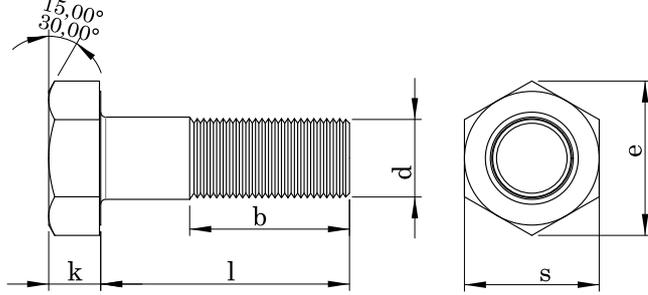


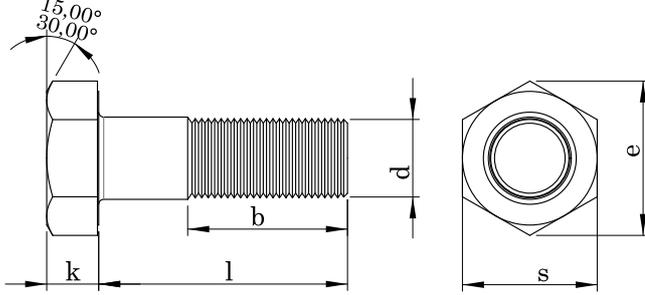
DIN 931 ISO 4014**ALTIKÖŞE BAŞLI YARIM DIŞ CIVATA CL:8.8 - 10.9 - 12.9****HEXAGON HEAD BOLTS****SECHSKANTSCHRAUBE MIT SCHAFT****Technical Informations / Teknik Bilgiler**

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	
	Norminal size	2,00	2,80	3,50	4,00	4,80	5,30	6,40	7,50	
Head height / Kafa yüksekliği k	A	min.	1,88	2,68	3,35	3,85	4,65	5,15	6,22	7,32
		max.	2,12	2,92	3,65	4,15	4,95	5,45	6,58	7,68
	B	min.								
		max.								
Head width / Anahtar ağızı	Product Grade	Norminal size max.	5,50	7,00	8,00	10,00	11,00	13,00	17,00	19,00
		s								
	min.	A	5,32	6,78	7,78	9,78	10,73	12,73	16,73	18,67
		B								
Diagonal / Köşegen e	Product Grade	min.	6,01	7,66	8,79	11,05	12,12	14,38	18,90	21,10
		A								
	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								
	b ³				22,00	24,00	26,00	28,00	32,00	36,00
									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							
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

Values are given in millimeters. / Değerler milimetre olarak verilmiştir.

DIN 931 ISO 4014**ALTİKÖŞE BAŞLI YARIM DİŞ CIVATA CL:8.8 - 10.9 - 12.9****HEXAGON HEAD BOLTS****SECHSKANTSCHRAUBE MIT SCHAFT****Technical Informations / Teknik Bilgiler**

Thread size / Anma çapı	Product Grade				M3	M4	M5	M6	M7	M8	M10	M12
	A	B	A	B								
Length/ Boy	min.	max.	min.	max.	Weight/Ağırlık							
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								

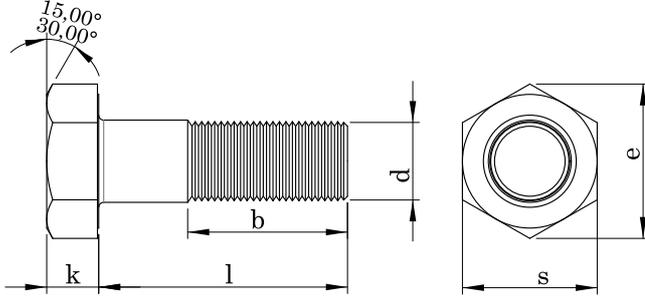
Values are given in millimeters. / Değerler milimetre olarak verilmiştir.

DIN 931 ISO 4014

ALTIKÖŞE BAŞLI YARIM DİŞ CIVATA CL:8.8 - 10.9 - 12.9

HEXAGON HEAD BOLTS

SECHSKANTSCHRAUBE MIT SCHAFT

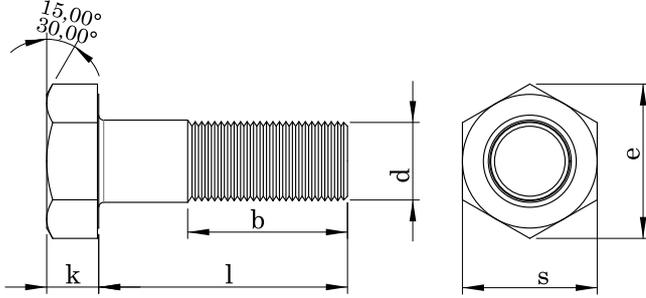
**Technical Informations / Teknik Bilgiler**

Thread size / Anma çapı (d)			M14	M16	M18	M20	M22
Pitch / Diş adımı	P		2,00	2,00	2,50	2,50	2,50
Head heigh / Kafa yüksekliği k	A	Norminal size max.	8,80	10,00	11,50	12,50	14,00
		min.	8,62	9,82	11,28	12,28	13,78
	B	max.	8,98	10,18	11,72	12,72	14,22
		min.		9,71	11,15	12,15	13,65
Head width / Anahtar ağızı	Product Grade	max.		10,29	11,85	12,85	14,35
		Norminal size max.	22,00	24,00	27,00	30,00	32,00
	s	min.	21,67	23,67	26,67	29,67	31,61
		A		23,16	26,16	29,16	31,00
Diagonal / Köşegen e	Product Grade	min.	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
		2	40,00	44,00	48,00	52,00	56,00
		3	53,00	57,00	61,00	65,00	69,00

b¹ for lengths l ≤ 125 mm.b² for lengths l >125 mm. ≤200 mm.b³ for lengths > 200 mm.

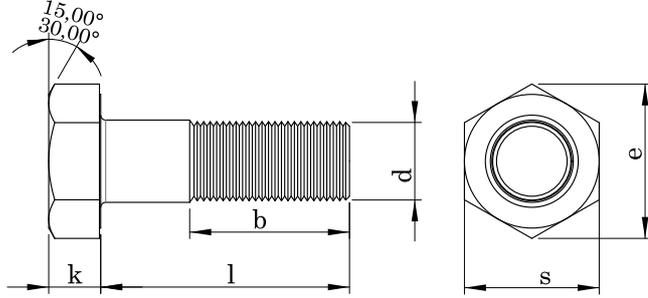
Thread size / Anma çapı	Product Grade		M14	M16	M18	M20	M22
	A	B					
Length/ Boy	min.	max.	Weight/Ağırlık				
12	11,65	12,35	-	-	-	-	-
14	13,65	14,35	-	-	-	-	-
16	15,65	16,35	-	-	-	-	-
18	17,65	18,35	-	-	-	-	-
20	19,58	20,42	-	-	-	-	-
22	21,58	22,42	-	-	-	-	-
25	24,58	25,42	-	-	-	-	-
28	27,58	28,42	-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

Values are given in millimeters. / Değerler milimetre olarak verilmiştir.

DIN 931 ISO 4014**ALTİKÖŞE BAŞLI YARIM DİŞ CIVATA CL:8.8 - 10.9 - 12.9****HEXAGON HEAD BOLTS****SECHSKANTSCHRAUBE MIT SCHAFT****Technical Informations / Teknik Bilgiler**

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

Values are given in millimeters. / Değerler milimetre olarak verilmiştir.

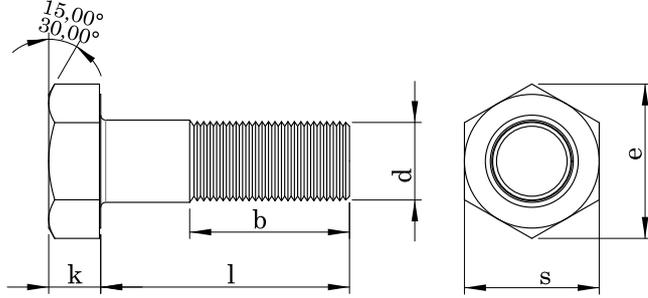
DIN 931 ISO 4014**ALTİKÖŞE BAŞLI YARIM DİŞ CIVATA CL:8.8 - 10.9 - 12.9****HEXAGON HEAD BOLTS****SECHSKANTSCHRAUBE MIT SCHAFT****Technical Informations / Teknik Bilgiler**

Thread size / Anma çapı (d)		M24	M27	M30	M33	M36	M39
Pitch / Diş adımı	P	3,00	3,00	3,50	3,50	4,00	4,00
Nominal size		15,00	17,00	18,70	21,00	22,50	25,00
Head height / Kafa yüksekliği k	A min.	14,78					
	max.	15,22					
Head with / Anahtar ağızı	B min.	14,65	16,65	18,28	20,58	22,08	24,58
	max.	15,35	17,35	19,12	21,42	22,92	25,42
Product Grade	Nominal size max.	36,00	41,00	46,00	50,00	55,00	60,00
	s min.	35,38					
Diagonal / Köşegen e	A min.	35,00	40,00	45,00	49,00	53,80	58,80
	B min.	39,98					
Product Grade	A min.	39,55	45,20	50,85	55,37	60,79	66,44
	B min.	39,55	45,20	50,85	55,37	60,79	66,44
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.

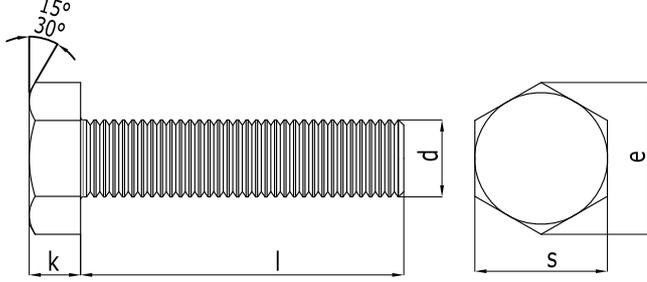
Thread size / Anma çapı	Product Grade				M24	M27	M30	M33	M36	M39
	A		B							
Length/ Boy	min.	max.	min.	max.	Weight/Ağırlık					
40	39,50	40,50	-	-						
45	44,50	45,50	-	-						
50	49,50	50,50	-	-						
55	54,40	55,60	-	-						
60	59,40	60,60	-	-						
65	64,40	65,60	-	-						
70	69,40	70,60	-	-						
75	74,40	75,60	-	-	364,0					
80	79,40	80,60	-	-	392,0	511,0				
85	84,30	85,70	-	-	410,0	534,0				
90	89,30	90,70	-	-	428,0	557,0	712,0			
95	94,30	95,70	-	-	446,0	580,0	739,0			

Values are given in millimeters. / Değerler milimetre olarak verilmiştir.

DIN 931 ISO 4014**ALTİKÖŞE BAŞLI YARIM DİŞ CIVATA CL:8.8 - 10.9 - 12.9****HEXAGON HEAD BOLTS****SECHSKANTSCHRAUBE MIT SCHAFT****Technical Informations / Teknik Bilgiler**

Thread size / Anma çapı	Product Grade				M24	M27	M30	M33	M36	M39
	A		B							
Length/ Boy	min.	max.	min.	max.	Weight/Ağırlık					
100	99,30	100,70	-	-	464,0	603,0	767,0	951,0		
110	109,30	110,70	-	-	500,0	650,0	823,0	1020,0	1240,0	
120	119,30	120,70	-	-	535,0	695,0	880,0	1090,0	1320,0	1510,0
130	129,20	130,80	-	-	560,0	720,0	920,0	1150,0	1390,0	1580,0
140	139,20	140,80	-	-	595,0	765,0	975,0	1220,0	1470,0	1660,0
150	149,20	150,80	-	-	630,0	810,0	1030,0	1290,0	1550,0	1740,0
160	159,20	160,80	158,00	162,00	665,0	855,0	1085,0	1350,0	1630,0	1830,0
170	169,20	170,80	168,00	172,00	700,0	900,0	1140,0	1410,0	1710,0	1920,0
180	179,20	180,80	178,00	182,00	735,0	945,0	1200,0	1480,0	1790,0	2010,0
190	189,10	190,90	187,70	192,30	770,0	990,0	1250,0	1540,0	1870,0	2100,0
200	199,10	200,90	197,70	202,30	805,0	1030,0	1310,0	1610,0	1950,0	2200,0
220	-	-	217,70	222,30	870,0	1130,0	1420,0	1750,0	2110,0	2410,0
240	-	-	237,70	242,30	935,0	1220,0	1530,0	1880,0	2270,0	2600,0
260	-	-	257,40	262,60	1000,0	1310,0	1640,0	2020,0	2430,0	2800,0
280	-	-	277,40	282,60	1080,0		1750,0	2150,0	2590,0	3010,0
300	-	-	297,40	302,60	1150,0		1860,0	2290,0	2750,0	3210,0

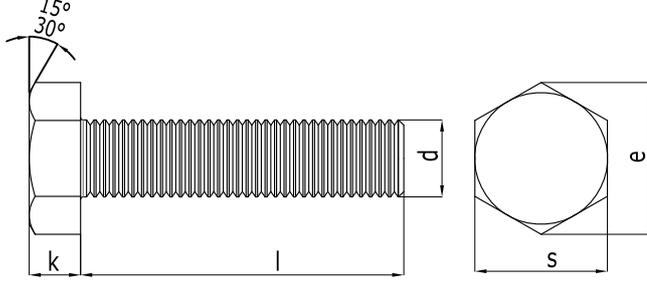
Values are given in millimeters. / Değerler milimetre olarak verilmiştir.

DIN 933 ISO 4017**ALTIKÖŞE BAŞLI TAM DİŞ CIVATA CL:8.8 - 10.9 - 12.9
HEXAGON HEAD BOLTS THREADED UP TO HEAD
SECHSKANTSCHRAUBE MIT GEWINDE BIS KOPF****Technical Informations / Teknik Bilgiler**

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
		A	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	min.	7,78	9,78	10,73	12,73	16,73
		A	min.	7,64	9,64	10,57	12,57	16,57
	Nominal	max.	8,00	10,00	11,00	13,00	17,00	
		B	min.	8,79	11,05	12,12	14,38	18,90
Diagonal / Köşegen	e	A	min.	8,79	11,05	12,12	14,38	18,90
		B	min.	8,63	10,89	11,94	14,20	18,72

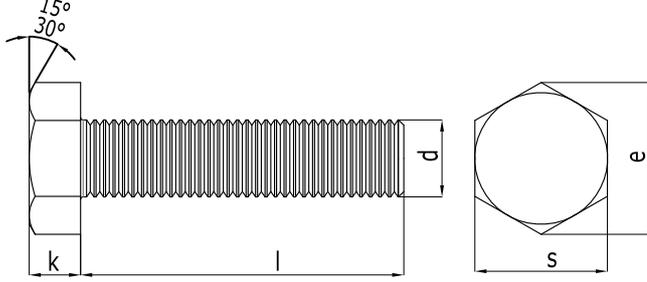
Thread size /Anma çapı	A		B		M5	M6	M7	M8	M10
	min.	max.	min.	max.	Weight/Ağırlık				
Length/ Boy (l)									
10	9,71	10,29	-	-	2,63	4,08	6,35	9,10	16,20
12	11,65	12,35	-	-	2,87	4,42	6,85	9,80	17,20
14	13,65	14,35	-	-	3,12	4,76	7,35	10,50	18,20
16	15,65	16,35	-	-	3,37	5,11	7,85	11,10	19,20
18	17,65	18,35	-	-	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	50,5	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

Values are given in millimeters. / Değerler milimetre olarak verilmiştir.

DIN 933 ISO 4017**ALTIKÖŞE BAŞLI TAM DIŞ CIVATA CL:8.8 - 10.9 - 12.9
HEXAGON HEAD BOLTS THREADED UP TO HEAD
SECHSKANTSCHRAUBE MIT GEWINDE BIS KOPF****Technical Informations / Teknik Bilgiler**

Thread size / Anma çapı (d)	A		B		M5	M6	M7	M8	M10
	min.	max.	min.	max.	Weight / Ağırlık gr/p				
Length / Boy (l)									
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					

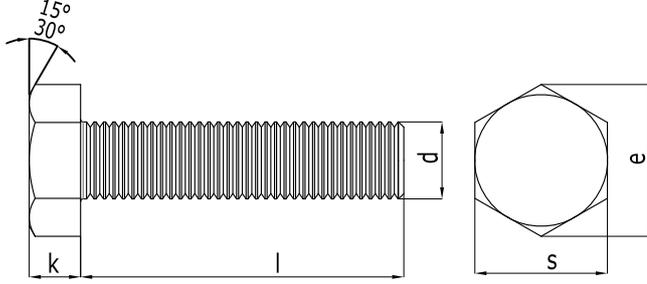
Values are given in millimeters. / Değerler milimetre olarak verilmiştir.

DIN 933 ISO 4017**ALTİKÖŞE BAŞLI TAM DIŞ CIVATA CL:8.8 - 10.9 - 12.9
HEXAGON HEAD BOLTS THREADED UP TO HEAD
SECHSKANTSCHRAUBE MIT GEWINDE BIS KOPF****Technical Informations / Teknik Bilgiler**

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	min.	18,67	21,67	23,67	26,67	29,67
		min.	18,48	21,16	23,16	26,15	29,16
	Nominal	max.	19,00	22,00	24,00	27,00	30,00
		min.	21,10	24,49	26,75	30,14	33,53
Diagonal / Köşegen e	A	min.	20,88	23,91	26,17	29,56	32,95
	B	min.	20,88	23,91	26,17	29,56	32,95

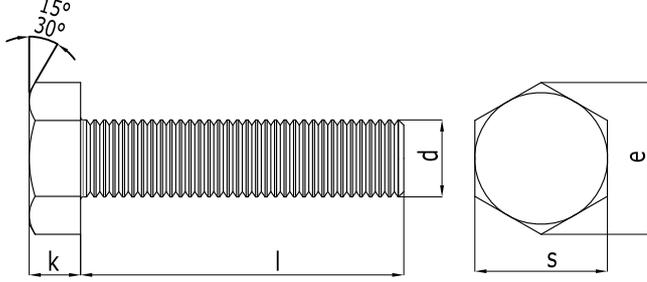
Thread size /Anma çapı	A		B		M12	M14	M16	M18	M20
	min.	max.	min.	max.					
Length/ Boy (l)	Weight/Ağırlık								
10	9,71	10,29	-	-	23,30	38,00			
12	11,65	12,35	-	-	25,00	40,00	52,90		
14	13,65	14,35	-	-	26,40	42,00	55,60		
16	15,65	16,35	-	-	27,70	44,00	58,30	82,00	105,00
18	17,65	18,35	-	-	29,10	46,00	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	50,5	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

Values are given in millimeters. / Değerler milimetre olarak verilmiştir.

DIN 933 ISO 4017**ALTİKÖŞE BAŞLI TAM DIŞ CIVATA CL:8.8 - 10.9 - 12.9
HEXAGON HEAD BOLTS THREADED UP TO HEAD
SECHSKANTSCHRAUBE MIT GEWINDE BIS KOPF****Technical Informations / Teknik Bilgiler**

Thread size / Anma çapı (d)	A		B		M12	M14	M16	M18	M20
	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

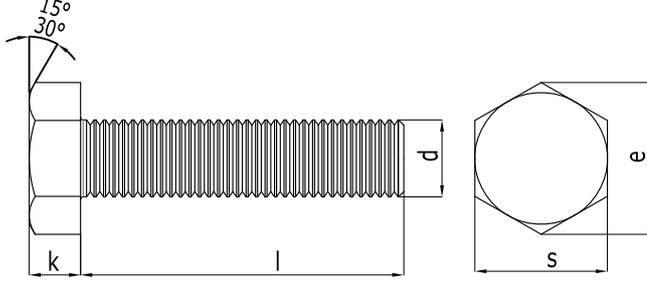
Values are given in millimeters. / Değerler milimetre olarak verilmiştir.

DIN 933 ISO 4017**ALTIKÖŞE BAŞLI TAM DIŞ CIVATA CL:8.8 - 10.9 - 12.9
HEXAGON HEAD BOLTS THREADED UP TO HEAD
SECHSKANTSCHRAUBE MIT GEWINDE BIS KOPF****Technical Informations / Teknik Bilgiler**

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	-	-
		A	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	min.	31,61	35,38	-	-
		A	min.	31,00	35,00	40,00	45,00
	B	min.	31,00	35,00	40,00	45,00	
		max.	32,00	36,00	41,00	46,00	
Diagonal / Köşegen	e	A	min.	35,72	39,98	-	-
		B	min.	35,03	39,55	45,20	50,85

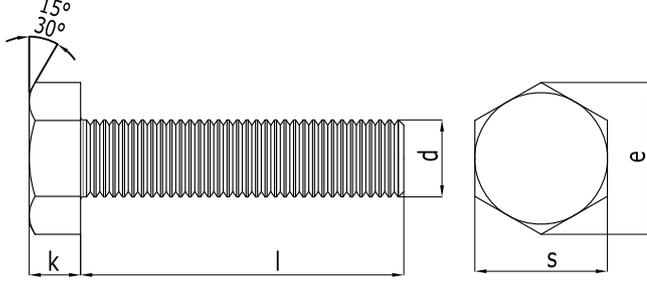
Thread size / Anma çapı	A		B		M22	M24	M27	M30
	min.	max.	min.	max.				
Length/ Boy (l)	Weight/Ağırlık							
10	9,71	10,29	-	-				
12	11,65	12,35	-	-				
14	13,65	14,35	-	-				
16	15,65	16,35	-	-	133,00	173,00		
18	17,65	18,35	-	-	137,00	178,00		
20	19,58	20,42	-	-	143,00	184,00		
22	21,58	22,42	-	-	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	50,5	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

Values are given in millimeters. / Değerler milimetre olarak verilmiştir.

DIN 933 ISO 4017**ALTİKÖŞE BAŞLI TAM DIŞ CIVATA CL:8.8 - 10.9 - 12.9
HEXAGON HEAD BOLTS THREADED UP TO HEAD
SECHSKANTSCHRAUBE MIT GEWINDE BIS KOPF****Technical Informations / Teknik Bilgiler**

Thread size / Anma çapı (d)	A		B		M22	M24	M27	M30
	min.	max.	min.	max.	Weight / Ağırlık gr/p			
Length / Boy (l)								
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

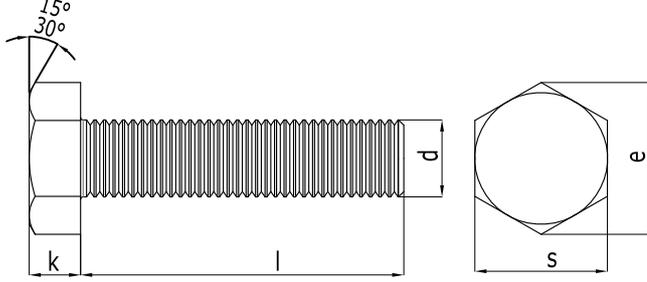
Values are given in millimeters. / Değerler milimetre olarak verilmiştir.

DIN 933 ISO 4017**ALTİKÖŞE BAŞLI TAM DIŞ CIVATA CL:8.8 - 10.9 - 12.9
HEXAGON HEAD BOLTS THREADED UP TO HEAD
SECHSKANTSCHRAUBE MIT GEWINDE BIS KOPF****Technical Informations / Teknik Bilgiler**

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.			
	Nominal	A	min.	20,58	22,08	24,58
		B	max.	21,42	22,92	25,42
Head width / Anahtar ağızı	s	A	min.			
		B	min.	49,00	53,80	58,80
	Nominal	A	min.			
		B	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
	min.	max.	min.	max.	Weight/Ağırlık		
Length/ Boy (l)							
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	50,50	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

Values are given in millimeters. / Değerler milimetre olarak verilmiştir.

DIN 933 ISO 4017**ALTIKÖŞE BAŞLI TAM DIŞ CIVATA CL:8.8 - 10.9 - 12.9****HEXAGON HEAD BOLTS THREADED UP TO HEAD****SECHSKANTSCHRAUBE MIT GEWINDE BIS KOPF****Technical Informations / Teknik Bilgiler**

Thread size / Anma çapı (d)	A		B		M33	M36	M39
	min.	max.	min.	max.	Weight / Ağırlık gr/p		
Length / Boy (l)							
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

Values are given in millimeters. / Değerler milimetre olarak verilmiştir.