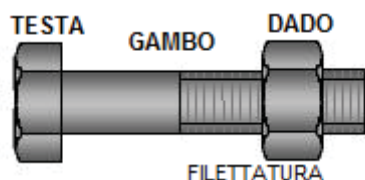


PROPRIETA' GEOMETRICHE DEI BULLONI



Le dimensioni caratteristiche di un bullone sono:

- d diametro nominale del gambo
- p passo della filettatura
- A_{res} area resistente

CARATTERISTICHE BULLONI

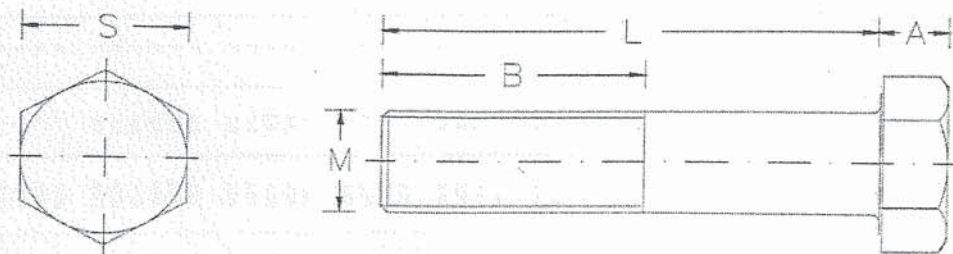
d	p	A _{res}	A	A _{res} /A	d	p	A _{res}	A	A _{res} /A
8	1.25	38.6	50.3	0.77	33	3.5	694	855	0.81
10	1.50	58.0	78.5	0.74	36	4.0	817	1018	0.80
12	1.75	84.3	113	0.75	39	4.0	976	1195	0.82
14	2.00	115	154	0.75	42	4.5	1120	1385	0.81
16	2.00	157	201	0.78	45	4.5	1310	1590	0.82
18	2.50	192	254	0.75	48	5.0	1470	1810	0.81
20	2.50	245	314	0.78	52	5.0	1760	2124	0.83
22	2.50	303	380	0.80	56	5.5	2030	2463	0.82
24	3.00	353	452	0.78	60	5.5	2360	2827	0.83
27	3.00	459	573	0.80	64	6.0	2680	3217	0.83
30	3.50	581	707	0.82	68	6.0	3060	3632	0.84

d Diametro Bullone (mm.)

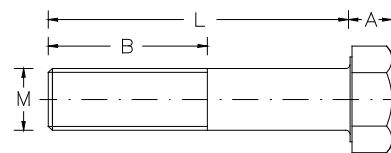
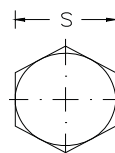
p Passo filettatura (mm.)

A_{res} Area Resistente (mmq.)

Aree effettive e dimensioni della testa del bullone



M (mm)	A_{res} (mm ²)	S (mm)
12	84	18
14	115	21
16	157	24
18	192	27
20	245	30
22	303	34
24	353	36
27	459	41
30	561	46

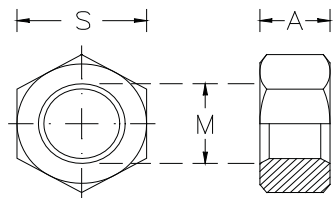


M, s, k, L, b = mm

Peso = g

S	A	L x B x Peso
M4	7	2,8 (20 x 14 x 2,54) (22 x 14 x 2,76) (25 x 14 x 3,00) (30 x 14 x 3,60) (35 x 14 x 3,95) (40 x 14 x 4,40) (45 x 14 x 4,90) (50 x 14 x 5,36) (55 x 14 x 5,82) (60 x 14 x 6,28)
M5	8	3,5 (20 x 16 x 4,03) (22 x 16 x 4,40) (25 x 16 x 4,77) (30 x 16 x 5,51) (35 x 16 x 6,25) (40 x 16 x 7,00) (45 x 16 x 7,73) (50 x 16 x 8,47) (55 x 16 x 9,21) (60 x 16 x 9,95) (65 x 16 x 10,69) (70 x 16 x 11,43) (75 x 16 x 12,17) (80 x 16 x 12,91)
M6	10	4 (25 x 18 x 7,21) (30 x 18 x 8,28) (35 x 18 x 9,34) (40 x 18 x 10,41) (45 x 18 x 11,48) (50 x 18 x 12,55) (55 x 18 x 13,61) (60 x 18 x 14,68) (65 x 18 x 15,75) (70 x 18 x 16,81) (75 x 18 x 17,88) (80 x 18 x 18,94) (90 x 18 x 21,08) (100 x 18 x 23,21) (110 x 18 x 23,35) (120 x 18 x 23,49) (130 x 24 x 23,63) (140 x 24 x 23,77) (150 x 24 x 23,91)
M7	11	4,8 (30 x 20 x 12,70) (35 x 20 x 13,60) (40 x 20 x 15,10) (45 x 20 x 16,60) (50 x 20 x 18,10) (55 x 20 x 19,50) (60 x 20 x 21,00) (65 x 11 x 22,50) (70 x 20 x 24,00) (75 x 20 x 25,50) (80 x 20 x 27,00) (90 x 20 x 28,50) (100 x 20 x 30,00) (110 x 20 x 31,50) (120 x 20 x 33,00) (130 x 26 x 34,50) (140 x 26 x 36,00) (150 x 26 x 37,50) (160 x 26 x 39,00) (180 x 26 x 40,50) (200 x 26 x 43,50) (220 x 26 x 46,50)
M8	13	5,5 (30 x 22 x 16,20) (35 x 22 x 18,11) (40 x 22 x 20,00) (45 x 22 x 21,92) (50 x 22 x 23,83) (55 x 22 x 25,74) (60 x 22 x 27,64) (65 x 22 x 29,55) (70 x 22 x 31,46) (75 x 22 x 33,36) (80 x 22 x 35,27) (90 x 22 x 39,08) (100 x 22 x 42,89) (110 x 22 x 46,70) (120 x 22 x 50,52) (130 x 28 x 50,73) (140 x 28 x 50,94) (150 x 28 x 51,15) (160 x 28 x 51,36) (180 x 28 x 51,57) (200 x 28 x 51,78) (220 x 28 x 51,99)
M10	17	7 (35 x 26 x 31,9) (40 x 26 x 34,89) (45 x 26 x 37,88) (50 x 26 x 40,87) (55 x 26 x 43,86) (60 x 26 x 46,85) (65 x 26 x 49,84) (70 x 26 x 52,83) (75 x 26 x 55,82) (80 x 26 x 58,81) (90 x 26 x 64,79) (100 x 26 x 70,77) (110 x 26 x 76,75) (120 x 26 x 82,73) (130 x 32 x 88,06) (140 x 32 x 94,04) (150 x 32 x 100,01) (160 x 32 x 106,00) (180 x 32 x 117,60) (200 x 32 x 130,20) (220 x 45 x 143,80)
M12	19	8 (40 x 30 x 49,62) (45 x 30 x 53,94) (50 x 30 x 58,25) (55 x 30 x 62,57) (60 x 30 x 66,88) (65 x 30 x 71,20) (70 x 30 x 75,50) (75 x 30 x 79,82) (80 x 30 x 84,13) (90 x 30 x 92,76) (100 x 30 x 101,39) (110 x 30 x 110,00) (120 x 30 x 118,64) (130 x 36 x 126,38) (140 x 36 x 135,00) (150 x 36 x 143,64) (160 x 36 x 152,26) (180 x 36 x 169,54) (200 x 36 x 186,82) (220 x 49 x 204,10)
M14	22	9 (45 x 34 x 73,80) (50 x 34 x 81,62) (55 x 34 x 87,50) (60 x 34 x 93,38) (65 x 34 x 99,27) (70 x 34 x 105,16) (75 x 34 x 111,04) (80 x 34 x 116,93) (90 x 34 x 128,70) (100 x 34 x 140,46) (110 x 34 x 152,24) (120 x 34 x 164,00) (130 x 40 x 174,57) (140 x 40 x 186,34) (150 x 40 x 198,11) (160 x 40 x 210,00) (180 x 40 x 233,54) (200 x 40 x 257,08) (220 x 53 x 280,62) (240 x 53 x 304,16) (260 x 53 x 327,70)
M16	24	10 (50 x 38 x 106,50) (55 x 38 x 114,20) (60 x 38 x 121,90) (65 x 38 x 129,60) (70 x 38 x 137,30) (75 x 38 x 145,00) (80 x 38 x 152,70) (90 x 38 x 168,00) (100 x 38 x 183,50) (110 x 38 x 199,00) (120 x 38 x 214,30) (130 x 44 x 228,30) (140 x 44 x 243,70) (150 x 44 x 260,00) (160 x 44 x 274,50) (180 x 44 x 305,30) (200 x 44 x 336,00) (220 x 57 x 365,00) (240 x 57 x 396,00) (260 x 57 x 427,00) (280 x 57 x 458,00) (300 x 57 x 489,00)
M18	27	12 (55 x 42 x 153,00) (60 x 42 x 163,00) (65 x 42 x 173,00) (70 x 42 x 183,00) (75 x 42 x 193,00) (80 x 42 x 203,00) (90 x 42 x 222,00) (100 x 42 x 242,00) (110 x 42 x 262,00) (120 x 42 x 282,00) (130 x 48 x 298,00) (140 x 48 x 318,00) (150 x 48 x 338,00) (160 x 48 x 358,00) (180 x 48 x 398,00) (200 x 48 x 438,00) (220 x 61 x 468,00) (240 x 61 x 508,00) (260 x 61 x 548,00) (280 x 61 x 588,00) (300 x 61 x 628,00)
M20	30	13 (55 x 46 x 195,00) (60 x 46 x 207,00) (65 x 46 x 219,00) (70 x 46 x 231,00) (75 x 46 x 243,00) (80 x 46 x 255,00) (90 x 46 x 279,00) (100 x 46 x 303,00) (110 x 46 x 327,00) (120 x 46 x 351,00) (130 x 52 x 374,00) (140 x 52 x 398,00) (150 x 52 x 422,00) (160 x 52 x 446,00) (180 x 52 x 494,00) (200 x 52 x 542,00) (220 x 65 x 586,00) (240 x 65 x 635,00) (260 x 65 x 683,00) (280 x 65 x 731,00) (300 x 65 x 779,00)
M22	32	14 (60 x 50 x 252,00) (65 x 50 x 267,00) (70 x 50 x 282,00) (75 x 50 x 297,00) (80 x 50 x 312,00) (90 x 50 x 342,00) (100 x 50 x 372,00) (110 x 50 x 402,00) (120 x 50 x 432,00) (130 x 56 x 455,00) (140 x 56 x 484,00) (150 x 56 x 513,00) (160 x 56 x 542,00) (180 x 56 x 600) (200 x 56 x 658,00) (220 x 69 x 713,00) (240 x 69 x 772,00) (260 x 69 x 830,00) (280 x 69 x 888,00) (300 x 69 x 946,00)
M24	36	15 (55 x 54 x 314,00) (60 x 54 x 322,00) (65 x 54 x 330,00) (70 x 54 x 347,00) (75 x 54 x 365,00) (80 x 54 x 382,00) (90 x 54 x 416,00) (100 x 54 x 451,00) (110 x 54 x 486,00) (120 x 54 x 521,00) (130 x 60 x 553,00) (140 x 60 x 588,00) (150 x 60 x 623,00) (160 x 60 x 658,00) (180 x 60 x 727,00) (200 x 60 x 796,00) (220 x 73 x 860,00) (240 x 73 x 929,00) (260 x 73 x 998,00) (280 x 73 x 1067,00) (300 x 73 x 1136,00)
M27	41	17 (80 x 60 x 511,00) (90 x 60 x 556,00) (100 x 60 x 600,00) (110 x 60 x 644,00) (120 x 60 x 688,00) (130 x 66 x 729,00) (140 x 66 x 773,00) (150 x 66 x 817,00) (160 x 66 x 861,00) (180 x 66 x 950,00) (200 x 66 x 1037,00) (220 x 79 x 1118,00) (240 x 79 x 1206,00) (260 x 79 x 1295,00) (280 x 79 x 1384,00) (300 x 79 x 1473,00)
M30	46	19 (80 x 66 x 637,00) (90 x 66 x 712,00) (100 x 66 x 766,00) (110 x 66 x 821,00) (120 x 66 x 875,00) (130 x 72 x 926,00) (140 x 72 x 980,00) (150 x 72 x 1035,00) (160 x 72 x 1089) (180 x 72 x 1198) (200 x 72 x 1307,00) (220 x 85 x 1406,00) (240 x 85 x 1515,00) (260 x 85 x 1624,00) (280 x 85 x 1733,00) (300 x 85 x 1842,00)
M33	50	21 (90 x 72 x 890,00) (100 x 72 x 956,00) (110 x 72 x 1022,00) (120 x 72 x 1088,00) (130 x 78 x 1150,00) (140 x 78 x 1216,00) (150 x 78 x 1282,00) (160 x 78 x 1348,00) (180 x 78 x 1480,00) (200 x 78 x 1612,00) (220 x 91 x 1732,00) (240 x 91 x 1864,00) (260 x 91 x 1996,00)

Tabella Dadi esagonali
UNI 5588



M, A = mm

Peso = g

	M4	M5	M6	M7	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33
S	7	8	10	11	13	17	19	22	24	27	30	32	36	41	46	50
A	3,2	4,0	5,0	5,5	6,5	8,0	10,0	11,0	13,0	15,0	16,0	18,0	19,0	22,0	24,0	26,0
Peso	0,80	1,22	2,47	3,13	5,31	11,55	17,00	24,90	33,36	49,24	64,23	78,79	109,85	165,53	230,52	289,40

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