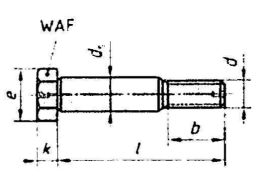


DE=	EN=	PT=	VN=
Hexagon head bolts			

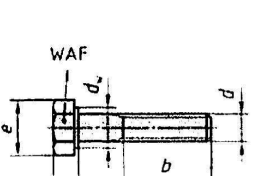
Hexagon head fit bolt with long threads

cf. DIN 609 (1995-02)

		M8	M10	M12	M16	M20	M24	M30	M36	M42	M48	
	d	M8 x 1	M10 x1	M12 x1,5	M16 x1,5	M20 x1,5	M24 x2	M30 x2	M36 x3	M42 x3	M48 x3	
	WAF	13	16	18	24	30	36	46	55	65	75	
	k	5,3	6,4	7,5	10	12,5	15	18,7	22	26	30	
	d _s K6	9	11	13	17	21	25	32	38	44	50	
	e	14,4	17,8	20	26,2	33	39,6	50,9	60,8	71,3	82,6	
	b	14,5	17,5	20,5	25	28,5	-	-	-	-	-	
	b''	16,5	19,5	22,5	27	30,5	36,5	43	49	56	63	
	b'''	-	-	-	32	35,5	41,5	48	54	61	68	
	l from to	25 80	30 100	32 120	38 150	45 150	55 150	65 200	70 200	80 200	85 200	
Nominal lengths l	25,28,30, 32,35, 38,40, 42,45, 48, 50, 55, 60-150, 160-200 mm											
Product grades (page 211)	Property classes	8,8							as per agreement			
		A2-70				A2-50						
d in mm	l in mm	Grade		Explanations								
≤ 10	all	A		1) for l < 150 mm 2) for l = 50-150 mm 3) for l > 150 mm								
≥ 12	all	B		Fit bolt DIN 609 - M16 x 125 -A2-70: d=M16 x 1,5, l = 125 mm, property class A2-7C								

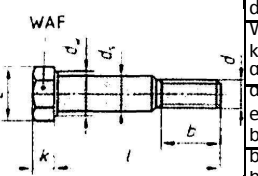
Hexagon bolt with large width across flats. High-strength friction grip (HV) bolts in steel structures

cf. DIN 6914 (1989 10)

	d	M12	M16	M20	M22	M24	M27	M30	M36	
	WAF	22,0	27	32	36	41	46	50	60	
	k	8,0	10	13	14	15	17	19	23	
	d _w	20,0	25,0	30,0	34,0	39,0	43,5	47,5	57,0	
	e	23,9	29,6	35	39,6	45,2	50,9	55,4	66,4	
	b	21,0	26	31	32	34	37	40	48	
	l from to	30 95	40 130	45 155	50 165	60 195	70 200	75 200	85 200	
	Nominal lengths l	30,35, 40, 45,50, 55-185, 190,195, 200 mm								
	Product Grades C	Property classes	All bolts: property class 10.9							
			Hexagon head bolt DIN 6914 - M12 x 65: d=M12 l = 65 mm, property class 10.9							

Hexagon fit bolts with large width across flats

cf. DIN 7999 (1983 12)

	d	M12	M16	M20	M22	M24	M27	M30
	WAF	21	27	34	36	41	46	50
	k	8	10	13	14	15	17	19
	d _w	19	25	32	34	39	43,5	47,5
	d _s 011	13	17	21	23	25	28	31
	e	22,8	29,6	37,3	39,6	45,2	50,9	55,4
	b	18,5	22	26	28	29,5	32,5	35
	b''	12	14	16	18	22	26	30
	b'''	-	-	-	-	28	32	36
	l from to	40 120	45 160	50 180	55 200	55 200	60 200	65 200
Nominal lengths l	40, 45, 50, 55, 60, 65-180, 185, 190, 195, 200 mm							
Product grades C	Property classes	All bolts: property class 10.9						
		Hexagon head bolt DIN 7999 - M24 x 165: d=M24, l = 165 mm, property class 10.9						

gez/erfasst:	hpw	Datum: 2009	education project	Sechskantenkopfschrauben03	translate/en_iwhp/p_cu/vn_ha	origin: Machine elements S 214
Aenderung:	an	Datum: 19.06.2015	WIAP KFKOK	Hexagon head bolts03	r2	Wi_8_f_i19_r2_214_bolt_screw_hex_3
Aenderung:	control 2	Data:	Safenwil Schweiz	spear 2	www.wiap.ch	idee of / from HPW