



Wide range fasteners manufacturer.

BOLTS

CATALOG

- ✓ **DIN 931**
- ✓ **DIN 933**
- ✓ **DIN 912**
- ✓ **DIN 6921**
- ✓ **DIN 7991**
- ✓ **DIN 7990**
- ✓ **DIN 603**
- ✓ **DIN 604**
- ✓ **DIN 913**
- ✓ **DIN 914**
- ✓ **DIN 960**
- ✓ **DIN 961**
- ✓ **DIN 6914**
- ✓ **UNC/UNF**



ADDRESS :

Fevzi Çakmak Mah. 10768. Sk.
Zip Code: 42050
Karatay / Konya / TÜRKİYE

+90 332 345 0427

+90 536 566 6990



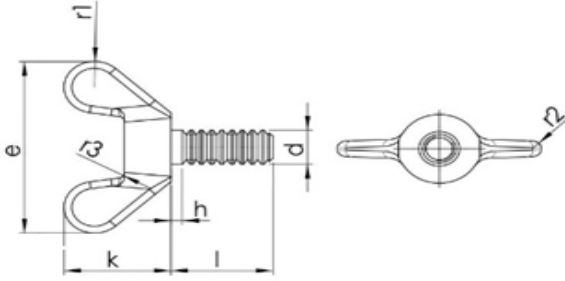
www.bitorkfasteners.com



info@bitorkfasteners.com

DIN 316

WING SCREWS

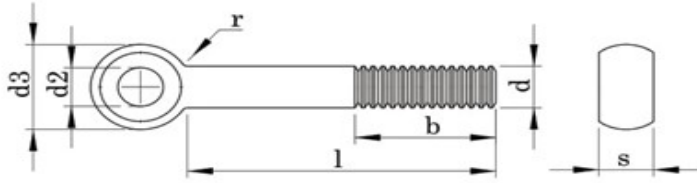


Teknik Bilgiler / Technical Informations										
Screw Thread d1 p ¹⁾	M4	M5	M6	M8	M10	M12	M16	M20	M24	
a	0,70	0,80	1,00	1,25	0,50	1,75	2,00	2,50	3,00	
max.	2,10	2,40	3,00	4,00	4,50	5,30	6,00	7,50	9,00	
d2	8,00	11,00	13,00	16,00	20,00	23,00	29,00	35,00	44,00	
min.	6,00	8,00	10,00	13,00	17,00	20,00	26,00	32,00	41,00	
d3	7,00	9,00	11,00	12,50	16,50	19,50	23,00	29,00	37,50	
min.	5,50	7,50	9,00	10,50	14,50	17,50	21,00	27,00	35,00	
e	20,00	26,00	33,00	39,00	51,00	65,00	73,00	90,00	110,00	
min.	18,00	24,00	30,00	36,00	48,00	62,00	70,00	86,00	106,00	
g1	1,90	2,30	2,30	2,80	4,40	4,90	6,40	6,90	9,40	
min.	1,10	1,50	1,50	2,00	3,60	4,10	5,60	6,10	8,60	
g2	2,30	2,80	3,30	4,40	5,40	6,40	7,50	8,00	10,50	
min.	1,70	2,30	2,70	3,60	4,60	5,60	6,50	7,00	9,50	
h	10,50	13,00	17,00	20,00	25,00	33,50	37,50	46,50	56,50	
min.	8,50	11,00	15,00	18,00	23,00	31,00	35,00	44,00	53,50	
m	4,60	6,50	8,00	10,00	12,00	14,00	17,00	21,00	25,00	
min.	3,20	4,00	5,00	6,50	8,00	10,00	13,00	16,00	20,00	
r1 ~	3,00	4,00	5,00	6,00	8,00	10,00	11,00	14,00	18,00	
r2 ~	radiused				1,00	1,00	1,20	1,60	2,50	
r3 ~	0,50	1,00	1,00	1,00	1,20	1,20	1,60	2,00	2,50	

Metric DIN 316 wing screws / butterfly screws have two wing like projections protruding from the head of the screw. This unique design makes it possible to use your thumb and forefinger to turn and tighten the screw rather than a wrench or other tool ensuring easy rapid assembly and disassembly using only fingers.

DIN 414

EYE BOLTS

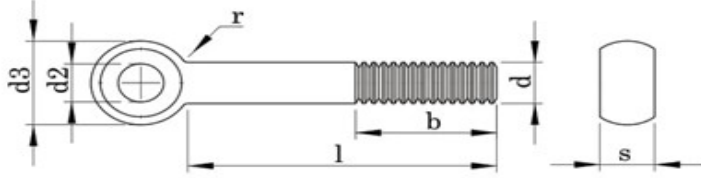


Teknik Bilgiler / Technical Informations							
Screw Thread d1		M5	M6	M8	M10	M12	
P	1	0,80	1,00	1,25	1,50	1,75	
	2	16,00	18,00	22,00	26,00	30,00	
	3	-	-	28,00	32,00	36,00	
b+ ² P	2	-	-	-	-	49,00	
	3	-	-	-	-	-	
d2	max.	5,00	6,00	8,00	10,00	12,00	
d3	TypeA	10,90	12,90	16,90	18,70	23,70	
	TypeB and C	min.	11,57	13,57	17,57	19,48	24,48
r	~	max.	2,50	4,00	4,00	6,00	
s	TypeA	min.	8,00	9,00	11,00	14,00	17,00
	TypeB and C	max.	7,52	8,52	10,30	13,30	16,30
		min.	6,00	7,00	9,00	12,00	14,00
		min.	5,88	6,85	8,85	11,82	13,82

Nominal size	Type A		L Type B		Type C		M5	M6	M8	M10	M12
	min.	max.	min.	max.	min.	max.					
30	28,95	31,05	29,35	30,65	29,60	30,40	7,93				
35	33,75	36,25	34,20	35,80	34,50	35,50	8,70	12,60			
40	38,75	41,25	39,20	40,80	39,50	40,50	9,47	13,70	25,00		
45	43,75	46,25	44,20	45,80	44,50	45,50	10,30	14,80	26,90	36,00	
50	48,75	51,25	49,20	50,80	49,50	50,50	11,00	15,90	28,90	39,10	
55	53,50	56,50	54,05	55,95	54,40	55,60	11,80	17,00	30,90	42,20	67,00
60	58,50	61,50	59,05	60,95	59,40	60,60	12,60	18,10	32,80	45,30	71,40
65	63,50	66,50	64,05	65,95	64,40	65,60	13,30	19,20	34,80	48,40	75,80
70	68,50	71,50	69,05	70,95	69,40	70,60	14,10	20,30	36,80	51,50	80,30
75	73,50	76,50	74,05	75,95	74,40	75,60	14,90	21,50	38,80	54,60	84,80
80	78,50	81,50	79,05	80,95	79,40	80,60	15,70	22,60	40,70	57,60	89,20
90	88,25	91,75	88,90	91,10	89,30	90,70		23,70	44,70	63,80	98,10
100	98,25	101,75	98,90	101,10	99,30	100,70			48,60	70,00	106,00
110	108,25	111,75	108,90	111,10	109,30	110,70			52,60	76,10	115,00
120	118,25	121,75	118,90	121,10	119,30	120,70			56,50	82,30	124,00
130	128,00	132,00	128,75	131,25	129,20	130,80			60,50	88,40	133,00
140	138,00	142,00	138,75	141,25	139,20	140,80			64,40	94,50	142,00
150	148,00	152,00	148,75	151,25	149,20	150,80				101,00	151,00
160	156,00	164,00	158,75	161,25	159,20	160,80					160,00
180	176,00	184,00	178,75	181,25	179,20	180,80					178,00
200	195,40	204,60	198,55	241,45	199,10	200,90					195,00
220	215,40	224,60	218,55	221,45	219,10	220,90					211,00
240	235,40	244,60	238,55	241,45	239,10	240,90					229,00
260	254,80	265,20	258,40	261,60	258,90	261,00					
280	274,80	285,20	278,40	281,60	278,90	281,00					
300	294,80	305,20	298,40	301,60	298,90	301,00					

DIN 444

EYE BOLTS

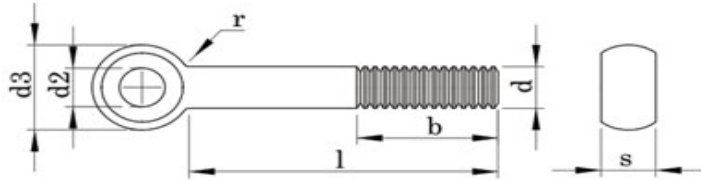


Teknik Bilgiler / Technical Informations						
Screw Thread d1		M16	M20	M24	M27	
P		2,00	2,50	3,00	3,00	
b+ ² P	1	38,00	46,00	54,00	60,00	
	2	44,00	52,00	60,00	66,00	
	3	57,00	65,00	73,00	79,00	
d2		16,00	18,00	22,00	24-25	
d3	TypeA TypeB and C	max.	32,00	40,00	45,00	50,00
		min.	30,40	38,40	43,40	48,40
r	~	6,00	6,00	10,00	10,00	
s	TypeA	max.	19,00	24,00	28,00	30,00
		min.	18,16	23,16	27,16	29,16
	TypeB and C	max.	17,00	22,00	25,00	27,00
		min.	16,82	21,79	24,79	26,79

Nominal size	Type A		Type B		Type C		M16	M20	M24	M27
	min.	max.	min.	max.	min.	max.				
30	28,95	31,05	29,35	30,65	29,60	30,40				
35	33,75	36,25	34,20	35,80	34,50	35,50				
40	38,75	41,25	39,20	40,80	39,50	40,50				
45	43,75	46,25	44,20	45,80	44,50	45,50				
50	48,75	51,25	49,20	50,80	49,50	50,50				
55	53,50	56,50	54,05	55,95	54,40	55,60				
60	58,50	61,50	59,05	60,95	59,40	60,60				
65	63,50	66,50	64,05	65,95	64,40	65,60				
70	68,50	71,50	69,05	70,95	69,40	70,60	149,00			
75	73,50	76,50	74,05	75,95	74,40	75,60	157,00			
80	78,50	81,50	79,05	80,95	79,40	80,60	164,00			
90	88,25	91,75	88,90	91,10	89,30	90,70	180,00			
100	98,25	101,75	98,90	101,10	99,30	100,70	196,00	334,00	454,00	
110	108,25	111,75	108,90	111,10	109,30	110,70	212,00	359,00	489,00	
120	118,25	121,75	118,90	121,10	119,30	120,70	228,00	383,00	524,00	618,00
130	128,00	132,00	128,75	131,25	129,20	130,80	244,00	408,00	560,00	663,00
140	138,00	142,00	138,75	141,25	139,20	140,80	259,00	433,00	596,00	708,00
150	148,00	152,00	148,75	151,25	149,20	150,80	275,00	457,00	631,00	753,00
160	156,00	164,00	158,75	161,25	159,20	160,80	291,00	482,00	667,00	798,00
180	176,00	184,00	178,75	181,25	179,20	180,80	322,00	531,00	738,00	888,00
200	195,40	204,60	198,55	241,45	199,10	200,90	354,00	581,00	809,00	978,00
220	215,40	224,60	218,55	221,45	219,10	220,90	383,00	624,00	868,00	1060,00
240	235,40	244,60	238,55	241,45	239,10	240,90	414,00	674,00	939,00	1140,00
260	254,80	265,20	258,40	261,60	258,90	261,00		723,00	1010,00	1230,00
280	274,80	285,20	278,40	281,60	278,90	281,00				1320,00
300	294,80	305,20	298,40	301,60	298,90	301,00				1400,00

DIN 444

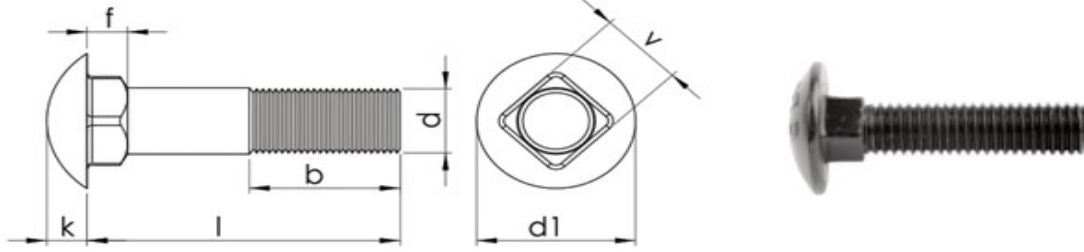
EYE BOLTS



Teknik Bilgiler / Technical Informations		M30	M33	M36	M39	
Screw Thread d1		M30	M33	M36	M39	
P		3,50	3,50	4,00	4,00	
b+ ² P	1	66,00	-	-	-	
	2	72,00	78,00	84,00	90,00	
	3	85,00	91,00	97,00	103,00	
d2		27-28	30,00	32-33	35-36	
d3	TypeA	max.	55,00	60,00	65,00	70,00
	TypeB and C	min.	53,10	58,10	63,10	68,10
r	~	10,00	16,00	16,00	16,00	
s	TypeA	max.	34,00	38,00	41,00	46,00
	TypeB and C	min.	33,00	37,00	40,00	45,00
		max.	30,00	34,00	38,00	41,00
		min.	29,79	33,75	37,75	40,75

Nominal size	Type A		L Type B		Type C		M30	M33	M36	M39
	min.	max.	min.	max.	min.	max.				
30	28,95	31,05	29,35	30,65	29,60	30,40				
35	33,75	36,25	34,20	35,80	34,50	35,50				
40	38,75	41,25	39,20	40,80	39,50	40,50				
45	43,75	46,25	44,20	45,80	44,50	45,50				
50	48,75	51,25	49,20	50,80	49,50	50,50				
55	53,50	56,50	54,05	55,95	54,40	55,60				
60	58,50	61,50	59,05	60,95	59,40	60,60				
65	63,50	66,50	64,05	65,95	64,40	65,60				
70	68,50	71,50	69,05	70,95	69,40	70,60				
75	73,50	76,50	74,05	75,95	74,40	75,60				
80	78,50	81,50	79,05	80,95	79,40	80,60				
90	88,25	91,75	88,90	91,10	89,30	90,70				
100	98,25	101,75	98,90	101,10	99,30	100,70				
110	108,25	111,75	108,90	111,10	109,30	110,70				
120	118,25	121,75	118,90	121,10	119,30	120,70				
130	128,00	132,00	128,75	131,25	129,20	130,80				
140	138,00	142,00	138,75	141,25	139,20	140,80				
150	148,00	152,00	148,75	151,25	149,20	150,80	997,00	1240,00		
160	156,00	164,00	158,75	161,25	159,20	160,80	1050,00	1310,00	1570,00	1880,00
180	176,00	184,00	178,75	181,25	179,20	180,80	1160,00	1440,00	1730,00	2070,00
200	195,40	204,60	198,55	241,45	199,10	200,90	1270,00	1570,00	1890,00	2250,00
220	215,40	224,60	218,55	221,45	219,10	220,90	1370,00	1690,00	2050,00	2420,00
240	235,40	244,60	238,55	241,45	239,10	240,90	1480,00	1820,00	2200,00	2610,00
260	254,80	265,20	258,40	261,60	258,90	261,00	1590,00	1960,00	2350,00	2790,00
280	274,80	285,20	278,40	281,60	278,90	281,00	1700,00	2100,00	2500,00	2970,00
300	294,80	305,20	298,40	301,60	298,90	301,00	1810,00	2240,00	2650,00	3100,00

DIN 603 MUSHROOM HEAD SQUARE NECK BOLTS



Teknik Bilgiler / Technical Informations									
Thread size / Anma çapı (d)			M5	M6	M8	M10	M12	M16	M20
Pitch / Diş adımı	P		0,80	1,00	1,25	1,50	1,75	2,00	2,50
Head height / Kafa yüksekliği	k	max.	3,30	3,88	4,88	5,38	6,95	8,95	11,05
		min.	2,70	3,12	4,12	4,62	6,05	8,05	9,95
Head Dia / Kafa çapı	dk	max.	13,55	16,55	20,65	24,65	30,65	38,80	46,80
		min.	12,45	15,45	19,35	23,35	29,35	37,20	45,20
Neck height / Boyun yüksekliği	f	max.	4,10	4,60	5,60	6,60	8,75	12,90	15,90
		min.	2,90	3,40	4,40	5,40	7,25	11,10	14,10
Neck width / Boyun genişliği	v	max.	5,48	6,48	8,58	10,58	12,70	16,70	20,84
		min.	4,52	5,52	7,42	9,42	11,30	15,30	19,16
Thread length / Diş uzunluğu	b ¹		16,00	18,00	22,00	26,00	30,00	38,00	46,00
		b ²	22,00	24,00	28,00	32,00	36,00	44,00	52,00

b¹ for lengths l ≤ 125 mm.

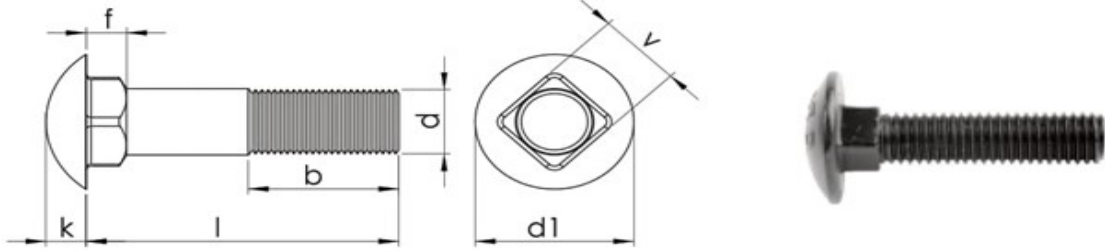
b² for lengths l 125 mm. ≤200 mm.

b³ for lengths > 200 mm.

Thread size / Anma çapı (d)		M5	M6	M8	M10	M12	M16	M20
Length / Boy	min.							
	max.							
		Weight /Ağırlık gr/p						
16	15,10	16,90	4,00	6,90				
20	18,95	21,05	4,50	7,60	13,80	22,70		
25	23,95	26,05	5,10	8,50	15,40	25,20		
30	28,95	31,05	5,90	9,60	17,00	27,70	45,70	
35	33,75	36,25	6,70	10,70	19,00	30,20	49,40	
40	38,75	41,25	7,50	11,80	21,00	32,70	53,10	
45	43,75	46,25	8,30	12,90	23,00	35,80	56,80	
50	48,75	51,25	9,10	14,00	25,00	38,90	61,20	119,00
55	53,50	56,50	9,90	15,10	26,90	42,00	65,60	126,00
60	58,50	61,50	10,70	16,20	28,90	45,10	70,00	133,00
65	63,50	66,50	11,50	17,30	30,90	48,20	74,40	141,00
70	68,50	71,50	12,30	18,40	32,90	51,30	78,80	149,00
								247,00

DIN 603 Carriage Bolts are round head bolts with external machine screw threads and an underhead square neck that helps prevent bolt rotation as the nut is tightened. The head is sometimes referred to as a mushroom head because of its low height rounded top and flat bearing surface. Secured with a nut, carriage bolts commonly fasten wood to wood, wood to metal and metal to metal.

DIN 603 MUSHROOM HEAD SQUARE NECK BOLTS



Teknik Bilgiler / Technical Informations									
Thread size / Anma çapı (d)			M5	M6	M8	M10	M12	M16	M20
Pitch / Diş adımı	P		0,80	1,00	1,25	1,50	1,75	2,00	2,50
Head height / Kafa yüksekliği	k	max.	3,30	3,88	4,88	5,38	6,95	8,95	11,05
		min.	2,70	3,12	4,12	4,62	6,05	8,05	9,95
Head Dia / Kafa çapı	dk	max.	13,55	16,55	20,65	24,65	30,65	38,80	46,80
		min.	12,45	15,45	19,35	23,35	29,35	37,20	45,20
Neck height / Boyun yüksekliği	f	max.	4,10	4,60	5,60	6,60	8,75	12,90	15,90
		min.	2,90	3,40	4,40	5,40	7,25	11,10	14,10
Neck width / Boyun genişliği	v	max.	5,48	6,48	8,58	10,58	12,70	16,70	20,84
		min.	4,52	5,52	7,42	9,42	11,30	15,30	19,16
Thread length / Diş uzunluğu	b ¹		16,00	18,00	22,00	26,00	30,00	38,00	46,00
	b ²		22,00	24,00	28,00	32,00	36,00	44,00	52,00

b¹ for lengths l ≤ 125 mm.

b² for lengths l 125 mm. ≤ 200 mm.

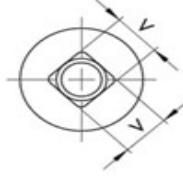
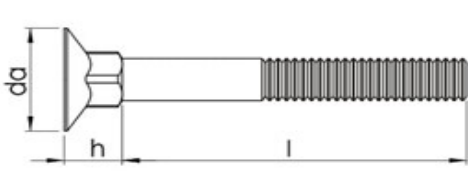
b³ for lengths > 200 mm.

Thread size / Anma çapı (d)		M5	M6	M8	M10	M12	M16	M20	
Length / Boy	min. max.	Weight / Ağırlık gr/p							
80	78,50 81,50	13,90	20,60	36,80	57,50	87,00	165,00	272,00	
90	88,25 91,75		22,80	40,80	63,70	96,00	181,00	297,00	
100	98,25 101,75		25,00	44,80	69,90	105,00	197,00	322,00	
110	108,25 111,75		27,20	48,80	76,10	114,00	213,00	347,00	
120	118,25 121,75		29,40	52,80	82,30	123,00	229,00	372,00	
130	128,00 132,00		31,60	56,80	88,50	132,00	245,00	397,00	
140	138,00 142,00		32,80	60,80	95,00	141,00	261,00	422,00	
150	148,00 152,00		35,00	64,80	101,00	150,00	277,00	447,00	
160	156,00 164,00				107,00	159,00	293,00	497,00	
180	176,00 184,00				119,00	177,00	325,00	547,00	
200	195,40 204,60				131,00	195,00	357,00	597,00	





DIN 605 FLAT COUNTERSUNK SQUARE NECK BOLTS



Teknik Bilgiler / Technical Informations						
Thread size / Anma çapı (d)		M5	M6	M8	M10	
Pitch / Diş adımı	P	0,80	1,00	1,25	1,50	
Head height / Kafa yüksekliği	h	min.	5,60	6,55	8,55	10,55
		max.	6,40	7,45	9,45	11,45
Head Dia / Kafa çapı	da	min.	12,55	15,55	19,45	23,45
		max.	13,45	16,45	20,55	24,55
Square width / Kafa genişliği	v	min.	4,52	5,52	7,42	9,42
		max.	5,48	6,48	8,58	10,58

Thread size / Anma çapı (d)			M5	M6	M8	M10
Length / Boy (l)	min.	max.	Weight / Ağırlık gr/p			
30	28,95	31,05	5,40	8,80	15,40	
35	33,95	36,05	6,20	9,80	17,40	
40	38,95	41,05	6,90	10,80	19,30	30,60
45	43,75	46,25		11,90	21,30	33,60
50	48,75	51,25		12,90	23,20	36,50
55	53,75	56,25		13,90	25,20	38,40
60	58,75	61,25		14,90	27,10	42,40
65	64,50	66,50			29,10	45,30
70	68,50	71,50			31,00	48,20
80		81,50			34,90	54,10
90		91,50				59,90
100		101,50				65,70

**ADDRESS :**

Fevzi Çakmak Mah. 10768. Sk.
Zip Code: 42050
Karatay / Konya / TÜRKİYE

+90 332 345 0427

+90 536 566 6990



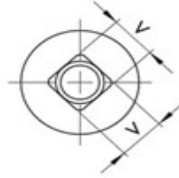
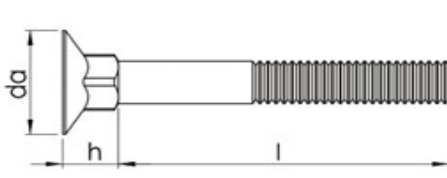
www.bitorkfasteners.com



info@bitorkfasteners.com



DIN 605 FLAT COUNTERSUNK SQUARE NECK BOLTS



Teknik Bilgiler / Technical Informations					
Thread size / Anma çapı (d)			M12	M16	M20
Pitch / Diş adımı	P		1,75	2,00	2,50
Head height / Kafa yüksekliği	h	min.	13,45	16,45	21,35
		max.	14,55	17,55	22,65
Head Dia / Kafa çapı	da	min.	27,35	37,35	43,25
		max.	28,65	38,65	44,75
Square width / Kafa genişliği	v	min.	11,32	15,32	19,22
		max.	12,68	16,68	20,78

Thread size / Anma çapı (d)			M12	M16	M20
Length / Boy (l)	min.	max.	Weight /Ağırlık gr/p		
30	28,95	31,05			
35	33,95	36,05			
40	38,95	41,05			
45	43,75	46,25			
50	48,75	51,25	72,80		
55	53,75	56,25	77,30		
60	58,75	61,25	81,30		
65	64,50	66,50	85,70	145,00	270,00
70	68,50	71,50	89,80	153,00	282,00
80	78,50	81,50	98,80	169,00	307,00
90	88,50	91,50	107,00	185,00	332,00
100	98,50	101,50	116,00	200,00	357,00



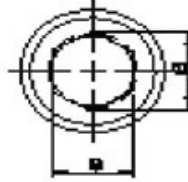
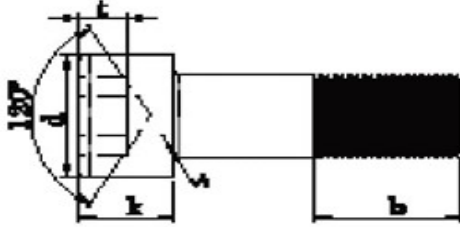
ATTENTION:

This bolt is produced together with the hexagon nut.



DIN 912 HEXAGON SOCKET HEAD CAP SCREWS

ISO 4762



Teknik Bilgiler / Technical Informations		M3	M4	M5	M6	M8	M10	M12	M14	
Thread size / Anma çapı (d)		M3	M4	M5	M6	M8	M10	M12	M14	
Pitch / Diş adımı	P	0,50	0,70	0,80	1,00	1,25	1,50	1,75	2,00	
Head height / Kafa yüksekliği	k	max.	3,00	4,00	5,00	6,00	8,00	10,00	12,00	14,00
		min.	2,86	3,82	4,82	5,70	7,64	9,64	11,57	13,57
Head Dia / Kafa çapı	d	max.	5,50	7,00	8,50	10,00	13,00	16,00	18,00	21,00
		min.	5,32	6,78	8,28	9,78	12,73	15,73	17,73	20,67
Socket width / Soket genişliği	s	min.	2,52	3,02	4,02	5,02	6,02	8,03	10,03	12,03
		max.	2,58	3,08	4,10	5,14	6,14	8,18	10,18	12,21
Socket dia / Soket çapı	e	2,87	3,44	4,58	5,72	6,86	9,15	11,43	13,72	
Socket depth / Soket derinliği	t	1,30	2,00	2,50	3,00	4,00	5,00	6,00	7,00	
Thread length / Diş uzunluğu	b ¹	18,00	20,00	22,00	24,00	28,00	32,00	36,00	40,00	
	b ²	Fully threaded. / Tam dişli.								

b¹ for lengths l ≤ 125 mm.

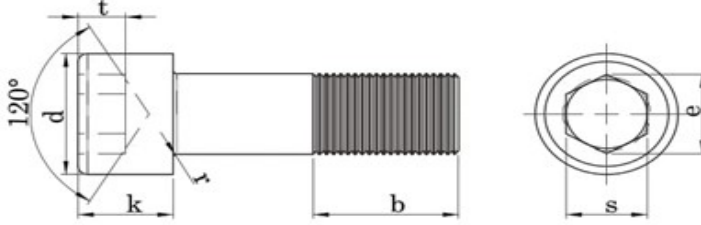
b² for lengths l 125 mm. ≤ 200 mm.

b³ for lengths > 200 mm.

Thread size / Anma çapı (d)		M3	M4	M5	M6	M8	M10	M12	M14	
Length Boy	min.	Weight /Ağırlık gr/p								
	max.									
5	4,76	5,24	0,67							
6	5,76	6,24	0,71	1,50						
8	7,71	8,29	0,80	1,65	2,45					
10	9,71	10,29	0,88	1,80	2,70	4,70				
12	11,65	12,35	0,96	1,95	2,95	5,07	10,90			
16	15,65	16,35	1,16	2,25	3,45	5,75	12,10	20,90		
20	19,58	20,42	1,36	2,65	4,01	6,53	13,40	22,90	32,10	
25	24,58	25,42	1,61	3,15	4,78	7,59	15,00	25,40	35,70	48,00
30	29,58	30,42	1,86	3,65	5,55	8,30	16,90	27,90	39,30	53,00
35	34,50	35,50		4,15	6,32	9,91	18,90	30,40	42,90	58,00
40	39,50	40,50		4,65	7,09	11,00	20,90	32,90	46,50	63,00
45	44,50	45,50		5,15	7,86	12,10	22,90	36,10	50,10	68,00
50	49,50	50,50		5,65	8,63	13,20	24,90	39,30	54,50	73,00
55	54,40	55,60			9,40	14,30	26,90	42,50	58,90	78,00
60	59,40	60,60			10,20	15,40	28,90	45,70	63,40	84,00
65	64,40	65,60			11,00	16,40	31,00	48,90	67,80	90,00
70	69,40	70,60			11,80	17,30	33,00	52,10	71,30	96,00
80	79,40	80,60			13,25	19,30	37,00	58,50	80,20	108,00

DIN 912 HEXAGON SOCKET HEAD CAP SCREWS

ISO 4762



Teknik Bilgiler / Technical Informations			M3	M4	M5	M6	M8	M10	M12	M14
Thread size / Anma çapı (d)			M3	M4	M5	M6	M8	M10	M12	M14
Pitch / Diş adımı	P		0,50	0,70	0,80	1,00	1,25	1,50	1,75	2,00
Head height / Kafa yüksekliği	k	max.	3,00	4,00	5,00	6,00	8,00	10,00	12,00	14,00
		min.	2,86	3,82	4,82	5,70	7,64	9,64	11,57	13,57
Head Dia / Kafa çapı	d	max.	5,50	7,00	8,50	10,00	13,00	16,00	18,00	21,00
		min.	5,32	6,78	8,28	9,78	12,73	15,73	17,73	20,67
Socket width / Soket genişliği	s	min.	2,50	3,00	4,00	5,00	6,00	8,00	10,00	12,00
		max.	2,52	3,02	4,02	5,02	6,02	8,03	10,03	12,03
Socket dia / Soket çapı	e		2,87	3,44	4,58	5,72	6,86	9,15	11,43	13,72
Socket depth / Soket derinliği	t		1,30	2,00	2,50	3,00	4,00	5,00	6,00	7,00
Thread length / Diş uzunluğu	b ¹ b ²		18,00	20,00	22,00	24,00	28,00	32,00	36,00	40,00
			Fully threaded. /Tam dişli.							

b¹ for lengths l ≤ 125 mm.

b² for lengths l 125 mm. ≤ 200 mm.

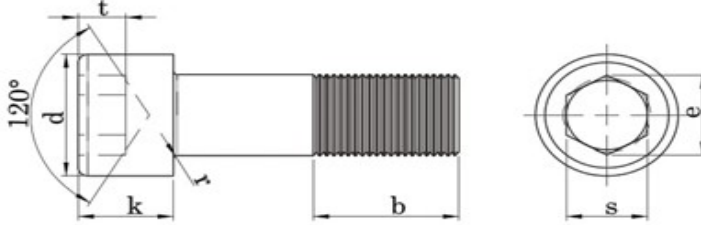
b³ for lengths > 200 mm.

Thread size / Anma çapı (d)		M3	M4	M5	M6	M8	M10	M12	M14
Length Boy	min.	Weight /Ağırlık gr/p							
	max.								
90	89,30			14,79	21,30	41,00	64,90	89,10	120,00
100	99,30			16,33	23,30	45,00	71,20	98,00	132,00
110	109,30			19,40	25,30	49,00	77,50	107,00	144,00
120	119,30				27,30	53,00	83,80	116,00	156,00
130	129,20				31,00	57,00	90,10	126,97	168,00
140	139,20				33,00	61,00	96,40	135,50	180,00
150	149,20					65,00	102,70	145,00	192,00
160	159,20					69,00	108,00	154,00	204,00
180	179,20								
200	199,10								
220	219,10								
240	239,10								
260	258,95								
280	278,95								
300	298,95								

Socket Cap Screw to DIN 912 standard are often referred to as Allen head bolts. They host a hexagonal recess and are driven using an insert bit or a hex wrench, making the screws more efficient than the slotted screw products. This is due to the hex socket drive having more resistance to cam out.

DIN 912 HEXAGON SOCKET HEAD CAP SCREWS

ISO 4762



Teknik Bilgiler / Technical Informations		M16	M18	M20	M22	M24	M27	M30	M33	
Thread size / Anma çapı (d)		M16	M18	M20	M22	M24	M27	M30	M33	
Pitch / Diş adımı	P	2,00	2,50	2,50	2,50	3,00	3,00	3,50	3,50	
Head height / Kafa yüksekliği	k	max.	16,00	18,00	20,00	22,00	24,00	27,00	30,00	33,00
		min.	15,57	17,57	19,48	21,48	23,48	26,48	29,48	32,38
Head Dia / Kafa çapı	d	max.	24,00	27,00	30,00	33,00	36,00	40,00	45,00	50,00
		min.	23,67	26,67	29,67	32,61	35,61	39,61	44,61	49,61
Socket width / Soket genişliği	s	min.	14,00	14,00	17,00	17,00	19,00	19,00	22,00	24,00
		max.	14,03	14,03	17,05	17,05	19,07	19,07	22,07	24,07
Socket dia / Soket çapı	e	16,00	16,00	19,44	19,44	21,73	21,73	25,15	27,43	
Socket depth / Soket derinliği	t	8,00	9,00	10,00	11,00	12,00	13,50	15,50	18,00	
Thread length / Diş uzunluğu	b ¹		44,00	48,00	52,00	56,00	60,00	66,00	72,00	78,00
		b ²	Fully threaded. / Tam dişli.							

b¹ for lengths l ≤ 125 mm.

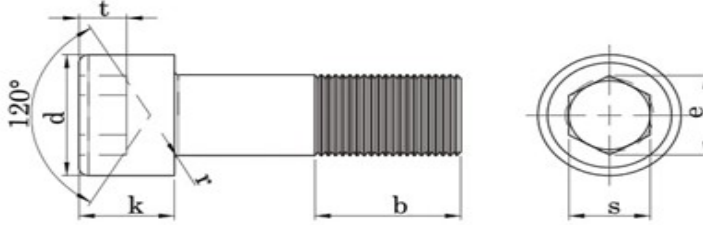
b² for lengths l 125 mm. ≤ 200 mm.

b³ for lengths > 200 mm.

Thread size / Anma çapı (d)			M16	M18	M20	M22	M24	M27	M30	M33
Length Boy	min.	max.	Weight /Ağırlık gr/p							
			5	4,76	5,24					
6	5,76	6,24								
8	7,71	8,29								
10	9,71	10,29								
12	11,65	12,35								
16	15,65	16,35								
20	19,58	20,42								
25	24,58	25,42	71,30							
30	29,58	30,42	77,80	111,00	128,00					
35	34,50	35,50	84,40	120,00	139,00	211,00				
40	39,50	40,50	91,00	129,00	150,00	224,00	270,00			
45	44,50	45,50	97,60	138,00	161,00	237,00	285,00	330,00	500,00	
50	49,50	50,50	106,00	147,00	172,00	250,00	300,00	352,00	527,00	630,00
55	54,40	55,60	114,00	156,00	183,00	263,00	316,00	374,00	554,00	665,00
60	69,40	60,60	122,00	165,00	194,00	276,00	330,00	396,00	581,00	700,00
65	64,40	65,60	130,00	174,00	205,00	291,00	345,00	418,00	608,00	735,00
70	69,40	70,60	130,00	183,00	216,00	306,00	363,00	440,00	635,00	770,00
80	79,40	80,60	154,00	203,00	241,00	336,00	399,00	484,00	690,00	830,00
90	89,30	90,70	170,00	223,00	266,00	366,00	435,00	529,00	745,00	900,00

DIN 912 HEXAGON SOCKET HEAD CAP SCREWS

ISO 4762



Teknik Bilgiler / Technical Informations		M16	M18	M20	M22	M24	M27	M30	M33	
Thread size / Anma çapı (d)										
Pitch / Diş adımı	P	2,00	2,50	2,50	2,50	3,00	3,00	3,50	3,50	
Head height / Kafa yüksekliği	k	max.	16,00	18,00	20,00	22,00	24,00	27,00	30,00	33,00
		min.	15,57	17,57	19,48	21,48	23,48	26,48	29,48	32,38
Head Dia / Kafa çapı	d	max.	24,00	27,00	30,00	33,00	36,00	40,00	45,00	50,00
		min.	23,67	26,67	29,67	32,61	35,61	39,61	44,61	49,61
Socket width / Soket genişliği	s	min.	14,00	14,00	17,00	17,00	19,00	19,00	22,00	24,00
		max.	14,03	14,03	17,05	17,05	19,07	19,07	22,07	24,07
Socket dia / Soket çapı	e	min.	14,03	14,03	17,05	17,05	19,07	19,07	22,07	24,07
		max.	14,21	14,21	17,23	17,23	19,28	19,28	22,28	24,28
Socket depth / Soket derinliği	t		16,00	16,00	19,44	19,44	21,73	21,73	25,15	27,43
Thread length / Diş uzunluğu	b ¹		8,00	9,00	10,00	11,00	12,00	13,50	15,50	18,00
		b ²	44,00	48,00	52,00	56,00	60,00	66,00	72,00	78,00

Fully threaded. / Tam dişli.

b¹ for lengths l ≤ 125 mm.

b² for lengths l 125 mm. ≤ 200 mm.

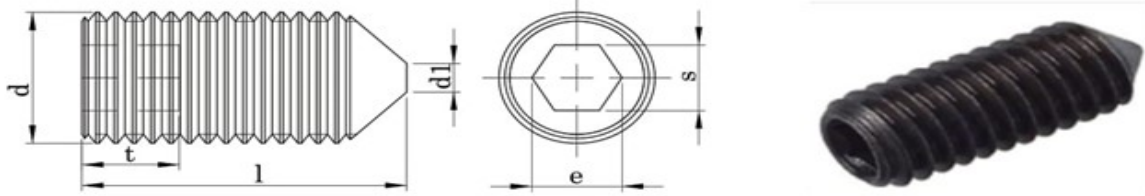
b³ for lengths > 200 mm.

Thread size / Anma çapı (d)		M16	M18	M20	M22	M24	M27	M30	M33	
Length Boy	min.	Weight / Ağırlık gr/p								
	max.									
100	99,30	100,70	186,00	243,00	291,00	396,00	471,00	574,00	800,00	970,00
110	109,30	110,70	202,00	263,00	316,00	426,00	507,00	619,00	855,00	1040,00
120	119,30	120,70	218,00	283,00	341,00	456,00	543,00	664,00	910,00	1110,00
130	129,20	130,80	234,00	303,00	366,00	486,00	579,00	709,00	965,00	1180,00
140	139,20	140,80	250,00	323,00	391,00	516,00	615,00	754,00	1020,00	1250,00
150	149,20	150,80	266,00	343,00	416,00	546,00	651,00	799,00	1080,00	1320,00
160	159,20	160,80	282,00	363,00	441,00	576,00	687,00	844,00	1130,00	1390,00
180	179,20	180,80		403,00	491,00	636,00	759,00	934,00	1240,00	1530,00
200	199,10	200,90		443,00	541,00	696,00	831,00	1020,00	1350,00	1670,00
220	219,10	220,90			691,00	756,00	903,00	1110,00	1460,00	1810,00
240	239,10	240,90			741,00		975,00	1230,00	1570,00	1950,00
260	258,95	261,05						1340,00	1680,00	2040,00
280	278,95	281,05							1790,00	2180,00
300	298,95	301,05							1900,00	2320,00

COATING : Plain, Zinc Plate, Zinc Flake, HDG

HARDNESS: Grade 8.8 , Grade 10.9, Grade 12.9 available

DIN 914 HEXAGON SOCKET SET SCREWS WITH CONE POINT ISO 4027 POINT

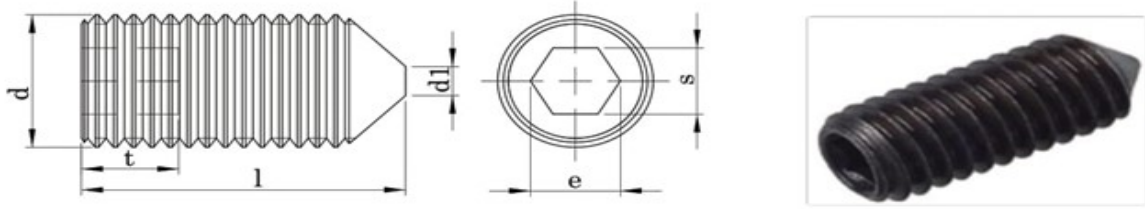


Teknik Bilgiler / Technical Informations		M1,4	M1,6	M1,8	M2	M2,5	M3	M4	M5	M6	M8
Thread size / Anma çapı (d)	P ^h)	0,30	0,35	0,35	0,40	0,45	0,50	0,70	0,80	1,00	1,25
df	~	Lower limit minor thread diameter									
d	max.	-	-	-	-	-	-	-	-	1,50	2,00
d	min.	-	-	-	-	-	-	-	-	0,90	1,40
e	min ²)	0,80	0,80	0,80	1,00	1,43	1,73	2,30	2,87	3,44	4,58
e	nominal size	0,70	0,70	0,70	0,90	1,30	1,50	2,00	2,50	3,00	4,00
s	min.	0,71	0,71	0,71	0,89	1,27	1,52	2,02	2,52	3,02	4,02
s	max.	0,72	0,72	0,72	0,90	1,30	1,55	2,05	2,56	3,08	4,10
t	min.3)	0,60	0,70	0,80	0,80	1,20	1,20	1,50	2,00	2,00	3,00
t	min.4)	1,40	1,50	1,60	1,70	2,00	2,00	2,50	3,00	3,50	5,00

Nominal Size	min.	max.	L										
			M1,4	M1,6	M1,8	M2	M2,5	M3	M4	M5	M6	M8	
			Weight / Ağırlık gr/p										
2	1,80	2,20											
2,5	2,30	2,70	0,02	0,02	0,03								
3	2,80	3,20	0,02	0,03	0,04	0,04							
3,5	3,26	3,74											
4	3,76	4,24	0,03	0,04	0,05	0,06	0,10	0,13					
5	4,76	5,24	0,04	0,05	0,06	0,07	0,13	0,17	0,26				
6	5,76	6,24	0,05	0,06	0,07	0,09	0,15	0,21	0,34	0,49			
8	7,00	8,29				0,12	0,12	0,30	0,49	0,73	1,04		
10	9,71	10,29				0,15	0,25	0,39	0,64	0,97	1,39		
12	11,65	12,35						0,48	0,79	1,21	1,74		
14	13,65	14,35											
16	15,65	16,35											
18	17,65	18,35											
20	19,58	20,42						0,84	1,39	2,17	3,14		
22	21,58	22,42											
25	24,58	25,42								2,77	4,02		
28	27,58	28,42											
30	29,58	30,42										4,90	
35	34,50	35,50										5,78	11,90
40	39,50	40,50											
45	44,50	45,50											
50	49,50	50,50											
55	54,40	55,60											
60	59,40	60,60											

DIN 914 HEXAGON SOCKET SET SCREWS WITH CONE POINT

ISO 4027



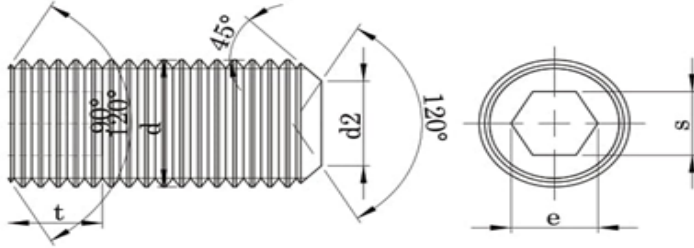
Teknik Bilgiler / Technical Informations		M 10	M 12	M 14	M 16	M 18	M 20	M 22	M 24
Screw Thread d1		M 10	M 12	M 14	M 16	M 18	M 20	M 22	M 24
P ^h)		1,50	1,75	2,00	2,00	2,50	2,50	2,50	3,00
df	~								
d	max.	2,50	3,00	4,00	4,00	5,00	5,00	6,00	6,00
	min.	1,90	2,40	3,25	3,25	4,25	4,25	5,25	5,25
e	min ²)	5,72	6,86	6,86	9,15	11,43	11,43	13,72	13,72
	nominal size	5,00	6,00	6,00	8,00	10,00	10,00	12,00	12,00
s	min.	5,02	6,02	6,02	8,03	10,03	10,03	12,03	12,03
	max.	5,10	6,10	6,10	8,12	10,12	10,12	12,14	12,14
t	min.3)	4,00	4,50	5,60	6,40	7,20	8,00	9,00	10,00
	min.4)	6,00	8,00	9,00	10,00	11,00	12,00	13,50	15,00

Nominal Size	L		M 10	M 12	M 14	M 16	M 18	M 20	M 22	M 24
	min.	max.								
2	1,80	2,20								
2,5	2,30	2,70								
3	2,80	3,20								
3,5	3,26	3,74								
4	3,76	4,24								
5	4,76	5,24								
6	5,76	6,24								
8	7,00	8,29								
10	7,10	10,29	3,94							
12	9,71	12,35	4,93	6,69						
14	11,65	14,35								
16	13,65	16,35	6,91	9,56						
18	15,65	18,35								
20	17,65	20,42	8,88	12,42						
22	19,58	22,42								
25	21,58	25,42	11,35	16,01						
28	24,58	28,42								
30	27,58	30,42	13,82	19,59						
35	29,58	35,50	16,29	23,18						
40	34,50	40,50	18,30	26,10	46,30		71,60		98,20	
45	44,50	45,50	21,23	30,34			81,90		113,00	
50	49,50	50,50	23,70	33,93			92,20		128,00	
55	54,40	55,60							143,00	
60	59,40	60,60	28,64	41,10					158,00	



DIN 916 HEXAGON SOCKET SECRWS WITH CUP POINT

ISO 4029



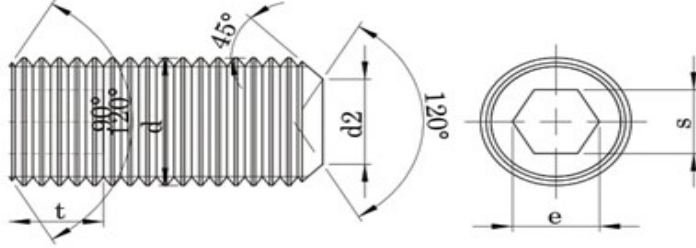
Teknik Bilgiler / Technical Informations		M1.4	M1.6	M1.8	M2	M2.5	M3	M4	M5
Thread size / Anma çapı (d)									
Pitch / Diş adımı	p	0,30	0,35	4,00	4,00	4,50	0,50	0,70	0,80
Cup point dia / Uç çapı	d2	0,70	0,80	0,90	1,00	1,20	1,40	2,00	2,50
	min.	0,45	0,55	0,65	0,75	0,95	1,15	1,75	2,25
	s	0,70	0,70	0,70	0,90	1,30	1,50	2,00	2,50
Head width / Anahtar ağızı	min.	0,71	0,71	0,71	0,89	1,27	1,52	2,02	2,52
	max.	0,72	0,72	0,72	0,90	1,30	1,55	2,05	2,56
Diagonal / Köşegen	e	0,60	0,70	0,80	0,80	0,90	1,20	1,50	2,00
Slot depth / Anahtar derinliği	t	1,40	1,50	1,60	1,70	2,00	2,00	2,50	3,00

Thread size / Anma çapı (d)			M1.4	M1.6	M1.8	M2	M2.5	M3	M4	M5
Length Boy	min.	max.	Weight / Ağırlık gr/p							
6	5,76	6,24	0,04	0,06	0,07	0,09	0,15	0,22	0,38	0,54
8	7,71	8,29				0,12	0,20	0,31	0,53	0,78
10	9,71	10,29				0,15	0,25	0,40	0,68	1,02
12	11,65	12,35						0,49	0,83	1,26
16	15,65	16,35						0,67	1,13	1,74
20	19,58	20,42						0,85	1,43	1,22
25	24,58	25,42								2,82
30	29,58	30,42								
35	34,50	35,50								
40	39,50	40,50								
45	44,50	45,50								
50	49,50	50,50								
60	59,40	60,60								

Metric DIN 916 hexagon socket set screws with cup point are headless and fully threaded screws with an internal hexagonal drive at one end and a cup-shaped (concave) surface at the other. They are to be inserted through pre-drilled aligned holes which permit tightening against an opposing shaft. This type of set screw is best used with a shaft made of softer material as the concave surface grips well and resists movement well.



DIN 916 HEXAGON SOCKET SCRWs WITH CUP POINT ISO 4029



Teknik Bilgiler / Technical Informations		M6	M8	M10	M12	M16	M18	M20	M24
Thread size / Anma çapı (d)		M6	M8	M10	M12	M16	M18	M20	M24
Pitch / Diş adımı	p	1,00	1,25	1,50	1,75	2,00	2,50	2,50	3,00
Cup point dia / Uç çapı	d2	3,00	5,00	6,00	8,00	10,00	12,00	14,00	16,00
	min.	2,75	4,70	5,70	7,64	9,64	11,57	13,57	15,57
	s	3,00	4,00	5,00	6,00	8,00	10,00	10,00	12,00
Head width / Anahtar ağızı	min.	3,02	4,02	5,02	6,02	8,03	10,03	10,03	12,03
	max.	3,08	4,10	5,10	6,10	8,12	10,12	10,12	12,14
Diagonal / Köşegen	e	2,80	3,80	4,00	4,80	6,40	7,20	8,30	10,00
Slot depth / Anahtar derinliği	t	3,50	5,00	6,00	8,00	10,00	11,00	12,00	15,00

Thread size / Anma çapı (d)		M6	M8	M10	M12	M16	M18	M20	M24
Length Boy	min.								
	max.								
		Weight /Ağırlık gr/p							
6	5,76	6,24	0,74						
8	7,71	8,29	1,09	1,88					
10	9,71	10,29	1,44	2,51					
12	11,65	12,35	1,79	3,14	4,73				
16	15,65	16,35	2,49	4,40	6,73	9,50			
20	19,58	20,42	3,19	5,66	8,71	12,30	20,90		
25	24,58	25,42	4,07	7,25	11,20	15,90	27,40	41,40	
30	29,58	30,42	4,95	8,84	13,70	19,50	34,00	51,70	70,30
35	34,50	35,50	5,83	10,40	16,20	23,10	40,50	62,00	85,30
40	39,50	40,50		12,00	18,70	26,70	47,10	72,30	100,00
45	44,50	45,50						82,60	115,00
50	49,50	50,50						92,90	130,00
60	59,40	60,60							160,00

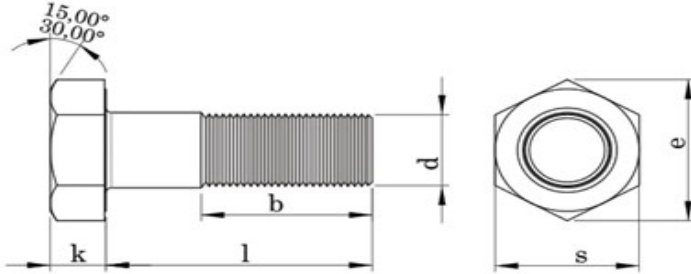


We have 303/304 (A2) and 316 (A4) stainless steel production for this screw.

DIN 931

HEXAGON HEAD BOLTS

ISO 4014



Teknik Bilgiler / Technical Informations		M3	M4	M5	M6	M7	M8	M10	M12
Thread size / Anma çapı (d)		M3	M4	M5	M6	M7	M8	M10	M12
Pitch / Diş adımı	P	0,50	0,70	0,80	1,00	1,00	1,25	1,50	1,75
Nominal size		2,00	2,80	3,50	4,00	4,80	5,30	6,40	7,50
Head height / Kafa yüksekliği	A min.	1,88	2,68	3,35	3,85	4,65	5,15	6,22	7,32
	B max.	2,12	2,92	3,65	4,15	4,95	5,45	6,58	7,68
Nominal size	min.								
	max.	5,50	7,00	8,00	10,00	11,00	13,00	17,00	19,00
Head width / Anahtar ağı	Product Grade A	5,32	6,78	7,78	9,78	10,73	12,73	16,73	18,67
	min. B								
Diagonal / Köşegen e	Product Grade A	6,01	7,66	8,79	11,05	12,12	14,38	18,90	21,10
	min. B								
Thread length / Diş uzunluğu	b ¹	12,00	14,00	16,00	18,00	20,00	22,00	26,00	30,00
	b ²			22,00	24,00	26,00	28,00	32,00	36,00
	b ³							45,00	49,00

b¹ for lengths l ≤ 125 mm.

b² for lengths l 125 mm. ≤ 200 mm.

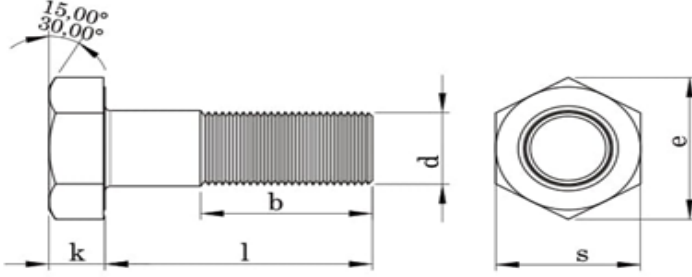
b³ for lengths > 200 mm.

Thread size Anma çapı	Product Grade				M3	M4	M5	M6	M7	M8	M10	M12
	A		B									
Length Boy	min.	max.	min.	max.	Weight /Ağırlık gr/p							
12	11,65	12,35	-	-								
14	13,65	14,35	-	-								
16	15,65	16,35	-	-								
18	17,65	18,35	-	-								
20	19,58	20,42	-	-	1,29							
22	21,58	22,42	-	-	1,43							
25	24,58	25,42	-	-	1,57	3,12	4,86					
28	27,58	28,42	-	-	1,74	3,41	5,25					
30	29,58	30,42	-	-	1,85	3,61	5,64	8,06	12,10			
35	34,50	35,50	-	-		4,04	6,42	9,13	13,60	18,20	44,60	42,13
40	39,50	40,50	-	-		4,53	7,20	10,20	15,10	20,30	35,00	49,10

Hexagon Bolts (DIN 931) are a partially threaded fastener with a hexagon-shaped head that is usually fixed with a spanner or socket tool. Hosting a machine thread, these bolts are suitable for use with either a nut or within a pre-tapped hole.

DIN 931 ISO 4014

HEXAGON HEAD BOLTS



Teknik Bilgiler / Technical Informations												
Thread size Anma çapı	Product Grade				M3	M4	M5	M6	M7	M8	M10	M12
	A		B									
Length Boy	min.	max.	min.	max.	Weight /Ağırlık gr/p							
45	44,50	45,50	-	-	5,03	7,98	11,30	16,60	22,20	38,00	53,60	
50	49,50	50,50	-	-	5,52	8,76	12,30	18,10	24,20	41,10	58,10	
55	54,40	55,60	-	-	6,02	9,54	13,40	19,50	25,80	43,80	62,60	
60	59,40	60,60	-	-	6,51	10,30	14,40	21,00	27,80	46,90	67,00	
65	64,40	65,60	-	-	7,01	11,10	15,50	22,50	29,80	50,00	70,30	
70	69,40	70,60	-	-	7,50	11,90	16,50	24,00	31,80	53,10	74,70	
75	74,40	75,60	-	-		12,70	17,60	25,50	33,70	56,20	79,10	
80	79,40	80,60	-	-		13,50	18,60	27,00	35,70	59,30	83,60	
85	84,30	85,70	-	-			19,70	28,50	37,70	62,40	88,10	
90	89,30	90,70	-	-			20,80	30,00	39,50	65,50	92,40	
95	94,30	95,70	-	-			21,90	31,50	41,40	68,60	96,80	
100	99,30	100,70	-	-			23,00	33,10	43,30	71,70	101,00	
110	109,30	110,70	-	-			25,20		47,60	77,90	109,00	
120	119,30	120,70	-	-			27,30		51,60	84,10	118,00	
130	129,20	130,80	-	-			29,70		55,60	90,30	125,95	
140	139,20	140,80	-	-			31,80		59,60	96,50	134,10	
150	149,20	150,80	-	-			34,00		63,60	102,70	142,60	
160	159,20	160,80	158,00	162,00							153,00	
170	169,20	170,80	168,00	172,00							162,00	
180	179,20	180,80	178,00	182,00							171,00	
190	189,10	190,90	187,70	192,30								
200	199,10	200,90	197,70	202,30								182,00
220	-	-	217,70	222,30								207,00
240	-	-	237,70	242,30								
260	-	-	257,40	262,60								
280	-	-	277,40	282,60								
300	-	-	297,40	302,60								

COATING : Plain, Zinc Plate, Zinc Flake, HDG

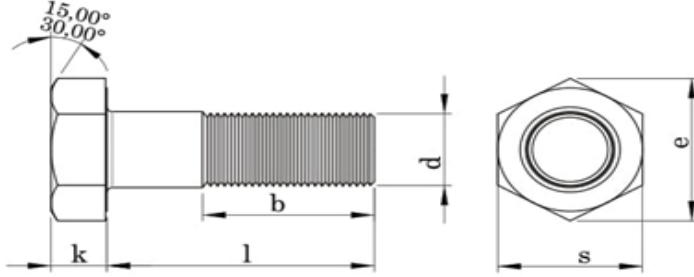
HARDNESS: Grade 5.8, Grade 8.8 , Grade 10.9, Grade 12.9 available

Stainless Steel: A2 (304 SS) and A4 (316 SS) available

DIN 931

HEXAGON HEAD BOLTS

ISO 4014



Teknik Bilgiler / Technical Informations								
Thread size / Anma çapı (d)			M14	M16	M18	M20	M22	
Pitch / Diş adımı	P		2,00	2,00	2,50	2,50	2,50	
	Nominal size	max.	8,80	10,00	11,50	12,50	14,00	
Head height / Kafa yüksekliği	A	min.	8,62	9,82	11,28	12,28	13,78	
		max.	8,98	10,18	11,72	12,72	14,22	
	B	min.		9,71	11,15	12,15	13,65	
		max.		10,29	11,85	12,85	14,35	
	Nominal size	max.	22,00	24,00	27,00	30,00	32,00	
Head width / Anahtar ağızı	Product Grade	ş	A	21,67	23,67	26,67	29,67	31,61
		min.	B		23,16	26,16	29,16	31,00
Diagonal / Köşegen e	Product Grade	min.	A	24,49	26,75	30,14	33,53	35,72
		B		26,17	29,56	32,95	35,03	
Thread length / Diş uzunluğu		b ¹	34,00	38,00	42,00	46,00	50,00	
		b ²	40,00	44,00	48,00	52,00	56,00	
		b ³	53,00	57,00	63,00	65,00	69,00	

b¹ for lengths l ≤ 125 mm.

b² for lengths l 125 mm. ≤ 200 mm.

b³ for lengths > 200 mm.

Thread size Anma çapı	Product Grade				M14	M16	M18	M20	M22
	A		B						
Length Boy	min.	max.	min.	max.	Weight /Ağırlık gr/p				
12	11,65	12,35	-	-					
14	13,65	14,35	-	-					
16	15,65	16,35	-	-					
18	17,65	18,35	-	-					
20	19,58	20,42	-	-					
22	21,58	22,42	-	-					
25	24,58	25,42	-	-					
28	27,58	28,42	-	-					
30	29,58	30,42	-	-					
35	34,50	35,50	-	-					
40	39,50	40,50	-	-					
45	44,50	45,50	-	-					
50	49,50	50,50	-	-	82,00	99,00	107,00	141,00	185,00

COATING : Plain, Zinc Plate, Zinc Flake, HDG

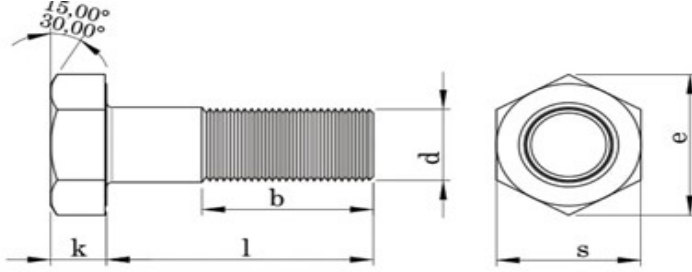
HARDNESS: Grade 5.8, Grade 8.8 , Grade 10.9, Grade 12.9 available

Stainless Steel: A2 (304 SS) and A4 (316 SS) available

DIN 931

ISO 4014

HEXAGON HEAD BOLTS



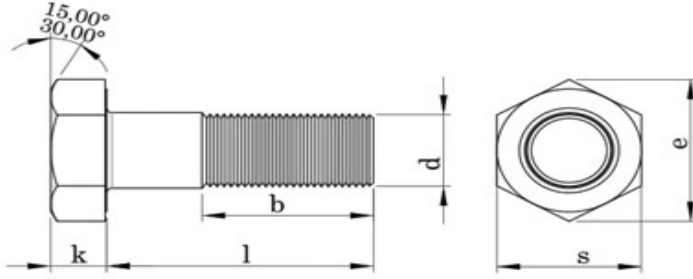
Teknik Bilgiler / Technical Informations									
Thread size Anma çapı	Product Grade				M14	M16	M18	M20	M22
	A		B						
Length Boy	min.	max.	min.	max.	Weight /Ağırlık gr/p				
55	54,40	55,60			88,10	115,00	151,00	207,00	
60	59,40	60,60			94,10	123,00	161,00	219,00	
65	64,40	65,60			98,80	131,00	171,00	231,00	281,00
70	69,40	70,60			105,00	139,00	181,00	243,00	296,00
75	74,40	75,60			111,00	147,00	191,00	255,00	311,00
80	79,40	80,60			117,00	155,00	200,00	267,00	326,00
85	84,30	85,70			123,00	163,00	210,00	279,00	341,00
90	89,30	90,70			127,00	171,00	220,00	291,00	356,00
95	94,30	95,70			133,00	179,00	230,00	303,00	370,00
100	99,30	100,70			139,00	186,00	240,00	327,00	400,00
110	109,30	110,70			151,00	202,00	260,00	351,00	430,00
120	119,30	120,70			164,00	218,00	280,00	374,00	450,00
130	129,20	130,80			174,00	230,00	296,00	398,00	480,00
140	139,20	140,80			185,00	246,00	316,00	422,00	510,00
150	149,20	150,80			198,00	262,00	336,00	446,00	540,00
160	159,20	160,80	158,00	162,00	211,00	278,00	356,00	470,00	570,00
170	169,20	170,80	168,00	172,00	223,00	294,00	376,00	494,00	600,00
180	179,20	180,80	178,00	182,00	235,00	310,00	396,00	519,00	630,00
190	189,10	190,90	187,70	192,30	247,00	326,00	415,00	544,00	660,00
200	199,10	200,90	197,70	202,30	260,00	342,00	435,00	590,00	720,00
220			217,70	222,30		374,00		635,00	
240			237,70	242,30		406,00		680,00	
260			257,40	262,60					
280			277,40	282,60					
300			297,40	302,60					



DIN 931

HEXAGON HEAD BOLTS

ISO 4014



Teknik Bilgiler / Technical Informations		M24	M27	M30	M33	M36	M39
Thread size / Anma çapı (d)		3,00	3,00	3,50	3,50	4,00	4,00
Pitch / Diş adımı	P						
	Nominal size max.	15,00	17,00	18,70	21,00	22,50	25,00
Head height / Kafa yüksekliği	A	min.	14,78				
		max.	15,22				
	B	min.	14,65	16,65	18,28	20,58	22,08
		max.	15,35	17,35	19,12	21,42	22,92
	Nominal size max.	36,00	41,00	46,00	50,00	55,00	60,00
Head width / Anahtar ağız	Product Grade	s	A	35,38			
		min.	B	35,00	40,00	45,00	49,00
Diagonal / Köşegen e	Product Grade	min.	A	39,98			
		B	39,55	45,20	50,85	55,37	60,79
Thread length / Diş uzunluğu	b ¹	54,00	60,00	66,00	72,00	78,00	84,00
	b ²	60,00	66,00	72,00	78,00	84,00	90,00
	b ³	73,00	79,00	85,00	91,00	97,00	103,00

b¹ for lengths l ≤ 125 mm.

b² for lengths l 125 mm. ≤ 200 mm.

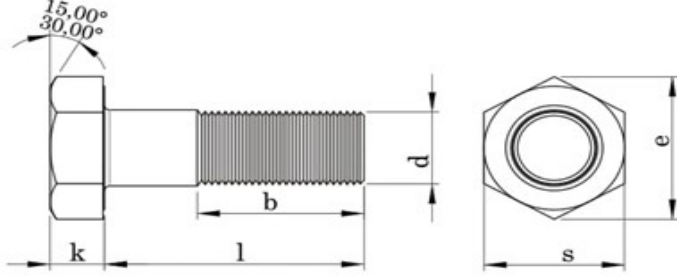
b³ for lengths > 200 mm.

Thread size Anma çapı	Product Grade				M24	M27	M30	M33	M36	M39
	A		B							
Length Boy	min.	max.	min.	max.	Weight /Ağırlık gr/p					
40	39,50	40,50	-	-						
45	44,50	45,50	-	-						
50	49,50	50,50	-	-						
55	54,40	55,60	-	-						
60	59,40	60,60	-	-						
65	64,40	65,60	-	-						
70	69,40	70,60	-	-						
75	74,40	75,60	-	-	364,00					
80	79,40	80,60	-	-	392,00	511,00				
85	84,30	85,70	-	-	410,00	534,00				
90	89,30	90,70	-	-	428,00	557,00	712,00			
95	94,30	95,70	-	-	446,00	580,00	739,00			

COATING : Plain, Zinc Plate, Zinc Flake, HDG

HARDNESS: Grade 5.8, Grade 8.8 , Grade 10.9, Grade 12.9 available

Stainless Steel: A2 (304 SS) and A4 (316 SS) available

**DIN 931**
ISO 4014**HEXAGON HEAD BOLTS**

Teknik Bilgiler / Technical Informations										
Thread size Anma çapı	Product Grade				M24	M27	M30	M33	M36	M39
	A		B							
Length Boy	min.	max.	min.	max.	Weight /Ağırlık gr/p					
100	99,30	100,70	-	-	464,00	603,00	767,00	951,00		
110	109,30	110,70	-	-	500,00	650,00	823,00	1020,00	1240,00	
120	119,30	120,70	-	-	535,00	695,00	880,00	1090,00	1320,00	1510,00
130	129,20	130,80	-	-	560,00	720,00	920,00	1150,00	1390,00	1580,00
140	139,20	140,80	-	-	595,00	765,00	975,00	1220,00	1470,00	1660,00
150	149,20	150,80	-	-	630,00	810,00	1030,00	1290,00	1550,00	1740,00
160	159,20	160,80	158,00	162,00	665,00	855,00	1085,00	1350,00	1630,00	1830,00
170	169,20	170,80	168,00	172,00	700,00	900,00	1140,00	1410,00	1710,00	1920,00
180	179,20	180,80	178,00	182,00	735,00	945,00	1200,00	1480,00	1790,00	2010,00
190	189,10	190,90	187,70	192,30	770,00	990,00	1250,00	1540,00	1870,00	2100,00
200	199,10	200,90	197,70	202,30	805,00	1030,00	1310,00	1610,00	1950,00	2200,00
220	-	-	217,70	222,30	870,00	1130,00	1420,00	1750,00	2110,00	2410,00
240	-	-	237,70	242,30	935,00	1220,00	1530,00	1880,00	2270,00	2600,00
260	-	-	257,40	262,60	1000,00	1310,00	1640,00	2020,00	2430,00	2800,00
280	-	-	277,40	282,60	1080,00		1750,00	2150,00	2590,00	3010,00
300	-	-	297,40	302,60	1150,00		1860,00	2290,00	2750,00	3210,00

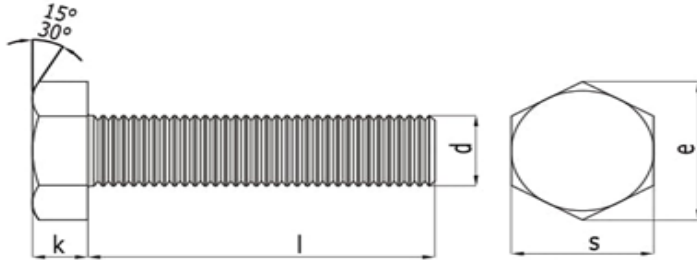


After M24 diameter, we manufacture hot forging up to 450 mm length.



DIN 933 ISO 4017

HEXAGON HEAD BOLTS (Full Thread)



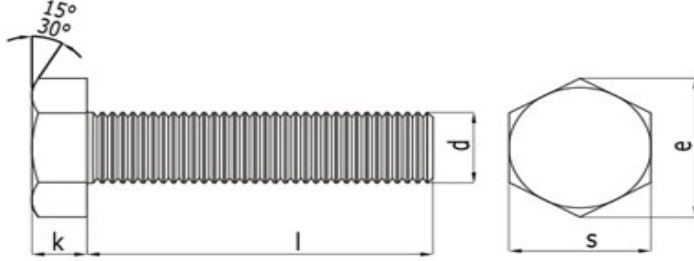
Teknik Bilgiler / Technical Informations								
Thread size / Anma çapı (d)			M5	M6	M7	M8	M10	
Pitch / Diş adımı		P	0,80	1,00	1,00	1,25	1,50	
		Nominal	3,50	4,00	4,80	5,30	6,40	
Head height / Kafa yüksekliği	k	A	min.	3,35	3,85	4,65	5,15	6,22
			max.	3,65	4,15	4,95	5,45	6,56
	B	min.	3,26	3,76	4,56	4,06	6,11	
		max.	3,74	4,24	5,04	5,54	6,69	
Head width / Anahtar ağızı	s	A	max.	7,78	9,78	10,73	12,73	16,73
			min.	7,64	9,64	10,57	12,57	16,57
	Nominal		8,00	10,00	11,00	13,00	17,00	
			8,79	11,05	12,12	14,38	18,90	
Diagonal / Köşegen	e	A	max.	8,79	11,05	12,12	14,38	18,90
		B	min.	8,63	10,89	11,94	14,20	18,72

Thread size Anma çapı	A		B		M5	M6	M7	M8	M10
	min.	max.	min.	max.					
Length Boy	Weight /Ağırlık gr/p								
10	9,71	10,29	-	-	2,63	4,08	6,35	9,10	16,20
12	11,65	12,35	-	-	2,87	4,42	6,85	9,80	17,20
14	13,65	14,35	-	-	3,12	4,76	7,35	10,50	18,20
16	15,65	16,35	-	-	3,37	5,11	7,85	11,10	19,20
18	17,65	18,35	-	-	3,62	5,45	8,35	11,70	20,20
20	19,58	20,42	-	-	3,87	5,80	8,85	12,30	21,20
22	21,58	22,42	-	-	4,12	6,15	9,35	12,90	22,20
25	24,58	25,42	-	-	4,49	6,65	10,00	13,90	23,70
28	27,58	28,42	-	-	4,86	7,15	10,70	14,90	25,20
30	29,58	30,42	-	-	5,11	7,51	11,30	15,50	26,20
35	34,50	35,50	-	-	5,73	8,37	12,50	17,10	28,70
40	39,50	40,50	-	-	6,35	9,23	13,80	18,70	31,20
45	44,50	45,50	43,75	46,25	6,99	10,10	15,00	20,30	33,70
50	49,50	50,50	48,75	51,25	7,59	11,00	16,30	21,80	36,20
55	54,40	55,60	53,50	56,50	8,21	11,90	17,50	23,40	38,70
60	59,40	60,60	58,50	61,50	8,83	12,70	18,70	25,00	41,30

DIN 933 Hexagon Head Cap Screws / Bolts are externally threaded fasteners with a hexagonal washer faced head and a chamfered tip to facilitate mating with an internally threaded component. DIN 933 hex screws have a fully threaded shank and are manufactured to very strict tolerances.

**DIN 933**

ISO 4017

HEXAGON HEAD BOLTS (Full Thread)

Teknik Bilgiler / Technical Informations									
Thread size Anma çapı	A		B		M5	M6	M7	M8	M10
Length Boy (l)	min.	max.	min.	max.	Weight /Ağırlık gr/p				
65	64,40	65,60	63,50	66,50	9,45	13,60	20,00	26,60	43,80
70	69,40	70,60	68,50	71,50	10,10	14,40	21,20	28,20	46,30
75	74,40	75,60	73,50	76,50	10,70	15,30	22,50	29,80	48,80
80	79,40	80,60	78,50	81,50	11,30	16,20	23,70	31,40	51,30
85	84,30	85,70	83,25	86,75			25,00	33,00	53,80
90	89,30	90,70	88,25	91,75			26,20	34,60	56,30
95	94,30	95,70	93,25	96,75			27,50	35,20	59,80
100	99,30	100,70	98,25	101,75			28,70	37,70	61,30
110	109,30	110,70	108,25	111,75				40,90	66,40
120	119,30	120,70	118,25	121,75					71,40
130	129,20	130,80	128,00	132,00					76,40
140	139,20	140,80	138,00	142,00					81,40
150	149,20	150,80	148,00	152,00					86,40
160	159,20	160,80	158,00	162,00					
170	169,20	170,80	168,00	172,00					
180	179,20	180,80	178,00	182,00					
190	189,08	190,92	187,70	192,30					
200	199,08	200,92	197,70	202,30					

**ADDRESS :**Fevzi Çakmak Mah. 10768. Sk.
Zip Code: 42050
Karatay / Konya / TÜRKİYE

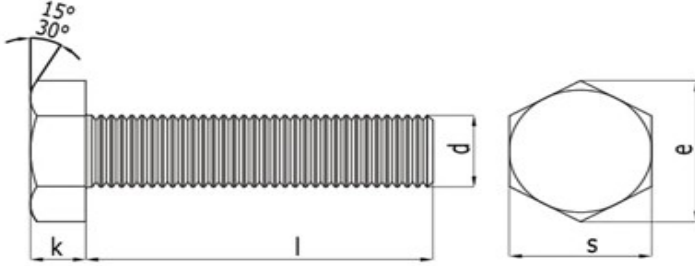
+90 332 345 0427

+90 536 566 6990

www.bitorkfasteners.cominfo@bitorkfasteners.com

DIN 933 ISO 4017

HEXAGON HEAD BOLTS (Full Thread)



Teknik Bilgiler / Technical Informations								
Thread size / Anma çapı (d)			M12	M14	M16	M18	M20	
Pitch / Diş adımı	P		1,75	2,00	2,00	2,50	2,50	
	Nominal		7,50	8,80	10,00	11,50	12,50	
Head height / Kafa yüksekliği	k	A	min.	7,32	8,62	9,82	11,28	12,28
			max.	7,68	8,98	10,18	11,72	12,72
	B	min.	7,21	8,51	9,71	11,15	12,15	
		max.	7,79	9,09	10,29	11,85	12,85	
Head width / Anahtar ağızı	s	A	max.	18,67	21,67	23,67	26,67	29,67
		B	min.	18,48	21,16	23,16	26,15	29,16
		Nominal		19,00	22,00	24,00	27,00	30,00
	Diagonal / Köşegen	e	A	max.	21,10	24,49	26,75	30,14
B			min.	20,88	23,91	26,17	29,56	32,95

Thread size Anma çapı	A		B		M12	M14	M16	M18	M20
Length Boy	min.	max.	min.	max.	Weight /Ağırlık gr/p				
10	9,71	10,29	-	-	23,30	38,00			
12	11,65	12,35	-	-	25,00	40,00	52,90		
14	13,65	14,35	-	-	26,40	42,00	55,60		
16	15,65	16,35	-	-	27,70	44,00	58,30	82,00	105,00
18	17,65	18,35	-	-	29,10	46,00	60,90	84,90	110,00
20	19,58	20,42	-	-	31,00	48,00	63,50	87,20	114,00
22	21,58	22,42	-	-	33,00	50,00	66,20	92,20	119,00
25	24,58	25,42	-	-	34,10	53,00	70,20	95,80	124,00
28	27,58	28,42	-	-	36,20	55,90	74,20	100,00	129,00
30	29,58	30,42	-	-	37,70	57,90	76,90	104,00	134,00
35	34,50	35,50	-	-	41,30	62,90	83,50	112,00	145,00
40	39,50	40,50	-	-	44,90	67,90	90,20	120,00	155,00
45	44,50	45,50	43,75	46,25	48,50	72,90	97,10	128,00	165,00
50	49,50	50,50	48,75	51,25	52,00	77,90	103,00	136,00	176,00
55	54,40	55,60	53,50	56,50	55,60	82,80	110,00	145,00	186,00
60	59,40	60,60	58,50	61,50	58,20	87,80	117,00	153,00	196,00

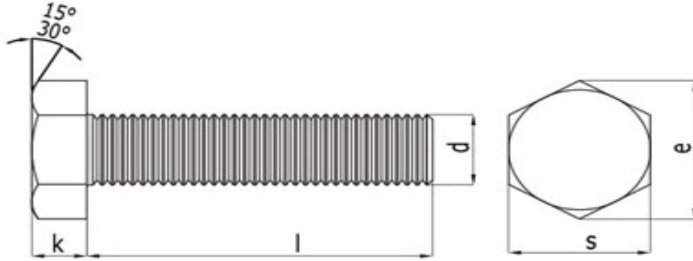
COATING : Plain, Zinc Plate, Zinc Flake, HDG

HARDNESS: Grade 5.8, Grade 8.8 , Grade 10.9, Grade 12.9 available

Stainless Steel: A2 (304 SS) and A4 (316 SS) available

**DIN 933**

ISO 4017

HEXAGON HEAD BOLTS (Full Thread)

Teknik Bilgiler / Technical Informations									
Thread size Anma çapı	A		B		M12	M14	M16	M18	M20
Length Boy (l)	min.	max.	min.	max.	Weight /Ağırlık gr/p				
65	64,40	65,60	63,50	66,50	62,80	92,80	123,00	161,00	207,00
70	69,40	70,60	68,50	71,50	66,40	97,90	130,00	169,00	217,00
75	74,40	75,60	73,50	76,50	70,00	102,00	137,00	177,00	227,00
80	79,40	80,60	78,50	81,50	73,60	107,00	144,00	186,00	238,00
85	84,30	85,70	83,25	86,75	77,20	112,00	150,00	194,00	247,00
90	89,30	90,70	88,25	91,75	80,80	117,00	157,00	202,00	258,00
95	94,30	95,70	93,25	96,75	84,40	122,00	164,00	210,00	268,00
100	99,30	100,70	98,25	101,75	88,00	127,00	170,00	218,00	279,00
110	109,30	110,70	108,25	111,75	95,20	137,00	184,00	235,00	300,00
120	119,30	120,70	118,25	121,75	102,00	147,00	197,00	251,00	320,00
130	129,20	130,80	128,00	132,00	109,00	157,00	210,00	268,00	340,00
140	139,20	140,80	138,00	142,00	116,00	167,00	224,00	284,00	361,00
150	149,20	150,80	148,00	152,00	123,00	177,00	237,00	300,00	381,00
160	159,20	160,80	158,00	162,00				316,00	402,00
170	169,20	170,80	168,00	172,00				332,00	422,00
180	179,20	180,80	178,00	182,00				348,00	442,00
190	189,08	190,92	187,70	192,30				364,00	462,00
200	199,08	200,92	197,70	202,30				380,00	484,00

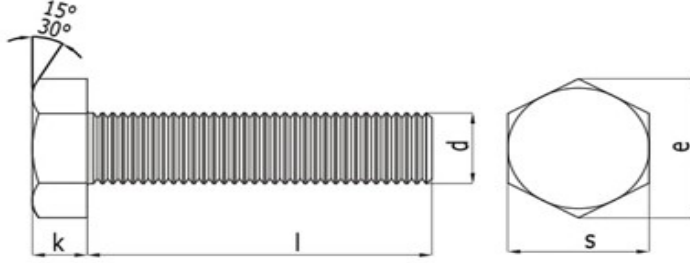


After M24 diameter, we manufacture hot forging up to 450 mm length.



DIN 933 ISO 4017

HEXAGON HEAD BOLTS (Full Thread)



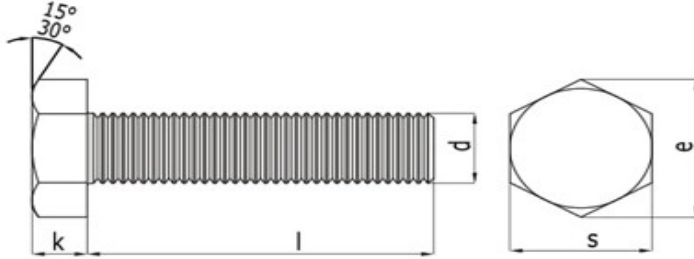
Teknik Bilgiler / Technical Informations							
Thread size / Anma çapı (d)			M22	M24	M27	M30	
Pitch / Diş adımı		P	2,50	3,00	3,00	3,50	
		Nominal	14,00	15,00	17,00	18,70	
Head height / Kafa yüksekliği	k	A	min.	13,78	14,78	-	-
			max.	14,22	15,22	-	-
	B	min.	13,65	14,65	16,65	18,28	
		max.	14,35	15,35	17,35	19,12	
Head width / Anahtar ağızı	s	A	max.	31,61	35,38	-	-
			min.	31,00	35,00	40,00	45,00
	Nominal			32,00	36,00	41,00	46,00
Diagonal / Köşegen	e	A	max.	35,72	39,98	-	-
		B	min.	35,03	39,55	45,20	50,85

Thread size Anma çapı	A		B		M22	M24	M27	M30
Length Boy (l)	min.	max.	min.	max.	Weight /Ağırlık gr/p			
10	9,71	10,29	-	-				
12	11,65	12,35	-	-				
14	13,65	14,35	-	-				
16	15,65	16,35	-	-	133,00	173,00		
18	17,65	18,35	-	-	137,00	178,00		
20	19,58	20,42	-	-	143,00	184,00		
22	21,58	22,42	-	-	148,00	190,00	269,00	
25	24,58	25,42	-	-	155,00	199,00	280,00	
28	27,58	28,42	-	-	161,00	200,00	292,00	
30	29,58	30,42	-	-	168,00	214,00	310,00	
35	34,50	35,50	-	-	181,00	229,00	319,00	424,00
40	39,50	40,50	-	-	193,00	244,00	338,00	448,00
45	44,50	45,50	43,75	46,25	206,00	259,00	358,00	472,00
50	49,50	50,50	48,75	51,25	219,00	274,00	377,00	496,00
55	54,40	55,60	53,50	56,50	232,00	289,00	397,00	519,00
60	59,40	60,60	58,50	61,50	244,00	304,00	416,00	543,00

COATING : Plain, Zinc Plate, Zinc Flake, HDG

HARDNESS: Grade 5.8, Grade 8.8, Grade 10.9, Grade 12.9 available

Stainless Steel: A2 (304 SS) and A4 (316 SS) available

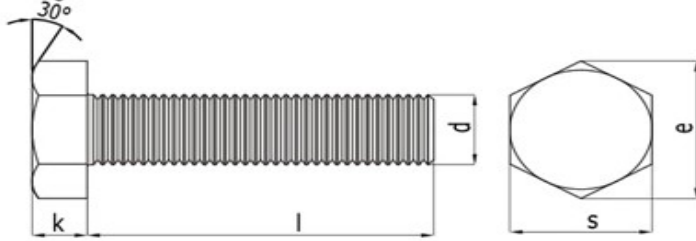
**DIN 933**
ISO 4017**HEXAGON HEAD BOLTS (Full Thread)**

Teknik Bilgiler / Technical Informations								
Thread size Anma çapı	A		B		M22	M24	M27	M30
Length Boy (l)	min.	max.	min.	max.	Weight /Ağırlık gr/p			
65	64,40	65,60	63,50	66,50	257,00	319,00	435,00	566,00
70	69,40	70,60	68,50	71,50	269,00	334,00	454,00	590,00
75	74,40	75,60	73,50	76,50	282,00	348,00	473,00	614,00
80	79,40	80,60	78,50	81,50	295,00	363,00	492,00	637,00
85	84,30	85,70	83,25	86,75	308,00	378,00	512,00	661,00
90	89,30	90,70	88,25	91,75	321,00	393,00	531,00	685,00
95	94,30	95,70	93,25	96,75	333,00	408,00	550,00	708,00
100	99,30	100,70	98,25	101,75	346,00	423,00	569,00	732,00
110	109,30	110,70	108,25	111,75	371,00	453,00	608,00	779,00
120	119,30	120,70	118,25	121,75	397,00	483,00	647,00	827,00
130	129,20	130,80	128,00	132,00	421,00	513,00	685,00	874,00
140	139,20	140,80	138,00	142,00	448,00	543,00	724,00	921,00
150	149,20	150,80	148,00	152,00	473,00	572,00	762,00	969,00
160	159,20	160,80	158,00	162,00	498,00	602,00	801,00	1010,00
170	169,20	170,80	168,00	172,00	523,00	632,00	839,00	1060,00
180	179,20	180,80	178,00	182,00	548,00	662,00	875,00	1110,00
190	189,08	190,92	187,70	192,30	573,00	692,00	911,00	1160,00
200	199,08	200,92	197,70	202,30	598,00	722,00	947,00	1210,00



DIN 933 ISO 4017

HEXAGON HEAD BOLTS (Full Thread)



Teknik Bilgiler / Technical Informations					
Thread size / Anma çapı (d)			M33	M36	M39
Pitch / Diş adımı	P		3,50	4,00	4,00
	Nominal		21,00	22,50	25,00
Head height / Kafa yüksekliği	k	A	min.		
		B	max.		
			20,58	22,08	24,58
			21,42	22,92	25,42
Head width / Anahtar ağızı	s	A	min.		
		B	min.		
			49,00	53,80	58,80
		Nominal	max.		
			50,00	55,00	60,00
Diagonal / Köşegen	e	A	min.		
		B	min.		
			55,37	60,79	66,44

Thread size Anma çapı	A		B		M33	M36	M39
Length Boy (l)	min.	max.	min.	max.	Weight / Ağırlık gr/p		
10	9,71	10,29	-	-			
12	11,65	12,35	-	-			
14	13,65	14,35	-	-			
16	15,65	16,35	-	-			
18	17,65	18,35	-	-			
20	19,58	20,42	-	-			
22	21,58	22,42	-	-			
25	24,58	25,42	-	-			
28	27,58	28,42	-	-			
30	29,58	30,42	-	-			
35	34,50	35,50	-	-	543,00	670,00	869,00
40	39,50	40,50	-	-	572,00	714,00	910,00
45	44,50	45,50	43,75	46,25	601,00	748,00	951,00
50	49,50	50,5	48,75	51,25	630,00	783,00	992,00
55	54,40	55,60	53,50	56,50	659,00	817,00	1030,00
60	59,40	60,60	58,50	61,50	688,00	851,00	1070,00

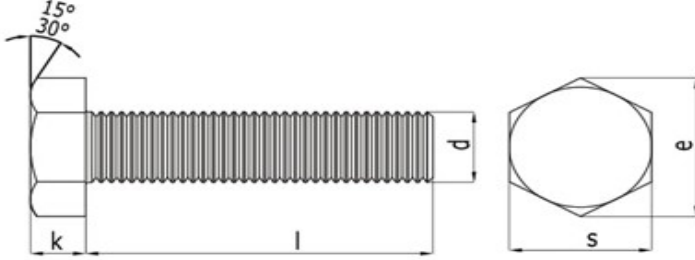
COATING : Plain, Zinc Plate, Zinc Flake, HDG

HARDNESS: Grade 5.8, Grade 8.8 , Grade 10.9, Grade 12.9 available

Stainless Steel: A2 (304 SS) and A4 (316 SS) available

**DIN 933**

ISO 4017

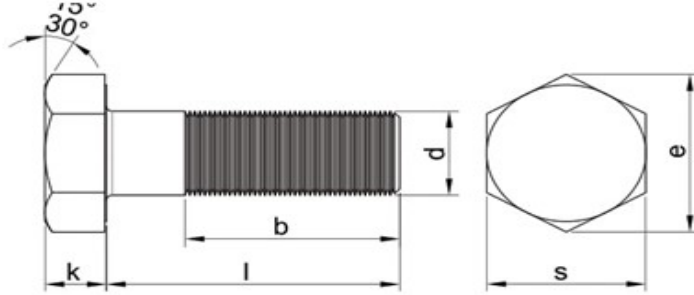
HEXAGON HEAD BOLTS (Full Thread)

Teknik Bilgiler / Technical Informations							
Thread size Anma çapı	A		B		M33	M36	M39
Length Boy (l)	min.	max.	min.	max.	Weight /Ağırlık gr/p		
65	64,40	65,60	63,50	66,50	717,00	886,00	1110,00
70	69,40	70,60	68,50	71,50	746,00	910,00	1160,00
75	74,40	75,60	73,50	76,50	775,00	950,00	1200,00
80	79,40	80,60	78,50	81,50	806,00	990,00	1240,00
85	84,30	85,70	83,25	86,75	837,00	1020,00	1280,00
90	89,30	90,70	88,25	91,75	866,00	1060,00	1320,00
95	94,30	95,70	93,25	96,75	891,00	1100,00	1360,00
100	99,30	100,70	98,25	101,75	920,00	1140,00	1400,00
110	109,30	110,70	108,25	111,75	978,00	1200,00	1480,00
120	119,30	120,70	118,25	121,75	1040,00	1260,00	1560,00
130	129,20	130,80	128,00	132,00	1090,00	1330,00	1650,00
140	139,20	140,80	138,00	142,00	1150,00	1400,00	1730,00
150	149,20	150,80	148,00	152,00	1210,00	1470,00	1810,00
160	159,20	160,80	158,00	162,00	1270,00	1540,00	1890,00
170	169,20	170,80	168,00	172,00	1330,00	1610,00	1970,00
180	179,20	180,80	178,00	182,00	1390,00	1680,00	2050,00
190	189,08	190,92	187,70	192,30	1440,00	1740,00	2140,00
200	199,08	200,92	197,70	202,30	1500,00	1810,00	2220,00



DIN 960 ISO 8765

HEXAGON HEAD BOLTS FINE THREADED



Teknik Bilgiler / Technical Informations									
Thread size / Anma çapı (d)		M8	M10	M12	M14	M16	M18	M20	
Pitch / Diş adımı	p	1,00	1,25	1,00	1,50	1,50	1,50	1,50	
	Nominal	5,30	6,40	7,50	8,80	10,00	11,50	12,50	
Head height / Kafa yüksekliği	k	min.	5,14	6,22	7,32	8,62	9,82	11,29	12,29
		max.	5,45	6,58	7,68	8,98	10,18	11,72	12,72
Head width / Anahtar ağızı	s	min.	12,73	16,73	18,73	21,67	23,67	26,67	29,67
		max.	13,00	17,00	19,00	22,00	24,00	27,00	30,00
Diagonal / Köşegen	e	min.	14,38	18,90	21,10	24,49	26,75	30,14	33,53
Thread length / Diş uzunluğu	b ¹		22,00	26,00	30,00	34,00	38,00	42,00	46,00
		b ²	28,00	32,00	36,00	40,00	44,00	48,00	52,00

b¹ for lengths l ≤ 125 mm.

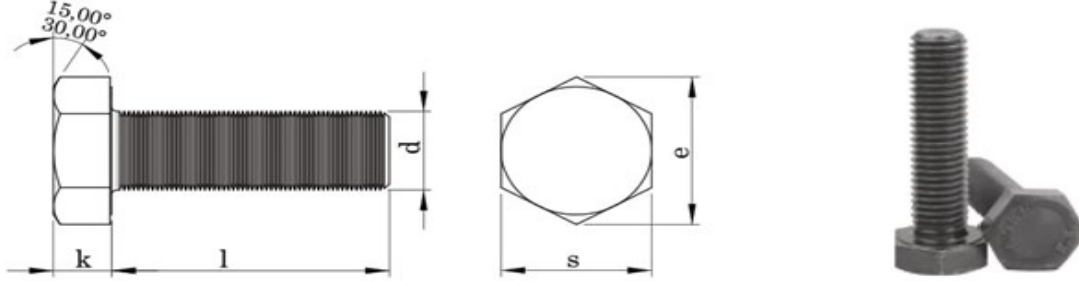
b² for lengths l 125 mm. ≤ 200 mm.

b³ for lengths > 200 mm.

Thread size Anma çapı	min.	max.	M8	M10	M12	M14	M16	M18	M20
			Weight /Ağırlık gr/p						
Length Boy (l)									
30	29,58	30,42	17,10						
35	34,50	35,50	19,10	33,20	46,40				
40	39,50	40,50	21,10	36,30	50,80				
45	44,50	45,50	23,00	39,40	55,20	78,90	103,00		
50	49,50	50,50	25,00	42,50	59,60	84,50	111,00		
55	54,40	55,60	27,00	45,50	64,00	90,10	119,00	159,00	
60	59,40	60,60	28,90	48,60	68,40	95,70	127,00	169,00	215,00
65	64,40	65,60	30,90	51,70	72,80	101,00	135,00	179,00	228,00
70	69,40	70,60	32,90	54,70	77,20	107,00	143,00	189,00	240,00
75	74,40	75,60	34,80	57,80	81,60	112,00	151,00	199,00	253,00
80	79,40	80,60	36,80	60,90	86,00	118,00	159,00	209,00	265,00
85	84,30	85,70	38,80	63,90	90,40	123,00	167,00	219,00	277,00
90	89,30	90,70	40,70	68,00	94,80	129,00	175,00	229,00	290,00
95	94,30	95,70	42,70	71,10	99,20	134,00	183,00	239,00	302,00
100	99,30	100,70	44,70	74,20	104,00	140,00	191,00	249,00	314,00
110	109,30	110,70	48,60	80,30	113,00	152,00	217,00	269,00	339,00
120	119,30	120,70	52,70	86,40	122,00	164,00	233,00	289,00	363,00
130	129,20	130,80	54,00	92,50	131,00	176,00	249,00	308,00	387,00
140	139,20	140,80	58,00	98,60	140,00	188,00	265,00	328,00	412,00
150	149,20	150,80	62,00	105,00	149,00	200,00	281,00	348,00	437,00
160	159,20	160,80		111,00	158,00	212,00	296,00	368,00	461,00
170	169,20	170,80			167,00	224,00	312,00	388,00	486,00
180	179,20	180,80			176,00	236,00	328,00	408,00	510,00
190	189,10	190,90				248,00	344,00	428,00	535,00
200	199,10	200,90				260,00	360,00	448,00	560,00

DIN 961 ISO 8676

HEXAGON CAP SCREWS, FINE THREAD



Teknik Bilgiler / Technical Informations		M8	M10	M12	M14	M16	M18	M20
Thread size / Anma çapı (d)		M8	M10	M12	M14	M16	M18	M20
Pitch / Diş adımı	P	1,00	1,00 1,25	1,50 1,25	1,50	1,50	1,50	1,50 2,00
	Nominal	5,30	6,40	7,50	8,80	10,00	11,50	12,50
Head height / Kafa yüksekliği	k	min. 5,15 max. 5,45	min. 6,22 max. 6,58	min. 7,32 max. 7,68	min. 8,62 max. 8,98	min. 9,82 max. 10,18	min. 11,29 max. 11,72	min. 12,29 max. 12,72
Head width / Anahtar ağızı	s	min. 12,73 max. 13,00	min. 15,73 max. 17,00	min. 17,73 max. 19,00	min. 20,67 max. 22,00	min. 23,67 max. 24,00	min. 26,67 max. 27,00	min. 29,67 max. 30,00
Diagonal / Köşegen	e	min. 14,38	min. 18,90	min. 21,10	min. 24,49	min. 26,75	min. 30,14	min. 33,53

b¹ for lengths l ≤ 125 mm.

b² for lengths l 125 mm. ≤ 200 mm.

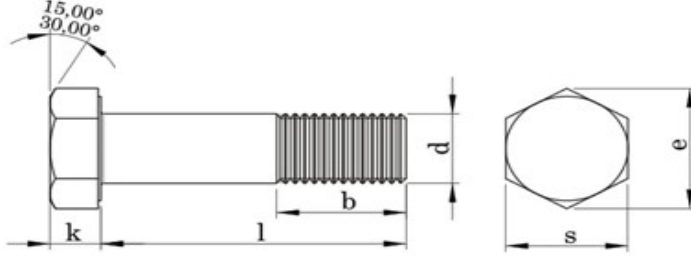
b³ for lengths > 200 mm.

Thread size Anma çapı	Length Boy (l)	min.	max.	M8	M10	M12	M14	M16	M18	M20
				Weight / Ağırlık gr/p						
20	19,58	20,42	12,40	23,50	32,90	48,70	64,50	90,00	118,00	
25	24,58	25,42	14,10	26,20	36,60	54,00	71,50	98,50	128,00	
30	29,58	30,42	15,70	28,90	40,30	59,10	78,50	107,00	139,00	
35	34,50	35,50	17,40	31,60	44,00	64,40	85,30	116,00	151,00	
40	39,50	40,50	19,10	34,30	47,70	69,60	92,30	124,00	162,00	
45	44,50	45,50	20,70	36,90	51,40	74,90	99,00	133,00	172,00	
50	49,50	50,50	22,30	39,60	55,00	80,20	106,00	142,00	184,00	
55	54,40	55,60	24,00	42,30	58,70	85,40	113,00	151,00	195,00	
60	59,40	60,60	25,70	45,10	62,40	90,60	120,00	160,00	207,00	
70	69,40	70,60	29,00	50,50	70,00	101,00	134,00	177,00	228,00	
80	79,40	80,60	32,30	55,80	77,40	111,00	148,00	195,00	251,00	
90	89,30	90,70	35,70	61,20	84,80	122,00	162,00	212,00	272,00	
100	99,30	100,70	38,90	66,70	92,20	133,00	176,00	229,00	295,00	
110	109,30	110,70	42,40	72,20	99,20	144,00	190,00	247,00	317,00	
120	119,30	120,70	45,90	77,50	107,00	154,00	204,00	265,00	339,00	
130	129,20	130,80		79,90	114,00	165,00	218,00	283,00	361,00	
140	139,20	140,80		88,30	121,00	175,00	232,00	300,00	383,00	
150	149,20	150,80		93,60	128,00	186,00	245,00	318,00	405,00	

DIN 961 Hexagon Head Cap Screws / Bolts are externally threaded fasteners with a hexagonal washer faced head and a chamfered tip to facilitate mating with an internally threaded component. DIN 961 hex screws have a fully threaded, fine threaded shank and are manufactured to very strict tolerances.

DIN 6914 HIGH-STRENGTH HEXAGON HEAD BOLTS

ISO EN 14399



Teknik Bilgiler / Technical Informations		M12	M16	M20	M22	M24	M27	M30	M36
Thread size / Anma çapı (d)		M12	M16	M20	M22	M24	M27	M30	M36
Pitch / Diş adımı	P	1,75	2,00	2,50	2,50	3,00	3,00	3,50	4,00
Head height / Kafa yüksekliği	k min.	7,55	9,25	12,10	13,10	14,10	16,10	17,95	21,95
	k max.	8,45	10,75	13,90	14,90	15,90	17,90	20,05	24,05
Head width / Anahtar ağızı	s min.	22,00	27,00	32,00	36,00	41,00	46,00	50,00	60,00
	s max.	21,60	26,16	31,00	35,00	40,00	45,00	49,00	58,80
Diagonal / Köşegen	e min.	23,91	29,56	35,03	39,55	45,20	50,85	55,37	66,44
	e b ¹	21,00	26,00	31,00	32,00	34,00	37,00	40,00	48,00
Thread length / Diş uzunluğu	b ²	23,00	28,00	33,00	34,00	37,00	39,00	42,00	50,00

b¹ for lengths l ≤ 125 mm.

b² for lengths l 125 mm. ≤ 200 mm.

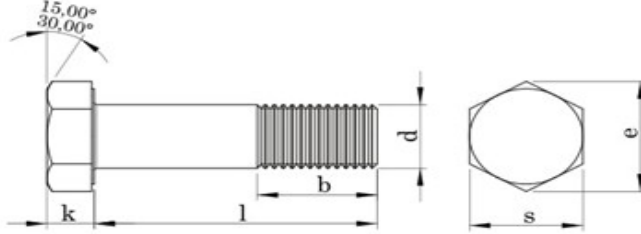
b³ for lengths > 200 mm.

Thread size Anma çapı	min.	max.	M12	M16	M20	M22	M24	M27	M30	M36
Length Boy (l)	Weight /Ağırlık gr/p									
30	28,95	31,05	49,10							
35	33,75	36,25	53,60							
40	38,75	41,25	58,00	105,00						
45	43,75	46,25	62,10	113,00	188,00					
50	48,75	51,25	66,60	121,00	200,00	257,00				
55	53,50	56,50	71,00	129,00	212,00	272,00				
60	58,50	61,50	75,40	137,00	225,00	286,00	362,00			
65	63,50	66,50	79,90	145,00	237,00	301,00	380,00			
70	68,50	71,50	84,30	153,00	249,00	316,00	398,00	532,00		
75	73,50	76,50	88,80	160,00	262,00	331,00	415,00	554,00	701,00	
80	78,50	81,50	93,20	168,00	274,00	346,00	433,00	576,00	728,00	
85	83,25	86,75	97,60	176,00	286,00	361,00	451,00	599,00	756,00	1184,00
90	88,25	91,75	102,00	184,00	298,00	375,00	467,00	621,00	784,00	1224,00
95	93,25	96,75	107,00	192,00	310,00	390,00	485,00	644,00	812,00	1264,00
100	98,25	101,75		199,00	322,00	405,00	503,00	665,00	838,00	1304,00
105	103,25	106,75		207,00	335,00	420,00	520,00	688,00	865,00	1336,00

The Din 6914 is a high strength hexagon bolts with large widths across flats for structural steel bolting. High strength hexagon head bolt are intended for use in GV & SL structural steel bolting in accordance with DIN18 800 part 1, together with DIN 6915 hexagon nuts & DIN 6916, DIN 6917 & DIN 6918 washer.

DIN 6914 HIGH-STRENGTH HEXAGON HEAD BOLTS

ISO EN 14399



Teknik Bilgiler / Technical Informations		M12	M16	M20	M22	M24	M27	M30	M36
Thread size / Anma çapı (d)		M12	M16	M20	M22	M24	M27	M30	M36
Pitch / Diş adımı	P	1,75	2,00	2,50	2,50	3,00	3,00	3,50	4,00
Head height / Kafa yüksekliği	k min.	7,55	9,25	12,10	13,10	14,10	16,10	17,95	21,95
	k max.	8,45	10,75	13,90	14,90	15,90	17,90	20,05	24,05
Head width / Anahtar ağızı	s min.	21,60	26,16	31,00	35,00	40,00	45,00	49,00	58,80
	s max.	22,00	27,00	32,00	36,00	41,00	46,00	50,00	60,00
Diagonal / Köşegen	e min.	23,91	29,56	35,03	39,55	45,20	50,85	55,37	66,44
	e b ¹	21,00	26,00	31,00	32,00	34,00	37,00	40,00	48,00
Thread length / Diş uzunluğu	b ²	23,00	28,00	33,00	34,00	37,00	39,00	42,00	50,00
	b ³								

b¹ for lengths l ≤ 125 mm.

b² for lengths l 125 mm. ≤ 200 mm.

b³ for lengths > 200 mm.

Thread size / Anma çapı (d)	Length / Boy		Weight / Ağırlık gr/p							
	min.	max.	M12	M16	M20	M22	M24	M27	M30	M36
110	108,25	111,75		215,00	347,00	435,00	538,00	710,00	893,00	1376,00
115	113,25	116,75		223,00	359,00	450,00	556,00	732,00	921,00	1415,00
120	118,25	121,75		231,00	372,00	465,00	574,00	755,00	949,00	1455,00
125	123,00	127,00		239,00	384,00	479,00	591,00	777,00	976,00	1495,00
130	128,00	132,00		247,00	396,00	494,00	609,00	800,00	1004,00	1535,00
135	133,00	137,00			409,00	509,00	627,00	822,00	1032,00	1575,00
140	138,00	142,00			421,00	524,00	645,00	845,00	1059,00	1615,00
145	143,00	147,00			433,00	539,00	662,00	867,00	1087,00	1655,00
150	148,00	152,00			446,00	554,00	680,00	890,00	1115,00	1695,00
155	151,00	159,00			458,00	569,00	698,00	912,00	1143,00	1735,00
160	156,00	164,00				584,00	716,00	935,00	1170,00	1775,00
165	161,00	169,00				599,00	733,00	957,00	1198,00	1815,00
170	166,00	174,00					751,00	979,00	1226,00	1855,00
175	171,00	179,00					769,00	1002,00	1254,00	1895,00
180	176,00	184,00					787,00	1024,00	1281,00	1935,00
185	180,40	189,60					804,00	1047,00	1309,00	1974,00
190	185,40	194,60					822,00	1069,00	1337,00	2014,00
195	190,40	199,60					840,00	1092,00	1365,00	2054,00
200	195,40	204,60						1114,00	1392,00	2094,00

COATING : Plain, Zinc Plate, Zinc Flake, HDG

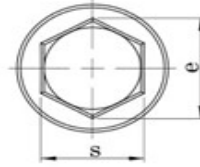
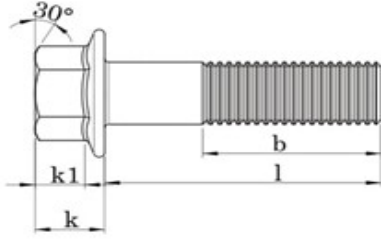
HARDNESS: Grade 5.8, Grade 8.8 , Grade 10.9, Grade 12.9 available

Stainless Steel: A2 (304 SS) and A4 (316 SS) available

DIN 6921

ISO EN 1665

HEXAGON HEAD FLANGE BOLTS



Teknik Bilgiler / Technical Informations		M5	M6	M8	M10	M12	M14	M16
Thread size / Anma çapı (d)								
Pitch / Diş adımı	P	0,80	1,00	1,25	1,50	1,75	2,00	2,00
Flange dia / Flanş çapı	dc	11,80	14,20	18,00	22,30	26,60	30,50	35,00
Flange height / Flanş yüksekliği	c	1,00	1,10	1,20	1,50	1,80	2,10	2,40
Head height / Kafa yüksekliği	k	5,40	6,60	8,10	9,20	11,50	12,80	14,40
	k1	2,00	2,50	3,20	3,60	4,60	5,10	5,80
Head width / Anahtar ağızı	s ^{min.}	7,78	9,78	12,73	14,73	15,73	17,73	20,67
	s ^{max.}	8,00	10,00	13,00	15,00	16,00	18,00	21,00
Diagonal / Köşegen	e	8,71	10,95	14,26	16,50	17,62	19,86	23,15
Thread length / Diş uzunluğu	b ₁	16,00	18,00	22,00	36,00	30,00	34,00	38,00
	b ₂	-	-	28,00	32,00	36,00	40,00	44,00

b¹ for lengths l ≤ 125 mm.

b² for lengths l 125 mm. ≤200 mm.

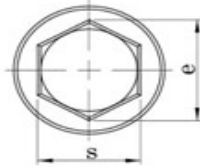
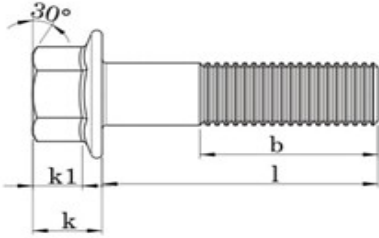
b³ for lengths > 200 mm.

Thread size / Anma çapı (d)	M5	M6	M8	M10	M12	M14	M16		
Length / Boy	min.	max.	Weight / Ağırlık gr/p						
10	9,71	10,29	3,22						
12	11,65	12,35	3,46	6,94	13,76	24,04			
16	15,65	16,35	3,94	7,62	15,01	26,01			
20	19,58	20,42	4,42	8,30	16,25	27,97	44,35		
25	24,58	25,42	5,25	9,16	17,80	30,42	47,90	66,13	83,82
30	29,58	30,42	6,00	10,50	19,36	32,88	51,46	71,01	90,37
35	34,50	35,50	6,74	11,58	21,77	35,33	55,02	75,89	96,92
40	39,50	40,50	7,48	12,65	23,68	39,18	58,57	80,76	103,50
45	44,50	45,50	8,23	13,73	25,60	42,20	64,20	85,64	110,00
50	49,50	50,50	8,97	14,80	27,52	45,21	68,54	93,45	116,60
55	54,40	55,60	9,71	15,88	29,44	48,23	72,87	99,37	126,70
60	59,40	60,60	10,46	16,96	31,36	51,24	77,21	105,30	134,50
65	64,40	65,60	11,20	18,03	33,27	54,25	81,55	111,20	142,30

Metric DIN 6921 Hexagon Flange Bolts are machine threaded bolts that have a circular washer like flange under the head that increases the bearing surface to distribute the load when the bolt is fastened to the substrate. DIN 6921 Hexagon Flange Bolts are available with and without serrations.

DIN 6921 ISO EN 1665

HEXAGON HEAD FLANGE BOLTS



Teknik Bilgiler / Technical Informations		M5	M6	M8	M10	M12	M14	M16
Thread size / Anma çapı (d)								
Pitch / Diş adımı	P	0,80	1,00	1,25	1,50	1,75	2,00	2,00
Flange dia / Flanş çapı	dc	11,80	14,20	18,00	22,30	26,60	30,50	35,00
Flange height / Flanş yüksekliği	c	1,00	1,10	1,20	1,50	1,80	2,10	2,40
Head height / Kafa yüksekliği	k	5,40	6,60	8,10	9,20	11,50	12,80	14,40
	k1	2,00	2,50	3,20	3,60	4,60	5,10	5,80
Head width / Anahtar ağızı	s ^{min.}	7,78	9,78	12,73	14,73	15,73	17,73	20,67
	s ^{max.}	8,00	10,00	13,00	15,00	16,00	18,00	21,00
Diagonal / Köşegen	e	8,71	10,95	14,26	16,50	17,62	19,86	23,15
Thread length / Diş uzunluğu	b ₁	16,00	18,00	22,00	36,00	30,00	34,00	38,00
	b ₂	-	-	28,00	32,00	36,00	40,00	44,00

b¹ for lengths l ≤ 125 mm.

b² for lengths l 125 mm. ≤ 200 mm.

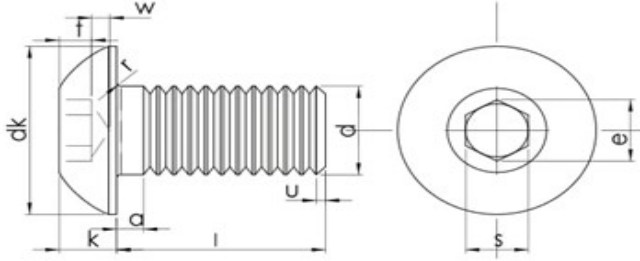
b³ for lengths > 200 mm.

Thread size / Anma çapı (d)	M5	M6	M8	M10	M12	M14	M16
Length / Boy	min.	max.	Weight / Ağırlık gr/p				
70	69,40	70,60	11,94	19,11	35,19	57,27	85,89
80	79,40	80,60	13,43	21,26	39,03	63,29	94,56
90	89,30	90,70		23,41	42,87	69,32	103,20
100	99,30	100,70		25,57	46,70	75,35	111,90
110	109,30	110,70			81,38	120,60	164,50
120	119,30	120,70			87,40	129,30	176,40
130	129,20	130,80			92,76	137,00	187,00
140	139,20	140,80				145,70	198,80
150	149,20	150,80					210,70
160	159,20	160,80					
180	179,20	180,80					
200	199,00	201,00					



ISO 7380

BUTTON HEAD SOCKET SCREWS

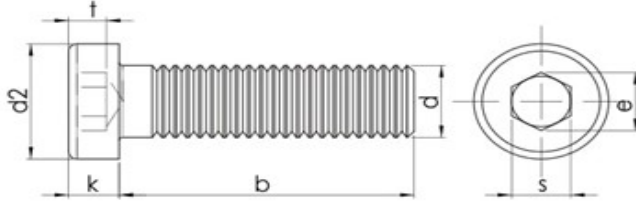


Teknik Bilgiler / Technical Informations		M 3	M 4	M 5	M 6	M 8	M 10	M 12	M 16
Thread size (d)		M 3	M 4	M 5	M 6	M 8	M 10	M 12	M 16
P1		0,50	0,70	0,80	1,00	1,25	1,50	1,75	2,00
a	max.	1,00	1,40	1,60	2,00	2,50	3,00	3,50	4,00
	min.	0,50	0,70	0,80	1,00	1,25	1,50	1,75	2,00
dk	max.	5,70	7,60	9,50	10,50	14,00	17,50	21,00	28,00
	min.	5,40	7,24	9,14	10,07	13,57	17,07	20,48	27,48
e2	max.	2,30	2,87	3,44	4,58	5,72	6,86	9,15	11,43
k	max.	1,65	2,20	2,75	3,30	4,40	5,50	6,60	8,80
	min.	1,40	1,95	2,50	3,00	4,10	5,20	6,24	8,44
r	min.	0,10	0,20	0,20	0,25	0,40	0,40	0,60	0,60
	min.	2,00	2,50	3,00	4,00	5,00	6,00	8,00	10,00
s3	max.	2,05	2,56	3,07	4,08	5,08	6,10	8,12	10,12
	min.	2,02	2,52	3,02	4,02	5,02	6,02	8,03	10,03
t	max.	1,04	1,30	1,56	2,08	2,60	3,12	4,16	5,20
W	min.	0,20	0,30	0,38	0,74	1,05	1,45	1,63	2,25

Nominal /Length	min.	max.	M 3	M 4	M 5	M 6	M 8	M 10	M 12	M 16
			Weight / Ağırlık gr/p							
10	9,71	10,29	1,00	1,20	2,08					
12	11,65	12,35	1,10	1,40	2,32	3,52	7,10			
(14) ⁵⁾	13,65	14,35								
16	15,65	16,35	1,20	1,57	2,80	4,20	8,34	14,62		
(18)	17,65	18,35								
20	19,58	20,42	1,40	2,00	3,28	4,88	9,58	16,57	27,86	
(22)	21,58	22,42								
25	24,58	25,42	1,60	2,30	3,87	5,73	11,14	19,01	31,42	
30	29,58	30,42	1,80	2,60	4,47	6,58	12,69	21,45	34,98	
35	34,50	35,50		2,91	5,61	8,02	14,24	23,89	38,54	
40	39,50	40,50		3,23	6,38	9,09	15,80	26,33	42,11	
45	44,50	45,50			7,15	10,17	16,63	27,34	45,67	
50	49,50	50,50			7,92	11,25	18,55	30,35	49,23	
55	54,40	55,60					20,47	33,36	48,57	
60	59,40	60,60					22,38			
65	64,40	65,60					24,30	36,38	52,90	
70	69,40	70,60					26,22			
75	74,40	75,60					28,14	42,41	61,57	
80	79,40	80,60					30,06	48,43	70,24	
85	84,30	85,70						51,45	74,57	
90	89,30	90,70							78,91	
95	94,30	95,70								
100	99,30	100,70								

DIN 7984

HEX SOCKET HEAD CAP SCREWS WITH LOW HEAD



Teknik Bilgiler / Technical Informations			M3	M4	M5	M6	M8	M10	M12	M14
Thread size / Anma çapı (d)										
Pitch / Diş adımı	P	P	0,50	0,70	0,80	1,00	1,25	1,50	1,75	2,00
Head height / Kafa Yüksekliği	k	min.	1,86	2,66	3,32	3,82	4,82	5,82	6,78	7,78
		max.	2,00	2,80	3,50	4,00	5,00	6,00	7,00	8,00
Head dia / Kafa çapı	d2	min.	5,32	6,78	8,28	9,78	12,73	15,73	17,73	20,67
		max.	5,50	7,00	8,50	10,00	13,00	16,00	18,00	21,00
Socket width / Soket genişliği	s	nominal	2,00	2,50	3,00	4,00	5,00	7,00	8,00	10,00
		min.	2,02	2,52	3,02	4,02	5,02	7,03	8,03	10,03
		max.	2,10	2,60	3,10	4,12	5,14	7,18	8,18	10,18
Socket dia / Soket çapı	e	min.	2,30	2,87	3,44	4,58	5,72	8,01	9,15	11,43
		nominal	1,50	2,30	2,70	3,00	3,80	4,50	5,00	5,30
Socket depth / Soket derinliği	t	min.	1,38	2,18	2,58	2,88	3,65	4,35	4,85	5,15
		max.	1,62	2,42	2,82	3,12	3,95	4,65	5,15	5,45
			12,00	14,00	16,00	18,00	22,00	26,00	30,00	34,00
Thread length / Diş uzunluğu	b ₁ b ₂ b ₃									

b¹ for lengths l ≤ 125 mm.

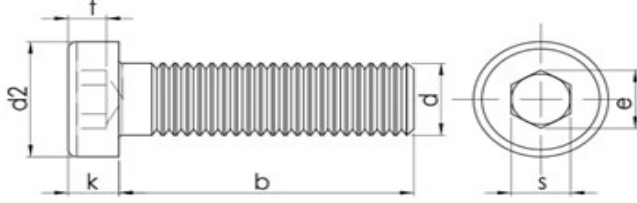
b² for lengths l 125 mm. ≤ 200 mm.

b³ for lengths > 200 mm.

Thread size / Anma çapı (d)			M3	M4	M5	M6	M8	M10	M12	M14
Length/ Boyçapı (d)	min.	max.	Weight/Ağırlık gr/p							
5	4,76	5,24	0,48							
6	5,76	6,24	0,52	0,96						
8	7,71	8,29	0,60	1,12	2,26					
10	9,71	10,29	0,69	1,28	2,50	3,59				
12	11,65	12,35	0,78	1,44	2,74	3,94	8,05			
14	13,65	14,35	0,86	1,60	2,98	4,29	8,65			
16	15,65	16,35	0,97	1,76	3,22	4,64	9,25	14,40		
18	17,65	18,35	1,10	1,95	3,46	4,99	9,85	15,40		
20	19,58	20,42	1,20	2,15	3,77	5,34	10,50	16,40	24,10	
25	24,58	25,42		2,64	4,54	6,45	12,00	19,00	27,70	
30	29,58	30,42			5,31	7,56	14,00	21,60	31,30	46,50
35	34,5	35,5				8,67	16,00	24,70	34,90	51,40
40	39,5	40,5				9,78	18,00	27,80	39,30	56,30
45	44,5	45,5					20,00	30,90	43,70	62,30
50	49,5	50,5					22,00	34,00	48,10	68,30
55	54,4	55,6					24,00	37,10	52,50	74,30
60	59,4	60,6					26,00	40,20	56,90	80,30
70	69,4	70,6						46,40	65,80	92,40
80	79,4	80,6							74,70	105,00
90	89,3	90,7								
100	99,3	100,7								

DIN 7984

HEX SOCKET HEAD CAP SCREWS WITH LOW HEAD



Teknik Bilgiler / Technical Informations						
Thread size / Anma çapı (d)		M16	M18	M20	M22	M24
Pitch / Diş adımı	P	2,00	2,50	2,50	2,50	3,00
Head height / Kafa Yüksekliği	k	8,78	9,78	10,73	11,73	12,73
	min. max.	9,00	10,00	11,00	12,00	13,00
Head dia / Kafa çapı	d2	23,67	26,67	29,67	32,61	35,61
	min. max.	24,00	27,00	30,00	33,00	36,00
Socket width / Soket genişliği	s	12,00	12,00	14,00	14,00	17,00
	nominal min. max.	12,03	12,03	14,03	14,03	17,05
Socket dia / Soket çapı	e	12,21	12,21	14,21	14,21	17,23
	min. max.	13,72	13,72	16,00	16,00	19,44
Socket depth / Soket derinliği	t	5,50	6,50	7,50	8,00	8,00
	nominal min. max.	5,35	6,32	7,32	7,82	7,82
Thread length / Diş uzunluğu	b ₁	38,00	42,00	46,00	50,00	54,00
	b ₂	44,00	48,00	52,00	56,00	60,00
	b ₃	57,00	61,00	65,00	69,00	73,00

b¹ for lengths l ≤ 125 mm.

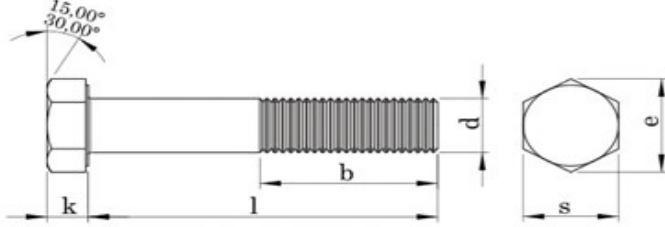
b² for lengths l 125 mm. ≤ 200 mm.

b³ for lengths > 200 mm.

Thread size / Anma çapı (d)		M16	M18	M20	M22	M24
Length/ Boyçapı (d)	min. max.	Weight/Ağırlık gr/p				
5	4,76 5,24					
6	5,76 6,24					
8	7,71 8,29					
10	9,71 10,29					
12	11,65 12,35					
14	13,65 14,35					
16	15,65 16,35					
18	17,65 18,35					
20	19,58 20,42					
25	24,58 25,42					
30	29,58 30,42	62,10				
35	34,50 35,50	68,80				
40	39,50 40,50	75,50	99,00	130,00		
45	44,50 45,50	82,20	107,00	140,00		
50	49,50 50,50	89,60	115,00	150,00	188,00	223,00
55	54,40 55,60	97,00	125,00	160,00	201,00	238,00
60	59,40 60,60	104,00	135,00	172,00	214,00	253,00
70	69,40 70,60	119,00	155,00	197,00	244,00	288,00
80	79,40 80,60	134,00	175,00	222,00	274,00	324,00
90	89,30 90,70		195,00	247,00	304,00	359,00
100	99,30 100,70		215,00	272,00	334,00	395,00

DIN 7990

HEX SOCKET COUNTERSUNK HEAD CAP SCREWS



Teknik Bilgiler / Technical Informations								
Thread size / Anma çapı (d)		M12	M16	M20	M22	M24	M27	M30
Pitch / Diş adımı P		1,75	2,00	2,50	2,50	3,00	3,00	3,50
Head height / Kafa Yüksekliği k	max.	8,45	10,75	13,90	14,90	15,90	17,90	20,05
	Nominal min.	8,00	10,00	13,00	14,00	15,00	17,00	19,00
Head with / Anahtar ağız s	max.	19,00	24,00	30,00	32,00	36,00	41,00	46,00
	min.	18,48	23,16	29,16	31,00	35,00	40,00	45,00
Diagonal / Köşegen e	min.	20,88	26,17	32,95	35,03	39,55	45,20	50,85
Thread length / Diş uzunluğu b		17,75	21,00	23,50	25,50	26,00	29,00	30,50

b¹ for lengths l ≤ 125 mm.

b² for lengths l 125 mm. ≤200 mm.

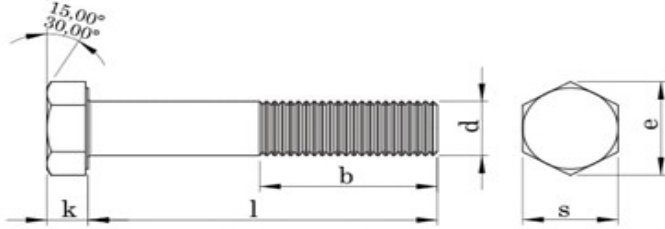
b³ for lengths > 200 mm.

Thread size / Anma çapı (d)		M12	M16	M20	M22	M24	M27	M30	
Length/ Boyçapı (d)	min.	max.	Weight/Ağırlık gr/p						
30	28,95	31,05	58,80						
35	33,75	36,25	63,20	119,00					
40	38,75	41,25	67,60	127,00	240,00	284,00			
45	43,75	46,25	72,00	135,00	252,00	299,00	377,00		
50	48,75	51,25	76,40	143,00	264,00	314,00	395,00		
55	53,50	56,50	80,80	151,00	276,00	329,00	413,00		
60	58,50	61,50	85,20	159,00	288,00	344,00	431,00	595,00	
65	63,50	66,50	89,60	167,00	300,00	359,00	449,00	617,00	
70	68,50	71,50	94,00	175,00	312,00	374,00	467,00	639,00	
75	73,50	76,50	98,40	183,00	324,00	389,00	485,00	661,00	
80	78,50	81,50	102,00	191,00	336,00	404,00	503,00	683,00	902,00
85	83,25	86,75	106,00	199,00	348,00	419,00	521,00	705,00	930,00
90	88,25	91,75	110,00	207,00	360,00	434,00	539,00	727,00	958,00
95	93,25	96,75	114,00	215,00	372,00	449,00	557,00	749,00	986,00
100	98,25	101,75	118,00	223,00	384,00	464,00	575,00	771,00	1014,00
105	103,25	106,75	122,00	231,00	396,00	479,00	593,00	793,00	1042,00
110	108,25	111,75	126,00	239,00	408,00	494,00	611,00	815,00	1070,00



DIN 7990

HEX SOCKET COUNTERSUNK HEAD CAP SCREWS



Teknik Bilgiler / Technical Informations		M12	M16	M20	M22	M24	M27	M30
Thread size / Anma çapı (d)		M12	M16	M20	M22	M24	M27	M30
Pitch / Diş adımı	P	1,75	2,00	2,50	2,50	3,00	3,00	3,50
Head height / Kafa Yüksekliği	max.	8,45	10,75	13,90	14,90	15,90	17,90	20,05
	Nominal	8,00	10,00	13,00	14,00	15,00	17,00	19,00
Head with / Anahtar ağızı	max.	19,00	24,00	30,00	32,00	36,00	41,00	46,00
	min.	18,48	23,16	29,16	31,00	35,00	40,00	45,00
Diagonal / Köşegen	e	20,88	26,17	32,95	35,03	39,55	45,20	50,85
Thread length / Diş uzunluğu	b	17,75	21,00	23,50	25,50	26,00	29,00	30,50

b^1 for lengths $l \leq 125$ mm.

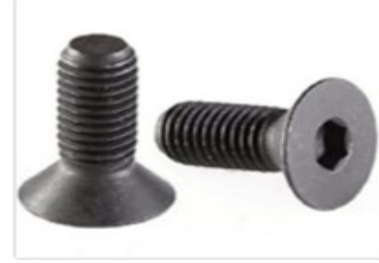
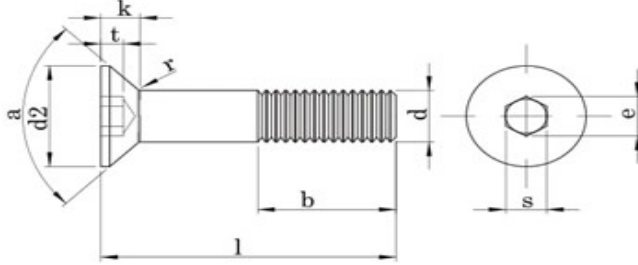
b^2 for lengths l 125 mm. ≤ 200 mm.

b^3 for lengths > 200 mm.

Thread size / Anma çapı (d)		M12	M16	M20	M22	M24	M27	M30
Length/ Boyçapı (d)	min.	max.	Weight/Ağırlık gr/p					
115	113,25	116,75	130,00	247,00	420,00	509,00	629,00	837,00
120	118,25	121,75	134,00	255,00	432,00	524,00	647,00	859,00
125	123,00	127,00		263,00	444,00	539,00	665,00	881,00
130	128,00	132,00		271,00	456,00	554,00	683,00	903,00
135	133,00	137,00		279,00	468,00	569,00	701,00	925,00
140	138,00	142,00		287,00	480,00	584,00	719,00	947,00
145	143,00	147,00		295,00	492,00	599,00	737,00	969,00
150	148,00	152,00		303,00	504,00	614,00	755,00	991,00
155	151,00	159,00			516,00	629,00	773,00	1013,00
160	156,00	164,00			528,00	644,00	791,00	1035,00
165	161,00	169,00			540,00	659,00	809,00	1057,00
170	166,00	174,00			552,00	674,00	827,00	1079,00
175	171,00	179,00			564,00	689,00	845,00	1101,00
180	176,00	184,00				704,00	863,00	1123,00
185	180,40	189,60				719,00	881,00	1145,00
190	185,40	194,60				734,00	899,00	1167,00
195	190,40	199,60				749,00	917,00	1189,00
200	195,40	204,60				764,00	935,00	1211,00

DIN 7991 ISO 10642

HEXAGON SOCKET COUNTERSUNK HEAD CAP SCREWS



Teknik Bilgiler / Technical Informations		M3	M4	M5	M6	M8	M10	M12
Thread size / Anma çapı (d)		M3	M4	M5	M6	M8	M10	M12
Pitch / Diş adımı	P	0,50	0,70	0,80	1,00	1,25	1,50	1,75
Head height / Kafa Yüksekliği	k max.	1,70	2,30	2,80	3,30	4,40	5,50	6,50
Head dia / Kafa çapı	d2 max.	6,00	8,00	10,00	12,00	16,00	20,00	24,00
	d2 min.	5,70	7,64	9,64	11,57	15,57	19,48	23,48
Socket width / Soket genişliği	s max.	2,10	2,60	3,10	4,12	5,14	6,14	8,18
	s Nominal	2,00	2,50	3,00	4,00	5,00	6,00	8,00
Socket dia / Soket çapı	e min.	2,02	2,52	3,02	4,02	5,02	6,02	8,03
	e max.	2,30	2,87	3,44	4,58	5,72	6,86	9,15
Socket depth / Soket derinliği	t max.	1,20	1,80	2,30	2,50	3,50	4,40	4,60
	t min.	0,95	1,55	2,05	2,25	3,20	4,10	4,30
Thread length / Diş uzunluğu	b ₁	12,00	14,00	16,00	18,00	22,00	26,00	30,00
	b ₂				24,00	28,00	32,00	36,00
	b ₃						45,00	49,00

b¹ for lengths l ≤ 125 mm.

b² for lengths l 125 mm. ≤ 200 mm.

b³ for lengths > 200 mm.

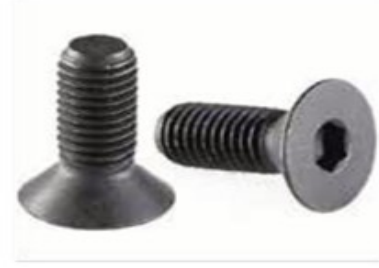
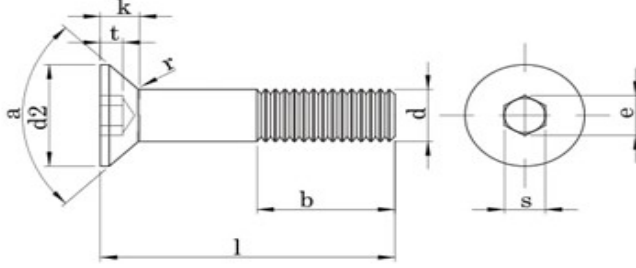
Thread size / Anma çapı (d)		M3	M4	M5	M6	M8	M10	M12	
Length/ Boyçapı (d)	min.								
	max.								
		Weight/Ağırlık gr/p							
8	7,71	8,29	0,47	0,92	1,60	2,35			
10	9,71	10,29	0,56	1,07	1,85	2,70	5,47		
12	11,65	12,35	0,65	1,23	2,10	3,05	6,10	10,10	
16	15,65	16,35	0,83	1,53	2,59	3,76	7,35	12,10	
20	19,58	20,42	1,00	1,84	3,09	4,46	8,60	14,10	21,20
25	24,58	25,42	1,35	2,23	3,71	5,34	10,20	16,60	24,80
30	29,58	30,42	1,63	2,90	4,33	6,22	11,70	19,10	28,50
35	34,50	35,50		3,40	5,43	7,10	13,30	21,60	32,10
40	39,50	40,50	2,19	3,90	6,20	8,83	14,80	24,10	35,70
50	49,50	50,50	2,75	4,90	7,74	11,00	19,90	30,10	43,00
60	59,40	60,60		5,90	9,28	13,17	24,80	35,70	54,00
70	69,40	70,60		6,90	10,80	15,34	29,70	41,20	62,90
80	79,40	80,60				17,51	34,60	46,70	71,80
90	89,30	90,70				19,68	39,50	52,20	80,70
100	99,30	100,70				21,85	44,40	57,70	89,60

DIN 7991 hexagon socket cap screws have a flat countersunk head with an internal hexagonal drive suited for a hex / Allen key or wrench. The internal drive is ideal for situations where externally wrenched screws are impractical such as in applications where limited space is available.

DIN 7991

ISO 10642

HEXAGON SOCKET COUNTERSUNK HEAD CAP SCREWS



Teknik Bilgiler / Technical Informations		M14	M16	M18	M20	M22	M24
Thread size / Anma çapı (d)		M14	M16	M18	M20	M22	M24
Pitch / Diş adımı	P	2,00	2,00	2,50	2,50	2,50	3,00
Head height / Kafa Yüksekliği	k max.	7,00	7,50	8,00	8,50	13,10	14,00
Head dia / Kafa çapı	d2 max.	27,00	30,00	33,00	36,00	36,00	39,00
	d2 min.	26,48	29,48	32,38	35,38	35,38	38,38
Socket width / Soket genişliği	s max.	10,18	10,18	12,21	12,21	14,21	14,21
	s Nominal	10,00	10,00	12,00	12,00	14,00	14,00
Socket dia / Soket çapı	e min.	11,43	11,43	13,72	13,72	16,00	16,00
	e max.	4,80	5,30	5,50	5,90	8,80	10,30
Socket depth / Soket derinliği	t min.	4,50	5,00	5,20	5,60	8,44	9,87
	t max.						
Thread length / Diş uzunluğu	b ₁	34,00	38,00	42,00	46,00	50,00	54,00
	b ₂	40,00	44,00	48,00	52,00	56,00	60,00
	b ₃	53,00	57,00	61,00	65,00	69,00	73,00

b¹ for lengths l ≤ 125 mm.

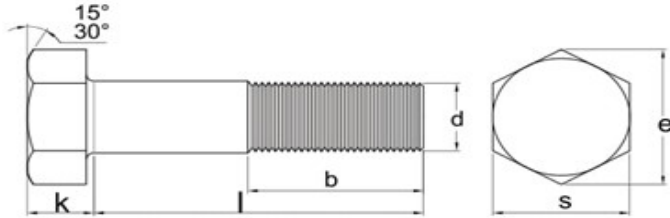
b² for lengths l 125 mm. ≤ 200 mm.

b³ for lengths > 200 mm.

Thread size / Anma çapı (d)	M14	M16	M18	M20	M22	M24
Length/ Boyçapı (d)	Weight/Ağırlık gr/p					
8	7,71	8,29				
10	9,71	10,29				
12	11,65	12,35				
16	15,65	16,35				
20	19,58	20,42				
25	24,58	25,42	37,30			
30	29,58	30,42	42,20	51,80		
35	34,50	35,50	47,20	58,40	91,40	
40	39,50	40,50	52,30	65,10	79,00	102,00
50	49,50	50,50	64,40	78,40	96,00	123,00
60	59,40	60,60	76,40	91,70	112,00	143,00
70	69,40	70,60	88,50	111,00	128,00	164,00
80	79,40	80,60	100,60	127,00	144,00	200,00
90	89,30	90,70	110,00	143,00	160,00	226,00
100	99,30	100,70	124,80	159,00	176,00	253,00



ASME B.18.2.1 HEXAGON HEAD UNC/UNF THREADED BOLTS

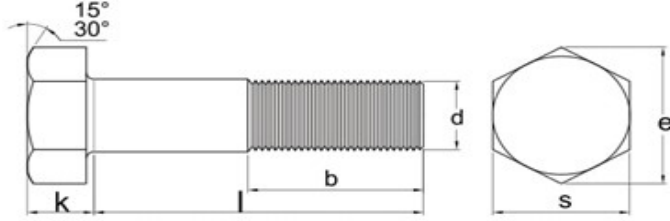


Teknik Bilgiler / Technical Informations								
Thread size / Anma çapı (d)			1/4	5/16	3/8	7/16	1/2	9/16
Pitch /Diş Adımı	P	mm.	6,35	7,94	9,52	1,00	12,70	14,29
		UNC	20,00	18,00	16,00	14,00	13,00	12,00
		UNF	28,00	24,00	24,00	20,00	20,00	18,00
Head height /Kafa Yüksekliği	k	max.	4,14	5,36	6,17	7,39	8,20	9,42
		min.	3,81	4,95	5,74	6,91	7,67	8,84
Head width /Anahtar Ağızı	s	max.	11,13	12,70	14,27	15,88	19,05	20,62
		min.	10,87	12,42	14,00	15,54	18,69	20,27
Diagonal /Köşegen	e	max.	12,83	14,66	16,51	18,34	22,00	23,83
		min.	12,40	14,15	15,95	17,73	21,34	23,11

Thread size / Anma çapı (d)			1/4	5/16	3/8	7/16	1/2	9/16
Length / Boy			Weight / Ağırlık gr/p					
5/8	15,88	d: 1/4 - 3/4 +0,05/-0,05	5,94	9,98	14,70			
3/4	19,05		6,53	10,93	16,10	23,04	36,74	
7/8	22,23		7,12	11,88	17,51	24,95	39,28	
1	25,40	d:1/4-3/8 +0,05 / -1,01	7,89	12,84	18,91	26,85	41,82	51,17
1 1/8	28,58		8,66	14,06	20,48	28,76	44,36	54,41
1 1/4	31,75		9,43	15,29	22,04	30,66	46,90	57,65
1 3/8	34,93		10,23	16,51	23,81	33,07	49,74	60,89
1 1/2	38,10		11,02	17,74	25,58	35,47	52,57	64,14
1 5/8	41,28		11,79	18,96	27,35	37,87	55,70	68,11
1 3/4	44,45	d: 7/16 - 1/2 +1,01 / -1,52	12,56	20,18	29,12	40,28	58,83	72,08
1 7/8	47,63		13,36	21,41	30,87	42,68	61,96	76,04
2	50,80	d:9/16 - 3/4 +1,52 / -2,03	14,15	22,63	32,61	45,09	65,09	80,01
2 1/8	53,98		14,92	23,84	34,38	47,49	68,22	83,98
2 1/4	57,15		15,69	25,04	36,15	49,90	71,35	87,95
2 3/8	60,33		16,49	26,26	37,90	52,30	74,48	91,92
2 1/2	63,50		17,28	27,49	39,64	54,70	77,61	95,89

ASME is the leading international developer of codes and standards, hereafter referred to as standards, associated with the art, science, and practice of mechanical engineering. ASME is the globally recognized, trusted source of consensus standards since 1884.

ASME B.18.2.1 HEXAGON HEAD UNC/UNF THREADED BOLTS



Teknik Bilgiler / Technical Informations								
Thread size / Anma çapı (d)			1/4	5/16	3/8	7/16	1/2	9/16
Pitch /Diş Adımı	P	mm.	6,35	7,94	9,52	1,00	12,70	14,29
		UNC	20,00	18,00	16,00	14,00	13,00	12,00
Head height /Kafa Yüksekliği	k	max.	4,14	5,36	6,17	7,39	8,20	9,42
		min.	3,81	4,95	5,74	6,91	7,67	8,84
Head width /Anahtar Ağızı	s	max.	11,13	12,70	14,27	15,88	19,05	20,62
		min.	10,87	12,42	14,00	15,54	18,69	20,27
Diagonal /Köşegen	e	max.	12,83	14,66	16,51	18,34	22,00	23,83
		min.	12,40	14,15	15,95	17,73	21,34	23,11

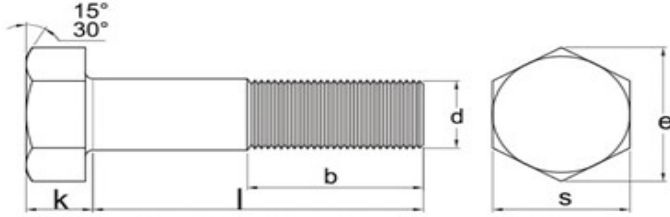
Thread size / Anma çapı (d)			1/4	5/16	3/8	7/16	1/2	9/16
Length / Boy			Weight / Ağırlık gr/p					
2 5/8	66,68		18,05	28,71	41,41	57,11	80,74	99,88
2 3/4	69,85	d: 1/4 - 3/8 -	18,82	29,94	43,18	59,51	83,87	103,87
2 7/8	73,03	1,01 /-1,52 d:	19,92	31,16	44,95	61,92	87,00	107,84
3	76,20	7/16 - 1/2 -1,52	20,41	32,39	46,72	64,32	90,13	11,81
3 1/4	82,55	/ -2,03 d: 9/16 -	21,95		50,21	69,13	96,39	119,75
3 1/2	88,90	3/4 +2,03 / -	23,54		53,75	73,94	102,65	127,69
3 1/4	95,25	2,54	25,08		57,24	78,74	108,91	135,62
4	101,60		26,67		60,78	83,51	115,17	143,56
4 1/4	108,00		28,24		64,30	88,31	121,43	151,50
4 1/2	114,30	d: 1/4 - 3/8	29,80		67,81	93,12	127,69	159,44
4 3/4	120,70	+1,52 / -2,54	31,37		71,33	97,93	133,95	167,38
5	127,00	d:7/16 - 1/2	32,93		74,84	102,74	140,21	175,31
5 1/4	133,40	+2,03 / -2,54			78,38	107,55	146,60	183,27
5 1/2	139,70	d:9/16 - 3/4			81,92	112,35	152,72	191,23
5 3/4	146,10	+2,54 / -2,54			85,43	117,16	158,98	199,17
6	152,40				88,95	121,97	165,24	207,11

The most common types of UN (Unified National) thread are:

UNC – Unified National Coarse Thread, comparable with the ISO metric thread

UNF – Unified National Fine Thread

ASME B.18.2.1 HEXAGON HEAD UNC/UNF THREADED BOLTS



Teknik Bilgiler / Technical Informations						
Thread size / Anma çapı (d)			5/8	3/4	7/8	1 "
Pitch /Diş Adımı	P	mm.	15,88	19,05	22,22	25,40
		UNC	11,00	10,00	9,00	8,00
		UNF	18,00	16,00	14,00	12,00
Head height /Kafa Yüksekliği	k	max.	10,24	12,27	14,30	15,93
		min.	9,60	11,56	13,49	15,01
Head width /Anahtar Ağızı	s	max.	23,83	28,58	33,32	38,10
		min.	23,42	27,94	32,64	37,31
Diagonal /Köşegen	e	max.	27,51	32,99	38,51	43,99
		min.	26,70	31,85	37,21	42,55

Thread size / Anma çapı (d)			5/8	3/4	7/8	1 "
Length / Boy			Weight / Ağırlık gr/p			
5/8	15,88					
3/4	19,05	d: 1/4 - 3/4				
7/8	22,23	+0,05/-0,05				
1	25,40		68,76			
1 1/8	28,58		72,78			
1 1/4	31,75		76,79	122,74		
1 3/8	34,93		80,81	128,64		
1 1/2	38,10	d:1/4-3/8 +0,05 / -	84,82	134,54		
1 5/8	41,28	1,01 d: 7/16 - 1/2	89,27	104,43		
1 3/4	44,45	+1,01 / -1,52	93,71	146,33	218,73	301,54
1 7/8	47,63	d:9/16 - 3/4	98,61	152,82		
2	50,80	+1,52 / -2,03	103,51	159,30	234,79	322,60
2 1/8	53,98		108,39	166,36		
2 1/4	57,15		113,26	173,41		
2 3/8	60,33		118,16	180,46		
2 1/2	63,50		123,06	187,20	272,57	364,72

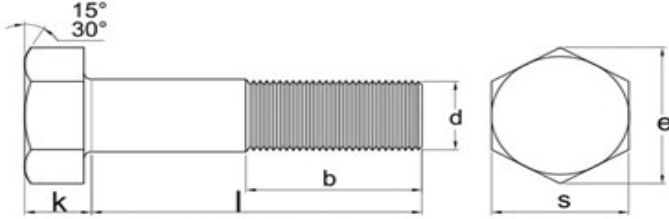
UNC Thread



UNF Thread



ASME B.18.2.1 HEXAGON HEAD UNC/UNF THREADED BOLTS



Teknik Bilgiler / Technical Informations						
Thread size / Anma çapı (d)			5/8	3/4	7/8	1 "
Pitch /Diş Adımı	P	mm.	15,88	19,05	22,22	25,40
		UNC	11,00	10,00	9,00	8,00
		UNF	18,00	16,00	14,00	12,00
Head height /Kafa Yüksekliği	k	max.	10,24	12,27	14,30	15,93
		min.	9,60	11,56	13,49	15,01
Head width /Anahtar Ağızı	s	max.	23,83	28,58	33,32	38,10
		min.	23,42	27,94	32,64	37,31
Diagonal /Köşegen	e	max.	27,51	32,99	38,51	43,99
		min.	26,70	31,85	37,21	42,55

Thread size / Anma çapı (d)			5/8	3/4	7/8	1 "
Length / Boy			Weight / Ağırlık gr/p			
2 5/8	66,68		127,94	194,57		
2 3/4	69,85	d: 1/4 - 3/8 -	132,81	201,62		
2 7/8	73,03	1,01 / -1,52 d:	137,71	208,68		
3	76,20	7/16 - 1/2 -1,52	142,61	215,73	311,96	416,66
3 1/4	82,55	/ -2,03 d: 9/16 -	152,36	229,84		
3 1/2	88,90	3/4 +2,03 / -	162,16	143,94	351,36	466,65
3 3/4	95,25	2,54	171,91	258,05		
4	101,60		181,71	272,16	390,75	516,64
4 1/4	108,00		191,48	286,26		
4 1/2	114,30	d: 1/4 - 3/8	201,26	300,37	430,00	566,62
4 3/4	120,70	+1,52 / -2,54	211,03	314,48		
5	127,00	d:7/16 - 1/2	220,81	328,58	469,53	616,60
5 1/4	133,40	+2,03 / -2,54	230,58	342,69		
5 1/2	139,70	d:9/16 - 3/4	240,36	356,80	508,93	666,60
5 3/4	146,10	+2,54 / -2,54	250,13	370,90		
6	152,40		259,91	385,01	548,00	716,59

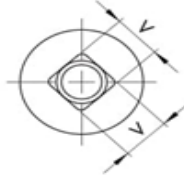
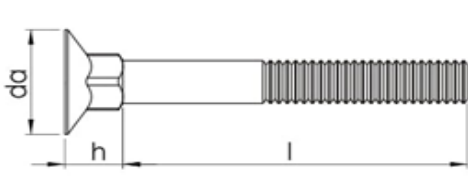
COATING : Plain, Zinc Plate, Zinc Flake, HDG

HARDNESS: Grade 5.8, Grade 8.8 , Grade 10.9, Grade 12.9 available

Stainless Steel: A2 (304 SS) and A4 (316 SS) available



UNC FLAT COUNTERSUNK SQUARE NECK BOLTS



Teknik Bilgiler / Technical Informations		
Thread size / Anma çapı (d)		7/16
Head height / Kafa yüksekliği	h	9,00
Head dia / Kafa çapı	da	20,00
Square width / Kafa genişliği	v	11,00

Thread size / Anma çapı (d)	7/16
Length / Boy (l)	Weight / Ağırlık gr/p
30	28,74
35	31,95
40	35,76
45	39,56
50	42,77
55	47,03
60	50,45
65	54,07
70	57,69



COATING : Plain, Zinc Plate, Zinc Flake, HDG

HARDNESS: Grade 8.8, Grade 10.9 available

**ADDRESS** :

Fevzi Çakmak Mah. 10768. Sk.
Zip Code: 42050
Karatay / Konya / TÜRKİYE

+90 332 345 0427

+90 536 566 6990



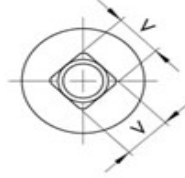
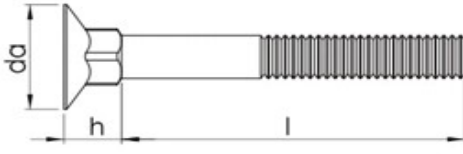
www.bitorkfasteners.com



info@bitorkfasteners.com



UNC FLAT COUNTERSUNK SQUARE NECK BOLTS



Teknik Bilgiler / Technical Informations						
Thread size / Anma çapı (d)		5/8	3/4	7/8	1 "	1 1/4"
Pitch / Diş adımı	P	11,00	10,00	9,00	8,00	7,00
Head height / Kafa yüksekliği	h	12,98	15,40	18,02	19,65	26,00
Head dia / Kafa çapı	da	26,13	30,09	35,28	40,06	51,00
Square width / Kafa genişliği	v	16,07	19,24	22,62	25,80	27,75

Thread size / Anma çapı (d)	5/8	3/4	7/8	1 "	1 1/4"
Length / Boy (l)	Weight / Ağırlık gr/p				
51	119,00				
57	128,00				
63,5	138,00	203,00			
76	153,00	228,00	325,00	430,00	
82			340,00	445,00	
90		260,00	360,00	475,00	
102			390,00	520,00	910,00
115		299,00		570,00	980,00
120			430,00		
127			450,00	610,00	1040,00

**ADDRESS :**

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Zip Code: 42050
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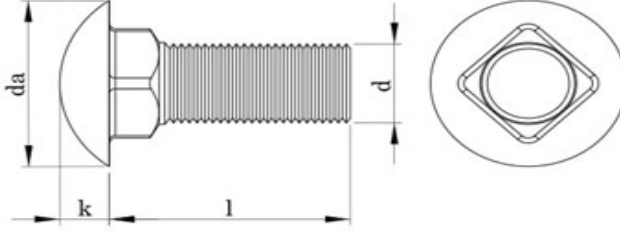
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MUSHROOM HEAD BOLTS



Teknik Bilgiler / Technical Informations			
Thread size / Anma çapı (d)	Kafa çapı / Diameter of Head	Head height / Kafa yüksekliği	Weight / Ağırlık
dxL	da	k	gr/p
6x12	13,50	3,00	4,50
6x15	13,50	3,00	5,10
8x15	15,00	3,50	8,10



Plain



Cross Slotted



Slotted Drive



Button Head



PROPERTIES OF STEELS AT ELEVATED TEMPERATURE

Dayanım Sınıfı (Property Class)	SICAKLIK (Temperature) °C				
	(+)20	(+)100	(+)200	(+)250	(+)300
	Akma Dayanımı Alt Sınırı (Lower yield stress) R_{eL} , veya 0,2 noktasındaki Akma Dayanımı (or proof stress) $R_{p0.2}$ N/mm ²				
5,6	300	270	230	215	195
8,8	640	590	540	510	480
10,9	940	875	790	745	705
12,9	1100	1020	925	875	825

CIVATA - SOMUN EŞLEŞMESİ THE RIGHT NUT WITH THE RIGHT BOLT DIE RICHTIGE BOLZEN-MÜTTERN ZUSAMMENSETZUNG					
DAYANIM SINIFI (Property Class)					
CIVATA (Bolt)					SOMUN (Nut)
3.6	4.6	4.8	5.6	5.8	5
		6,8			6
		8,8			8
		10,9			10
		12,9			12

ÜRÜN SINIFI (Product Grade)	DİŞ TOLERANSI (The Tolerance)		TOLERANS (Tolerance Grade)
	CIVATA (Bolt)	SOMUN (Nut)	
A	6g	6H	ORTA (Medium)
B	6g	6H	ORTA-KABA (Medium- Coarse)
C	8g	7H	KABA (Coarse)

CLEARANCE HOLES FOR BOLTS AND SCREWS

ÇAP (Thread diameter) d	DELİK ÇAPI (Clearance hole) d _n		
	SERİLER (Series)		
	İNCE (FINE)	ORTA (MEDIUM)	KABA (COARSE)
1	1.1	1.2	1.3
1,2	1.3	1.4	1.5
1,4	1.5	1.6	1.8
1,6	1.7	1.8	
1,8	2	2.1	2.2
2	2.2	2.4	2.6
2,5	2.7	2.9	3.1
3	3.2	3.4	3.6
3,5	3.7	3.9	4.2
4	4.3	4.5	4.8
4,5	4.8	5	5.2
5	5.3	5.5	5.8
6	6.4	6.6	7
7	7.4	7.6	8
8	8.4	9	10
10	10.5	11	12
12	13	13.5	14.5
14	15	15.5	16.5
16	17	17.5	18.5
18	19	20	21
20	21	22	24
22	23	24	26
24	25	26	28
27	28	30	32
30	31	33	35
33	34	36	38
36	37	39	42
39	40	42	45
42	43	45	48
45	46	48	52
48	50	52	56
52	54	56	62
56	58	62	66
60	62	66	70
64	66	70	74
68	70	74	78