



4014
2013

ISO 4014:2011
Hexagon head bolts — Product grades A and
(IDT)

27 2002 . 184- « — 1.0—2004 « », -
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2 229 « »

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4 28 2013 . 572-
4014:2011 « -
» (ISO 4014:2011 «Hexagon head bolts — Product grade A and
B»). -
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5 50796-95 (4014—88)

1) « 1.0—2012 (8).
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(gosf.ru)

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			4014:2011							*
	:									
a)			(4014.	4015,	4016,	8765);			
b)			(4017,	4018.	8676):				
c)			(4032.	4033,	4034.	4035,	4036.	7040,	
7041,	7042.	7719,		7720.	8673.	8674,	8675.	10511.	10512,	
10513);										
d)				(4162.	15071	15072);			
e)			(4161.	7043.	7044,	10663.	12125,		
12126	21670).									

	1.	-	*	\$
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/ - 380.		/.		
	2.	-	362,85	382,85
			/. « /	/. *

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	14	-	23.26	23.36
	,	-		
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3.5			11,715	2.525
	s,	-		
	3.5	-	26.67	5.82
	s,	-		
	14	-	33.38	20.67
	/5	,		
/ = 320	45		11.5	182.5

(5 2015 .)

Hexagon head bolts. Product grades A and

—2014—07—01

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104 1.6 64 , 1.6 24 24
 150 , ,
 104 150 ,
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 888. 898*1, 965-1. 3506-1. 4753 4759-1. 724.

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 225
 (ISO 225. Fasteners — Bolts, screws, studs and nuts — Symbols and description of dimensions)
 724 ISO (ISO 724, ISO general-
 purpose metric screw threads — Basic dimensions)
 898-1
 1.
 (ISO 898*1. Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws
 and studs with specified property classes — Coarse thread and fine pitch thread)
 CO 965*1 ISO 1.
 (ISO 965*2. ISO general-purpose metric screw threads — Tolerances — Part 1: Principles and basic data)
 3269 (ISO 3269. Fasteners — Acceptance
 inspection)
 3506*1
 1. (ISO 3506-1, Mechanical properties of corrosion-resistant stainless-
 steel fasteners — Part 1: Bolts, screws and studs)
 4017 (ISO 4017, Hexagon head
 screws — Product grades A and B)
 4042 (ISO 4042. Fasteners — Electroplated
 coatings)
 4753 (ISO 4753.
 Fasteners — Ends of parts with external ISO metric thread)
 4759-1 1.
 (ISO 4759-1. Tolerances for fasteners — Part 1: Bolts, screws, studs and nuts — Product grades A. and C)
 6157-1 1.
 (ISO 6157-1. Fasteners — Surface discontinuities — Part 1: Bolts, screws and studs for general
 requirements)

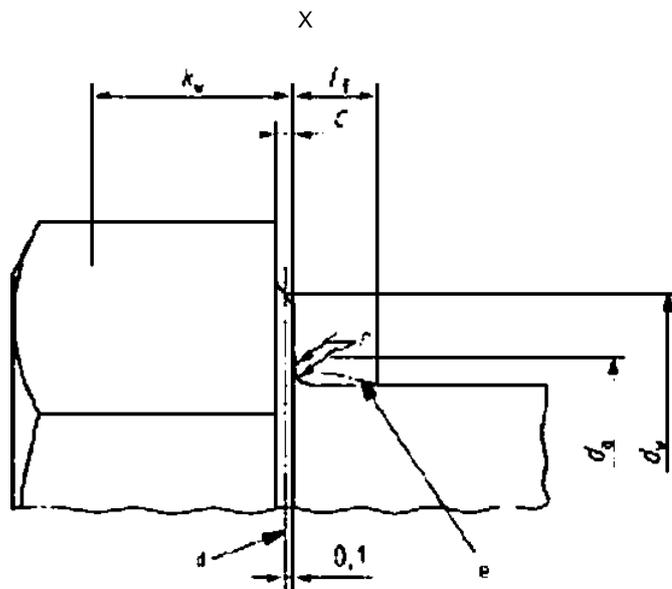
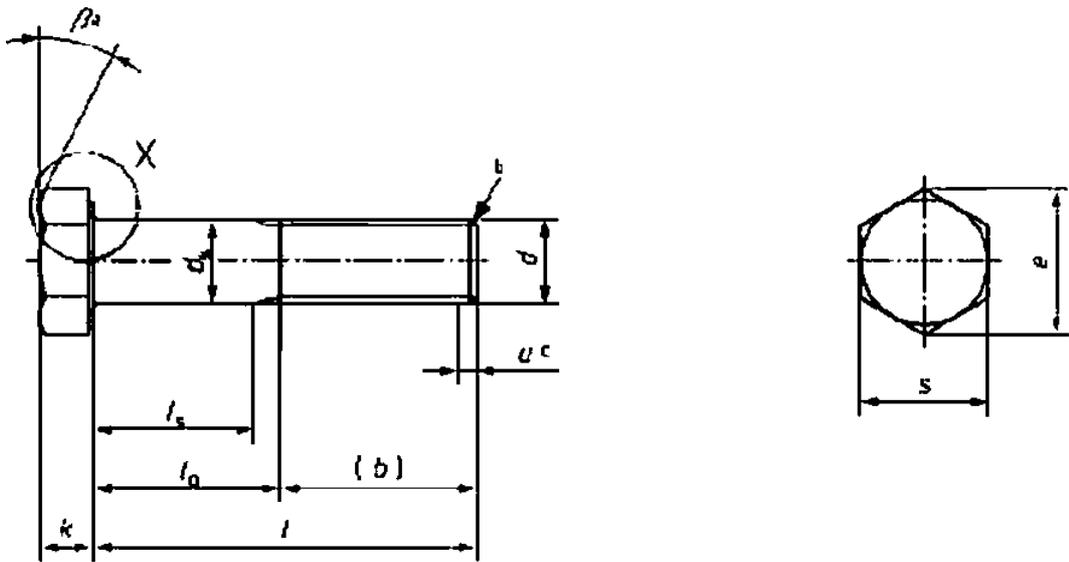
8839
 (ISO 8839, Mechanical properties of fasteners — Bolts, screws, studs and nuts made of non-ferrous metals)

8992
 Fasteners — General requirements for bolts, screws, studs and nuts) (ISO 8992)

10683
 Fasteners — Non-electrolytically applied zinc flake coatings) (ISO 10683)

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 225



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 d_M

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			1.6	M2	23		4	5	U6	8	
*			0.35	0.4	0.45		0.7	0.8	1	125	1.5
		0	9	10	11	12	14	16	18	22	26
		c	15	16	17	18	20	22	24	28	32
		<3	28	29	30	31	33	35	37	41	45
			0.2S	025	025	0.40			0.50	080	080
			0.10	0.10	0.10	0.15	0.15	0.15	0.15	0.15	0.15
<*«			2	28	3.1	38	4.7	5.7	68	92	11.2
d.		=	1.60	200	200	3.00	400	500	6.00	800	10.00
			1.46	1.66	2.36	2.66	3.62	4.82	5.62	7.78	9.78
			1,35	1.75	225	2.75	3.70	4.70	5.70	784	984
d _w			2.27	3.07	4.07	4.57	588	688	8.88	1183	14.63
		6	2.30	205	3.95	4.45	5.74	6.74	8.74	1137	14.47
(fi*			3.*1	432	5.45	6.01	786	8.79	11.05	1438	17.77
			3.26	4.18	5.31	5.68	7.50	8.63	1089	1420	17.59
h			08	08	1	1	12	1.2	1.4	2	2
			1.1	1.4	1.7	2	28	3.5	4	53	6.4
			1225	1.525	1.825	2.125	2.925	3.65	4.15	5.45	658
			0.975	1.275	1.575	1875	2.675	335	3.8S	5.15	622
		D	13	1.6	1.9	22	3.0	3.74	4.24	554	689
			0.9	12	1.5	18	2.6	326	3.76	5.06	6.11
k _w *			0.68	089	1.10	1.31	187	235	2.70	381	435
			0.63	084	105	1.26	182	2 28	2.63	354	428
r			0.1	0.1	0.1	0.1	02	0.2	0.25	03	0.4
s'		«	3.20	4.00	5.00	5.50	7.00	800	1000	1300	16.00
			3.02	382	482	5.32	6.78	7,78	9.78	12.73	15.73
			2.90	3.70	4.70	5.20	6.64	7.64	9.64	12.57	15.57

. 4					1.6	2	M2.S	3	4	MS															
1																									
»					-	*9	-	9	-	'	-		-	*9	-	'	-	*9	-	*	9	-	*9		
12	11.65	1235	-	-	12	3																			
16	15.65	1635	-	-	52	7	4	6	2.75	5															
20	19.58	20.42	18,95	21.05				10	6.75	9	53	8													
25	24.58	25.42	23.95	26.05					11.75	14	10,5	13	7.5	11	5	9									
30	29.58	30,42	28.95	31.05							15.5	18	12.5	16	10	14	7	12							
35	34.5	353	33.75	36.25									17.5	21	15	19	12	17							
40	39.5	403	38.75	41.25									22.5	26	20	24	17	22	11.75	18					
45	44.5	455	43.75	46.25											: 25	29	22	27	16.75	23	11.5	19			
50	49.5	50.5	48.75	51.25											:	34	27	32	21.75	28	163	24			
55	54.4	55.6	53.5	56.5													! 32	37	26.75	33	213	29			
60	59.4	60.6	58.5	61.5													37	42	31.75	38	263	34			
65	64,4	65.6	63.5	66.5															36.75	43	313	39			
70	69.4	70.6	68.5	71.5															•41.75	48	63	44			
80	79.4	80.6	78.5	81.5															; 51.75	58	463	54			
90	89.3	90.7	88.25	91.75																	: 56.5	64			
100	99.3	100,7	98.25	101.75																		• 663	74		
110	109.3	110.7	108.25	111.75																					
120	1193	120.7	11825	121.75																					

			12	16	20	24		36	42	48	MS6	64
			1.75	2	2.5	3	36	4	4,5	5	5.5	6
^	b		30	36	46	54	66	-	-	-	-	-
				<4	52	60	72	84	98	108	-	-
	d		49	57	65	73	85	97	109	121	137	153
			0.60	0.6	0.6	06	06	06	1.0	1.0	1.0	10
			0.15	0.2	0.2	0 2	03	03	0.3	0.3	0.3	03
<*			13.7	17.7	22.4	26.4	.4	39.4	45.8	52.6	83	71
	.=		12,00	16,00	20.00	24.00	30.00	36.00	42.00	48.00	56.00	64.00
			1173	15.73	19.67	2367	-	-	-	-	-	-
			11.57	15.57	19.48	23.48	2948	3S38	41.38	47.38	55.26	6326
			16.63	22.49	26.19	33.61	-	-	-	-	-	-
			16.47	22	27,7	33.25	42.75	51.11	59.95	.45	78.66	88.16
o'			20	26.75	33.53	3968	-	-	-	-	-	-
			19.65	26.17	32.95	39.55	5065	60.79	713	826	93.56	104.86
b			3	3	4	4	6	6	8	10	12	13
			76	10	126	15	18.7	22.5	26	30	35	40
			7.68	10.18	12.715	15.215	-	-	-	-	-	-
			7.32	962	12685	14.785	-	-	-	-	-	-
			7.79	10.29	12.85	1535	19.12	22.92	26.42	30.42	356	40.5
			721	9.71	12.15	14.65	1828	22.06	25.58	29.58	346	39.5
V			5.12	667	8.6	1035	-	-	-	-	-	-
			5.05	6.6	861	1036	12.8	1548	17.91	20.71	24.15	2765
			0.6	0.6	0.8	0.8	1	1	1.2	1.6	2	2
s'	.»		1600	24.00	30.00	36 60	46	55.0	656	750	850	95.0
			17.73	23.67	29.67	3538	-	-	-	-	-	-
			17.57	23.16	29.16	35.00	45	53.6	83.1	73.1	826	92.8

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			6																					
	-	-	-	-		'	>*	*9	'	'	'	'	'	'										
						-	-	-	-	-	-	-	-	-										
50	49.5	50.5	—	-	11.25	20																		
55	54.4	55.6	53.5	56.5	1625	25																		
60	59.4	60.6	58.5	61.5	2125	30																		
65	64.4	65.6	63.5	66.5	2625	35	17	27																
70	69.4	70.6	66.5	71.5	3125	40	22	32																
60	79.4	60.6	78.5	81.5	4125	50	32	42	21.5	34														
90	69.3	90.7	68.25	91.75	5125	60	42	52	31.5	44	21	36												
100	99.3	100.7	98.25	101.75	6125	70	52	62	41.5	54	31	46												
110	109.3	110.7	108.25	111.75	7125	80	62	72	51.5	64	41	56	26.5	44										
120	119.3	120.7	118.25	121.75	81.25	90	72	82	61.5	74	51	66	36.5	54										
130	129.2	130.6	128	132			76	66	65.5	78	55	70	40.5	56										
140	139.2	140.6	138	142		I ₈₆		96	75.5	66	65	80	50.5	66	36	56								
150	149.2	150.6	148	152				106	85.5	98	75	90	60.5	78	46	66								
160	—	—	158	162				106	95.5	108	65	100	70.5	88	56	76	415	64						
160	—	—	178	182					115.5	128	105	120	90.5	108	76	96	61.5	84	47	72				
200	—	—	197.7	202.3					135.5	146	125	140	110.5	126	96	116	61.5	104	67	92				
220	—	—	217.7	222.3							132	147	117.5	135	103	123	88.5	111	74	99	55.5	83		
240	-	-	237.7	242.3							152	167	137.5	155	123	143	108.5	131	94	119	75.5	103		
260	—	—	257.4	262.6									157.5	175	143	163	128.5	151	114	139	95.5	123	77	107
260	-	-	277.4	282.6									177.5	195	163	183	148.5	171	134	159	115.5	143	97	127
300	—	—	297.4	302.6									197.5	215	163	203	166.5	191	154	179	135.5	163	117	147
320	—	—	317.15	322.65											203	223	168.5	211	174	199	155.5	183	137	167
340	—	—	337.15	342.65											233	243	206.5	231	194	219	175.5	203	157	187

PejfcCa,tf					12	16	20	24		36	42	48	56	64										
A																								
/																								
MO*	**	*	**	Gone*	'g	*g	'	*g	:g	*g	*g	*	*g	*g										
360	-	-	357.15	362,65	60	-	-	-	-	-	-	-	-	-	243	263	228.5	251	214	239	195.5	223	177	207
380	-	-	377.15	362.85													248.5	271	234	259	215.5	243	197	227
400	-	-	387.15	402.85													268.5	291	254	279	235.5	263	217	247
420	-	-	41685	423.15													2888	311	274	299	255.5	283	237	267
440	-	-	436 85	443.15													3085	331	294	319	275.5	303	257	287
460	-	-	45685	463.15															314	339	2955	323	277	307
480	-	-	476 85	483.15															334	359	3155	343	297	327
500	-	-	49685	503.15																	3355	363	317	347

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.d				3.5	14	1&	22	27					
°				0.6	2	2.5	2.5	3					
^	b			13	34	42	50	60					
				19	40	48	56	66					
	d			32	53	61	69	79					
				0.40	0.60	0.8	0.8	0.8					
				0.15	0.15	0.2	0.2	0.2					
				4.1	15.7	20.2	24.4	30.4					
<*	.=			3.50	14.00	18.00	22.0	27.00					
				3.32	13.73	17.73	21.67	—					
				3.20	13.57	17.57	21.48	26.48					
*w				5.07	19.64	25.34	31.71	—					
				4.95	19.15	24.85	31.35	38					
				6.58	23.26	30.14	37.72	—					
				6.44	22.78	29.56	37.29	45.2					
				1	3	3	4	6					
				2.4	8.8	11.5	14	17					
				11.715	8.98	11.715	14.215	—					
				2.275	8.62	11.285	13.785	—					
				2.6	9.09	11.65	14.35	17,35					
				2.2	8.51	11.15	13.65	13.65					
V				1.59	6.03	7.9	9.65	—					
				1.54	5.96	7.81	9.56	11.66					
				0.1	0.6	0.6	0.8	1					
s	.=			6.00	21.00	27.00	34.00	41					
				26.67	33.38	26.67	33.38	—					
				5.70	20.16	26.16	33.00	40					
				**V9									
	9	0)	9	£	9	*	«	9	99	«	9		9
	£	£	£	£	£	£	£	£	£	£	£	£	£
	£	£	£	£	£	£	£	£	£	£	£	£	£
20	19.58	20.42	—	—	4	7							
25	24.58	25.42	—	—	9	12							
30	29.58	30.42	—	—	14	17						1	
35	34.5	35.5	—	—	19	22							
40	39.5	40.5	38.75	41.25			1					(1 7	
45	44.5	45.5	43.75	46.25									
50	49.5	50.5	48.75	51.25								1	
55	54.4	55.6	53.5	56.5								1	
60	59.4	60.6	58.5	61.5			!16	26				1	
65	64.4	65.6	63.5	66.5			21	31				1	
70	69.4	70.6	68.5	71.5			26	36	15.5	28		1	
80	79.4	80.6	78.5	81.5			36	46	25.5	38		1	
90	89.3	90.7	88.25	91.75			•46	56	35.5	48	27.5	40 1	
100	99.3	100.7	98.25	101.75			156	66	45.5	58	37.5	50 1 25	40
110	109.3	110.7	108.25	111.75			1 66	76	55.5	68	47.5	60 i 35	50

.<t				M3.S	Mt4	1	22	27
*				0.6	2	2.5	2.5	3
^	b			13	34	42	50	60
	c			19	40	48	56	66
	d			32	53	61	69	79
				0.40	0.60	0.8	⊙	0.8
				0.15	0.15	0.2	0.2	0.2
				4.1	15.7	20.2	24.4	30.4
d _s	. =			3.50	14.00	18.00	22.0	27.00
	AlVntfO			3.32	13.73	17.73	21.67	—
				3.20	13.57	17.57	21.48	26.48
ft _{aW}	AltfnYU			5,07	19.64	25.34	31.71	—
				4.95	19.15	24.85	31.35	38
				6.58	23.26	30.14	37.72	—
				6.44	22.78	29.56	37.29	45.2
U				1	3	3	4	6
				2.4	8.8	11.5	14	17
	D			11.715	8.98	11,715	14.215	—
				2.275	8.62	11,285	13.785	—
				2.6	9.09	11.85	14.35	17.35
				2.2	8.51	11.15	13.65	13.65
			1.59	6.03	7.9	9.65	—	
				1.54	5.96	7.81	9.56	11.66
r				0.1	0.6	0.6	0.8	1
5	»			6.00	21.00	27.00	34.00	41
				26.67	33.38	26.67	33.38	—
				5.70	20.16	26.16	33.00	40

1					V*														
					k														*g
8	8				8	8	8												
X	X				X	X	X												
120	119.3	120.7	118.25	121.75			76	86	65.5	78	57.5	70	45	60					
130	129.2	130.8	128	132			80	90	69.5	82	61.5	74	49	64					
140	139.2	140.8	138	142			90	100	79.5	92	71.5	84	59	74					
150	149.2	150.8	148	152					189.5	102	81.5	94	69	84					
160	—	—	158	162					99.5	112	91,5	104	79	94					
180	—	—	178	182					119.5	132	111.5	124	99	114					
200	—	—	197.7	202.3							131.5	144	119	134					
220	—	—	217.7	222.3							138.5	151	126	141					
240	—	—	237.7	242.3									146	161					
260	—	—	257.4	262.6									166	181					

,d				9	M4S	52	60							
*				3.5	4	4.5	5	5.5						
^	b			—	—	—	—	—						
	d			78	90	102	116	—						
				91	103	115	129	145						
				0.6	1.0	1.0	1.0	1.0						
				0.2	0.3	0.3	0.3	0.3						
				36,4	42.4	48.6	56.6	67						
	=			33.00	39.00	45.00	52.00	60.00						
				—	—	—	—	—						
				32.38	38.38	44.38	51.26	59.26						
W				—	—	—	—	—						
				46.55	55.86	64.7	74.2	83.41						
				—	—	—	—	—						
				55.37	66.44	76.95	88.25	99.21						
*				6	6		10	12						
				21	25	28	33	36						
				—	—	—	—	—						
				—	—	—	—	—						
				21.42	25.42	28.42	33.5	38.5						
				20.58	24.58	27.58	32.5	37.5						
?				—	—	—	—	—						
				14.41	17.21	19.31	22.75	26.25						
				1	1	1.2	1.6	2						
5	.=			50	60.0	70.0	80.0	90.0						
				—	—	—	—	—						
				49	58.8	68.1	78.1	87.8						
w,*8														
	8	01	\$		\$	«	\$	v	\$	J	's	«	k	'
	1	«	\$	£	1	£	5	£	5	£	£	£	\$	«1
	£	¥	£	£	£	£	£	£	£	£	£	£	£	£
400	—	—	397.15	402.85					262.5	285	246	271	227.5	255
420	—	—	416.85	423.15					262.5	305	266	291	247.5	275
440	—	—	436.65	443.15					302.5	325	286	311	267.5	295
460	—	—	456.85	463.15							306	331	287.5	315
460	—	—	476.85	483.15							326	351	307.5	335
500	—	—	496.85	503.15									327.5	355

1% / :

p- :
s 125 :
125 \$ 200 ;
d >20° :
*) * 10*7 -
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		8992			
		724, 965-1			
	*	$d <$: SdS 39 : 5.6. 8.8, 9.8, 10.9 $d > 39$:	4\$ 24 : 2-70, 4-70 24 <4 S3 9 : 2-50. 4-50 4>39 ; -	8839	
		3mmS $d \leq 39$ mm: 898-1 4<3 4>39 : -	4 539 : 3506-1 4>39 :		
		4 S 24 /\$ 150 : $d > 24$ /> 104 150 6:			
		4759-1			
	—	4042 - - - 10683		- 4042	
		6157-1			
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* 898-1 3506-1 -

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724	MOD	24705—2004 (724:1993) « - »
898-1	IDT	898-1—2011 « 1. , »
965-1	MOO	16093—2004 (965-1:1998. 965-3:1998) « - »
3269	IDT	3269—2009 « - »
3506-1	IDT	3506-1—2009 « 1. - »
4017	IDT	4017—2013 « - »
4042	IDT	4042—2009 « - »
4753	MOO	12414—94 « , . »
4759-1	IDT	4759-1—2009 « . 1. , , . »
6157-1	IDT	6157-1—2009 « - 1. , »
8839	IDT	8839—2009 « , , »
8992	IDT	8992—2011 « . , , »
10683	—	
<p>— 8</p> <p>• — : • MOD—</p>		

- [1] ISO 888. *Bolts, screws and studs — Nominal lengths and thread lengths for general purpose bolts*
- [2] ISO 4015. *Hexagon head bolts — Product grade — Reduced shank (shank diameter approximately equal to pitch diameter)*
- [3] ISO 4016. *Hexagon head bolts — Product grade C*
- [4] ISO 4018. *Hexagon head screws — Product grade C*
- [5] ISO 4032. *Hexagon nuts, style 1 — Product grades A and*
- [6] ISO 4033. *Hexagon nuts, style 2 — Product grades A and*
- [7] ISO 4034. *Hexagon nuts — Product grade C*
- [8] ISO 4035. *Hexagon thin nuts (chamfered) — Product grades A and*
- [9] ISO 4036. *Hexagon thin nuts (unchamfered) — Product grade*
- [10] ISO 4161. *Hexagon nuts with flange — Coarse thread*
- [11] ISO 4162. *Hexagon flange Potts — Small series*
- [12] ISO 7040. *Prevailing torque type hexagon nuts (with non-metallic insert), style 1 — Property classes 5, 8 and 10*
- [13] ISO 7041. *Prevailing torque type hexagon nuts (with non-metallic insert), style 2 — Property classes 9 and 12*
- [14] ISO 7042. *Prevailing torque type all-metal hexagon nuts, style 2 — Property classes 5, 8, 10 and 12*
- [15] ISO 7043. *Prevailing torque type hexagon nuts with flange (with non-metallic insert) — Product grades A and*
- [16] ISO 7044. *Prevailing torque type all-metal hexagon nuts with flange — Product grades A and*
- [17] ISO 7719. *Prevailing torque type all-metal hexagon nuts, style 1 — Property classes 5, 8 and 10*
- [18] ISO 7720. *Prevailing torque type all-metal hexagon nuts, style 2 — Property class 9*
- [19] ISO 8673. *Hexagon nuts, style 1. with metric fine pitch thread — Product grades A and*
- [20] ISO 8674. *Hexagon nuts, style 2. with metric fine pitch thread — Product grades A and*
- [21] ISO 8675. *Hexagon thin nuts (chamfered) with metric fine pitch thread — Product grades A and*
- [22] ISO 8676. *Hexagon head screws with metric fine pitch thread — Product grades A and*
- [23] ISO 8765. *Hexagon head bolts with metric fine pitch thread — Product grades A and*
- [24] ISO 10511. *Prevailing torque type hexagon thin nuts (with non-metallic insert)*
- [25] ISO 10512. *Prevailing torque type hexagon nuts (with non-metallic insert), style 1. with metric fine pitch thread — Property classes 6, 8 and 10*
- [26] ISO 10513. *Prevailing torque type all-metal hexagon nuts, style 2. with metric fine pitch thread — Property classes 8, 10 and 12*
- [27] ISO 10663. *Hexagon nuts with flange — Fine pitch thread*
- [28] ISO 12125. *Prevailing torque type hexagon nuts with flange (with non-metallic insert) with metric fine pitch thread — Product grades A and*
- [29] ISO 12126. *Prevailing torque type all-metal hexagon nuts with flange with metric fine pitch thread — Product grades A and*
- [30] ISO 15071. *Hexagon Potts with flange — Small series — Product grade A*
- [31] ISO 15072. *Hexagon Potts with flange with metric fine pitch*
- [32] ISO 21670. *Hexagon weld nuts with flange*

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