

Catálogo de productos

Fijaciones



altos estándares de **calidad** | precisión **garantizada** | durabilidad y **resistencia**



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Más de 30 años de innovación

En **B&P Fasteners Solutions** desarrollamos fijaciones de alto desempeño pensadas para los desafíos reales de **la industria y el agro**.

Respaldados por **BPB Group**, combinamos ingeniería, tecnología y capacidad productiva para ofrecer **soluciones confiables, precisas y duraderas**.

Cada producto se fabrica con materiales seleccionados y procesos avanzados, asegurando resistencia, calidad constante y desempeño en condiciones exigentes.

Impulsados por la innovación y la mejora continua, aportamos valor técnico que impulsa la productividad y acompaña el crecimiento de nuestros clientes.



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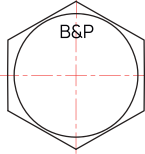
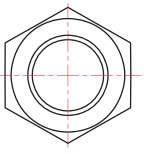
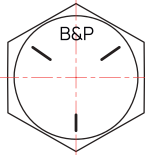
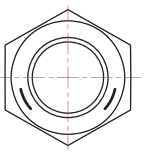
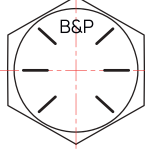
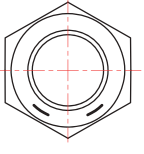
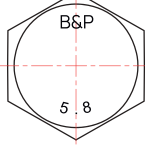
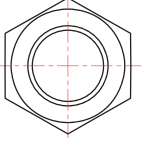
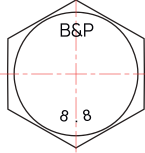
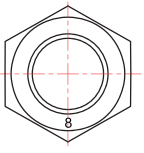
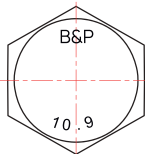
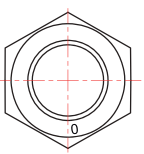
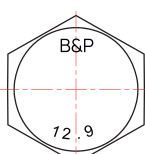
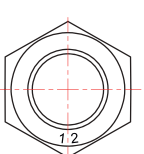
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Información técnica

	TORNILLO		TUERCA
DUREZA 1/4" - 3/4" 80-100HRB >3/4" - 1.1/2" 70-100HRB		MODELO GR2 LÍNEA EN PULG.	
DUREZA 1/4" - 1" 25-34HRB >1" - 1.1/2" 19-30HRB Obs: Equal Hardness ASTM A325		MODELO GR5 LÍNEA EN PULG.	
DUREZA 1/4" - 1.1/2" 33-39HRB		MODELO GR8 LÍNEA EN PULG.	
DUREZA 82-95HRB		5.8 MODELO CL6 LÍNEA MÉTRICA	
DUREZA <M16 22-32HRC >M16 23-34HRC		8.8 MODELO CL8 LÍNEA MÉTRICA	
DUREZA 32-39HRC		10.9 MODELO CL10 LÍNEA MÉTRICA	
DUREZA 36-42HRC		12.9 MODELO CL12 LÍNEA MÉTRICA	



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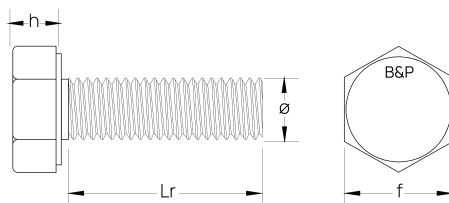
GROUP

Bulón cabeza hexagonal

Rosca entera grado 2 UNC / USS



ϕ Diámetro rosca
 Lr Longitud de rosca
 h Altura cabeza
 f Llave
 Hpp Hilos por pulgada



ø	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1.1/8"	1.1/4"	1.3/8"	1.1/2"
Hpp	24 N°10	20 UNC	18 UNC	16 UNC	14 UNC	13 UNC	12 BSW	12 UNC	11 UNC	10 UNC	9 UNC	8 UNC	7 UNC	7 UNC	6 UNC	6 UNC
f	5/16"	7/16"	1/2"	9/16"	5/8"	3/4"	3/4"	13/16"	15/16"	1.7/8"	1.5/16"	1.1/2"	1.1/16"	1.7/8"	2.1/16"	2.1/4"
h	3,05	4,14	5,36	6,17	7,39	8,20	8,20	9,42	10,24	12,27	14,30	15,93	18,23	20,65	22,30	24,73
Lr																
1/2"	0111030110	0111040110	0111050110	0111060110												
5/8"	0111030210	0111040210	0111050210	0111060210												
3/4"	0111030310	0111040310	0111050310	0111060310	111070310	0111080310	111090310									
7/8"	0111030410	0111040410	0111050410	0111060410												
1"	0111030510	0111040510	0111050510	0111060510	111070510	0111080510	111090510	111100510	0111110510	0111120510						
1.1/4"	0111030610	0111040610	0111050610	0111060610	111070610	0111080610	111090610	0111100610	0111110610	0111120610						
1.1/2"	0111030710	0111040710	0111050710	0111060710	111070710	0111080710	111090710	111100710	0111110710	0111120710	0111130710					
1.3/4"	0111030810	0111040810	0111050810	0111060810	111070810	0111080810	111090810	111100810	0111110810	0111120810	0111130810					
2"	0111030910	0111040910	0111050910	0111060910	111070910	0111080910	111090910	0111100910	0111110910	0111120910	0111130910	0111140910	0111150910			
2.1/4"		0111041010	0111051010	0111061010		0111081010	0111091010		0111111010	0111121010	0111131010	0111141010	0111151010			
2.1/2"		0111041110	0111051110	0111061110		0111081110	0111091110	0111101110	0111111110	0111121110	0111131110	0111141110	0111151110	0111161110		
2.3/4"		0111041210	0111051210	0111061210		0111081210	0111091210		0111111210	0111121210	0111131210	0111141210	0111151210	0111161210		
3"		0111041310	0111051310	0111061310		0111081310	0111091310	0111101310	0111111310	0111121310	0111131310	0111141310	0111151310	0111161310	0111171310	0111181310
3.1/4"		0111041410	0111051410	0111061410		0111081410	0111091410		0111111410	0111121410	0111131410	0111141410				
3.1/2"		0111041510	0111051510	0111061510		0111081510	0111091510	0111101510	0111111510	0111121510	0111131510	0111141510	0111151510	0111161510	0111171510	0111181510
4"		0111041710	0111051710	0111061710		0111081710	0111091710	1011101710	0111111710	0111121710	0111131710	0111141710	0111151710	0111161710	0111171710	0111181710
4.1/2"				0111061910		0111081910	0111091910		0111111910	0111121910	0111131910	0111141910	0111151910	0111161910	0111171910	0111181910
5"				0111062110		0111082110	0111092110		0111112110	0111122110	0111132110	0111142110	0111152110	0111162110	0111172110	0111182110

Bulón cabeza hexagonal

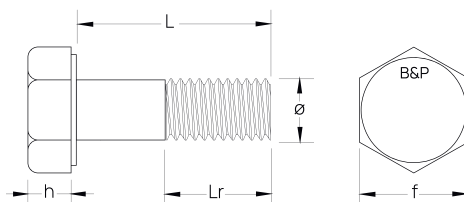
Rosca entera grado 2 UNC / USS

ø	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1 1/8"	1 1/4"	1 3/8"	1 1/2"
Hpp	24 N°10	20 UNC	18 UNC	16 UNC	14 UNC	13 UNC	12 BSW	12 UNC	11 UNC	10 UNC	9 UNC	8 UNC	7 UNC	7 UNC	6 UNC	6 UNC
f	5/16"	7/16"	1/2"	9/16"	5/8"	3/4"	3/4"	13/16"	15/16"	1 7/8"	1 5/16"	1 1/2"	1 11/16"	1 7/8"	2 1/16"	2 1/4"
h	3,05	4,14	5,36	6,17	7,39	8,20	8,20	9,42	10,24	12,27	14,30	15,93	18,23	20,65	22,30	24,73
Lr																
5 1/2"	0111082310 0111092310 0111112310 0111122310 0111132310 0111142310 0111152310 0111162310 0111172310 0111182310															
6"	0111082510 0111092510 0111112510 0111122510 0111132510 0111142510 0111152510 0111162510 0111172510 0111182510															

Bulón cabeza hexagonal

Rosca parcial grado 2 UNC / USS

ø Diámetro rosca
Lr Longitud de rosca
h Altura cabeza
f Llave
Hpp Hilos por pulgada



ø	1/4"	5/16"	3/8"	7/16"	1/2"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1,1/8"	1,1/4"	1,3/8"	1,1/2"	
Hpp	20 UNC	18 UNC	16 UNC	14 UNC	13 UNC	12 BSW	12 UNC	11 UNC	10 UNC	9 UNC	8 UNC	7 UNC	7 UNC	6 UNC	6 UNC	
f	7/16"	1/2"	9/16"	5/8"	3/4"	3/4"	13/16"	15/16"	1,1/8"	1,5/16"	1,1/2"	1,11/16"	1,7/8"	2,1/16"	2,1/4"	
h	4,14	5,36	6,17	7,39	8,20	8,20	9,42	10,24	12,27	14,30	15,93	18,23	20,65	22,30	24,73	
Lr	+6"	3/4"	7/8"	1"	1,1/8"	1,1/4"	1,1/4"	1,3/8"	1,1/2"	1,3/4"	2"	2,1/4"	2,1/2"	2,3/4"	3"	3,1/4"
	-6"					1,1/2"	1,1/2"	1,3/4"	2"	2,1/4"	2,1/2"	2,3/4"	3"	3,1/4"	3,1/2"	
L																
1,1/2"	112080710															
1,3/4"	0112040810 0112050810 0112060810 0112070810 0112080810 0112090810															
2"	0112040910 0112050910 0112060910 0112070910 0112080910 0112090910 0112100910 0112110910 0112120910 0112130910															
2,1/4"	0112041010 0112051010 0112061010 0112071010 0112081010 0112091010 0112101010 0112111010 0112121010 0112131010															
2,1/2"	0112041110 0112051110 0112061110 0112071110 0112081110 0112091110 0112101110 0112111110 0112121110 0112131110 0112141110															
2,3/4"	0112041210 0112051210 0112061210 0112071210 0112081210 0112091210 0112101210 0112111210 0112121210 0112131210 0112141210															
3"	0112041310 0112051310 0112061310 0112071310 0112081310 0112091310 0112101310 0112111310 0112121310 0112131310 0112141310 0112151310 0112161310															
3,1/4"	0112041410 0112051410 0112061410 0112071410 0112081410 0112091410 0112101410 0112111410 0112121410 0112131410 0112141410															



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Bulón cabeza hexagonal

Rosca parcial grado 2 UNC / USS

ø	1/4"	5/16"	3/8"	7/16"	1/2"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1.1/8"	1.1/4"	1.3/8"	1.1/2"
Hpp	20 UNC	18 UNC	16 UNC	14 UNC	13 UNC	12 BSW	12 UNC	11 UNC	10 UNC	9 UNC	8 UNC	7 UNC	7 UNC	6 UNC	6 UNC
f	7/16"	1/2"	9/16"	5/8"	3/4"	3/4"	13/16"	15/16"	1/8"	15/16"	1/2"	1.1/16"	1.7/8"	2.1/16"	2.1/4"
h	4,14	5,36	6,17	7,39	8,20	8,20	9,42	10,24	12,27	14,30	15,93	18,23	20,65	22,30	24,73
Lr	+6"	7/8"	1"	1.1/8"	1.1/4"	1.1/4"	1.3/8"	1.1/2"	1.3/4"	2"	2.1/4"	2.1/2"	2.3/4"	3"	3.1/4"
-6"					1.1/2"	1.1/2"		1.3/4"	2"	2.1/4"	2.1/2"	2.3/4"	3"	3.1/4"	3.1/2"
L															
3.1/2"	0112041510	0112051510	0112061510	0112071510	0112081510	0112091510	0112101510	0112111510	0112121510	0112131510	0112141510	0112151510	0112161510	0112171510	
4"	0112041710	0112051710	0112061710	0112071710	0112081710	0112091710	0112101710	0112111710	0112121710	0112131710	0112141710	0112151710	0112161710	0112171710	0112181710
4.1/2"		0112051910	0112061910	0112071910	0112081910	0112091910	0112101910	0112111910	0112121910	0112131910	0112141910	0112151910	0112161910	0112171910	0112181910
5"		0112052110	0112062110	0112072110	0112082110	0112092110	0112102110	0112112110	0112122110	0112132110	0112142110	0112152110	0112162110	0112172110	0112182110
5.1/2"		0112052310	0112062310	0112072310	0112082310	0112092310	0112102310	0112112310	0112122310	0112132310	0112142310	0112152310	0112162310	0112172310	0112182310
6"		0112052510	0112062510	0112072510	0112082510	0112092510	0112102510	0112112510	0112122510	0112132510	0112142510	0112152510	0112162510	0112172510	0112182510
6.1/2"					0112082710	0112092710		0112112710	0112122710	0112132710	0112142710	0112152710	0112162710	0112172710	0112182710
7"					0112082910	0112092910		0112112910	0112122910	0112132910	0112142910	0112152910	0112162910	0112172910	0112182910
7.1/2"					0112083110	0112093110		0112113110	0112123110	0112133110	0112143110	0112153110	0112163110	0112173110	0112183110
8"					0112083310	0112093310		0112113310	0112123310	0112133310	0112143310	0112153310	0112163310	0112173310	0112183310
9"								0112113710	0112123710	0112133710	0112143710	0112153710	0112163710	0112173710	0112183710
10"								0112114110	0112124110	0112134110	0112144110	0112154110	0112164110	0112174110	0112184110



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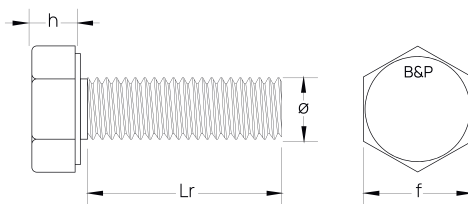
GROUP

Bulón cabeza hexagonal

Rosca entera grado 2 UNF / SAE



Ø Diámetro rosca
Lr Longitud de rosca
h Altura cabeza
f Llave
Hpp Hilos por pulgada



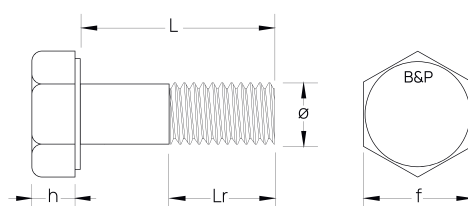
Ø	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"
Hpp	28 UNF	24 UNF	24 UNF	20 UNF	20 UNF	18 UNF	18 UNF	16 UNF
f	7/16"	1/2"	9/16"	5/8"	3/4"	13/16"	15/16"	1 1/8"
h	4,14	5,36	6,17	7,39	8,20	9,42	10,24	12,27
Lr								
3/4"	0113045310	0113055310	0113065310	0113075310				
1"	0113045510	0113055510	0113065510	0113075510	0113085510	0113105510	0113115510	
1 1/4"	0113045610	0113055610	0113065610	0113075610	0113085610	0113105610	0113115610	0113125610
1 1/2"	0113045710	0113055710	0113065710	0113075710	0113085710	0113105710	0113115710	0113125710
1 3/4"	0113045810	0113055810	0113065810	0113075810	0113085810	0113105810	0113115810	0113125810
4"	0113045910	0113055910	0113065910	0113075910	0113085910	0113105910	0113115910	0113125910

Bulón cabeza hexagonal

Rosca parcial grado 2 UNF / SAE



Ø Diámetro rosca
Lr Longitud de rosca
h Altura cabeza
f Llave
Hpp Hilos por pulgada



Ø	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"
Hpp	28 UNF	24 UNF	24 UNF	20 UNF	20 UNF	18 UNF	18 UNF	16 UNF
f	7/16"	1/2"	9/16"	5/8"	3/4"	13/16"	15/16"	1 1/8"
h	4,14	5,36	6,17	7,39	8,20	9,42	10,24	12,27
Lr	3/4"	7/8"	1"	1 1/8"	1 1/4"	1 3/8"	1 1/2"	1 3/4"
2"	0114045910	0114055910	0114065910	0114075910	0114085910	0114105910	0114115910	0114125910
2 1/4"	0114046010	0114056010	0114066010	0114076010	0114086010	0114106010	0114116010	0114126010

Bulón cabeza hexagonal

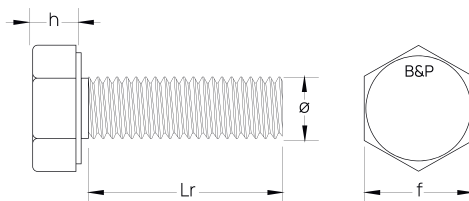
Rosca parcial grado 2 UNF / SAE

Ø	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"
Hpp	28 UNF	24 UNF	24 UNF	20 UNF	20 UNF	18 UNF	18 UNF	16 UNF
f	7/16"	1/2"	9/16"	5/8"	3/4"	13/16"	15/16"	1 1/8"
h	4,14	5,36	6,17	7,39	8,20	9,42	10,24	12,27
Lr	3/4"	7/8"	1"	1 1/8"	1 1/4"	1 3/8"	1 1/2"	1 3/4"
2 1/2"	0114046110	0114056110	0114066110	0114076110	0114086110	0114106110	0114116110	0114126110
3"	0114046310	0114056310	0114066310	0114076310	0114086310	0114106310	0114116310	0114126310
3 1/2"		0114056510	0114066510	0114076510	0114086510	0114106510	0114116510	0114126510
4"		0114056710	0114066710	0114076710	0114086710	0114106710	0114116710	0114126710
4 1/2"			0114066910		0114086910		0114116910	0114126910
5"			0114067110		0114087110		0114117110	0114127110

Bulón cabeza hexagonal

Rosca entera grado 5 UNC / USS

Ø Diámetro rosca
Lr Longitud de rosca
h Altura cabeza
f Llave
Hpp Hilos por pulgada



Ø	1/4"	5/16"	3/8"	7/16"	1/2"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1 1/8"	1 1/4"	1 3/8"	1 1/2"
Hpp	20 UNC	18 UNC	16 UNC	14 UNC	13 UNC	12 BSW	12 UNC	11 UNC	10 UNC	9 UNC	8 UNC	7 UNC	7 UNC	6 UNC	6 UNC
f	7/16"	1/2"	9/16"	5/8"	3/4"	3/4"	13/16"	15/16"	1 1/8"	1 5/16"	1 1/2"	1 11/16"	1 7/8"	2 1/16"	2 1/4"
h	4,14	5,36	6,17	7,39	8,20	8,20	9,42	10,24	12,27	14,30	15,93	19,82	20,65	22,30	24,73
Lr															
1/2"	0115040120	0115050120	0115060120												
5/8"	0115040220	0115050220	0115060220												
3/4"	0115040320	0115050320	0115060320	0115070320	0115080320	0115090320									
7/8"	0115040420	0115050420	0115060420												
1"	0115040520	0115050520	0115060520	0115070520	0115080520		0115100520	0115110520	0115120520						



B&P

fastenersolutions

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Una marca de



BPB

GROUP

Bulón cabeza hexagonal

Rosca entera grado 5 UNC / USS

ø	1/4"	5/16"	3/8"	7/16"	1/2"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1,1/8"	1,1/4"	1,3/8"	1,1/2"
Hpp	20 UNC	18 UNC	16 UNC	14 UNC	13 UNC	12 BSW	12 UNC	11 UNC	10 UNC	9 UNC	8 UNC	7 UNC	7 UNC	6 UNC	6 UNC
f	7/16"	1/2"	9/16"	5/8"	3/4"	3/4"	13/16"	15/16"	1,1/8"	1,5/16"	1,1/2"	1,11/16"	1,7/8"	2,1/16"	2,1/4"
h	4,14	5,36	6,17	7,39	8,20	8,20	9,42	10,24	12,27	14,30	15,93	19,82	20,65	22,30	24,73
Lr															
1,1/4"	0115040620	0115050620	0115060620	0115070620	0115080620	0115090620	0115100620	0115110620	0115120620						
1,1/2"	0115040720	0115050720	0115060720	0115070720	0115080720	0115090720	0115100720	0115110720	0115120720	0115130720					
1,3/4"	0115040820	0115050820	0115060820	0115070820	0115080820	0115090820	0115100820	0115110820	0115120820	0115130820					
2"	0115040920	0115050920	0115060920	0115070920	0115080920	0115090920	0115100920	115110920	0115120920	0115130920	0115140920	0115150920			
2,1/4"	0115041020	0115051020	0115061020	0115081020		0115091020		0115111020	0115121020	0115131020	0115141020	0115151020			
2,1/2"	0115041120	0115051120	0115061120	0115081120		0115091120	0115101120	0115111120	0115121120	0115131120	0115141120	0115151120	0115161120		
2,3/4"	0115041220	0115051220	0115061220	0115081220		0115091220		0115111220	0115121220	0115131220	0115141220	0115151220	0115161220		
3"	0115041320	0115051320	0115061320	0115081320		0115091320	0115101320	0115111320	0115121320	0115131320	0115141320	0115151320	0115161320	0115171320	0115181320
3,1/4"	0115041420	0115051420	0115061420	0115081420		0115091420		0115111420	0115121420	0115131420	0115141420				
3,1/2"	0115041520	0115051520	0115061520	0115081520		0115091520	0115101520	0115111520	0115121520	0115131520	0115141520	0115151520	0115161520	0115171520	0115181520
4"	0115041720	0115051720	0115061720	0115081720		0115091720	0115101720	0115111720	0115121720	0115131720	0115141720	0115151720	0115161720	0115171720	0115181720
4,1/2"			0115061920	0115081920		0115091920		0115111920	0115121920	0115131920	0115141920	0115151920	0115161920	0115171920	0115181920
5"			0115062120	0115082120		0115092120		0115112120	0115122120	0115132120	0115142120	0115152120	0115162120	0115172120	0115182120
5,1/2"					0115082320	0115092320		0115112320	0115122320	0115132320	0115142320	0115152320	0115162320	0115172320	0115182320
6"					0115082520	0115092520		0115112520	0115122520	0115132520	0115142520	0115152520	0115162520	0115172520	0115182520

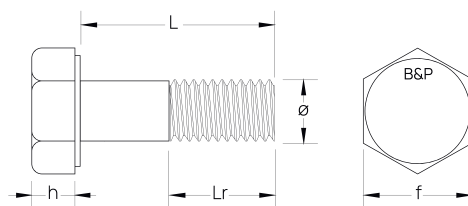


Bulón cabeza hexagonal

Rosca parcial grado 5 UNC / USS



ϕ Diámetro rosca
 Lr Longitud de rosca
 h Altura cabeza
 f Llave
 Hpp Hilos por pulgada



ø	1/4"	5/16"	3/8"	7/16"	1/2"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1.1/8"	1.1/4"	1.3/8"	1.1/2"	
Hpp	20 UNC	18 UNC	16 UNC	14 UNC	13 UNC	12 BSW	12 UNC	11 UNC	10 UNC	9 UNC	8 UNC	7 UNC	7 UNC	6 UNC	6 UNC	
f	7/16"	1/2"	9/16"	5/8"	3/4"	3/4"	13/16"	15/16"	1,1/8"	1,5/16"	1,1/2"	1,1/16"	1,7/8"	2,1/16"	2,1/4"	
h	4,14	5,36	6,17	7,39	8,20	8,20	9,42	10,24	12,27	14,30	15,93	19,82	20,65	22,30	24,73	
Lr	+6"	3/4"	7/8"	1"	1,1/4"	1,1/8"	1,1/4"	1,3/8"	1,1/2"	1,3/4"	2"	2,1/4"	2,1/2"	2,3/4"	3"	3,1/4"
	-6"					1,1/2"	1,1/2"		1,3/4"	2"	2,1/4"	2,1/2"	2,3/4"	3"	3,1/4"	3,1/2"
1.3/4"	0116040820 0116050820 0116060820 0116070820 0116080820 0116090820															
2"	0116040920 0116050920 0116060920 0116070920 0116080920 0116090920 0116100920 0116110920 0116120920 0116130920															
2.1/4"	0116041020 0116051020 0116061020 0116071020 0116081020 0116091020 0116101020 0116111020 0116121020 0116131020															
2.1/2"	0116041120 0116051120 0116061120 0116071120 0116081120 0116091120 0116101120 0116111120 0116121120 0116131120 0116141120															
3/4"	0116041220 0116051220 0116061220 0116071220 0116081220 0116091220 0116101220 0116111220 0116121220 0116131220 0116141220															
3"	0116041320 0116051320 0116061320 0116071320 0116081320 0116091320 0116101320 0116111320 0116121320 0116131320 0116141320 0116151320 0116161320															
3.1/4"	0116041420 0116051420 0116061420 0116071420 0116081420 0116091420 0116101420 0116111420 0116121420 0116131420 0116141420															
3.1/2"	0116041520 0116051520 0116061520 0116071520 0116081520 0116091520 0116101520 0116111520 0116121520 0116131520 0116141520 0116151520 0116161520 0116171520															
4"	0116041720 0116051720 0116061720 0116071720 0116081720 0116091720 0116101720 0116111720 0116121720 0116131720 0116141720 0116151720 0116161720 0116171720 0116181720															
4.1/2"	0116041920 0116051920 0116061920 0116071920 0116081920 0116091920 0116101920 0116111920 0116121920 0116131920 0116141920 0116151920 0116161920 0116171920 0116181920															
5"	0116042120 0116052120 0116062120 0116072120 0116082120 0116092120 0116102120 0116112120 0116122120 0116132120 0116142120 0116152120 0116162120 0116172120 0116182120															
5.1/2"	0116042320 0116052320 0116062320 0116072320 0116082320 0116092320 0116102320 0116112320 0116122320 0116132320 0116142320 0116152320 0116162320 0116172320 0116182320															
6"	0116042520 0116052520 0116062520 0116072520 0116082520 0116092520 0116102520 0116112520 0116122520 0116132520 0116142520 0116152520 0116162520 0116172520 0116182520															
6.1/2"					0116082720 0116092720			0116112720 0116122720 0116132720 0116142720 0116152720 0116162720 0116172720 0116182720								
7"					0116082920 0116092920			0116112920 0116122920 0116132920 0116142920 0116152920 0116162920 0116172920 0116182920								
7.1/2"					0116083120 0116093120			0116113120 0116123120 0116133120 0116143120 0116153120 0116163120 0116173120 0116183120								
8"					0116083320 0116093320			0116113320 0116123320 0116133320 0116143320 0116153320 0116163320 0116173320 0116183320								
9"								0116113720 0116123720 0116133720 0116143720 0116153720 0116163720 0116173720 0116183720								



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Una marca de



BPB

GROUP

Bulón cabeza hexagonal

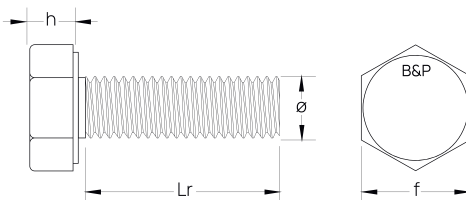
Rosca parcial grado 5 UNC / USS

Ø	1/4"	5/16"	3/8"	7/16"	1/2"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1 1/8"	1 1/4"	1 3/8"	1 1/2"
Hpp	20 UNC	18 UNC	16 UNC	14 UNC	13 UNC	12 BSW	12 UNC	11 UNC	10 UNC	9 UNC	8 UNC	7 UNC	7 UNC	6 UNC	6 UNC
f	7/16"	1/2"	9/16"	5/8"	3/4"	3/4"	13/16"	15/16"	1 1/8"	1 5/16"	1 1/2"	1 11/16"	1 7/8"	2 1/16"	2 1/4"
h	4,14	5,36	6,17	7,39	8,20	8,20	9,42	10,24	12,27	14,30	15,93	19,82	20,65	22,30	24,73
Lr	+6"	3/4"	7/8"	1"	1 1/4"	1 1/8"	1 1/4"	1 3/8"	1 1/2"	1 3/4"	2"	2 1/4"	2 1/2"	2 3/4"	3"
-6"					1 1/2"	1 1/2"		1 3/4"	2"	2 1/4"	2 1/2"	2 3/4"	3"	3 1/4"	3 1/2"
10"	0116114120 0116124120 0116134120 0116144120 0116154120 0116164120 0116174120 0116184120														

Bulón cabeza hexagonal

Rosca entera grado 5 UNF / SAE

Ø Diámetro rosca
Lr Longitud de rosca
h Altura cabeza
f Llave
Hpp Hilos por pulgada



Ø	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"
Hpp	28 UNF	24 UNF	24 UNF	20 UNF	20 UNF	18 UNF	18 UNF	16 UNF	14 UNF	14 UNS
f	7/16"	1/2"	9/16"	5/8"	3/4"	13/16"	15/16"	1 1/8"	1 5/16"	1 1/2"
h	4,14	5,36	6,17	7,39	8,20	9,42	10,24	12,27	14,30	15,93
Lr										
1/2"	0117045120	0117055120								
5/8"	0117045220	0117055220	0117065220							
3/4"	0117045320	0117055320	0117065320	0117075320						
7/8"	0117045420	0117055420	0117065420							
1"	0117045520	0117055520	0117065520	0117075520	0117085520		0117115520			
1 1/4"	0117045620	0117055620	0117065620	0117075620	0117085620	0117105520	0117115620	0117125620		
1 1/2"	0117045720	0117055720	0117065720	0117075720	0117085720	0117105620	0117115720	0117125720		
1 3/4"	0117045820	0117055820	0117065820	0117075820	0117085820	0117105720	0117115820	0117125820		
2"	0117045920	0117055920	0117065920	0117075920	0117085920	0117105820	0117115920	0117125920	0117135920	0117145920
2 1/4"	0117046020	0117056020	0117066020		0117086020	0117105920	0117116020	0117126020	0117136020	0117146020



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fastenersolutions

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Una marca de



BPB

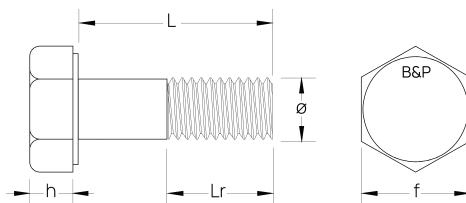
GROUP

Bulón cabeza hexagonal

Rosca parcial grado 5 UNF / SAE



$\varnothing$ Diámetro rosca
 Lr Longitud de rosca
 h Altura cabeza
 f Llave
 Hpp Hilos por pulgada



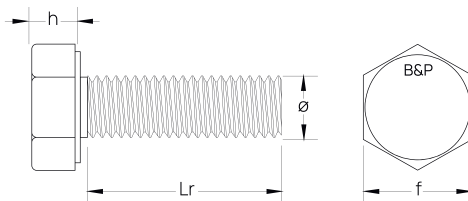
$\varnothing$	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"
Hpp	28 UNF	24 UNF	24 UNF	20 UNF	20 UNF	18 UNF	18 UNF	16 UNF	14 UNF	14 UNS
f	7/16"	1/2"	9/16"	5/8"	3/4"	13/16"	15/16"	1 1/8"	1 5/16"	1 1/2"
h	4,14	5,36	6,17	7,39	8,20	9,42	10,24	12,27	14,30	15,93
Lr	Menor a 6"								2"	2 1/4"
	Mayor a 6"								2 1/4"	2 1/2"
Medidas										
1 1/4"	0118075620									
1 1/2"	0118075720 0118085720									
2"	0118045920	0118055920	0118065920	0118075920	0118085920	0118105920	0118115920	0118125920		
2 1/4"	0118046020	0118056020	0118066020	0118076020	0118086020	0118106020	0118116020	0118126020	0118136020	
2 1/2"	0118046120	0118056120	0118066120	0118076120	0118086120	0118106120	0118116120	0118126120	0118136120	0118146120
3"	0118046320	0118056320	0118066320	0118076320	0118086320	0118106320	0118116320	0118126320	0118136320	0118146320
3 1/2"		0118056520	0118066520	0118076520	0118086520	0118106520	0118116520	0118126520	0118136520	0118146520
4"		0118056720	0118066720	0118076720	0118086720	0118106720	0118116720	0118126720	0118136720	0118146720
4 1/2"			0118066920		0118086920		0118116920	0118126920	0118136920	0118146920
5"			0118067120		0118087120		0118117120	0118127120	0118137120	0118147120
5 1/2"							0118117320	0118127320	0118137320	0118147320
6"							0118117520	0118127520	0118137520	0118147520
6 1/2"									0118137720	0118147720
7"									0118137920	0118147920
8"									0118138320	0118148320

Bulón cabeza hexagonal

Rosca entera grado 8 UNC / USS



Ø Diámetro rosca
Lr Longitud de rosca
h Altura cabeza
f Llave
Hpp Hilos por pulgada



Ø	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1.1/4"	1.1/2"
Hpp	20 UNC	18 UNC	16 UNC	13 UNC	11 UNC	10 UNC	9 UNC	8 UNC	7 UNC	6 UNC
f	7/16"	1/2"	9/16"	3/4"	15/16"	1,1/8"	1.5/16"	1,1/2"	1.7/8"	2,1/4"
h	4,14	5,36	6,17	8,20	10,24	12,27	14,30	15,93	20,65	24,73
Lr										
3/4"	0119040320	0119050320	0119060320	0119080320						
1"	0119040520	0119050520	0119060520	0119080520	0119110520	0119120520				
1.1/4"	0119040620	0119050620	0119060620	0119080620	0119110620	0119120620				
1.1/2"	0119040720	0119050720	0119060720	0119080720	0119110720	0119120720				
1.3/4"	0119040820	0119050820	0119060820	0119080820	0119110820	0119120820				
2"	0119040920	0119050920	0119060920	0119080920	0119110920	0119120920	0119130920	0119140920		
2.1/4"	0119041020	0119051020	0119061020	0119081020	0119111020	0119121020	0119131020	0119141020		
2.1/2"	0119041120	0119051120	0119061120	0119081120	0119111120	0119121120	0119131120	0119141120	0119161120	
2.3/4"	0119041220	0119051220	0119061220	0119081220	0119111220	0119121220	0119131220	0119141220	0119161220	
3"	0119041320	0119051320	0119061320	0119081320	0119111320	0119121320	0119131320	0119141320	0119161320	0119181320
3.1/2"	0119041520	0119051520	0119061520	0119081520	0119111520	0119121520	0119131520	0119141520	0119161520	0119181520
4"	0119041720	0119051720	0119061720	0119081720	0119111720	0119121720	0119131720	0119141720	0119161720	0119181720
4.1/2"			0119061920	0119081920	0119111920	0119121920	0119131920	0119141920	0119161920	0119181920
5"			0119062120	0119082120	0119112120	0119122120	0119132120	0119142120	0119162120	0119182120
5.1/2"				0119082320	0119112320	0119122320	0119132320	0119142320	0119162320	0119182320
6"				0119082520	0119112520	0119122520	0119132520	0119142520	0119162520	0119182520



B&P

fastenersolutions

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Una marca de



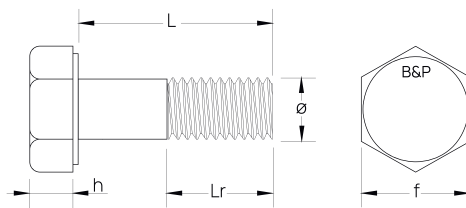
BPB

GROUP

Bulón cabeza hexagonal

Rosca parcial grado 8 UNC / USS

$\varnothing$ Diámetro rosca
 Lr Longitud de rosca
 h Altura cabeza
 f Llave
 Hpp Hilos por pulgada

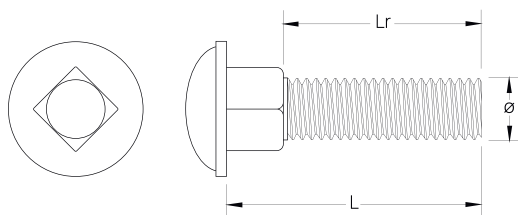


$\varnothing$	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1 1/4"	1 1/2"
Hpp	20 UNC	18 UNC	18 UNC	13 UNC	11 UNC	10 UNC	9 UNC	14 UNS	7 UNC	6 UNC
f	7/16"	1/2"	9/16"	3/4"	15/16"	1 1/8"	1 5/16"	1 1/2"	1 7/8"	2 1/4"
h	4,14	5,36	6,17	8,20	10,24	12,27	14,30	15,93	20,65	24,73
Lr	Menor a 6"	3/4"	7/8"	1"	1 1/4"	1 1/2"	1 3/4"	2"	2 1/4"	2 3/4"
	Mayor a 6"			1 1/2"	1 3/4"	2"	2 1/4"	2 1/2"	3"	3 1/2"
Medidas										
1 3/4"	0120040820	0120050820	0120060820	0120080820						
2"	0120040920	0120050920	0120060920	0120080920	0120090920	0120120920	0120130920			
2 1/4"	0120041020	0120051020	0120061020	0120081020	0120091020	0120121020	0120131020			
2 1/2"	0120041120	0120051120	0120061120	0120081120	0120091120	0120121120	0120131120	0120141120		
2 3/4"	0120041220	0120051220	0120061220	0120081220	0120091220	0120121220	0120131220	0120141220		
3"	0120041320	0120051320	0120061320	0120081320	0120091320	0120121320	0120131320	0120141320	0120161320	
3 1/2"	0120041520	0120051520	0120061520	0120081520	0120091520	0120121520	0120131520	0120141520	0120161520	
4"	0120041720	0120051720	0120061720	0120081720	0120091720	0120121720	0120131720	0120141720	0120161720	0120181720
4 1/2"		0120051920	0120061920	0120081920	0120091920	0120121920	0120131920	0120141920	0120161920	0120181920
5"		0120052120	0120062120	0120082120	0120092120	0120122120	0120132120	0120142120	0120162120	0120182120
5 1/2"		0120052320	0120062320	0120082320	0120092320	0120122320	0120132320	0120142320	0120162320	0120182320
6"		0120052520	0120062520	0120082520	0120092520	0120122520	0120132520	0120142520	0120162520	0120182520
6 1/2"				0120082720	0120092720	0120122720	0120132720	0120142720	0120162720	0120182720
7"				0120082920	0120092920	0120122920	0120132920	0120142920	0120162920	0120182920
7 1/2"				0120083120	0120093120	0120123120	0120133120	0120143120	0120163120	0120183120
8"				0120083320	0120093320	0120123320	0120133320	0120143320	0120163320	0120183320
9"									0120163720	0120183720
10"									0120164120	0120184120

Bulón cabeza redonda

Sin tuerca UNC / USS

Ø Diámetro de rosca
Lr Longitud de rosca
L Longitud



Ø	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"
Hpp	24 N°10	20 UNC	18 UNC	16 UNC	14 UNC	12 BSW	11 UNC
Lr	+6"	2"	2"	2"	2"	2"	2"
	-6"	2.1/4"	2.1/4"	2.1/4"	2.1/4"	2.1/4"	2.1/4"
L							
3/4"	0103030310	0103040310	0103050310				
1"	0103030510	0103040510	0103050510	0103060510			
1.1/4"	0103030610	0103040610	0103050610	0103060610			
1.1/2"	0103030710	0103040710	0103050710	0103060710	0103070710	0103090710	0103110710
1.3/4"	0103030810	0103040810	0103050810	0103060810		0103090810	0103110810
2"	0103030910	0103040910	0103050910	0103060910	0103070910	0103090910	0103110910
2.1/4"		0103041010	0103051010	0103061010		0103091010	0103111010
2.1/2"		0103041110	0103051110	0103061110	0103071110	0103091110	0103111110
2.3/4"		0103041210	0103051210	0103061210		0103091210	0103111210
3"		0103041310	0103051310	0103061310	0103071310	0103091310	0103111310
3.1/4"		0103041410	0103051410	0103061410		0103091410	0103111410
3.1/2"		0103041510	0103051510	0103061510	0103071510	0103091510	0103111510
4"		0103041710	0103051710	0103061710	0103071710	0103091710	0103111710
4.1/2"		0103041910	0103051910	0103061910	0103071910	0103091910	0103111910
5"			0103052110	0103062110	0103072110	0103092110	0103112110
5.1/2"			0103052310	0103062310	0103072310	0103092310	0103112310
6"			0103052510	0103062510	0103072510	0103092510	0103112510
6.1/2"			0103052710	0103062710	0103072710	0103092710	0103112710

Bulón cabeza redonda

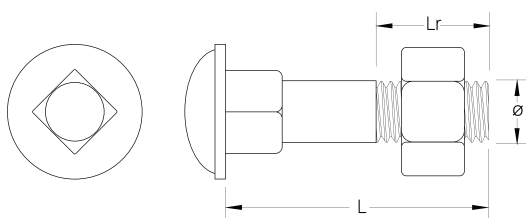
Sin tuerca UNC / USS

Ø	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"
Hpp	24 N°10	20 UNC	18 UNC	16 UNC	14 UNC	12 BSW	11 UNC
Lr	+6"	2"	2"	2"	2"	2"	2"
	-6"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"
L							
7"			0103052910	0103062910	0103072910	0103092910	0103112910
7 1/2"			0103053110	0103063110	0103073110	0103093110	0103113110
8"			0103053310	0103063310	0103073310	0103093310	0103113310
8 1/2"			0103053510	0103063510		0103093510	0103113510
9"			0103053710	0103063710		0103093710	0103113710
9 1/2"			0103053910	0103063910		0103093910	0103113910
10"			0103054110	0103064110		0103094110	0103114110
11"			0103054310	0103064310		0103094310	0103114310
12"			0103054510	0103064510		0103094510	0103114510

Bulón cabeza redonda

Con tuerca UNC / USS

Ø Diámetro de rosca
Lr Longitud de rosca
L Longitud



Ø	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"
Hpp	24 N°10	20 UNC	18 UNC	16 UNC	14 UNC	12 BSW	11 UNC
Lr	+6"	2"	2"	2"	2"	2"	2"
	-6"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"
L							
3/4"	0101030310	0101040310	0101050310				
1"	0101030510	0101040510	0101050510	0101060510			

Bulón cabeza redonda

Con tuerca UNC/ USS

Ø	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"
Hpp	24 N°10	20 UNC	18 UNC	16 UNC	14 UNC	12 BSW	11 UNC
Lr	+6"	2"	2"	2"	2"	2"	2"
	-6"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"
L							
1.1/4"	0101030610	0101040610	0101050610	0101060610			
1.1/2"	0101030710	0101040710	0101050710	0101060710	0101070710	0101090710	0101110710
1.3/4"	0101030810	0101040810	0101050810	0101060810		0101090810	0101110810
2"	0101030910	0101040910	0101050910	0101060910	0101070910	0101090910	0101110910
2.1/4"		0101041010	0101051010	0101061010		0101091010	0101111010
2.1/2"		0101041110	0101051110	0101061110	0101071110	0101091110	0101111110
2.3/4"		0101041210	0101051210	0101061210		0101091210	0101111210
3"		0101041310	0101051310	0101061310	0101071310	0101091310	0101111310
3.1/4"		0101041410	0101051410	0101061410		0101091410	0101111410
3.1/2"		0101041510	0101051510	0101061510	0101071510	0101091510	0101111510
4"		0101041710	0101051710	0101061710	0101071710	0101091710	0101111710
4.1/2"		0101041910	0101051910	0101061910	0101071910	0101091910	0101111910
5"		0101042110	0101052110	0101062110	0101072110	0101092110	0101112110
5.1/2"			0101052310	0101062310	0101072310	0101092310	0101112310
6"			0101052510	0101062510	0101072510	0101092510	0101112510
6.1/2"			0101052710	0101062710	0101072710	0101092710	0101112710
7"			0101052910	0101062910	0101072910	0101092910	0101112910
7.1/2"			0101053110	0101063110	0101073110	0101093110	0101113110
8"			0101053310	0101063310	0101073310	0101093310	0101113310
8.1/2"			0101053510	0101063510		0101093510	0101113510
9"			0101053710	0101063710		0101093710	0101113710



B&P

fastenersolutions

19

Una marca de



BPB

GROUP

Bulón cabeza redonda

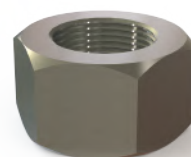
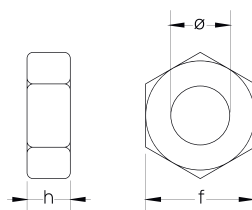
Con tuerca UNC / USS

Ø	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"
Hpp	24 N°10	20 UNC	18 UNC	16 UNC	14 UNC	12 BSW	11 UNC
Lr	+6"	2"	2"	2"	2"	2"	2"
	-6"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	2 1/4"
L							
9 1/2"			0101053910	0101063910			0101093910 0101113910
10"			0101054110	0101064110			0101094110 0101114110
11"			0101054310	0101064310			0101094310 0101114310
12"			0101054510	0101064510			0101094510 0101114510

Tuerca hexagonal

Grado 2

f Llave
h Altura
Ø Diámetro interno



MEDIDA Ø	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
1/8"	1/4"	40	0202010110			2,59	2,90
Nº 8 - 5/32"	1/4"	32	0202020110			2,59	2,90
Nº 8 - 5/32"	5/16"	32	0202021110			2,97	3,30
Nº 10 - 3/16"	5/16"	24	0202030110	32	0201030210	4,00	4,20
Nº 10 - 3/16"	3/8"	24	0202031110	32	0201031210	4,00	4,20
1/4"	3/8"	20	0202041110	28	0201041210	5,00	5,20
1/4"	7/16"	20	0202040110	28	0201040210	5,38	5,74
5/16"	1/2"	18	0202050110	24	0201050210	6,55	6,93

Tuerca hexagonal

Grado 2

MEDIDA Ø	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
3/8"	9/16"	16	0202060110	24	0201060210	8,13	8,56
7/16"	5/8"	14	0202070110	20	0201070210	9,27	9,77
7/16"	11/16"	14	0202071110	20	0201071210	9,27	9,77
1/2"	3/4"	13	0202080110	202	0201080210	10,85	11,38
1/2" BSW	3/4"	12 BSW	0202090110			10,85	11,38
9/16"	7/8"	12	0202100110	18	0201100210	12,01	12,60
5/8"	15/16"	11	0202110110	18	0201110210	13,60	14,20
3/4"	1,1/8"	10	0202120110	16	0201120210	15,67	16,89
7/8"	1.5/16"	9	0202130110	14	0201130210	18,39	19,71
1"	1,1/2"	8	0202140110	14 UNS	0201140310	21,11	22,53
1.1/8"	1.5/8"	7	0202150110	12	0201150210	23,85	25,37
1.1/8"	1,1/16"	7	0202151110	12	0201151210	23,85	25,37
1.1/4"	1.7/8"	7	0202160110	12	0201160210	26,16	27,78
1.3/8"	2"	6	0202170110	12	0201170210	28,58	29,77
1.1/2"	2"	6	0202180110	12	0201180210	29,17	31,00
1.1/2"	2,1/4"	6	0202181110	12	0201181210	31,62	33,45
1 3/4"	2 5/8"	5	0202200110			37,08	39,12
2"	3"	4,5	0202220110			42,55	44,78
2,1/4"	3.3/8"	4,5	0202230110			47,56	50,00
2,1/2"	3.3/4"	4	0202240110			53,50	55,56
2.3/4"	4,1/8"	4	0202250110			58,41	61,11
3"	4,1/2"	4	0202260110			64,36	67,41

Tuerca hexagonal

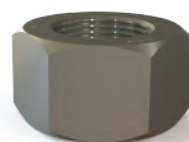
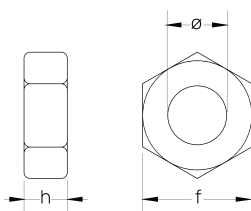
Grado 2

MEDIDA $\varnothing$	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
3.1/4"	4.7/8"	4	0202270110			69,02	72,22
3.1/2"	5.1/4"	4	0202280110			74,28	77,78
3.3/4"	5.5/8"	4	0202290110			79,74	83,34
4"	6"	4	0202300110			84,85	88,90

Tuerca hexagonal

Grado 5

f Llave
h Altura
 $\varnothing$ Diámetro interno



MEDIDA $\varnothing$	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
1/4"	7/16"	20	0204040120	28	0203040220	5,38	5,74
5/16"	1/2"	18	0204050120	24	0203050220	6,55	6,93
3/8"	9/16"	16	0204060120	24	0203060220	8,13	8,56
7/16"	5/8"	14	0204070120	20	0203070220	9,27	9,77
7/16"	11/16"	14	0204071120	20	0203071220	9,27	9,77
1/2"	3/4"	13	0204080120	20	0203080220	10,85	11,38
1/2" BSW	3/4"	12 BSW	0204090120			10,85	11,38
9/16"	7/8"	12	0204100120	18	0203100220	12,01	12,60
5/8"	15/16"	11	0204110120	18	0203110220	13,60	14,20
3/4"	1.1/8"	10	0204120120	16	0203120220	15,67	16,89

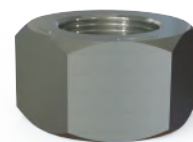
Tuerca hexagonal

Grado 5

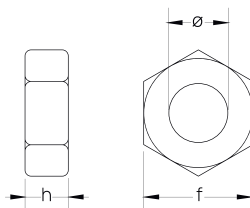
MEDIDA ø	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
7/8"	15/16"	9	0204130120	14	0203130220	18,39	19,71
1"	1 1/2"	8	0204140120	14 UNS	0203140320	21,11	22,53
1 1/8"	1 5/8"	7	0204150120	12	0203150220	23,85	25,37
1 1/8"	1 11/16"	7	0204151120	12	0203151220	23,85	25,37
1 1/4"	1 7/8"	7	0204160120	12	0203160220	26,16	27,78
1 3/8"	2"	6	0204170120	12	0203170220	28,58	29,77
1 1/2"	2"	6	0204180120	12	0203180220	29,17	31,00
1 1/2"	2 1/4"	6	0204181120	12	0203181220	31,62	33,45
1 3/4"	2 5/8"	5	0204200120			37,08	39,12
2"	3"	4,5	0204220120			42,55	44,78
2 1/4"	3 3/8"	4,5	0204230120			47,56	50,00
2 1/2"	3 3/4"	4	0204240120			53,50	55,56
2 3/4"	4 1/8"	4	0204250120			58,41	61,11
3"	4 1/2"	4	0204260120			64,36	67,41
3 1/4"	4 7/8"	4	0204270120			69,02	72,22
3 1/2"	5 1/4"	4	0204280120			74,28	77,78
3 3/4"	5 5/8"	4	0204290120			79,74	83,34
4"	6"	4	0204300120			84,85	88,90

Tuerca hexagonal

Grado 8



f Llave
h Altura
Ø Diámetro interno



MEDIDA Ø	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
1/4"	7/16"	20	0206040130	28	0205040230	5,38	5,74
5/16"	1/2"	18	0206050130	24	0205050230	6,55	6,93
3/8"	9/16"	16	0206060130	24	0205060230	8,13	8,56
7/16"	5/8"	14	0206070130	20	0205070230	9,27	9,77
7/16"	11/16"	14	0206071130	20	0205071230	9,27	9,77
1/2"	3/4"	13	0206080130	20	0205080230	10,85	11,38
1/2" BSW	3/4"	12 BSW	0206090130			10,85	11,38
9/16"	7/8"	12	0206100130	18	0205100230	12,01	12,60
5/8"	15/16"	11	0206110130	18	0205110230	13,60	14,20
3/4"	1,1/8"	10	0206120130	16	0205120230	15,67	16,89
7/8"	1,5/16"	9	0206130130	14	0205130230	18,39	19,71
1"	1,1/2"	8	0206140130	14 UNS	0205140330	21,11	22,53
1,1/8"	1,5/8"	7	0206150130	12	0205150230	23,85	25,37
1,1/8"	1,11/16"	7	0206151130	12	0205151230	23,85	25,37
1,1/4"	1,7/8"	7	0206160130	12	0205160230	26,16	27,78
1,3/8"	2"	6	0206170130	12	0205170230	28,58	29,77
1,1/2"	2"	6	0206180130	12	0205180230	29,17	31,00
1,1/2"	2,1/4"	6	0206181130	12	0205181230	31,62	33,45
1,3/4"	2,5/8"	5	0206200130			37,08	37,12

Tuerca hexagonal

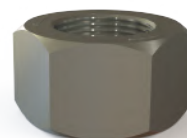
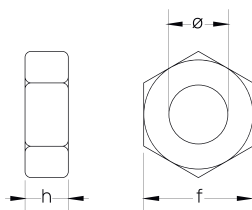
Grado 8

MEDIDA ϕ	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
2"	3"	45	0206220130			42,55	44,78
2.1/4"	3.3/8"	45	0206230130			47,56	50,00
2.1/2"	3.3/4"	4	0206240130			53,50	55,56
2.3/4"	4.1/8"	4	0206250130			58,41	61,11
3"	4.1/2"	4	0206260130			64,36	67,41
3.1/4"	4.7/8"	4	0206270130			69,02	72,22
3.1/2"	5.1/4"	4	0206280130			74,28	77,78
3.3/4"	5.5/8"	4	0206290130			79,74	83,34
4"	6"	4	0206300130			84,85	88,90

Tuerca hexagonal

Pesada Grado 2

f Llave
h Altura
 ϕ Diámetro interno



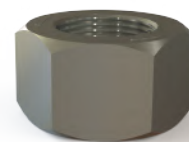
MEDIDA ϕ	f	Rosca UNC / USS		h. ALTURA	
		HILOS	CÓDIGO	Mínima	Máxima
5/16"	9/16"	18	0207050110	7,12	7,97
3/8"	11/16"	16	0207060110	8,67	9,59
7/16"	3/4"	14	0207070110	10,24	11,20
1/2"	7/8"	13	0207080110	11,79	12,80
1/2" BSW	7/8"	12 BSW	0207090110	11,79	12,80

Tuerca hexagonal

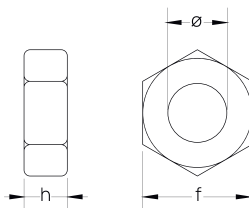
Pesada Grado 2

MEDIDA ø	f	Rosca UNC / USS		h. ALTURA	
		HILOS	CÓDIGO	Mínima	Máxima
9/16"	15/16"	12	0207100110	13,36	14,42
5/8"	1 1/16"	11	0207110110	14,91	16,03
3/4"	1 1/4"	10	0207120110	18,04	19,25
7/8"	1 7/16"	9	0207130110	21,16	22,48
1"	1 5/8"	8	0207140110	24,29	25,70
1 1/8"	1 13/16"	7	0207150110	27,71	28,93
1 1/4"	2"	7	0207160110	30,15	31,77
1 1/2"	2 3/8"	6	0207180110	36,40	38,22
1 5/8"	2 9/16"	5	0207190110	39,52	41,45
1 3/4"	2 3/4"	5	0207200110	42,65	44,67
1 7/8"	2 15/16"	45	0207210110	45,77	47,90
2"	3 1/8"	45	0207220110	48,89	51,17
2 1/4"	3 1/2"	45	0207230110	54,74	57,19
2 1/2"	3 7/8"	4	0207240110	60,98	63,93
2 3/4"	4 1/4"	4	0207250110	67,23	70,08
3"	4 5/8"	4	0207260110	73,48	76,53
3 1/4"	5"	4	0207270110	79,35	82,60
3 1/2"	5 3/8"	4	0207280110	85,60	89,05
3 3/4"	5 3/4"	4	0207290110	91,85	95,50
4"	6 1/8"	4	0207300110	98,10	101,95

Tuerca hexagonal Alta Grado 2



f Llave
h Altura
Ø Diámetro interno

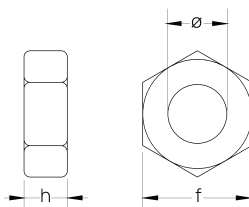


MEDIDA Ø	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
3/8"	9/16"	16	0243060110	24	0244060210	11,72	12,15
7/16"	5/8"	14	0243070110	20	0244070210	13,64	14,14
1/2"	3/4"	13	0243080110	20	0244080210	15,47	16,00
9/16"	7/8"	12	0243100110	18	0244100210	19,17	19,76
5/8"	15/16"	11	0243110110	18	0244110210	20,56	21,16
3/4"	1 1/16"	10	0243120110	16	0244120210	22,19	23,41
7/8"	1 1/4"	9	0243130110	14	0244130210	26,46	27,78
1"	1 1/2"	8	0243140110	14 UNS	0244140310	32,66	33,78
1 1/8"	1 5/8"	7	0243150110	12	0244150210	32,66	33,78
1 1/4"	1 3/4"	7	0243160110	12	0244160210	34,53	35,50

Tuerca hexagonal Baja Grado 2



f Llave
h Altura
Ø Diámetro interno



MEDIDA Ø	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
Nº10 - 3/16"	5/16"	24	0252030110	32	0251030210	3,00	3,30

Tuerca hexagonal

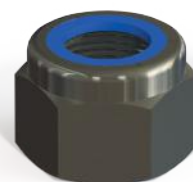
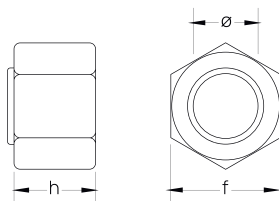
Baja Grado 2

MEDIDA ø	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
Nº10 - 3/16"	5/16"	24	0252030110	32	0251030210	3,00	3,30
Nº10	3/8"	24	0252031110	32	0251031210	3,00	3,30
1/4"	7/16"	20	0252040110	28	0251040210	3,81	4,16
5/16"	1/2"	18	0252050110	24	0251050210	4,57	4,95
3/8"	9/16"	16	0252060110	24	0251060210	5,34	5,76
7/16"	5/8"	14	0252070110	20	0251070210	6,09	6,60
1/2"	3/4"	13	0252080110	20	0251080210	7,67	8,20
1/2" BSW	3/4"	12 BSW	0252090110			7,67	8,20
9/16"	7/8"	12	0252100110	18	0251100210	7,64	8,23
5/8"	15/16"	11	025211010	18	0251110210	9,22	9,83
3/4"	1,1/8"	10	0252120110	16	0251120210	10,11	11,32
7/8"	1,5/16"	9	0252130110	14	0251130210	11,63	12,95
1"	1,1/2"	8	0252140110	14 UNS	0251140310	13,18	14,60
1,1/8"	1,5/8"	7	0252150110	12	0251150210	14,70	16,26
1,1/4"	1,7/8"	7	0252160110	12	0251160210	17,44	19,07
1,3/8"	2"	6	0252170110	12	0251170210	18,97	20,70
1,1/2"	2"	6	0252180110	12	0251180210	20,52	22,35

Tuerca hexagonal

Autofrenante grado 2

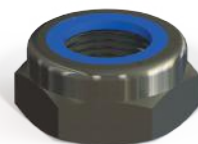
f Llave
h Altura
Ø Diámetro interno



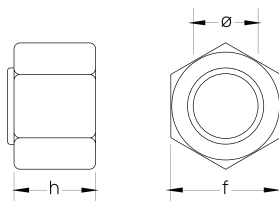
MEDIDA Ø	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
Nº10 - 3/16"	3/8"	24	0235031110	32	0233031210	5,85	6,32
1/4"	7/16"	20	0235040110	28	0233040210	7,57	8,33
5/16"	1/2"	18	0235050110	24	0233050210	8,66	9,12
3/8"	9/16"	16	0235060110	24	0233060210	11,35	11,91
7/16"	5/8"	14	0235070110	20	0233070210	12,65	13,31
1/2"	3/4"	13	0235080110	20	0233080210	14,70	15,47
1/2" BSW	3/4"	12	0235090110			14,70	15,47
9/16"	7/8"	12	0235100110	18	0233100210	15,83	16,66
5/8"	15/16"	11	0235110110	18	0233110210	18,67	19,43
3/4"	1,1/16"	10	0235121110	16	0233121210	21,85	22,62
3/4"	1,1/8"	10	0235120110	16	0233120210	21,85	22,62
7/8"	1,1/4"	9	0235131110	14	0233131210	24,62	25,37
7/8"	1,5/16"	9	0235130110	14	0233130210	24,62	25,37
1"	1,7/16"	8	0235141110	14 UNS	0233141310	25,81	27,38
1"	1,1/2"	8	0235140110	14 UNS	0233140310	25,81	27,38
1,1/8"	1,5/8"	7	0235150110	12	0233150210	28,60	30,00
1,1/4"	1,7/8"	7	0235160110	12	0233160210	32,50	33,50

Tuerca hexagonal

Autofrenante baja grado 2



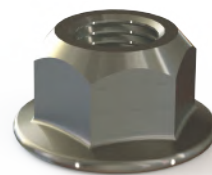
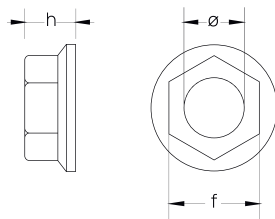
f Llave
h Altura
Ø Diámetro interno



MEDIDA Ø	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
1/4"	7/16"	20	0236040110	28	0234040210	6,17	6,50
5/16"	1/2"	18	0236050110	24	0234050210	8,66	9,12
3/8"	9/16"	16	0236060110	24	0234060210	9,04	9,52
7/16"	5/8"	14	0236070110	20	0234070210	10,55	11,11
1/2"	3/4"	13	0236080110	20	0234080210	12,06	12,70
1/2" BSW	3/4"	12 BSW	0236090110			12,06	12,70
9/16"	7/8"	12	0236100110	18	0234100210	13,57	14,29
5/8"	15/16"	11	0236110110	18	0234110210	15,09	15,89
3/4"	1 1/8"	10	0236120110	16	0234120210	16,91	17,80
7/8"	1 5/16"	9	0236130110	14	0234130210	18,43	19,40
1"	1 1/2"	8	0236140110	14 UNS	0234140210	20,33	21,50
1 1/8"	1 5/8"	7	0236150110	12	0234150210	21,30	22,50
1 1/4"	1 7/8"	7	0236160110	12	0234160210	24,00	25,50
1 1/2"	2 1/4"	6	0236181110	12	0234181210	27,50	29,00

Tuerca hexagonal Flangeada grado 2

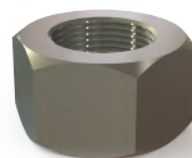
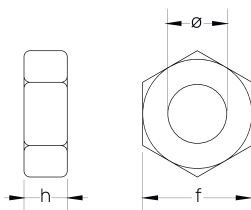
f Llave
h Altura
Ø Diámetro interno



MEDIDA Ø	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA		FLANGE
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima	
1/4"	7/16"	20	0220040110	28	0221040210	5,63	5,99	15,08
5/16"	1/2"	18	0220050110	24	0221050210	6,80	7,18	17,27
3/8"	9/16"	16	0220060110	24	0221060210	8,38	8,81	19,05
7/16"	5/8"	14	0220070110	20	0221070210	9,52	10,03	23,79
1/2"	3/4"	13	0220080110	20	0221080210	11,09	11,63	26,18
1/2" BSW	3/4"	12 BSW	0220090110			11,09	11,63	26,18
9/16"	7/8"	12	0220100110	18	0221100210	12,26	12,85	30,17
5/8"	15/16"	11	0220110110	18	0221110210	13,84	14,45	32,53
3/4"	1 1/8"	10	0220120110	16	0221120210	15,92	17,14	38,10

Tuerca hexagonal ASTM A194 - 2H

f Llave
h Altura
Ø Diámetro interno



MEDIDA Ø	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
1/2"	7/8"	13	0226080110			11,79	12,80
5/8"	1 1/16"	11	0226110110			14,91	16,03

Tuerca hexagonal

ASTM A194 - 2H

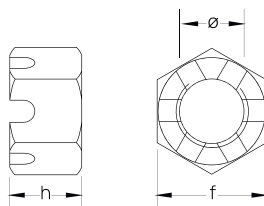
MEDIDA ø	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
3/4"	1,1/4"	10	0226120110			18,03	19,25
7/8"	1,7/16"	9	0226130110			21,16	22,48
1"	1,5/8"	8	0226140110			24,28	24,70
1,1/8"	1,13/16"	7	0226151010	8 UN	0227150310	27,41	28,9.
1,1/4"	2"	7	0226160110	8 UN	0227160310	30,15	31,77
1,1/2"	2,3/8"	6	0226180110	8 UN	0227180310	36,40	38,22
1,5/8"	2,9/16"	5	0226190110	8 UN	0227190310	39,52	41,45
1,3/4"	2,3/4"	5	0226200110	8 UN	0227200310	42,65	44,67
1,7/8"	2,15/16"	4,5	0226210110	8 UN	0227210310	45,77	47,90
2"	3,1/8"	4,5	0226220110	8 UN	0227220310	48,89	51,17
2,1/4"	3,1/2"	4,5	0226230110	8 UN	0227230310	54,74	57,17
2,1/2"	3,7/8"	4	0226240110	8 UN	0227240310	60,98	63,62
2,3/4"	4,1/4"	4	0226250110	8 UN	0227250310	67,23	70,08
3"	4,5/8"	4	0226260110	8 UN	0227260310	73,48	76,53
3,1/4"	5"	4	0226270110	8 UN	0227270310	79,35	82,60
3,1/2"	5,3/8"	4	0226280110	8 UN	0227280310	85,60	89,05
3,3/4"	5,3/4"	4	0226290110	8 UN	0227290310	91,85	95,50
4"	6,1/8"	4	0226300110	8 UN	0227300310	98,10	101,95

Tuerca hexagonal

Castillo sin corona grado 2



f Llave
h Altura
Ø Diámetro interno



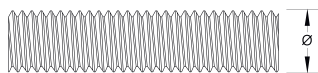
MEDIDA Ø	f	Rosca UNC / USS		Rosca UNF / SAE		h. ALTURA	
		HILOS	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
1/2"	3/4"	13	0255080110	20	0256080210	10,85	11,38
1/2" BSW	3/4"	12 BSW	0255090110			10,85	11,38
9/16"	7/8"	12	0255100110	18	0256100210	12,01	12,60
5/8"	15/16"	11	0255110110	18	0256110210	13,60	14,20
3/4"	1 1/8"	10	0255120110	16	0256120210	15,67	16,89
7/8"	1.5/16"	9	0255130110	14	0256130210	18,39	19,71
1"	1 1/2"	8	0255140110	14 UNS	0256140310	21,11	22,53
1 1/8"	1.5/8"	7	0255150110	12	0256150210	23,85	25,37
1 1/4"	1.7/8"	7	0255160110	12	0256160210	26,16	27,78
1.3/8"	2"	6	0255170110	12	0256170210	28,56	29,77
1 1/2"	2"	6	0255180110	12	0256180210	29,17	31,00
1 1/2"	2 1/4"	6	0255181110	12	0256181210	31,62	33,45

Varilla roscada

Por metro, UNC / USS



Ø Diámetro

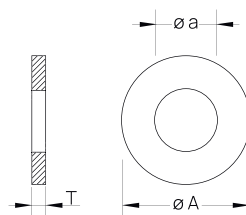


MEDIDA Ø	HILOS	Peso x 100 (PCS KG)	CÓDIGO
5/32"	32 - N°8	7,00	0405020110
3/16"	24 - N°10	10,00	0405030110
1/4"	20 - UNC	18,00	0405040110
5/16"	18 - UNC	29,50	0405050110
3/8"	16 - UNC	43,00	0405060110
7/16"	14 - UNC	59,00	0405070110
1/2"	13 - UNC	78,70	0405080110
1/2" BSW	12 - BSW	77,80	0405090110
9/16"	12 - UNC	102,40	0405100110
5/8"	11 - UNC	124,00	0405110110
3/4"	10 - UNC	185,00	0405120110
7/8"	9 - UNC	255,60	0405130110
1"	8 - UNC	340,00	0405140110

Arandela plana



øA Diámetro externo
øa Diámetro interno
T Espesor

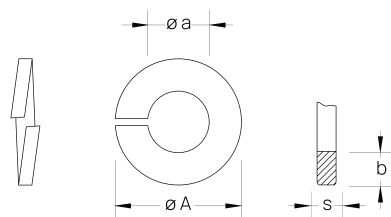


MEDIDA	ø a		ø A		T		Código
	Mínima	Máxima	Mínima	Máxima	Mínima	Máxima	
3/16"	6,22	6,73	14,14	14,65	0,91	1,65	0302030010
1/4"	7,01	7,51	15,74	16,25	1,29	2,03	0302040010
5/16"	8,61	9,11	17,29	17,85	1,29	2,03	0302050010
3/8"	10,18	10,69	20,44	21,00	1,29	2,03	0302060010
7/16"	11,78	12,29	23,24	23,79	1,29	2,03	0302070010
1/2"	13,39	13,86	26,79	27,73	1,88	3,07	0302080010
9/16"	14,96	15,46	29,18	30,12	1,88	3,07	0302100010
5/8"	16,48	17,42	33,14	34,08	1,88	3,07	0302110010
3/4"	20,44	21,38	37,13	38,07	2,74	4,05	0302120010
7/8"	23,64	24,58	44,27	45,21	2,74	4,05	0302130010
1"	26,79	27,73	50,62	51,56	2,74	4,05	0302140010

Arandela grower

Templado negro

øA Diámetro mayor
øa Diámetro menor
s Sección
b Ancho

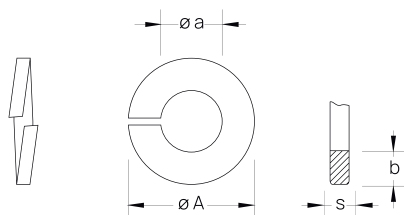


MEDIDA	ø a		ø A	b Nom	s Nom	Código
	Mínima	Máxima				
1/4"	6,4	6,6	12,37	2,77	1,57	0318040030
5/16"	7,97	8,17	14,8	3,18	1,98	0318050030
3/8"	9,57	9,77	17,27	3,58	2,39	0318060030
7/16"	11,17	11,43	19,71	3,96	2,77	0318070030
1/2"	12,75	13	22,07	4,34	3,17	0318080030
9/16"	14,32	14,57	24,51	3,58	3,58	0318100030
5/8"	15,95	16,28	27,25	5,16	3,96	0318110030
3/4"	19,12	19,45	32,13	5,94	4,77	0318120030

Arandela grower

Zincado plateado

øA Diámetro mayor
øa Diámetro menor
s Sección
b Ancho



MEDIDA	ø a		ø A	b Nom	s Nom	Código
	Mínima	Máxima				
1/4"	6,4	6,6	12,37	2,77	1,57	0318040010
5/16"	7,97	8,17	14,8	3,18	1,98	0318050010
3/8"	9,57	9,77	17,27	3,56	2,39	0318060010

Arandela grower

Zincado plateado

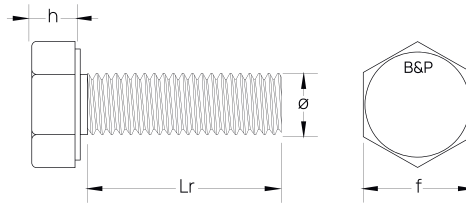
MEDIDA	ø a		ø A	b Nom	s Nom	Código
	Mínima	Máxima				
7/16"	11,17	11,43	19,71	3,96	2,77	0318070010
1/2"	12,75	13	22,07	4,34	3,17	0318080010
9/16"	14,32	14,57	24,51	3,58	3,58	0318100010
5/8"	15,95	16,28	27,25	5,16	3,96	0318110010
3/4"	19,12	19,45	32,13	5,94	4,77	0318120010

Bulón cabeza hexagonal

Rosca entera clase 8.8 MA



ϕ Diámetro rosca
 Lr Longitud de rosca
 h Altura cabeza
 f Llave



Medida	M5	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36
Rosca	0,80 MA	1,00 MA	1,25 MA	1,50 MA	1,75 MA	2,00 MA	2,00 MA	2,50 MA	2,50 MA	2,50 MA	3,00 MA	3,00 MA	3,50 MA	3,50 MA	4,00 MA
f	8	10	13	17	19	22	24	27	30	32	36	41	46	50	55
h	3,50	4,00	5,30	6,40	7,50	8,80	10,00	11,50	12,50	14,00	15,00	17,00	19,00	21,42	22,92
Lr															
10	0128530120	0128540120													
12	0128530220	0128540220	0128560220												
16	0128530320	0128540320	0128560320	0128580320											
18	0128530420	0128540420	0128560420												
20	0128530520	0128540520	0128560520	0128580520	0128590520										
22	0128530620	0128540620	0128560620												
25	0128530720	0128540720	0128560720	0128580720	0128590720	0128600720	0128610720								
30	0128530820	0128540820	0128560820	0128580820	0128590820	0128600820	0128610820	0128620820	0128630820						
35	0128530920	0128540920	0128560920	0128580920	0128590920	0128600920	0128610920	0128620920	0128630920						
40	0128531020	0128541020	0128561020	0128581020	0128591020	0128601020	0128611020	0128621020	0128631020						
45		0128541120	0128561120	0128581120	0128591120	0128601120	0128611120	0128621120	0128631120						
50		0128541220	0128561220	0128581220	0128591220	0128601220	0128611220	0128621220	0128631220	0128641220	0128651220	0128661220	0128671220	0128681220	0128691220
55			0128561320	0128581320	0128591320	0128601320	0128611320	0128621320	0128631320	0128641320	0128651320	0128661320	0128671320	0128681320	0128691320
60			0128561420	0128581420	0128591420	0128601420	0128611420	0128621420	0128631420	0128641420	0128651420	0128661420	0128671420	0128681420	0128691420
65			0128561520	0128581520	0128591520	0128601520	0128611520	0128621520	0128631520	0128641520	0128651520	0128661520	0128671520	0128681520	0128691520
70			0128561620	0128581620	0128591620	0128601620	0128611620	0128621620	0128631620	0128641620	0128651620	0128661620	0128671620	0128681620	0128691620
80			0128561820	0128581820	0128591820	0128601820	0128611820	0128621820	0128631820	0128641820	0128651820	0128661820	0128671820	0128681820	0128691820
90			0128562020	0128582020	0128592020	0128602020	0128612020	0128622020	0128632020	0128642020	0128652020	0128662020	0128672020	0128682020	0128692020

Bulón cabeza hexagonal

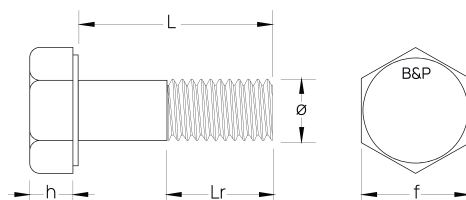
Rosca entera clase 8.8 MA

Medida	M5	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36
Rosca	0,80 MA	1,00 MA	1,25 MA	1,50 MA	1,75 MA	2,00 MA	2,00 MA	2,50 MA	2,50 MA	2,50 MA	3,00 MA	3,00 MA	3,50 MA	3,50 MA	4,00 MA
f	8	10	13	17	19	22	24	27	30	32	36	41	46	50	55
h	3,50	4,00	5,30	6,40	7,50	8,80	10,00	11,50	12,50	14,00	15,00	17,00	19,00	21,42	22,92
Lr															
100	0128562220 0128582220 0128592220 0128602220 0128612220 0128622220 0128632220 0128642220 0128652220 0128662220 0128672220 0128682220 0128692220														
110	0128562320 0128582320 0128592320 0128612320 0128632320 0128652320 0128662320 0128672320 0128682320 0128692320														
120	0128562420 0128582420 0128592420 0128612420 0128632420 0128652420 0128662420 0128672420 0128682420 0128692420														
130	0128582520 0128592520 0128612520 0128632520 0128652520 0128662520 0128672520 0128682520 0128692520														
140	0128582620 0128592620 0128612620 0128632620 0128652620 0128662620 0128672620 0128682620 0128692620														
150	0128582720 0128592720 0128612720 0128632720 0128652720 0128662720 0128672720 0128682720 0128692720														

Bulón cabeza hexagonal

Rosca parcial clase 8.8 MA

Ø Diámetro rosca
 Lr Longitud de rosca
 h Altura cabeza
 f Llave
 Hpp Hilos por pulgada



	Medida Ø	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36
	Rosca	1,00 MA	1,25 MA	1,50 MA	1,75 MA	2,00 MA	2,00 MA	2,50 MA	2,50 MA	2,50 MA	3,00 MA	3,00 MA	3,50 MA	3,50 MA	4,00 MA
	f	10	13	17	19	22	24	27	30	32	36	41	46	50	55
	h	4,00	5,30	6,40	7,50	8,80	10,00	11,50	12,50	14,00	15,00	17,00	19,00	21,42	22,92
Lr	Hasta 125	18,00	22,00	26,00	30,00	34,00	38,00	42,00	46,00	50,00	54,00	60,00	66,00	72,00	78,00
	125 a 200		28,00	32,00	36,00	40,00	44,00	48,00	52,00	56,00	60,00	66,00	72,00	78,00	84,00
	> 200								65,00	69,00	73,00	79,00	85,00	91,00	97,00
Largo	30	0129580820													
	35	0129540920 0129560920 0129580920 0129590920													
	40	0129541020 0129561020 0129581020 0129591020													
	45	0129541120 0129561120 0129581120 0129591120 0129601120													



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Una marca de



BPB

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Bulón cabeza hexagonal

Rosca parcial clase 8.8 MA

Medida	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36	
Rosca	1,00 MA	1,25 MA	1,50 MA	1,75 MA	2,00 MA	2,00 MA	2,50 MA	2,50 MA	2,50 MA	3,00 MA	3,00 MA	3,50 MA	3,50 MA	4,00 MA	
f	10	13	17	19	22	24	27	30	32	36	41	46	50	55	
h	4,00	5,30	6,40	7,50	8,80	10,00	11,50	12,50	14,00	15,00	17,00	19,00	21,42	22,92	
Lr	Hasta 125	18,00	22,00	26,00	30,00	34,00	38,00	42,00	46,00	50,00	54,00	60,00	66,00	72,00	78,00
	125 a 200		28,00	32,00	36,00	40,00	44,00	48,00	52,00	56,00	60,00	66,00	72,00	78,00	84,00
>200								65,00	69,00	73,00	79,00	85,00	91,00	97,00	
Largo															
50	0129541220	0129561220	0129581220	0129591220	0129601220	0129611220									
55	0129541320	0129561320	0129581320	0129591320	0129601320	0129611320									
60	0129541420	0129561420	0129581420	0129591420	0129601420	0129611420	0129621420	0129631420							
65	0129541520	0129561520	0129581520	0129591520	0129601520	0129611520	0129621520	0129631520							
70	0129541620	0129561620	0129581620	0129591620	0129601620	0129611620	0129621620	0129631620	0129641620						
75		0129561720	0129581720	0129591720											
80		0129561820	0129581820	0129591820	0129601820	0129611820	0129621820	0129631820	0129641820	0129651820	0129661820				
90		0129562020	0129582020	0129592020	0129602020	0129612020	0129622020	0129632020	0129642020	0129652020	0129662020	0129672020			
100		0129562220	0129582220	0129592220	0129602220	0129612220	0129622220	0129632220	0129642220	0129652220	0129662220	0129672220	0129682220		
110		0129562320	0129582320	0129592320	0129602320	0129612320	0129622320	0129632320	0129642320	0129652320	0129662320	0129672320	0129682320	0129692320	
120		0129562420	0129582420	0129592420	0129602420	0129612420	0129622420	0129632420	0129642420	0129652420	0129662420	0129672420	0129682420	0129692420	
130			0129582520	0129592520	0129602520	0129612520	0129622520	0129632520	0129642520	0129652520	0129662520	0129672520	0129682520	0129692520	
140			0129582620	0129592620	0129602620	0129612620	0129622620	0129632620	0129642620	0129652620	0129662620	0129672620	0129682620	0129692620	
150			0129582720	0129592720	0129602720	0129612720	0129622720	0129632720	0129642720	0129652720	0129662720	0129672720	0129682720	0129692720	
160			0129582820	0129592820		0129612820	0129622820	0129632820	0129642820	0129652820	0129662820	0129672820	0129682820	0129692820	
170			0129582920	0129592920		0129612920	0129622920	0129632920	0129642920	0129652920	0129662920	0129672920	0129682920	0129692920	
180			0129583020	0129593020		0129613020	0129623020	0129633020	0129643020	0129653020	0129663020	0129673020	0129683020	0129693020	
190			0129583120	0129593120		0129613120	0129623120	0129633120	0129643120	0129653120	0129663120	0129673120	0129683120	0129693120	
200			0129583220	0129593220		0129613220	0129623220	0129633220	0129643220	0129653220	0129663220	0129673220	0129683220	0129693220	



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Bulón cabeza hexagonal

Rosca parcial clase 8.8 MA

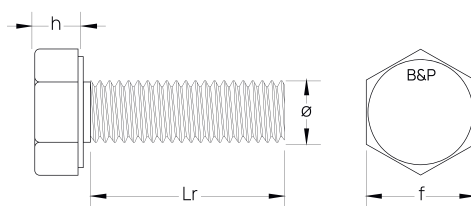
	Medida	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M33	M36
	Rosca	1,00 MA	1,25 MA	1,50 MA	1,75 MA	2,00 MA	2,00 MA	2,50 MA	2,50 MA	2,50 MA	3,00 MA	3,00 MA	3,50 MA	3,50 MA	4,00 MA
	f	10	13	17	19	22	24	27	30	32	36	41	46	50	55
	h	4,00	5,30	6,40	7,50	8,80	10,00	11,50	12,50	14,00	15,00	17,00	19,00	21,42	22,92
Lr	Hasta 125	18,00	22,00	26,00	30,00	34,00	38,00	42,00	46,00	50,00	54,00	60,00	66,00	72,00	78,00
	125 a 200		28,00	32,00	36,00	40,00	44,00	48,00	52,00	56,00	60,00	66,00	72,00	78,00	84,00
	> 200								65,00	69,00	73,00	79,00	85,00	91,00	97,00
Largo															
	220	0129633420 0129643420 0129653420 0129663420 0129673420 0129683420 0129693420													
	250	0129633720 0129643720 0129653720 0129663720 0129673720 0129683720 0129693720													

Bulón cabeza hexagonal

Rosca entera clase 8.8 MB



Ø Diámetro rosca
 Lr Longitud de rosca
 h Altura cabeza
 f Llave



Medida	M8	M10	M12	M14	M16	M18	M20	M10	M12
Rosca	1,00 MB	1,00 MB	1,50 MB	1,50 MB	1,50 MB	1,50 MB	1,50 MB	1,25 MB	1,25 MB
f	13	17	19	22	24	27	30	17	19
h	5,30	6,40	7,50	8,80	10,00	11,50	12,50	6,40	7,50
Lr									
20	0130565520	0130585520	0130595520					0130905520	0130905520
25	0130565720	0130585720	0130595720	0130605720	0130615720			0130905720	0130905720
30	0130565820	0130585820	0130595820	0130605820	0130615820	0130625820		0130905820	0130905820
35	0130565920	0130585920	0130595920	0130605920	0130615920	0130625920		0130905920	0130905920
40	0130566020	0130586020	0130596020	0130606020	0130616020	0130626020	0130636020	0130906020	0130906020
45	0130566120	0130586120	0130596120	0130606120	0130616120	0130626120	0130636120	0130906120	0130906120
50	0130566220	0130586220	0130596220	0130606220	0130616220	0130626220	0130636220	0130906220	0130906220



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fastenersolutions

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Una marca de



BPB

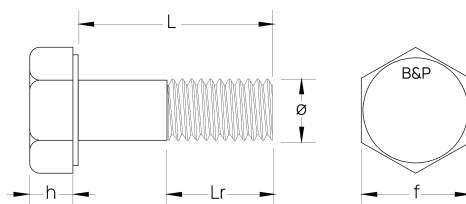
GROUP

Bulón cabeza hexagonal

Rosca parcial clase 8.8 MB



$\varnothing$ Diámetro rosca
 Lr Longitud de rosca
 h Altura cabeza
 f Llave



Medida Ø	M8	M10	M12	M14	M16	M18	M20	M10	M12	
Rosca	1,00 MB	1,00 MB	1,50 MB	1,50 MA	1,50 MB	1,50 MB	1,50 MB	1,25	1,25	
f	13	17	19	22	24	27	30	17	19	
h	5,30	6,40	7,50	8,80	10,00	11,50	12,50	6,40	7,50	
Lr	Hasta 125	22,00	26,00	30,00	34,00	38,00	42,00	46,00	26,00	30,00
	>125	28,00	32,00	36,00	40,00	44,00	48,00	52,00	32,00	36,00
Largo										
30	0131585820									
35	0131585920 0131595920									
40	0131566020	0131586020	0131596020	0131606020	0131616020					
45	0131566120	0131586120	0131596120	0131606120	0131616120				0131906120	0131916120
50	0131566220	0131586220	0131596220	0131606220	0131616220				0131906220	0131916220
55	0131566320	0131586320	0131596320	0131606320	0131616320					
60	0131566420	0131586420	0131596420	0131606420	0131616420	0131626420	0131636420	0131906420	0131916420	
65	0131566520	0131586520	0131596520	0131606520	0131616520	0131626520	0131636520			
70	0131566620	0131586620	0131596620	0131606620	0131616620	0131626620	0131636620	0131906620	0131916620	
80	0131566820	0131586820	0131596820	0131606820	0131616820	0131626820	0131636820	0131906820	0131916820	
90	0131567020	0131587020	0131597020	0131607020	0131617020	0131627020	0131637020	0131907020	0131917020	
100	0131567220	0131587220	0131597220	0131607220	0131617220	0131627220	0131637220	0131907220	0131917220	
110			0131597320	0131607320	0131617320	0131627320	0131637320	0131907320	0131917320	
120			0131597420	0131607420	0131617420	0131627420	0131637420	0131907420	0131917420	
130				0131607520	0131617520	0131627520	0131637520			
140				0131607620	0131617620	0131627620	0131637620			
150				0131607720	0131617720	0131627720	0131637720			



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Una marca de



BPB

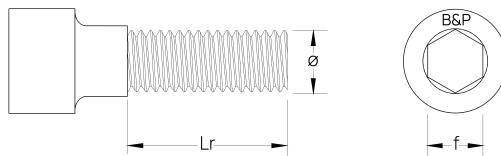
GROUP

Bulón cabeza cilíndrica Allen

Clase 12.9 MA



$\varnothing$ Diámetro rosca
 Lr Longitud de rosca
 f Llave



ROSCA $\varnothing$	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24
paso	1,00 MA	1,25 MA	1,50 MA	1,75 MA	2,00 MA	2,00 MA	2,50 MA	2,50 MA	2,50 MA	3,00 MA
f	5	6	8	10	12	14	14	17	17	19
Lr										
12	0161540230	0161560230								
16	0161540330	0161560330	0161580330							
20	0161540530	0161560530	0161580530	0161590530						
25	0161540730	0161560730	0161580730	0161590730	0161600730	0161610730				
30	0161540830	0161560830	0161580830	0161590830	0161600830	0161610830				
35	0161540930	0161560930	0161580930	0161590930	0161600930	0161610930				
40	0161541030	0161561030	0161581030	0161591030	0161601030	0161611030	0161621030	0161631030		
45	0161541130	0161561130	0161581130	0161591130	0161601130	0161611130	0161621130	0161631130		
50	0161541230	0161561230	0161581230	0161591230	0161601230	0161611230	0161621230	0161631230	0161641230	0161651230
55	0161541330	0161561330	0161581330	0161591330	0161601330	0161611330	0161621330	0161631330		0161651330
60	0161541430	0161561430	0161581430	0161591430	0161601430	0161611430	0161621430	0161631430	0161641430	0161651430
65	0161541530	0161561530	0161581530	0161591530	0161601530	0161611530	0161621530	0161631530		0161651530
70	0161541630	0161561630	0161581630	0161591630	0161601630	0161611630	0161621630	0161631630	0161641630	0161651630
75		0161561730	0161581730	0161591730		0161611730				
80		0161561830	0161581830	0161591830	0161601830	0161611830	0161621830	0161631830	0161641830	0161651830
90		0161562030	0161582030	0161592030	0161602030	0161612030	0161622030	0161632030	0161642030	0161652030
100		0161562230	0161582230	0161592230	0161602230	0161612230	0161622230	0161632230	0161642230	0161652230
110		0161562330	0161582330	0161592330	0161602330	0161612330	0161622330	0161632330	0161642330	0161652330
120		0161562430	0161582430	0161592430	0161602430	0161612430	0161622430	0161632430	0161642430	0161652430



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fastenersolutions

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Una marca de



BPB

GROUP

Bulón cabeza cilíndrica Allen

Clase 12.9 MA

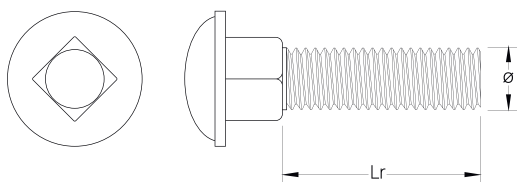
ROSCA Ø	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24
paso	1,00 MA	1,25 MA	1,50 MA	1,75 MA	2,00 MA	2,00 MA	2,50 MA	2,50 MA	2,50 MA	3,00 MA
f	5	6	8	10	12	14	14	17	17	19
Lr										
130			0161582530	0161592530	0161602530	0161612530	0161622530	0161632530	0161642530	0161652530
140			0161582630	0161592630	0161602630	0161612630	0161622630	0161632630	0161642630	0161652630
150			0161582730	0161592730	0161602730	0161612730	0161622730	0161632730	0161642730	0161652730
160						0161612830	0161622830	0161632830	0161642830	0161652830
170						0161612930	0161622930	0161632930	0161642930	0161652930
180						0161613030	0161623030	0161633030	0161643030	0161653030
190						0161613130	0161623130	0161633130	0161643130	0161653130
200						0161613230	0161623230	0161633230	0161643230	0161653230

Bulón cabeza redonda

Clase 8.8 MA



Ø Diámetro de rosca
Lr Longitud



Ø	M6	M8	M10	M12
Hpp	1,00 MA	1,25 MA	1,50 MA	1,75 MA
Lr +125mm	18,00	22,00	26,00	30,00
-125mm	-	-	-	36,00
L				
16	0102540320	0102560320		
20	0102540520	0102560520	0102580520	
25	0102540720	0102560720	0102580720	0102590720

Bulón cabeza redonda

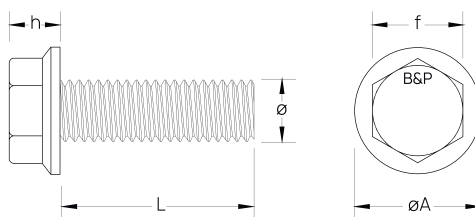
Clase 8.8 MA

Ø		M6	M8	M10	M12
Hpp		1,00 MA	1,25 MA	1,50 MA	1,75 MA
Lr	+125mm	18,00	22,00	26,00	30,00
	-125mm	-	-	-	36,00
L					
30		0102540820	0102560820	0102580820	0102590820
35		0102540920	0102560920	0102580920	0102590920
40		0102541020	0102561020	0102581020	0102591020
45		0102541120	0102561120	0102581120	0102591120
50		0102541220	0102561220	0102581220	0102591220
55		0102541320	0102561320	0102581320	0102591320
60		0102541420	0102561420	0102581420	0102591420
65			0102561520	0102581520	0102591520
70		0102541620	0102561620	0102581620	0102591620
75			0102561720	0102581720	0102591720
80			0102561820	0102581820	0102591820
90			0102562020	0102582020	0102592020
100			0102562220	0102582220	0102592220
110					0102592320
120					0102592420
130					0102592520
140					0102592620
150					0102592720

Bulón cabeza hexagonal flangeado

Clase 8.8 MA

Ø Diámetro de rosca
L Longitud
h Altura cabeza
f Llave
ØA Diámetro cabeza



Rosca Ø	M6	M8	M10	M12	M14	M16	M20
paso	1,00	1,25	1,50	1,75	2,00	2,00	2,50
f	10	13	15	16	18	21	27
h	6,60	8,10	9,20	11,50	12,80	14,40	17,10
ØA	14,20	18,00	22,30	26,60	30,50	35,00	43,00
L							
12	0151540220						
16	0151540320	0151560320					
20	0151540520	0151560520	0151580520				
25	0151540720	0151560720	0151580720	0151590720			
30	0151540820	0151560820	0151580820	0151590820	0151600820		
35	0151540920	0151560920	0151580920	0151590920	0151600920	0151610920	
40	0151541020	0151561020	0151581020	0151591020	0151601020	0151611020	0151631020
45	0151541120	0151561120	0151581120	0151591120	0151601120	0151611120	0151631120
50	0151541220	0151561220	0151581220	0151591220	0151601220	0151611220	0151631220
55	0151541320	0151561320	0151581320	0151591320	0151601320	0151611320	0151631320
60	0151541420	0151561420	0151581420	0151591420	0151601420	0151611420	0151631420
65		0151561520	0151581520	0151591520	0151601520	0151611520	0151631520
70		0151561620	0151581620	0151591620	0151601620	0151611620	0151631620
80		0151561820	0151581820	0151591820	0151601820	0151611820	0151631820
90			0151582020	0151592020	0151602020	0151612020	0151632020
100			0151582220	0151592220	0151602220	0151612220	0151632220
110				0151592320	0151602320	0151612320	0151632320
120				0151592420	0151602420	0151612420	0151632420



B&P

fastenersolutions

46

Una marca de



BPB

GROUP

Bulón cabeza hexagonal flangeado

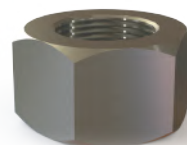
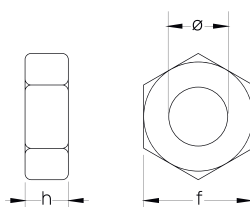
Clase 8.8 MA

Rosca $\varnothing$	M6	M8	M10	M12	M14	M16	M20
paso	1,00	1,25	1,50	1,75	2,00	2,00	2,50
f	10	13	15	16	18	21	27
h	6,60	8,10	9,20	11,50	12,80	14,40	17,10
$\varnothing A$	14,20	18,00	22,30	26,60	30,50	35,00	43,00
L							
130						0151612520	0151632520
140						0151612620	0151632620
150						0151612720	0151632720
160							0151632820
180							0151633020
200							0151633220

Tuerca hexagonal

Clase 6

f Llave
h Altura
 $\varnothing$ Diámetro interno



MEDIDA $\varnothing$	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
M2,5	5	0,45	0211500110			1,80	2,00
M3	5,5	0,50	0211510110			2,15	2,40
M4	7	0,70	0211520110			2,90	3,20
M5	8	0,80	0211530110			3,90	4,00
M6	10	1,00	0211540110	0,75	0212540210	4,70	5,00
M7	11	1,00	0211550110			5,20	5,50
M8	13	1,25	0211560110	1,00	02125602100	6,14	6,50

Tuerca hexagonal

Clase 6

MEDIDA	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
M9	13	1,25	0211570110			6,14	6,50
M10	17	1,50	0211580110	1,00	0212580210	7,64	8,00
M10 (8,25)	17			1,25	0212580310	7,64	8,00
M10	19	1,75	0211590110	1,50	0212590210	9,64	10,00
M10 (1,25)	19			1,25	0212590310	9,64	10,00
M12	22	2,00	0211600110	1,50	0212600210	10,30	11,00
M12 (6,25)	24	2,00	0211610110	1,50	0212610210	12,30	13,00
M18	27	2,50	0211620110	1,50	0212620210	14,30	15,00
M20	30	2,50	0211630110	1,50	0212630210	14,90	16,00
M22	32	2,50	0211640110	1,50	0212640210	16,90	18,00
M20	36	3,00	0211650110	2,00	0212650210	17,70	19,00
M22	41	3,00	0211660110	2,00	0212660210	20,70	22,00
M30	46	3,50	0211670110	2,00	0212670210	22,70	24,00
M33	50	3,50	0211680110	2,00	0212680210	24,70	26,00
M36	55	4,00	0211690110	3,00	0212690210	27,70	29,00
M39	60	4,00	0211700110			29,40	31,00
M42	65	4,50	0211710110			32,40	34,00
M45	70	4,50	0211720110			34,40	36,00
M48	75	5,00	0211730110			36,40	38,00
M52	80	5,00	0211740110			40,40	42,00
M56	85	5,50	0211750110			43,40	45,00
M60	90	5,50	0211760110			46,40	48,00
M64	95	6,00	0211770110			49,10	51,00

Tuerca hexagonal

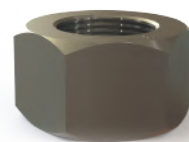
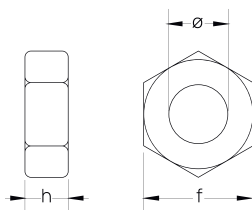
Clase 6

MEDIDA $\varnothing$	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
M68	100	6,00	0211780110			52,10	54,00
M72	105	6,00	0211790110			56,10	58,00
M76	110	6,00	0211800110			59,10	61,00
M80	115	6,00	0211810110			62,10	64,00
M100	145	6,00	0211820110			78,10	80,00

Tuerca hexagonal

Clase 8

f Llave
h Altura
 $\varnothing$ Diámetro interno



MEDIDA $\varnothing$	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
M5	8	0,80	0213530120	0,75	0214530220	4,70	5,00
M6	10	1,00	0213540120	0,75	0214540220	4,70	5,00
M8	13	1,25	0213560120	1,00	0214560220	6,14	6,50
M10	17	1,50	0213580120	1,00	0214580220	7,64	8,00
M10 (1,25)	17			1,25	0214580320	7,64	8,00
M12	19	1,75	0213590120	1,50	0214590220	9,64	10,00
M12 (1,25)	19			1,25	0214590320	9,64	10,00
M14	22	2,00	0213600120	1,50	0214600220	10,30	11,00
M16	24	2,00	0213610120	1,50	0214610220	12,30	13,00

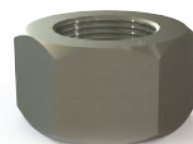
Tuerca hexagonal

Clase 8

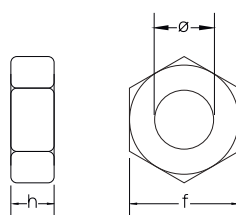
MEDIDA Ø	f	Rosca MA		Rosca MB		h.ALATURA	
		PASO	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
M18	27	2,50	0213620120	1,50	0214620220	14,30	15,00
M20	30	2,50	0213630120	1,50	0214630220	14,90	16,00
M22	32	2,50	0213640120	1,50	0214640220	16,90	18,00
M24	36	3,00	0213650120	2,00	0214650220	17,70	19,00
M27	41	3,00	0213660120	2,00	0214660220	20,70	22,00
M30	46	3,50	0213670120	2,00	0214670220	22,70	24,00
M33	50	3,50	0213680120	2,00	0214680220	24,70	26,00
M36	55	4,00	0213690120	3,00	0214690220	27,70	29,00
M39	60	4,00	0213700120			29,40	31,00
M42	65	4,50	0213710120			32,40	34,00
M45	70	4,50	0213720120			34,40	36,00
M48	75	5,00	0213730120			36,40	38,00
M52	80	5,00	0213740120			40,40	42,00
M56	85	5,50	0213750120			43,40	45,00
M60	90	5,50	0213760120			46,40	48,00
M64	95	6,00	0213770120			49,10	51,00
M68	100	6,00	0213780120			52,10	54,00
M72	105	6,00	0213790120			56,10	58,00
M76	110	6,00	0213800120			59,10	61,00
M80	115	6,00	0213810120			62,10	64,00
M100	145	6,00	0213820120			78,10	80,00

Tuerca hexagonal

Clase 10



f Llave
h Altura
Ø Diámetro interno



MEDIDA Ø	f	Rosca MA		Rosca MB		h.ALATURA	
		PASO	CÓDIGO	PASO	CÓDIGO	Mínima	Máxima
M6	10	1,00	0215540130	0,75	0216540230	4,70	5,00
M8	13	1,25	0215560130	1,00	0216560230	6,14	6,50
M10	17	1,50	0215580130	1,00	0216580230	7,64	8,00
M10 (1,25)	17			1,25	0216580330	7,64	8,00
M12	19	1,75	0215590130	1,50	0216590230	9,64	10,00
M12 (1,25)	19			1,25	0216590330	9,64	10,00
M14	22	2,00	0215600130	1,50	0216600230	10,30	11,00
M16	24	2,00	0215610130	1,50	0216610230	12,30	13,00
M18	27	2,50	0215620130	1,50	0216620230	14,30	15,00
M20	30	2,50	0215630130	1,50	0216630230	14,90	16,00
M22	32	2,50	0215640130	1,50	0216640230	16,90	18,00
M24	36	3,00	0215650130	2,00	0216650230	17,70	19,00
M27	41	3,00	0215660130	2,00	0216660230	20,70	22,00
M30	46	3,50	0215670130	2,00	0216670230	22,70	24,00
M33	50	3,50	0215680130	2,00	0216680230	24,70	26,00
M36	55	4,00	0215690130	3,00	0216660230	27,70	29,00
M39	60	4,00	0215700130		0216670230	29,40	31,00
M42	65	4,50	0215710130		0216680230	32,40	34,00
M45	70	4,50	0215720130		0216690230	34,40	36,00
M48	75	5,00	0215730130			36,40	38,00

Tuerca hexagonal

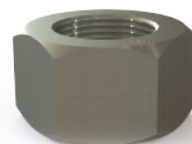
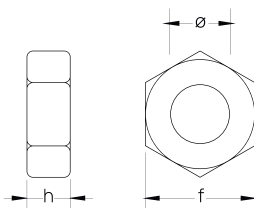
Clase 10

MEDIDA $\varnothing$	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	PASO	CÓDIGO	Mínima	Máxima
M52	80	5,00	0215740130			40,40	42,00
M56	85	5,50	0215750130			43,40	45,00
M60	90	5,50	0215760130			46,40	48,00
M64	95	6,00	0215770130			49,10	51,00
M68	100	6,00	0215780130			52,10	54,00
M72	105	6,00	0215790130			56,10	58,00
M76	110	6,00	0215800130			59,10	61,00
M80	115	6,00	0215810130			62,10	64,00
M100	145	6,00	0215820130			78,10	80,00

Tuerca hexagonal

Pesada Clase 10

f Llave
h Altura
 $\varnothing$ Diámetro interno



MEDIDA $\varnothing$	f	Rosca MA		h. ALTURA	
		PASO	CÓDIGO	Mínima	Máxima
M12	22	1,75	0217590130	9,64	10,00
M16	27	2,00	0217610130	12,30	13,00
M20	32	2,50	0217630130	14,90	16,00
M22	36	2,50	0217640130	16,90	18,00
M24	41	3,00	0217650130	18,70	20,00

Tuerca hexagonal

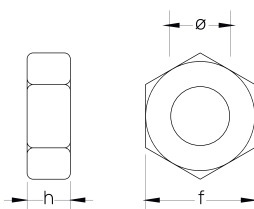
Pesada Clase 10

MEDIDA $\varnothing$	f	Rosca MA		h. ALTURA	
		PASO	CÓDIGO	Mínima	Máxima
M27	46	3,00	0217660130	20,70	22,00
M30	50	3,50	0217670130	22,70	24,00
M36	60	4,00	0217690130	27,70	29,00

Tuerca hexagonal

Baja clase 6 DIN 439

f Llave
h Altura
 $\varnothing$ Diámetro interno



MEDIDA $\varnothing$	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	PASO	CÓDIGO	Mínima	Máxima
M8	13	1,25	0247560110	1,00	0248560210	3,64	4,00
M10	17	1,50	0247580110	1,00	0248580210	4,64	5,00
M10 (1,25)	17			1,25	0248580310	4,64	5,00
M12	19	1,75	0247590110	1,50	0248590210	5,64	6,00
M12 (1,25)	19			1,25	0248590310	5,64	6,00
M14	22	2,00	0247600110	1,50	0248600210	6,42	7,00
M16	24	2,00	0247610110	1,50	0248610210	7,42	8,00
M18	27	2,50	0247620110	1,50	0248620210	8,42	9,00
M20	30	2,50	0247630110	1,50	0248630210	9,10	10,00
M22	32	2,50	0247640110	1,50	0248640210	9,90	11,00
M24	36	3,00	0247650110	2,00	0248650210	10,90	12,00

Tuerca hexagonal

Baja clase 6 DIN 439

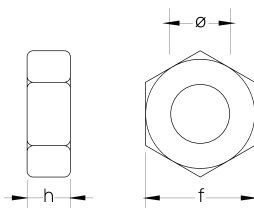
MEDIDA $\varnothing$	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	PASO	CÓDIGO	Mínima	Máxima
M27	41	3,00	0247660110	2,00	0248660210	12,40	13,50
M30	46	3,50	0247670110	2,00	0248670210	13,90	15,00
M33	50	3,50	0247680110	2,00	0248680210	15,40	16,50
M36	55	4,00	0247690110	3,00	0248690210	16,90	18,00

Tuerca hexagonal

Baja clase 6 DIN 936



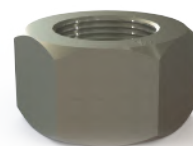
f Llave
h Altura
 $\varnothing$ Diámetro interno



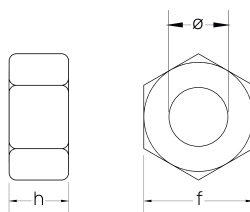
MEDIDA $\varnothing$	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	PASO	CÓDIGO	Mínima	Máxima
M8	13	1,25	0249560210	1,00	0250560210	4,64	5,00
M10	17	1,50	0249580210	1,00	0250580210	5,64	6,00
M10 (1,25)	17			1,25	0250580310	5,64	6,00
M12	19	1,75	0249590210	1,50	0250590210	6,64	7,00
M12 (1,25)	19			1,25	0250590310	6,64	7,00
M14	22	2,00	0249600210	1,50	0250600210	7,64	8,00
M16	24	2,00	0249610210	1,50	0250610210	7,64	8,00
M18	27	2,50	0249620210	1,50	0250620210	8,64	9,00
M20	30	2,50	0249630210	1,50	0250630210	8,64	9,00
M22	32	2,50	0249640210	1,50	0250640210	9,64	10,00
M24	36	3,00	0249650210	2,00	0250650210	9,64	10,00

Tuerca hexagonal

Doble clase 10



f Llave
h Altura
Ø Diámetro interno

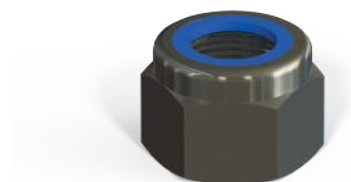
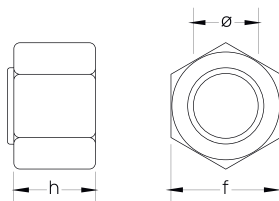


MEDIDA Ø	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
M10	19	1,50	0245580110	1,00	0246580210	13,44	14,00
M10 (1,25)	19			1,25	0246580310	13,44	14,00
M12	19	1,75	0245590110	1,50	0246590210	15,44	16,00
M12 (1,25)	19			1,25	0246590310	14,44	16,00
M14	22	2,00	0245600110	1,50	0246600210	18,57	19,00
M16	24	2,00	0245610110	1,50	0246610210	20,57	21,00
M18	27	2,50	0245620110	1,50	0246620210	22,57	23,00
M20	30	2,50	0245630110	1,50	0246630210	26,57	27,00
M22	32	2,50	0245640110	1,50	0246640210	26,57	27,00
M24	36	3,00	0245650110	2,00	0246650210	30,07	30,50
M30	46	3,50	0245670110	2,00	0246670210	34,50	36,00

Tuerca hexagonal

Autofrenante Clase 8

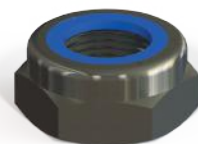
f Llave
h Altura
Ø Diámetro interno



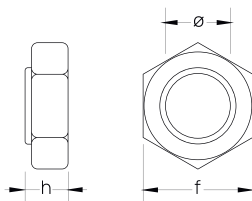
MEDIDA Ø	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
M5	8	0,80	0238530110			6,00	6,30
M6	10	1,00	0238540110			7,70	8,00
M8	13	1,25	0238560110	1,00	0240560210	9,14	9,50
M10	17	1,50	0238580110	1,00	0240580210	11,14	11,50
M10 (1,25)	17			1,25	0240580310	11,14	11,50
M12	19	1,75	0238590110	1,50	0240590210	13,64	14,00
M12 (1,25)	19			1,25	0240590310	13,64	14,00
M14	22	2,00	0238600110	1,50	0240600210	15,30	16,00
M16	24	2,00	0238610110	1,50	0240610210	17,30	18,00
M18	27	2,50	0238620110	1,50	0240620210	19,16	20,00
M20	30	2,50	0238630110	1,50	0240630210	20,70	22,00
M22	32	2,50	0238640110	1,50	0240640210	23,70	25,00
M24	36	3,00	0238650110	2,00	0240650210	26,70	28,00

Tuerca hexagonal

Autofrenante baja clase 8



f Llave
h Altura
Ø Diámetro interno

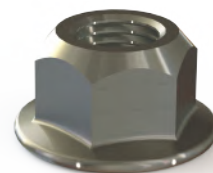
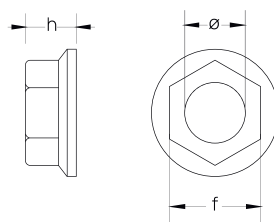


MEDIDA Ø	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	HILOS	CÓDIGO	Mínima	Máxima
M5	8	0,80	0237530110				
M6	10	1,00	0237540110	0,75	0239540210	5,70	6,00
M8	13	1,25	0237560110	1,00	0239560210	7,64	8,00
M10	17	1,50	0237580110	1,00	0239580210	9,64	10,00
M10 (1,25)	17			1,25	0239580310	9,64	10,00
M12	19	1,75	0237590110	1,50	0239590210	11,57	12,00
M12 (1,25)	19			1,25	0239590310	11,57	12,00
M14	22	2,00	0237600110	1,50	0239600210	13,30	14,00
M16	24	2,00	0237610110	1,50	0239610210	15,30	16,00
M18	27	2,50	0237620110	1,50	0239620210	17,66	18,50
M20	30	2,50	0237630110	1,50	0239630210	18,70	20,00
M22	32	2,50	0237640110	1,50	0239640210	20,70	22,00
M24	36	3,00	0237650110	2,00	0239650210	22,70	24,00
M27	41	3,00	0237660110	2,00	0239660210	25,70	27,00
M30	46	3,50	0237671010	2,00	0239670210	28,70	30,00
M33	50	3,50	0237680110	2,00	0239680210	31,70	33,00
*M36	55	4,00	0237691110	3,00	0239691210	27,70	29,00

Tuerca hexagonal

Flangeada clase 6

f Llave
h Altura
Ø Diámetro interno



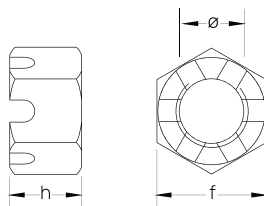
MEDIDA Ø	f	Rosca MA		Rosca MB		h. ALTURA		FLANGE
		PASO	CÓDIGO	PASO	CÓDIGO	Mínima	Máxima	
M6	10	1,00	0222540110	0,75	0223540210	5,70	6,00	14,20
M8	13	1,25	0222560110	1,00	0223560210	7,60	8,00	17,90
M10	15	1,50	0222581110	1,00	0223581210	9,60	10,00	21,80
M10 (1,25)	15			1,25	0223581310	9,60	10,00	21,80
M10	17	1,50	0222580110	1,50	0223580210	9,60	10,00	21,80
M10 (1,25)	17			1,25	0223580310	9,60	10,00	21,80
M12	18	1,75	0222591110	1,50	0223591210	11,60	12,00	26,00
M12 (1,25)	18			1,25	0223591310	11,60	12,00	26,00
M12	19	1,75	0222590110	1,50	0223590210	11,60	12,00	26,00
M12 (1,25)	19			1,25	0223590310	11,60	12,00	26,00
M14	21	2,00	0222601110	1,50	0223601210	13,30	14,00	29,90
M14	22	2,00	0222600110	1,50	0223600210	13,30	14,00	29,90
M16	24	2,00	0222610110	1,50	0223610210	15,30	16,00	34,50

Tuerca hexagonal

Castillo sin corona clase 6



f Llave
h Altura
Ø Diámetro interno



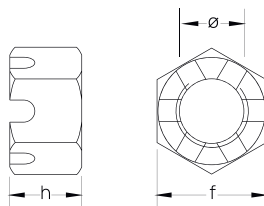
MEDIDA Ø	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	PASO	CÓDIGO	Mínima	Máxima
M10	17	1,50	0257580110	1,00	0258580210	7,64	8,00
M10 (1,25)	17			1,25	0258580310	7,64	8,00
M12	19	1,75	0257590110	1,50	0258590210	9,64	10,00
M12 (1,25)	19			1,25	0258590310	9,64	10,00
M14	22	2,00	0257600110	1,50	0258600210	10,30	11,00
M16	24	2,00	0257610110	1,50	0258610210	12,30	13,00
M18	27	2,50	0257620110	1,50	0258620210	14,30	15,00
M20	30	2,50	0257630110	1,50	0258630210	14,90	16,00
M22	32	2,50	0257640110	1,50	0258640210	16,90	18,00
M24	36	3,00	0257650110	2,00	0258650210	17,70	19,00
M27	41	3,00	0257660110	2,00	0258660210	20,70	22,00
M30	46	3,50	0257670110	2,00	0258670210	22,70	24,00
M33	50	3,50	0257680110	2,00	0258680210	24,70	26,00
M36	55	4,00	0257690110	3,00	0258690210	27,70	29,00

Tuerca hexagonal

Castillo con corona clase 6



f Llave
h Altura
Ø Diámetro interno



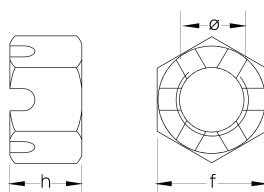
MEDIDA Ø	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	PASO	CÓDIGO	Mínima	Máxima
M14	22	2,00	0259601110	1,50	0260601210	15,57	16,00
M16	24	2,00	0259611110	1,50	0260611210	18,48	19,00
M18	27	2,50	0259621110	1,50	0260621210	20,16	21,00
M20	30	2,50	0259631110	1,50	0260631210	21,16	22,00
M22	32	2,50	0259641110	1,50	0260641210	25,16	26,00
M24	36	3,00	0259651110	2,00	0260651210	26,16	27,00

Tuerca hexagonal

Castillo con corona baja clase 6



f Llave
h Altura
Ø Diámetro interno



MEDIDA Ø	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	PASO	CÓDIGO	Mínima	Máxima
M14	22	2,00	0261600110	1,50	0262600210	10,57	11,00
M16	24	2,00	0261610110	1,50	0262610210	11,57	12,00
M18	27	2,50	0261620110	1,50	0262620210	12,30	13,00
M20	30	2,50	0261630110	1,50	0262630210	12,30	13,00
M22	32	2,50	0261640110	1,50	0262640210	14,30	15,00

Tuerca hexagonal

Castillo con corona baja clase 6

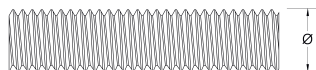
MEDIDA Ø	f	Rosca MA		Rosca MB		h. ALTURA	
		PASO	CÓDIGO	PASO	CÓDIGO	Mínima	Máxima
M24	36	3,00	0261650110	2,00	0262650210	14,30	15,00

Varilla roscada

Por metro, MA



L Longitud



MEDIDA Ø	PASO	Peso x 100 (PCS KG)	CÓDIGO
M5	0,80 - MA	12,00	0401530110
M6	1,00 - MA	17,00	0401540110
M8	1,25 - MA	32,00	0401560110
M10	1,50 - MA	50,00	0401580110
M12	1,75 - MA	72,00	0401590110
M14	2,00 - MA	99,00	0401600110
M16	2,00 - MA	131,00	0401610110
M18	2,50 - MA	161,00	0401620110
M20	2,50 - MA	205,00	0401630110
M22	2,50 - MA	251,80	0401640110
M24	3,00 - MA	295,00	0401650110



B&P

fastenersolutions

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Una marca de



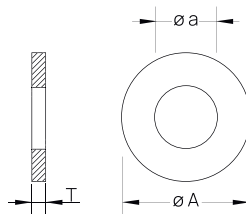
BPB

GROUP

Arandela plana



$\varnothing A$ Diámetro externo
 $\varnothing a$ Diámetro interno
 T Espesor

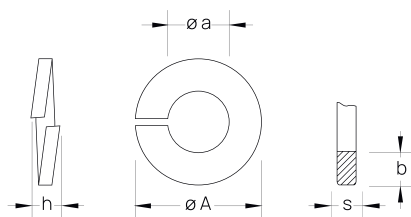


Medida $\varnothing$	$\varnothing a$		$\varnothing A$		T		Código
	Mínima	Máxima	Mínima	Máxima	Mínima	Máxima	
M6	6,40	6,62	11,57	12,00	1,80	1,80	0301540010
M8	8,40	8,62	15,57	16,00	1,80	1,80	0301560010
M10	10,50	10,77	19,48	20,00	2,20	2,20	0301580010
M12	13,00	13,27	23,48	24,00	2,70	2,70	0301590010
M14	15,00	15,27	27,48	28,00	2,70	2,70	0301600010
M16	17,00	17,27	29,48	30,00	3,30	3,30	0301610010
M18	19,00	19,33	33,38	34,00	3,30	3,30	0301620010
M20	21,00	21,33	36,38	37,00	3,30	3,30	0301630010
M22	23,00	23,33	38,38	39,00	3,30	3,30	0301640010
M24	25,00	25,30	43,38	44,00	4,30	4,30	0301650010

Arandela grower

Templado negro

ØA Diámetro mayor
Øa Diámetro menor
s Sección
b Ancho
h Altura libre

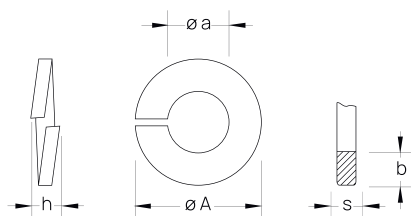


MEDIDA	Ø a		Ø A	b		s		h		Código
	Mínima	Máxima		Norm	Tolerancia	Norm	Tolerancia	Mínima	Máxima	
M6	6,10	6,50	11,80	2,50	± 0,15	1,60	± 0,10	3,20	3,80	0317540030
M8	8,10	8,50	14,80	3,00	± 0,15	2,00	± 0,10	4,00	4,70	0317560030
M10	10,20	10,70	18,10	3,50	± 0,20	2,20	± 0,15	4,40	5,20	0317580030
M12	12,20	12,70	21,10	4,00	± 0,20	2,50	± 0,15	5,00	5,90	0317590030
M14	14,20	14,70	24,10	4,50	± 0,20	3,00	± 0,15	6,00	7,10	0317600030
M16	16,20	17,00	27,40	5,00	± 0,20	3,50	± 0,20	7,00	8,30	0317610030

Arandela grower

Zincado plateado

ØA Diámetro mayor
Øa Diámetro menor
s Sección
b Ancho
h Altura libre



MEDIDA	Ø a		Ø A	b		s		h		Código
	Mínima	Máxima		Norm	Tolerancia	Norm	Tolerancia	Mínima	Máxima	
M6	6,10	6,50	11,80	2,50	± 0,15	1,60	± 0,10	3,20	3,80	0317540010
M8	8,10	8,50	14,80	3,00	± 0,15	2,00	± 0,10	4,00	4,70	0317560010
M10	10,20	10,70	18,10	3,50	± 0,20	2,20	± 0,15	4,40	5,20	0317580010
M12	12,20	12,70	21,10	4,00	± 0,20	2,50	± 0,15	5,00	5,90	0317590010
M14	14,20	14,70	24,10	4,50	± 0,20	3,00	± 0,15	6,00	7,10	0317600010
M16	16,20	17,00	27,40	5,00	± 0,20	3,50	± 0,20	7,00	8,30	0317610010



B&P

fastenersolutions

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Una marca de



BPB

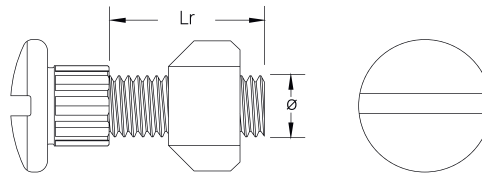
GROUP

Bulón de sección

Cabeza redonda, estriado. Tuerca autofrenante Grado 8/ 10.9



Lr Largo rosca
 Ø Rosca



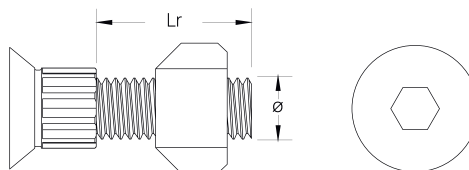
ROSCA Ø	7/32" 24 - BSW			M6 X 1.00		
Lr	5/8"	3/4"	1"	15	20	25
Código	0170140210	0170140310	0170140510	0171540310	0171540510	0171540710

Bulón de sección

Cabeza fresada allen, estriado. Tuerca autofrenante Grado 8 /10.9



Lr Largo rosca
 Ø Rosca



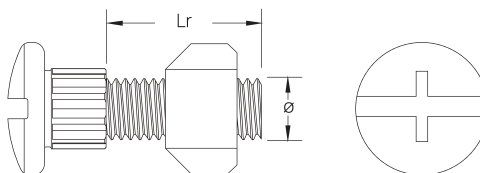
ROSCA Ø	7/32" 24 - BSW			M6 X 1.00		
Lr	5/8"	3/4"	1"	15	25	35
Código	0172140210	0172140310	0172140510	0173540310	0173540710	0173540910

Bulón de sección

Cabeza fresada cruz, estriado. Tuerca autofrenante Grado 10.9



Lr Largo rosca
 Ø Rosca



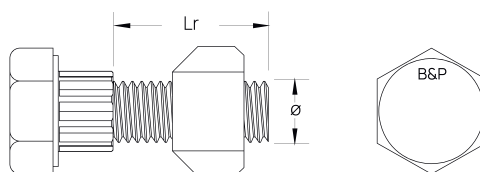
ROSCA Ø	7/32" 24 - BSW			M6 X 1.00		
Lr	5/8"	1"	1,1/4"	15	25	35
Código	0174140210	0174140510	0174140610	0175540310	0175540710	0175540910

Bulón de sección

Cabeza hexagonal, estriado. Tuerca autofrenante Grado 10.9



Lr Largo rosca
 Ø Rosca



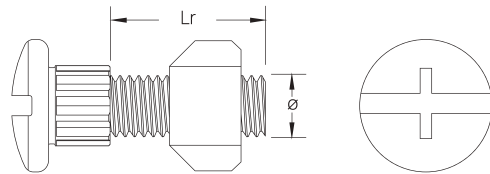
ROSCA Ø	7/32" 24 - BSW				M6 X 1.00			
Lr	5/8"	3/4"	1"	1,1/4"	15	20	25	35
Código	0176140210	0176140310	0176140510	0176140710	0177540310	0177540510	0177540710	0173540910

Bulón de sección

Cabeza redonda cuello oblondo. Tuerca autofrenante Grado 10.9



Lr Largo rosca
Ø Rosca



ROSCA Ø		M6 X 1.00		
Lr	15	20	25	
Código	0179540310	0179540510	0179540710	



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