										
75	14,0	20,7	37,0	95,0	176	290	458	630											
80	21,1	40,7	70,1	100	182	303	474	653	833	1080									
90		44,7	76,3	109	198	329	511	698	908	1150									
100		43,7	82,5	118	214	355	547	743	963	1220	1520	1870							
110			68,7	127	230	381													
120				94,9	136	246	407	618	833	1070	1350	1680	2000	2450					
130				101	145	262	433												
140				107	154	278	459	689	923	1180	1480	1840	2250	2670	3140				
150					113	163	294	485	725	968	1230	1550	1920	2340	2760	3150	3600		
160					119	172	310	501	760	1010	1290	1620	2000	2430	2890	3450	4000		
170						125	181	326	527										
180						131	190	342	553	831	1100	1400	1750	2180	2620	3110	3650	4250	5130
190						137	199	358	579										
200						143	208	374	605	902	1190	1510	1850	2220	2680	3330	3950	4550	5400
Weight of nut kg/1000 pieces	1,11	2,32	4,82	10,9	15,9	30,8	60,3	103	154	216	271	369	472	610	750	924	1150		

Bracketed sizes should be avoided wherever possible.

Normally these bolts are manufactured in the sizes characterized by the specified weights. Sizes where the weights are quoted in bold type are generally kept as normal stock because of their frequency of use.

1) to 6) see page 2

Continued on page 2
Explanations on page 2

Technical conditions of delivery according to DIN 267

Strength category (material): 3.6 or 4.6 (at manufacturer's choice) according to DIN 267
Sheet 3

Type I g according to DIN 267 Sheet 2

If surface protection is required, the designation must be augmented according to
DIN 267 Sheet 9.

If, in an exceptional case, one of the types B, B or Sk permitted by DIN 962 is specified,
this shall be indicated at the time of ordering. For examples of designation, see DIN 962.

1) When the bolts are packaged in counted quantities the nuts are supplied loose.

2) For lengths up to 120 mm

3) For lengths of 130 to 200 mm

4) For lengths above 200 mm

5) Lengths above 200 mm should be graduated in steps of 20 mm.

6) For lengths above the stepped line $b = l - a$; a according to DIN 76

Explanations

This Standard agrees essentially with the following ISO Recommendations issued by the International Organization for Standardization (ISO):

ISO/R 272-1968

Hexagon bolts and nuts, widths across flats, heights of heads, thicknesses of nuts, metric series
Boulons et écrous hexagonaux, surplate, hauteurs de tête, hauteurs d'écrou, série métrique

ISO/R 755-1968

Hexagon bolts and nuts, metric series
Tolerances on widths across flats, widths across corners

Boulons à tête hexagonale et écrous hexagonaux, série métrique
Tolérance des surplate, surangles

ISO/R 855-1968

Bolts and screws, radii under the head for general purpose bolts and screws, metric series
Vis et boulons, rayon d'arrondi sous tête de vis et boulons pour application générale, série
métrique

ISO/R 888-1968

Nominal lengths for bolts, screws and studs
Thread lengths for general purpose bolts

Longueurs de tige nominales des vis, boulons et goujons
Longueurs filées des boulons d'application générale