



Resistencias y Accesorios Para Moldes



HECHOS

Comprobados durante tres décadas, por las selectas industrias, que solo se conforman con lo mejor y por esta razón forman parte de nuestra estimada clientela.



SELECCION

De materias primas de la más alta calidad, procesos de trabajo de los más modernos efectuados en maquinaria de alta precisión y constante control de calidad de todas las operaciones son los factores, que en conjunto con nuestra larga experiencia, garantizan nuestros productos.



COLUMNAS

- 1.- Fabricado en acero cementado y rectificado.
- 2.- Los largos años serán de acuerdo con las indicaciones del cliente en las necesidades del mismo.
- 3.- La tolerancia en el diámetro es mínima.
- 4.- Los diámetros van calculados de acuerdo con el tamaño del portatroquel.



BUJES

- 1.- Están fabricados de acero cementado y rectificadas.
- 2.- Están calculados con un extra, garantizando así su precisión.



ESPIGAS

Se proporcionan según las necesidades del cliente con dimensiones.

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Tel: (55) 9131 - 1349

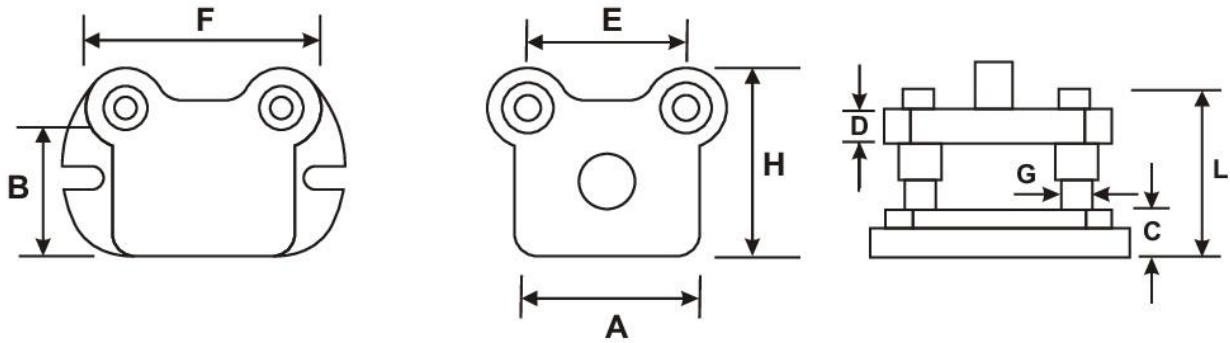
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PORTATROQUELES DE FIGURA

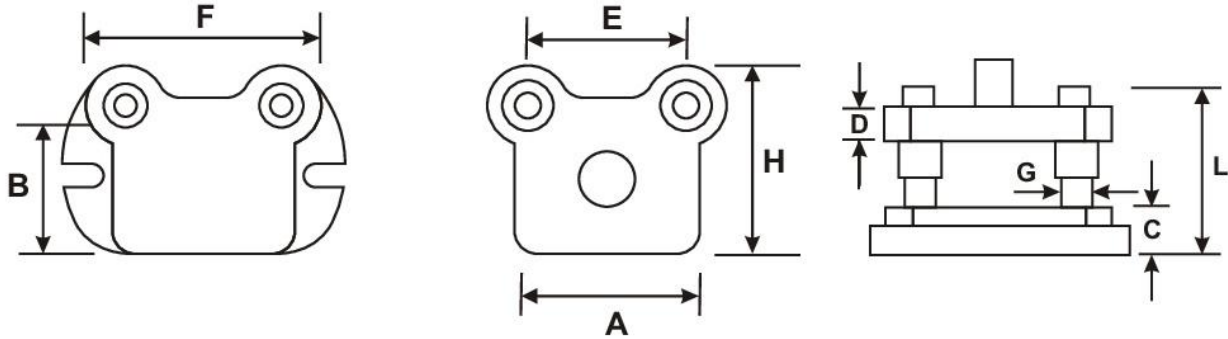


Medidas Espigas: 1 x 2 (25.4 diámetro x 50.8 mm. Largo)

1-1/2 X 2 (38.1 X 50.8), 1-1/2 X 2-1/2 (38.1 X 63.5), 1-1/2 X 3 (38.1 X 76.2),
 1-9/16 X 2 (39.7 X 50.8), 2 X 2 (50.8 X 50.8) 2 X 2-1/2 (50.8 X 63.5) 2 X 3 (50.8 X 76.2)

A	B	C		D		E	F	G	H	CLAVE
76	76	25.4	1	25.4	1	76	133	19.1	121	33 APA
3	3	28.8	1.125	25.4	1	3	5 1/4	3/4	4 3/4	33 APB
76	102	25.4	1	25.4	1	76	133	19.1	48	34 APA
3	4	28.8	1.125	25.4	1	3	5 1/4	3/4	5 3/4	34 APB
102	76	25.4	1	25.4	1	86	143	19.1	114	43 APA
4	3	28.8	1.125	25.4	1	3.375	5 5/8	3/4	4 1/2	43 APB
102	127	28.8	1.125	25.4	1	102	171	25.4	178	45 APA
4	5	35	1.375	28.8	1.125	4	6 3/4	1	7	45 APB
127	102	28.8	1.125	25.4	1	96	162	25.4	149	54 APA
5	4	35	1.375	28.8	1.125	3.750	6 3/8	1	5 7/8	54 APB
127	127	28.8	1.125	25.4	1	98	168	25.4	178	55 APA
5	5	35	1.375	28.8	1.125	3.875	5 5/8	1	7	55 APB
127	178	35	1.375	25.4	1.125	159	229	25.4	232	57 APA
5	7	41.3	1.625	35	1.375	6.250	9	1	9 1/8	57 APB
152	102	35	1.375	28.8	1.125	127	197	25.4	148	64 APA
6	4	41.3	1.625	36	1.375	5	7 3/4	1	5 3/4	64 APB
152	127	35	1.375	28.8	1.125	133	197	25.4	178	65 APA
6	5	41.3	1.625	36	1.375	5.250	7 3/4	1	7	65 APB
165	152	35	1.375	28.8	1.125	137	203	25.4	197	66 APA
6 1/2	6	41.3	1.625	36	1.375	5.375	8	1	7 3/4	66 APB
152	229	35	1.375	28.8	1.125	187	280	31.7	266	69 APA
6	9	41.3	1.625	35	1.375	7.375	10 1/4	1 1/4	11 1/4	69 APB
178	127	35	1.375	28.8	1.125	159	229	25.4	171	75 APA
7	5	41.3	1.625	35	1.375	6.250	9	1	6 3/4	75 APB
190	178	35	1.375	28.8	1.125	162	229	25.4	232	77 APA
70 1/2	7	41.3	1.625	36	1.375	6.375	9	1	9 1/8	77 APB
178	254	41.3	1.625	35.8	1.375	213	286	31.7	311	710 APA
7	10	47.6	1.875	41.3	1.625	8.375	11 1/4	1 1/4	12 1/4	710 APB

PORTATROQUELES DE FIGURA

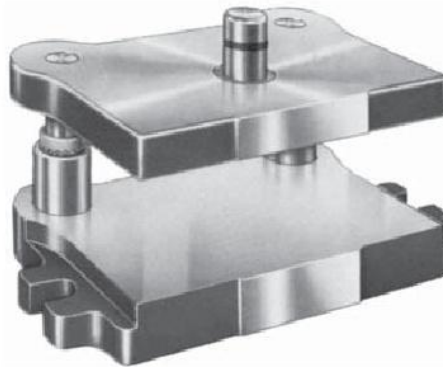
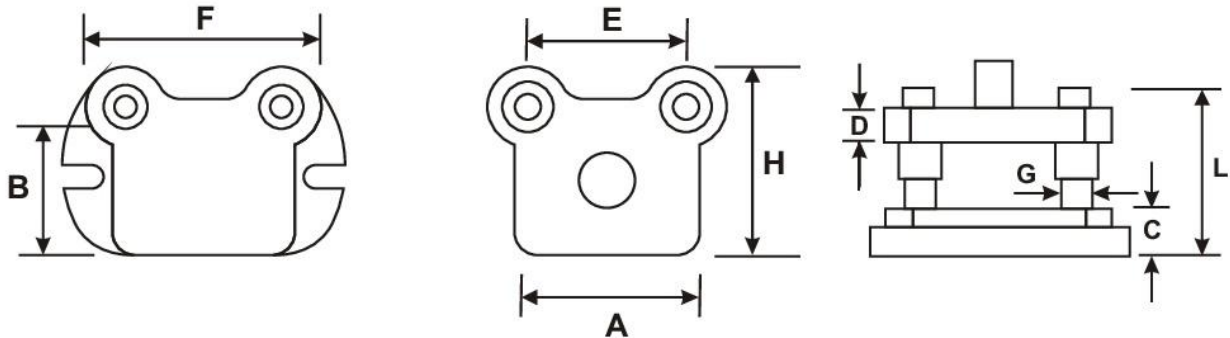


Medidas Espigas: 1 x 2 (25.4 diámetro x 50.8 mm. Largo)

1-1/2 X 2 (38.1 X 50.8), 1-1/2 X 2-1/2 (38.1 X 63.5), 1-1/2 X 3 (38.1 X 76.2),
 1-9/16 X 2 (39.7 X 50.8), 2 X 2 (50.8 X 50.8) 2 X 2-1/2 (50.8 X 63.5) 2 X 3 (50.8 X 76.2)

A	B	C		D		E	F	G	H	CLAVE
203	127	127	1.375	28	1.125	180	247	25.4	180	85 APA
8	5	5	1.625	36	1.375	7	9 3/4	1	7	85 APB
203	152	152	1.375	28	1.125	185	238	25.4	200	86 APA
8	6	8	1.625	35	1.375	8 5/8	9 3/8	1	7 7/8	86 APB
216	203	203	1.375	28	1.125	209	279	25.41	280	88 APA
8 1/2	8	8	1.625	35	1.375	8 1/4	11	31.7	10 1/4	88 APB
203	279	279	1.625	35	1.375	241	317	1 1/4	343	811 APA
8	11	11	1.875	41	1.625	9 1/2	12 1/2	25.4	13 1/2	811 APB
229	152	152	1.375	28	1.125	187	254	1	197	96 APA
9	8	8	1.625	35	1.375	7 3/8	10	31.7	7 3/4	96 APB
250	178	178	1.625	35	1.375	216	292	1 1/4	228	1007 APA
10	7	7	1.875	41	1.625	8 1/2	11 1/2	38.1	9	1007 APB
250	305	305	1.875	41	1.625	298	381	1 1/2	374	1012 APA
10	12	12	2.125	48	1.875	11 3/4	15	38.1	14 3/4	1012 APB
250	358	358	2.125	48	1.875	311	393	1 1/2	425	1014 APA
10	14	14	2.375	54	2.125	12 1/4	15 1/2	31.7	16 3/4	1014 APB
279	203	203	1.875	41	1.625	288	343	1 1/4	288	1108 APA
11	8	8	2.125	48	1.875	10 1/2	13 1/2	38.1	10 1/2	1108 APB
305	250	250	1.875	41	1.625	292	374	1 1/2	320	1210 APA
12	10	10	1.125	48	1.875	11 1/2	14 3/4	38.1	12 5/8	1210 APB
305	406	408	2.125	48	1.875	349	432	1 1/2	476	1216 APA
12	16	16	2.375	54	2.125	13 3/4	17	31.7	18 3/4	1216 APB
358	152	152	1.875	41	1.625	358	444	1 1/4	216	1406 APA
14	6	8	2.125	48	1.875	10 1/8	17 1/2	38.1	8 1/2	1406 APB
358	229	229	2.125	48	1.875	311	412	1 1/2	308	1409 APA
14	9	9	2.375	54	2.125	12 1/4	16 1/4	38.1	12 1/8	1409 APB
358	250	250	2.125	48	1.875	355	438	1 1/2	324	1410 APA
14	10	10	2.375	54	2.125	14	17 1/4	38.1	12 3/4	1410 APB

PORTATROQUELES DE FIGURA

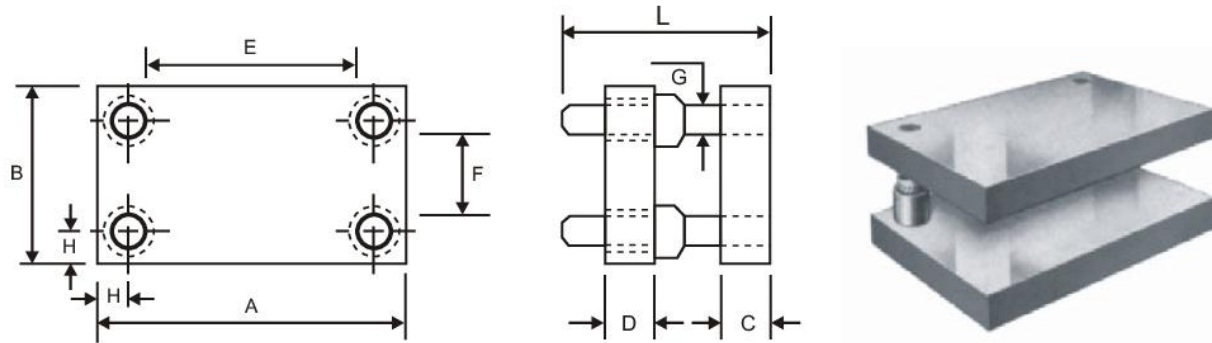


Medidas Espigas: 1 x 2 (25.4 diámetro x 50.8 mm. Largo)

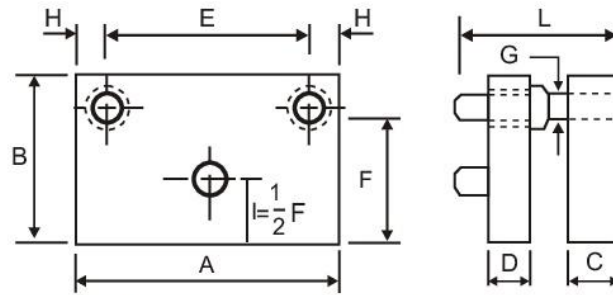
1-1/2 X 2 (38.1 X 50.8), 1-1/2 X 2-1/2 (38.1 X 63.5), 1-1/2 X 3 (38.1 X 76.2),
 1-9/16 X 2 (39.7 X 50.8), 2 X 2 (50.8 X 50.8) 2 X 2-1/2 (50.8 X 63.5) 2 X 3 (50.8 X 76.2)

A	B	C		D		E	F	G	H	CLAVE
355	355	54	2.125	48	1.875	355	438	38.1	422	1414 APA
14	14	60	2.375	54	2.125	14	17 1/4	1 1/2	16 5/8	1414 APB
384	152	48	1.875	41	1.625	362	444	38.1	216	1508 APA
15	6	54	2.125	48	1.875	4 1/4	17 1/2	1 1/2	8 1/2	1508 APB
384	254	54	2.125	48	2.875	362	444	38.1	317	1510 APA
15	10	60	2.375	54	2.125	14 1/4	17 1/2	1 1/2	12 1/2	1510 APB
432	203	54	2.125	48	1.875	419	501	38.1	270	1708 APA
17	8	60	2.375	54	2.125	16 1/2	19 3/4	1 1/2	10 5/8	1708 APB
432	254	54	2.125	48	1.875	419	501	38.1	320	1710 APA
17	10	60	2.375	54	2.125	16 1/2	19 3/4	1 1/2	12 5/8	1710 APB
432	306	54	2.125	48	1.875	419	501	38.1	371	1712 APA
17	12	60	2.375	54	2.125	16 1/2	19 3/4	1 1/2	14 5/8	1712 APB
432	355	54	2.125	48	1.875	419	501	38.1	419	1714 APA
17	14	60	2.375	54	2.125	16 1/4	19 3/4	1 1/2	16 1/2	1714 APB
432	408	54	2.125	48	1.875	419	501	38.1	476	1716 APA
17	16	60	2.375	54	2.125	16 1/2	19 3/4	1 1/2	18 3/4	1716 APB
508	229	54	2.125	48	1.875	432	520	38.1	298	2009 APA
20	9	60	2.375	54	2.125	17	20 1/2	1/2	11 3/4	2009 APB
508	305	54	2.125	48	1.875	432	520	38.1	371	2012 APA
20	12	60	2.375	54	2.125	17	20 1/2	1 1/2	14 5/8	2012 APB
508	355	54	2.125	48	1.875	432	520	38.1	422	2014 APA
20	14	60	2.375	54	2.125	17	20 1/2	1 1/2	16 5/8	2014 APB

PORTATROQUELES RECTANGULARES

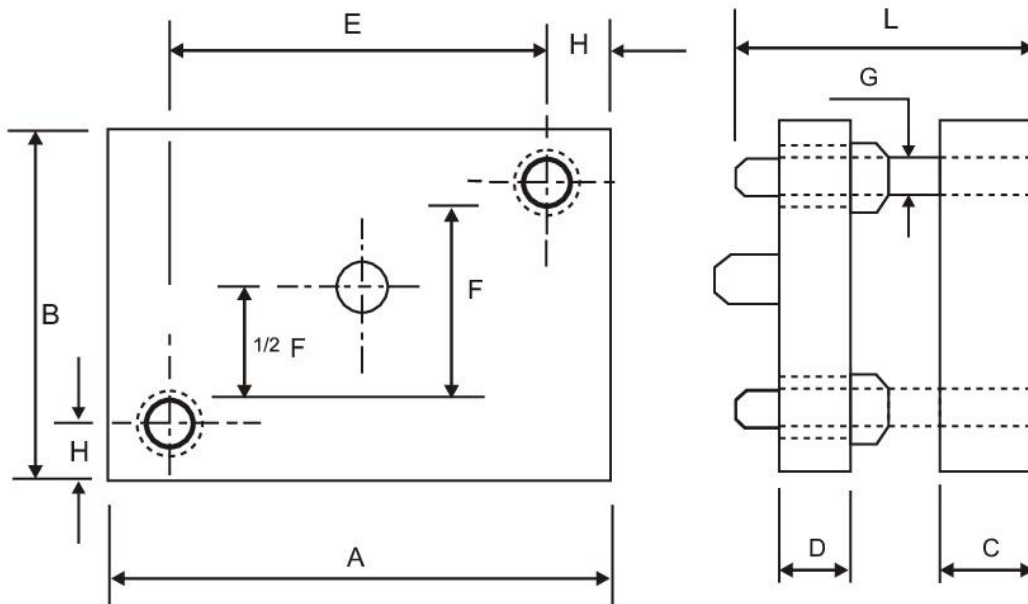


A	B	C		D		E	F	G	H	CLAVE
203	203	28	1.125	25	1	108	106	25.4	35	88 T3A
8	8	35	1.375	28	1.125	4 1/4	4 1/4	1	1 3/8	88 T3B
250	203	28	1.125	25	1	159	106	25.4	35	1006 T3A
10	8	35	1.375	28	1.125	6 1/4	4 1/4	1	1 3/8	1006 T3B
250	229	35	1.375	28	1.125	146	121	31.7	38	1009 T3A
10	9	41	1.625	35	1.375	5 3/8	4 1/4	1 1/4	1 1/2	1009 T3B
306	250	35	1.375	28	1.125	197	148	31.7	38	1210 T3A
12	10	41	1.625	35	1.375	7 3/4	5 3/4	1 1/4	1 1/2	1210 T3B
305	279	35	1.375	28	1.125	197	171	31.7	38	1211 T3A
12	11	41	1.625	35	1.375	7 3/4	6 3/4	1 1/4	1 1/2	1211 T3B
355	250	41	1.625	35	1.375	229	127	38.1	38	1410 T3A
14	10	48	1.875	41	1.625	9	5	1 1/2	1 1/2	1410 T3B
355	306	41	1.625	35	1.375	229	178	38.1	44	1412 T3A
14	12	48	1.875	41	1.625	9	7	1 1/2	1 2/4	1412 T3B
406	306	41	1.625	35	1.375	279	178	38.1	44	1612 T3A
16	12	48	1.875	41	1.625	11	7	1 1/2	1 3/4	1612 T3B
406	355	41	1.625	35	1.375	279	299	38.1	44	1614 T3A
16	14	48	1.875	41	1.625	11	9	1 1/2	1 3/4	1614 T3B
457	250	41	1.625	35	1.375	330	127	38.1	44	1810 T3A
18	10	48	1.875	41	1.375	13	5	1 1/2	1 3/4	1810 T3B
457	305	41	1.625	35	1.375	330	178	38.1	44	1812 T3A
18	12	48	1.875	41	1.625	13	7	1 1/2	1 3/4	1812 T3B
508	279	41	1.625	35	1.375	381	152	38.1	44	2011 T3A
20	11	48	1.875	41	1.625	15	6	1 1/2	1 3/4	2011 T3B
508	355	41	1.625	35	1.375	381	229	38.1	44	2014 T3A
20	14	48	1.875	41	1.625	15	9	1 1/2	1 3/4	2014 T3B
508	406	41	1.625	35	1.375	381	279	38.1	44	2016 T3A
20	16	48	1.875	41	1.625	15	11	1 1/2	1 3/4	2016 T3B
533	457	41	1.625	35	1.375	406	330	38.1	44	2118 T3A
21	18	48	1.875	41	1.625	16	13	1 1/2	1 3/4	2118 T3B
559	306	41	1.625	35	1.375	432	178	38.1	44	2212 T3A
22	12	48	1.875	41	1.625	17	7	1 1/2	1 3/4	2212 T3B
559	355	41	1.625	35	1.375	432	229	38.1	44	2214 T3A
22	14	48	1.875	41	1.625	17	9	1 1/2	1 3/4	2214 T3B
559	457	41	1.625	35	1.375	432	330	38.1	44	2218 T3A
22	18	48	1.875	41	1.625	17	13	1 1/2	1 3/4	2218 T3B
635	432	41	1.625	35	1.375	508	305	38.1	44	2517 T3A
25	17	48	1.875	41	1.625	20	12	1 1/2	1 3/4	2517 T3B
635	508	41	1.625	35	1.375	508	381	38.1	44	2520 T3A
25	20	48	1.875	41	1.625	20	15	1 1/2	1 3/4	2520 T3B

RESISTENCIAS Y ACCESORIOS PARA MOLDES
FORJADOS RECTANGULARES


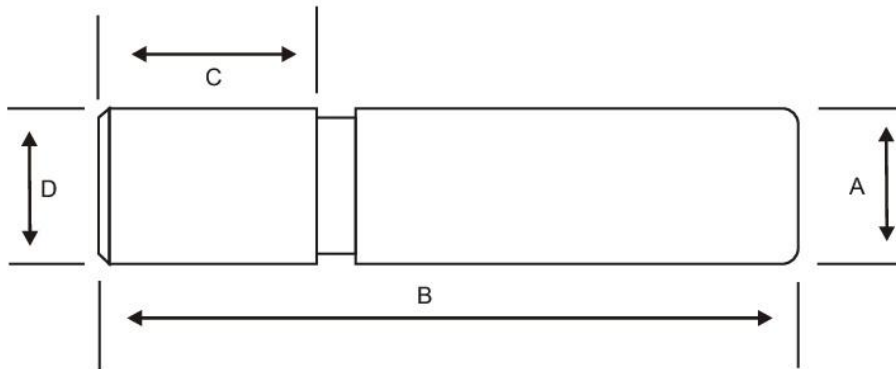
A	B	C		D		E	F	G	H	CLAVE
203	203	35	1.375	28	1.125	133	152	25.4	35	88 T2A
8	8	41	1.625	35	1.375	5 1/4	6	1	13/8	88 T2B
203	254	35	1.375	28	1.125	133	203	25.4	35	810 T2A
8	10	41	1.625	35	1.375	5 1/4	8	1	13/8	810 T2B
254	229	41	1.625	35	1.375	178	178	31.7	38	109 T2A
10	9	48	1.785	41	1.625	7	7	1.250	11/2	109 T2B
254	305	41	1.625	35	1.375	178	254	31.7	38	1012 T2A
10	12	48	1.875	41	1.625	7	10	1.250	11/2	1012 T2B
305	203	41	1.625	35	1.375	226	152	31.7	38	1208 T2A
12	8	48	1.875	41	1.625	9	6	1.250	11/2	1208 T2B
305	279	41	1.625	41	1.375	228	228	31.7	38	1211 T2A
12	11	48	1.875	48	1.625	9	9	1.250	11/2	1211 T2B
305	356	48	1.875	41	1.625	216	305	38.1	44	1214 T2A
12	14	54	2.125	48	1.875	8 1/2	12	1.500	13/4	1214 T2B
355	254	48	1.875	41	1.625	267	203	38.1	44	1410 T2A
14	10	54	2.125	48	1.875	10 1/2	8	1.500	13/4	1410 T2B
355	305	48	1.875	41	1.625	267	254	38.1	44	1412 T2A
14	12	54	2.125	48	1.875	10 1/2	10	1.500	13/4	1412 T2B
355	406	48	1.875	41	1.625	267	356	38.1	44	1416 T2A
14	16	54	2.125	48	1.875	10 1/2	14	1.500	13/4	1416 T2B
457	254	48	1.875	41	1.625	368	203	38.1	44	1810 T2A
18	10	54	2.125	48	1.875	14 1/2	8	1.500	13/4	1810 T2B
457	305	48	1.875	41	1.625	368	241	38.1	44	1812 T2A
18	12	54	2.125	48	1.875	14 1/2	9 1/2	1.500	13/4	1812 T2B
508	203	48	1.875	41	1.625	419	140	38.1	44	2008 T2A
20	8	54	2.125	48	1.875	16 1/2	5 1/2	1.500	13/4	2008 T2B
508	278	48	1.875	41	1.625	---	216	38.1	44	2011 T2A
20	11	54	2.125	48	1.875	16 1/2	8 1/2	1.500	13/4	2011 T2B
508	355	48	1.875	41	1.625	---	---	38.1	44	2014 T2A
20	14	54	2.125	48	1.875	16 1/2	11 1/2	1.500	13/4	2014 T2B
508	506	48	1.875	41	1.625	---	---	38.1	44	2016 T2A
20	16	54	2.125	48	1.875	16 1/2	13 1/2	1.500	13/4	2016 T2B
559	229	48	1.875	41	1.625	---	---	38.1	44	2209 T2A
22	9	54	2.125	48	1.875	18 1/2	6 1/2	1.500	13/4	2209 T2B
559	305	48	1.875	41	1.625	470	241	38.1	44	2212 T2A
22	12	54	2.125	48	1.875	18 1/2	9 1/2	1 1/2	13/4	2212 T2B
559	355	48	1.875	41	1.625	470	292	38.1	44	2214 T2A
22	14	54	2.125	48	1.875	18 1/2	11 1/2	1 1/2	13/4	2214 T2B
559	457	48	1.875	41	1.625	470	394	38.1	44	2218 T2A
22	18	54	2.125	48	1.875	18 1/2	15 1/2	1 1/2	13/4	2218 T2B
635	254	48	1.875	41	1.625	546	190	38.1	44	2510 T2A
25	10	54	2.125	48	1.875	21 1/2	7 1/2	1 1/2	13/4	2510 T2B
635	355	48	1.875	41	1.625	546	292	38.1	44	2514 T2A
25	14	54	2.125	48	1.875	21 1/2	11 1/2	1 1/2	13/4	2514 T2B
635	406	48	1.875	41	1.625	546	343	38.1	44	2516 T2A
25	16	54	2.125	48	1.875	21 1/2	13 1/2	1 1/2	13/4	2516 T2B

PORTATROQUELES RECTANGULARES



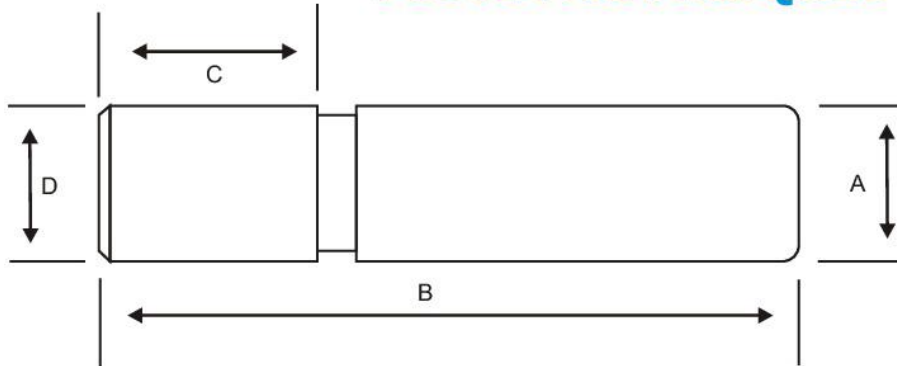
A	B	C		D		E	F	G	H	CLAVE	
203	203	---	---	---	---	108	148	25.4	35	88	T4
8	8	20	1.125	25	1	4 1/4	4 1/4	1	1 3/8		
254	229	---	---	---	---	159	133	25.4	35	109	T4
10	9	35	1.357	28	1.125	6 1/4	5 1/4	1	1 3/8		
279	229	---	---	---	---	184	133	25.4	35	1109	T4
11	9	35	1.375	28	1.125	7 1/4	5 1/4	1	1 3/8		
305	254	---	---	---	---	209	159	25.4	35	1210	T4
12	10	41	1.625	35	1.375	8 1/4	6 1/4	1	1 3/8		
330	279	---	---	---	---	222	171	31.7	38	1311	T4
13	11	41	1.625	35	1.375	8 3/4	6 3/4	1 1/4	1 1/2		
381	279	---	---	---	---	273	171	31.7	38	1511	T4
15	11	48	1.875	41	1.625	10 3/4	6 3/4	1 1/4	1 1/2		
432	355	---	---	---	---	324	248	31.7	38	1714	T4
17	14	48	1.875	41	1.625	12 3/4	9 3/4	1 1/4	1 1/2		

POSTE PARA TROQUEL



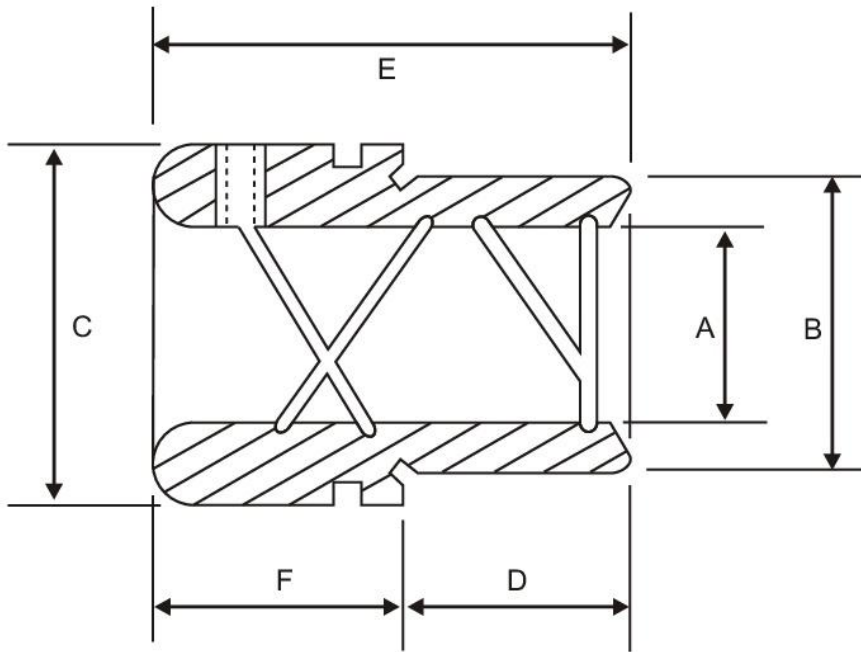
STANDARD				CLAVE	METRICO			
A	B	C	D		A	B	C	D
3/4	4	1. 1/8	0.752	BA- 1	19.05	101.6	28.5	19.1
	4 1/2			BA- 2		114.3		
	5			BA- 3		127		
	5 1/2			BA- 4		139.7		
	6			BA- 5		152.4		
	6. 1/2			BA- 5-1		165.1		
	7.			BA- 5-5		177.8		
	8.			BA- 5-8		203.2		
1	4	1 3/8	1.002	BA- 6	25.4	101.60	39.9	25.45
	4. 1/2	1 1/2		BA- 7		114.3		
	5			BA- 8		127		
	5. 1/2			BA- 9		139.7		
	6			BA- 10		152.4		
	6. 1/2			BA- 11		165.1		
	7			BA- 12		177.8		
	7. 1/2			BA- 13		190.5		
	8			BA- 14		203.5		
	8. 1/2			BA- 14-1		215.9		
	9			BA- 14-2		228.6		
	9. 1/2			BA- 14-3		241.3		
10.	BA- 14-4		254					
11.	BA- 14-5	279.4						
12.	BA- 14-6	304.8						
1. 1/4	5	1. 1/2	1.252	BA- 15	31.75	127	38.1	31.80
	5. 1/2	1. 3/4		BA- 16		139.7		
	6			BA- 17		152.4		
	6. 1/2			BA- 18		165.1		
	7			BA- 19		177.8		
	7. 1/2			BA- 20		190.5		
	8			BA- 21		203.2		
	8. 1/2			BA- 22		215.9		
	9			BA- 22-1		228.6		
	9. 1/2			BA- 22-2		241.3		
	10			BA- 22-3		254		
	11			BA- 22-4		279.4		
12	BA- 22-5		304.8					

POSTE PARA TROQUEL



STANDARD				CLAVE	METRICO			
A	B	C	D		A	B	C	D
1. 1/2	5	2	1.502	BA- 23	38.1	127.4	50.8	38.15
	5. 1/2			BA- 24		239.7		
	6			BA- 25		152.4		
	6. 1/2			BA- 26		165.1		
	7	2. 1/2		BA- 27		177.8	63.5	
	7. 1/2			BA- 28		190.5		
	8			BA- 29		203.2		
	8. 1/2			BA- 30		215.9		
	9			BA- 31		228.8		
	9. 1/2			BA- 31-1		241.3		
	10			BA- 31-2		254		
	11			BA- 31-3		279.4		
12	BA- 31-4	304.8						
1. 3/4	6	2. 1/2	1.752	BC- 10	44.45	152.4	63.5	44.50
	6. 1/2			BC- 11		165.1		
	7			BC- 12		177.8		
	7. 1/2			BC- 13		190.5		
	8			BC- 14		203.2		
	8. 1/2			BC- 15		215.9		
	9			BC- 16		228.6		
	9. 1/2			BC- 17		241.3		
	10			BC- 18		254		
	11			BC- 19		279.4		
	12			BC- 20		304.8		
	2			6		2. 1/2		
7		BA- 33	177.8					
8		BA- 34	203.2					
9		BA- 35	228.6					
10		BA- 36	254					
11		BA- 37	279.4					
12	BA- 38	304.8						

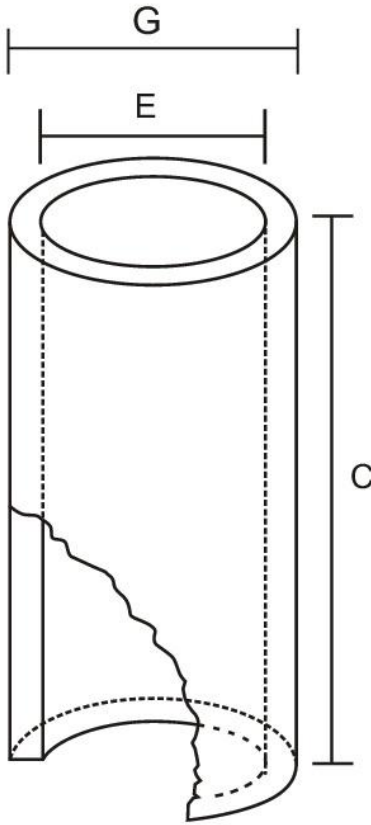
BUJE PARA TROQUEL



**SE SURTEN DE BRONCE CON LAS MEDIDAS DE ESTE CATALOGO
O SEGUN NECESIDADES**

PULGADAS							MILIMETROS						
A	B	C	D	E	F	CLAVE	A	B	C	D	E	F	
0.750	1.127	1. 3/8	15./16	1.5/16	1	BE-1	19.05	28.62	34.92	23.81	49.21	25.4	
1.000	1.502	1. 3/4	1.3/16	2.7/16	1.1/4	BE-2	25.4	38.15	44.45	30.16	61.91	31.75	
1.000	1.502	1. 3/4	1.3/16	2.15/16	1.3/4	BE-2L	25.4	38.15	44.45	30.16	84.61	44.45	
1.250	1.752	2	1.5/16	2.13/16	1.1/2	BE-3	31.75	44.50	50.8	33.33	71.43	38.1	
1.250	1.752	2	1.5/16	3.5/16	2	BE-3L	31.75	44.50	50.8	33.33	84.13	50.8	
1.500	2.002	2. 1/4	1.7/16	2.15/16	1.1/2	BE-4	38.1	50.85	57.15	36.51	74.61	38.1	
1.500	2.002	2. 1/4	1.7/16	3.7/16	2	BE-4L	38.1	50.85	57.15	36.51	87.31	50.8	
1.750	2.252	2. 5/8	1.3/4	3.1/4	1.1/2	BE-5	44.45	57.20	66.67	44.45	82.55	38.1	
1.750	2.252	2. 5/8	1.3/4	3.31/4	2	BE-5L	44.45	57.20	66.67	44.45	95.25	50.8	
2.000	2.502	3. 1/8	.15/16	3.7/16	1.1/2	BE-6	50.8	63.55	76.32	49.21	87.31	38.1	
2.000	2.502	3. 1/8	.15/16	3.15/16	2	BE-6L	50.8	63.55	76.32	49.21	100.01	50.8	

CAMISAS

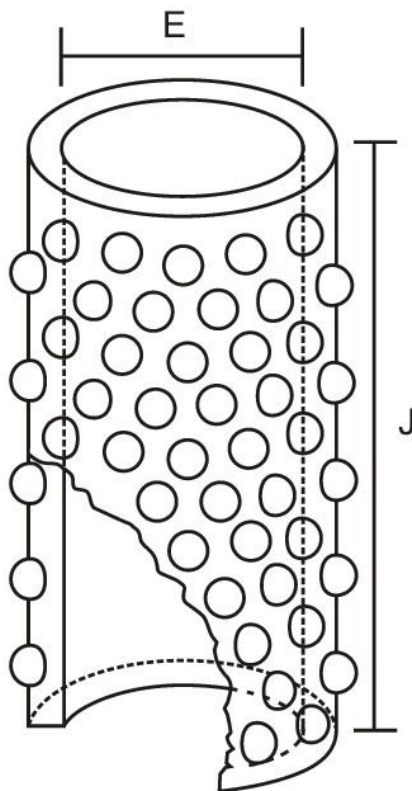


C	E=3/4	E=1	E=1 1/4	E=1 1/2	E=1 3/4	E=2	G Ø EXTERIOR	BALAS
	CLAVE	CLAVE	CLAVE	CLAVE	CLAVE	CLAVE		
2"	C-3-20	C-1-20	C-12-20	C-15-20	C-75-20	C-20-20	E=3/4 1.2504 - 1.2507	1/8
2 1/2"	C-3-25	C-1-25	C-12-25	C-15-25	C-75-25	C-20-25	E=1" 1.6254 - 1.6257	
3"	C-3-30	C-1-30	C-12-30	C-15-30	C-75-30	C-20-30	E=1 1/4 1.8754 - 1.8757	
3 1/2"	C-3-35	C-1-35	C-12-35	C-15-35	C-75-35	C-20-35	E=1 1/2 2.1254 - 2.1257	
4"	C-3-40	C-1-40	C-12-40	C-15-40	C-75-40	C-20-40	E=1 3/4	
4 1/2"	C-3-45	C-1-45	C-12-45	C-15-45	C-75-45	C-20-45	E=2"	
5"	C-3-50	C-1-50	C-12-50	C-15-50	C-75-50	C-20-50		
5 1/2"	C-3-55	C-1-55	C-12-55	C-15-55	C-75-55	C-20-55		
6"	C-3-60	C-1-60	C-12-60	C-15-60	C-75-60	C-20-60		
6 1/2"	C-3-65	C-1-65	C-12-65	C-15-65	C-75-65	C-20-65		

C	E=3/4	E=1	E=1 1/4	E=1 1/2	E=1 3/4	E=2	G Ø EXTERIOR	BALAS
	CLAVE	CLAVE	CLAVE	CLAVE	CLAVE	CLAVE		
2"	C3-3-20	C3-1-20	C3-12-20	C3-15-20	C3-75-20	C3-20-20	E=3/4 1.375 + 0.0004	3/16
2 1/2"	C3-3-25	C3-1-25	C3-12-25	C3-15-25	C3-75-25	C3-20-25	E=1 1.717 + 0.0007	
3"	C3-3-30	C3-1-30	C3-12-30	C3-15-30	C3-75-30	C3-20-30	E=1 1/4 2.107 + 0.0007	
3 1/2"	C3-3-35	C3-1-35	C3-12-35	C3-15-35	C3-75-35	C3-20-35	E=1 1/2 2.437 - 0.0007	
4"	C3-3-40	C3-1-40	C3-12-40	C3-15-40	C3-75-40	C3-20-40		
4 1/2"	C3-3-45	C3-1-45	C3-12-45	C3-15-45	C3-75-45	C3-20-45		
5"	C3-3-50	C3-1-50	C3-12-50	C3-15-50	C3-75-50	C3-20-50		
5 1/2"	C3-3-55	C3-1-55	C3-12-55	C3-15-55	C3-75-55	C3-20-55		
6"	C3-3-60	C3-1-60	C3-12-60	C3-15-60	C3-75-60	C3-20-60		
6 1/2"	C3-3-65	C3-1-65	C3-12-65	C3-15-65	C3-75-65	C3-20-65		

C	E=3/4	E=1	E=1 1/4	E=1 1/2	E=1 3/4	E=2	G Ø EXTERIOR	BALAS
	CLAVE	CLAVE	CLAVE	CLAVE	CLAVE	CLAVE		
2"	C5-3-20	C5-1-20	C5-12-20	C5-15-20	C5-75-20	C5-20-20	E=3/4 1.375 + 0.0004	5/32
2 1/2"	C5-3-25	C5-1-25	C5-12-25	C5-15-25	C5-75-25	C5-20-25	E=1 1.750 + 0.0007	
3"	C5-3-30	C5-1-30	C5-12-30	C5-15-30	C5-75-30	C5-20-30	E=1 1/4 2.000 + 0.0007	
3 1/2"	C5-3-35	C5-1-35	C5-12-35	C5-15-35	C5-75-35	C5-20-35	E=1 1/2 2.3125 + 0.0007	
4"	C3-3-40	C5-1-40	C5-12-40	C5-15-40	C5-75-40	C5-20-40		
4 1/2"	C5-3-45	C5-1-45	C5-12-45	C5-15-45	C5-75-45	C5-20-45		
5"	C5-3-50	C5-1-50	C5-12-50	C5-15-50	C5-75-50	C5-20-50		
5 1/2"	C5-3-55	C5-1-55	C5-12-55	C5-15-55	C5-75-55	C5-20-55		
6"	C5-3-60	C5-1-60	C5-12-60	C5-15-60	C5-75-60	C5-20-60		
6 1/2"	C5-3-65	C5-1-65	C5-12-65	C5-15-65	C5-75-65	C5-20-65		

JAULAS EMBALADAS



J	E=3/4	E=1	E=1 1/4	E=1 1/2	E=1 3/4	E=2"	BALAS
	CLAVE	CLAVE	CLAVE	CLAVE	CLAVE	CLAVE	
1 1/2"	J-3-15	J-1-15	J-12-15	J-15-15	J-175-15	J-20-15	1/8
2"	J-3-20	J-1-20	J-12-20	J-15-20	J-175-20	J-20-20	
2 1/2"	J-3-25	J-1-25	J-12-25	J-15-25	J-175-25	J-20-25	
3"	J-3-30	J-1-30	J-12-30	J-15-30	J-175-30	J-20-30	
3 1/2"	J-3-35	J-1-35	J-12-35	J-15-35	J-175-35	J-20-35	
4"	J-3-40	J-1-40	J-12-40	J-15-40	J-175-40	J-20-40	
4 1/2"	J-3-45	J-1-45	J-12-45	J-15-45	J-175-45	J-20-45	
5"	J-3-50	J-1-50	J-12-50	J-15-50	J-175-50	J-20-50	
5 1/2"	J-3-55	J-1-55	J-12-55	J-15-55	J-175-55	J-20-55	
6"	J-3-60	J-1-60	J-12-60	J-15-60	J-175-60	J-20-60	

J	E=3/4	E=1	E=1 1/4	E=1 1/2	E=1 3/4	E=2"	BALAS
	CLAVE	CLAVE	CLAVE	CLAVE	CLAVE	CLAVE	
1 1/2"	J3-3-15	J3-1-15	J3-12-15	J3-15-15	J3-75-15	J3-20-15	3/16
2"	J3-3-20	J3-1-20	J3-12-20	J3-15-20	J3-75-20	J3-20-20	
2 1/2"	J3-3-25	J3-1-25	J3-12-25	J3-15-25	J3-75-25	J3-20-25	
3"	J3-3-30	J3-1-30	J3-12-30	J3-15-30	J3-75-30	J3-20-30	
3 1/2"	J3-3-35	J3-1-35	J3-12-35	J3-15-35	J3-75-35	J3-20-35	
4"	J3-3-40	J3-1-40	J3-12-40	J3-15-40	J3-75-40	J3-20-40	
4 1/2"	J3-3-45	J3-1-45	J3-12-45	J3-15-45	J3-75-45	J3-20-45	
5"	J3-3-50	J3-1-50	J3-12-50	J3-15-50	J3-75-50	J3-20-50	
5 1/2"	J3-3-55	J3-1-55	J3-12-55	J3-15-55	J3-75-55	J3-20-55	
6"	J3-3-60	J3-1-60	J3-12-60	J3-15-60	J3-75-60	J3-20-60	

J	E=3/4	E=1	E=1 1/4	E=1 1/2	E=1 3/4	E=2"	BALAS
	CLAVE	CLAVE	CLAVE	CLAVE	CLAVE	CLAVE	
1 1/2"	J5-3-15	J5-1-15	J5-12-15	J5-15-15	J5-75-15	J5-20-15	1/4
2"	J5-3-20	J5-1-20	J5-12-20	J5-15-20	J5-75-20	J5-20-20	
2 1/2"	J5-3-25	J5-1-25	J5-12-25	J5-15-25	J5-75-25	J5-20-25	
3"	J5-3-30	J5-1-30	J5-12-30	J5-15-30	J5-75-30	J5-20-30	
3 1/2"	J5-3-35	J5-1-35	J5-12-35	J5-15-35	J5-75-35	J5-20-35	
4"	J5-3-40	J5-1-40	J5-12-40	J5-15-40	J5-75-40	J5-20-40	
4 1/2"	J5-3-45	J5-1-45	J5-12-45	J5-15-45	J5-75-45	J5-20-45	
5"	J5-3-50	J5-1-50	J5-12-50	J5-15-50	J5-75-50	J5-20-50	
5 1/2"	J5-3-55	J5-1-55	J5-12-55	J5-15-55	J5-75-55	J5-20-55	
6"	J5-3-60	J5-1-60	J5-12-60	J5-15-60	J5-75-60	J5-20-60	

TORNILLO ALLEN GUIA STD.



PERNO SOLIDO RECTIFICADO STD.



	DESCRIPCION
CUERDA: 10-24	1/4 X 1/4.
	1/4 X 3/8.
	1/4 X 1/2.
	1/4 X 5/8.
	1/4 X 3/4.
	1/4 X 1"
	1/4 X 1.1/4
	1/4 X 1.1/2.
	1/4 X 1.3/4.
	1/4 X 2".
	1/4 X 2.1/4.
	1/4 X 2.1/2.

	DESCRIPCION
CUERDA: 1/4 - 20	5/16 X 3/8.
	5/16 X 1/2.
	5/16 X 5/8.
	5/16 X 3/4.
	5/16 X 1"
	5/16 X 1.1/4
	5/16 X 1.1/2.
	5/16 X 1.3/4.
	5/16 X 2".
	5/16 X 2.1/4.
	5/16 X 2.1/2.

	DESCRIPCION
CUERDA: 5/16 - 18	3/8 X 3/8.
	3/8 X 1/2.
	3/8 X 5/8.
	3/8 X 3/4.
	3/8 X 1"
	3/8 X 1.1/4
	3/8 X 1.1/2.
	3/8 X 1.3/4.
	3/8 X 2".
	3/8 X 2.1/4.
	3/8 X 2.1/2.
	3/8 X 2.3/4
	3/8 X 3"
	3/8 X 3.1/4
	3/8 X 3.1/2.
	3/8 X 3.3/4
	3/8 X 4"

	DESCRIPCION
CUERDA: 3/8 - 16	1/2 X 1/2.
	1/2 X 5/8.
	1/2 X 3/4.
	1/2 X 1"
	1/2 X 1.1/4
	1/2 X 1.1/2.

	DESCRIPCION
CUERDA: 3/8 - 16	1/2 X 1.3/4.
	1/2 X 2".
	1/2 X 2.1/4.
	1/2 X 2.1/2.
	1/2 X 2.3/4
	1/2 X 3"
	1/2 X 3.1/4
	1/2 X 3.1/2.
	1/2 X 3.3/4
	1/2 X 4"
	1/2 X 4.1/4.

	DESCRIPCION
CUERDA: 1/2 - 13	5/8 X 1.1/4
	5/8 X 1.1/2.
	5/8 X 1.3/4.
	5/8 X 2".
	5/8 X 2.1/4.
	5/8 X 2.1/2.
	5/8 X 2.3/4
	5/8 X 3"
	5/8 X 3.1/4
	5/8 X 3.1/2.
	5/8 X 3.3/4
	5/8 X 4".
	5/8 X 4.1/4.
	5/8 X 4.1/2.

	DESCRIPCION
CUERDA: 5/8 - 11	3/4 X 1.1/2.
	3/4 X 1.3/4.
	3/4 X 2".
	3/4 X 2.1/4.
	3/4 X 2.1/2.
	3/4 X 2.3/4
	3/4 X 3"
	3/4 X 3.1/4
	3/4 X 3.1/2.
	3/4 X 3.3/4
	3/4 X 4"

DESCRIPCION
1/8 X 3/8.
1/8 X 1/2.
1/8 X 5/8.
1/8 X 3/4.
1/8 X 7/8.
1/8 X 1"
1/8 X 1.1/4.
1/8 X 1.1/2.
1/8 X 1.3/4.
1/8 X 2"

3/16 X 1/2.
3/16 X 5/8.
3/16 X 3/4.
3/16 X 7/8.
3/16 X 1"
3/16 X 1.1/4.
3/16 X 1.1/2.
3/16 X 1.3/4.
3/16 X 2"

1/4 X 1/2.
1/4 X 5/8.
1/4 X 3/4.
1/4 X 7/8.
1/4 X 1"
1/4 X 1.1/4.
1/4 X 1.1/2.
1/4 X 1.3/4.
1/4 X 2".
1/4 X 2.1/4.
1/4 X 2.1/2.
1/4 X 3"

5/16 X 1/2.
5/16 X 5/8.
5/16 X 3/4.
5/16 X 7/8.
5/16 X 1"
5/16 X 1.1/4.
5/16 X 1.1/2.
5/16 X 1.3/4.
5/16 X 2".
5/16 X 2.1/4.
5/16 X 2.1/2.
5/16 X 3".

DESCRIPCION
3/8 X 1/2.
3/8 X 5/8.
3/8 X 3/4.
3/8 X 7/8.
3/8 X 1"
3/8 X 1.1/4.
3/8 X 1.1/2.
3/8 X 1.3/4.
3/8 X 2"
3/8 X 2.1/4.
3/8 X 2.1/2.
3/8 X 3".

1/2 X 3/4.
1/2 X 1"
1/2 X 1.1/4.
1/2 X 1.1/2.
1/2 X 1.3/4.
1/2 X 2".
1/2 X 2.1/4.
1/2 X 2.1/2.
1/2 X 3".
1/2 X 3.1/2.
1/2 X 4".

5/8 X 1".
5/8 X 1.1/4.
5/8 X 1.1/2.
5/8 X 1.3/4.
5/8 X 2".
5/8 X 2.1/4.
5/8 X 2.1/2.
5/8 X 3".
5/8 X 3.1/2.
5/8 X 4".
5/8 X 4.1/2.
5/8 X 5".

3/4 X 2".
3/4 X 2.1/4.
3/4 X 2.1/2.
3/4 X 3".
3/4 X 3.1/2.
3/4 X 4".
3/4 X 4.1/2.
3/4 X 5".
3/4 X 6".

TORNILLO ALLEN GUIA MM.



PERNO SOLIDO RECTIFICADO MM.



	DESCRIPCION
CUERDA: 5 - 0.8	6 X 12.
	6 X 16.
	6 X 20.
	6 X 25.
	6 X 30.
	6 X 35.
	6 X 40.
	6 X 45.
	6 X 50.

CUERDA: 6 - 1.0	8 X 16.
	8 X 20.
	8 X 25.
	8 X 30.
	8 X 35.
	8 X 40.
	8 X 45.
	8 X 50.
	8 X 55.
	8 X 60.
8 X 70.	
8 X 80.	

CUERDA: 8 - 1.25	10 X 20.
	10 X 25.
	10 X 30.
	10 X 35.
	10 X 40.
	10 X 45.
	10 X 50.
	10 X 55.
	10 X 60.
	10 X 65.
10 X 70.	
10 X 80.	

	DESCRIPCION
CUERDA: 10 - 1.5	12 X 20.
	12 X 25.
	12 X 30.
	12 X 35.
	12 X 40.
	12 X 45.
	12 X 50.
	12 X 55.
	12 X 60.
	12 X 65.
12 X 70.	
12 X 80.	
12 X 90.	
12 X 100	

CUERDA: 12 - 1.75	16 X 20.
	16 X 25.
	16 X 30.
	16 X 35.
	16 X 40.
	16 X 45.
	16 X 50.
	16 X 55.
	16 X 60.
	16 X 70.
16 X 80.	
16 X 90.	
16 X 100	



DESCRIPCION
3 X 10.
3 X 16.
3 X 20.
3 X 25.
3 X 30.
3 X 35.
3 X 40.
3 X 45.
3 X 50.

4 X 10.
4 X 16.
4 X 20.
4 X 25.
4 X 30.
4 X 35.
4 X 40.
4 X 45.
4 X 50.

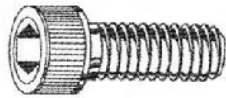
5 X 10.
5 X 16.
5 X 20.
5 X 25.
5 X 30.
5 X 35.
5 X 40.
5 X 45.
5 X 50.

6 X 10.
6 X 16.
6 X 20.
6 X 25.
6 X 30.
6 X 35.
6 X 40.
6 X 45.
6 X 50.

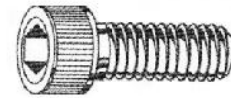
DESCRIPCION
8 X 20.
8 X 25.
8 X 30.
8 X 35.
8 X 40.
8 X 45.
8 X 50.
8 X 55.
8 X 60.

10 X 25.
10 X 30.
10 X 35.
10 X 40.
10 X 45.
10 X 50.
10 X 55.
10 X 60.

12 X 20.
12 X 25.
12 X 30.
12 X 35.
12 X 40.
12 X 45.
12 X 50.
12 X 55.
12 X 60.
12 X 70.
12 X 80.
12 X 90.
12 X 100.



TORNILLO ALLEN STD.



DESCRIPCION
4-40 X 1/4.
4-40 X 3/8.
4-40 X 1/2.
4-40 X 5/8.
4-40 X 3/4.
4-40 X 1".

5-40 X 1/4.
5-40 X 3/8.
5-40 X 1/2.
5-40 X 3/4.
5-40 X 5/8.
5-40 X 1".
5-40 X 1. 1/4.
5-40 X 1. 1/2.
5-40 X 2".

6-32 X 1/4.
6-32 X 3/8.
6-32 X 1/2.
6-32 X 5/8.
6-32 X 3/4.
6-32 X 1".
6-32 X 1. 1/4.
6-32 X 1. 1/2.
6-32 X 2".

8-32 X 1/4.
8-32 X 3/8.
8-32 X 1/2.
8-32 X 5/8.
8-32 X 3/4.
8-32 X 1".
8-32 X 1. 1/4.
8-32 X 1. 1/2.
8-32 X 2".
8-32 X 2. 1/2.
8-32 X 3".

10-24 X 3/8.
10-24 X 1/2.
10-24 X 5/8.
10-24 X 3/4.
10-24 X 7/8.
10-24 X 1".
10-24 X 1. 1/4.
10-24 X 1. 1/2.
10-24 X 1. 3/4.
10-24 X 2".

DESCRIPCION
10-24 X 2. 1/4.
10-24 X 2. 1/2.
10-24 X 3".
10-24 X 3. 1/2.
10-24 X 4".

10-32 X 3/8.
10-32 X 1/2.
10-32 X 5/8.
10-32 X 3/4.
10-32 X 1".
10-32 X 1. 1/4.
10-32 X 1. 1/2.
10-32 X 2".
10-32 X 2. 1/2.
10-32 X 3".

1/4-20 X 3/8.
1/4-20 X 1/2.
1/4-20 X 5/8.
1/4-20 X 3/4.
1/4-20 X 7/8.
1/4-20 X 1".
1/4-20 X 1. 1/4.
1/4-20 X 1. 1/2.
1/4-20 X 1. 3/4.
1/4-20 X 2".
1/4-20 X 2. 1/4.
1/4-20 X 2. 1/2.
1/4-20 X 2. 3/4.
1/4-20 X 3".
1/4-20 X 3. 1/4.
1/4-20 X 3. 1/2.
1/4-20 X 4".
1/4-20 X 4. 1/2.
1/4-20 X 5".
1/4-20 X 5. 1/2.
1/4-20 X 6".

1/4-28 X 1/2.
1/4-28 X 5/8.
1/4-28 X 3/4.
1/4-28 X 1".
1/4-28 X 1. 1/4.
1/4-28 X 1. 1/2.
1/4-28 X 2".
1/4-28 X 2. 1/2.
1/4-28 X 3".

DESCRIPCION
5-16-18 X 3/8.
5-16-18 X 1/2.
5-16-18 X 5/8.
5-16-18 X 3/4.
5-16-18 X 7/8.
5-16-18 X 1".
5-16-18 X 1. 1/4.
5-16-18 X 1. 1/2.
5-16-18 X 1. 3/4.
5-16-18 X 2".
5-16-18 X 2. 1/4.
5-16-18 X 2. 1/2.
5-16-18 X 2. 3/4.
5-16-18 X 3".
5-16-18 X 3. 1/2.
5-16-18 X 4".
5-16-18 X 4. 1/2.
5-16-18 X 5".
5-16-18 X 5. 1/2.
5-16-18 X 6".
5-16-18 X 7".
5-16-18 X 8".

5-16-24 X 1/2.
5-16-24 X 3/4.
5-16-24 X 1".
5-16-24 X 1. 1/4.
5-16-24 X 1. 1/2.
5-16-24 X 2".
5-16-24 X 2. 1/2.
5-16-24 X 3".
5-16-24 X 3. 1/2.
5-16-24 X 4".

3/8-16 X 1/2.
3/8-16 X 5/8.
3/8-16 X 3/4.
3/8-16 X 7/8.
3/8-16 X 1".
3/8-16 X 1. 1/4.
3/8-16 X 1. 1/2.
3/8-16 X 1. 3/4.
3/8-16 X 2".
3/8-16 X 2. 1/4.
3/8-16 X 2. 1/2.
3/8-16 X 2. 3/4.
3/8-16 X 3".
3/8-16 X 3. 1/2.
3/8-16 X 4".

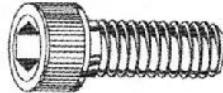
DESCRIPCION
3/8-16 X 4. 1/2.
3/8-16 X 5".
3/8-16 X 5. 1/2.
3/8-16 X 6".
3/8-16 X 6. 1/2.
3/8-16 X 7".
3/8-16 X 8".

3/8-24 X 3/4.
3/8-24 X 1".
3/8-24 X 1. 1/4.
3/8-24 X 1. 1/2.
3/8-24 X 2".
3/8-24 X 2. 1/2.
3/8-24 X 3".
3/8-24 X 3. 1/2.
3/8-24 X 4".

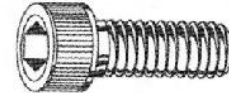
7/16-14 X 3/4.
7/16-14 X 1".
7/16-14 X 1. 1/4.
7/16-14 X 1. 1/2.
7/16-14 X 1. 3/4.
7/16-14 X 2".
7/16-14 X 2. 1/2.
7/16-14 X 3".
7/16-14 X 3. 1/2.
7/16-14 X 4".
7/16-14 X 4. 1/2.
7/16-14 X 5".
7/16-14 X 6".

7/16-20 X 1".
7/16-20 X 1. 1/4.
7/16-20 X 1. 1/2.
7/16-20 X 2".
7/16-20 X 2. 1/2.
7/16-20 X 3".

1/2-13 X 3/4.
1/2-13 X 1".
1/2-13 X 1. 1/4.
1/2-13 X 1. 1/2.
1/2-13 X 1. 3/4.
1/2-13 X 2".
1/2-13 X 2. 1/4.
1/2-13 X 2. 1/2.
1/2-13 X 2. 3/4.
1/2-13 X 3".



TORNILLO ALLEN STD.



DESCRIPCION
1/2-13 X 3. 1/2.
1/2-13 X 4".
1/2-13 X 4. 1/2.
1/2-13 X 5".
1/2-13 X 5. 1/2.
1/2-13 X 6".
1/2-13 X 6. 1/2.
1/2-13 X 7".
1/2-13 X 8".
1/2-13 X 9".
1/2-13 X 10".

1/2-20X 1".
1/2-20X 1. 1/4.
1/2-20X 1. 1/2.
1/2-20X 1. 3/4.
1/2-20X 2".
1/2-20X 2. 1/2.
1/2-20X 3".
1/2-20X 4".
1/2-20X 4. 1/2.
1/2-20X 5".
1/2-20X 5. 1/2.
1/2-20X 6".

9/16-12 X 1. 1/2.
9/16-12 X 2".
9/16-12 X 2. 1/2.
9/16-12 X 3".
9/16-12 X 4.

5/8-11 X 1".
5/8-11 X 1. 1/4.
5/8-11 X 1. 1/2.
5/8-11 X 1. 3/4.
5/8-11 X 2".
5/8-11 X 2. 1/4.
5/8-11 X 2. 1/2.
5/8-11 X 2. 3/4.
5/8-11 X 3".
5/8-11 X 3. 1/2.
5/8-11 X 4".
5/8-11 X 4. 1/2.
5/8-11 X 5".
5/8-11 X 5. 1/2.
5/8-11 X 6".
5/8-11 X 6. 1/2.
5/8-11 X 7".
5/8-11 X 8".

DESCRIPCION
5/8-11 X 9".
5/8-11 X 10".
5/8-11 X 11".

5/8-18 X 1. 1/2.
5/8-18 X 2".
5/8-18 X 2. 1/2.
5/8-18 X 3".
5/8-18 X 3. 1/2.
5/8-18 X 4".
5/8-18 X 4. 1/2.
5/8-18 X 5".

3/4-10 X 1. 1/4.
3/4-10 X 1. 1/2.
3/4-10 X 1. 3/4.
3/4-10 X 2".
3/4-10 X 2. 1/4.
3/4-10 X 2. 1/2.
3/4-10 X 2. 3/4.
3/4-10 X 3".
3/4-10 X 3. 1/2.
3/4-10 X 4".
3/4-10 X 4. 1/2.
3/4-10 X 5".
3/4-10 X 5. 1/2.
3/4-10 X 6".
3/4-10 X 6. 1/2.
3/4-10 X 7".
3/4-10 X 8".
3/4-10 X 9".
3/4-10 X 10".
3/4-10 X 11".
3/4-10 X 12".

3/4-16 X 1. 1/2.
3/4-16 X 2".
3/4-16 X 2. 1/2.
3/4-16 X 3".

7/8-9 X 2".
7/8-9 X 2. 1/4.
7/8-9 X 2. 1/2.
7/8-9 X 2. 3/4.
7/8-9 X 3".
7/8-9 X 3. 1/2.
7/8-9 X 4".
7/8-9 X 4. 1/2.

DESCRIPCION
7/8-9 X 5. 1/2.
7/8-9 X 6".
7/8-9 X 6. 1/2.
7/8-9 X 7".
7/8-9 X 8".
7/8-9 X 10".
7/8-9 X 12".

1"-8 X 2".
1"-8 X 2. 1/4.
1"-8 X 2. 1/2.
1"-8 X 2. 3/4.
1"-8 X 3".
1"-8 X 3. 1/2.
1"-8 X 4".
1"-8 X 4. 1/2.
1"-8 X 5".
1"-8 X 5. 1/2.
1"-8 X 6".
1"-8 X 6. 1/2.
1"-8 X 7".
1"-8 X 8".
1"-8 X 9".
1"-8 X 10".
1"-8 X 11".
1"-8 X 12".

1. 1/4-7 X 2. 1/2.
1. 1/4-7 X 3".
1. 1/4-7 X 3. 1/2.
1. 1/4-7 X 4".
1. 1/4-7 X 4. 1/2.
1. 1/4-7 X 5".
1. 1/4-7 X 5. 1/2.
1. 1/4-7 X 6".
1. 1/4-7 X 6. 1/2.
1. 1/4-7 X 7".
1. 1/4-7 X 8".
1. 1/4-7 X 9".
1. 1/4-7 X 10".
1. 1/4-7 X 12".

DESCRIPCION
1.1/2-6 X 3".
1.1/2-6 X 3. 1/2.
1.1/2-6 X 4".
1.1/2-6 X 4. 1/2.
1.1/2-6 X 5".
1.1/2-6 X 5. 1/2.
1.1/2-6 X 6".
1.1/2-6 X 6. 1/2.
1.1/2-6 X 7".
1.1/2-6 X 8".
1.1/2-6 X 9".
1.1/2-6 X 10".
1.1/2-6 X 12".

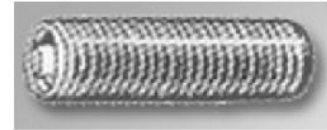


TAPON AUTOSELLANTE ALLEN EN ACERO Y LATON

DESCRIPCION
1/16. NPT
1/8. NPT
1/4. NPT
3/8. NPT
1/2. NPT
3/4. NPT
1". NPT
1. 1/4-11.1/2. NPT
1. 1/2-11.1/2. NPT



OPRESOR ALLEN STD.


DESCRIPCION

4-40 X 1/16.
4-40 X 3/16.
4-40 X 1/4.
4-40 X 3/8.
4-40 X 1/2.
4-40 X 3/4.

5-40 X 1/16.
5-40 X 3/16.
5-40 X 1/4.
5-40 X 5/16.
5-40 X 3/8.
5-40 X 1/2.
5-40 X 3/4.
5-40 X 7/8.
5-40 X 1".

6-32 X 1/8.
6-32 X 3/16.
6-32 X 1/4.
6-32 X 5/16.
6-32 X 3/8.
6-32 X 1/2.
6-32 X 3/4.
6-32 X 1".

8-32 X 1/8.
8-32 X 3/16.
8-32 X 1/4.
8-32 X 5/16.
8-32 X 3/8.
8-32 X 1/2.
8-32 X 3/4.
8-32 X 1".

10-24 X 3/16.
10-24 X 1/4.
10-24 X 5/16.
10-24 X 3/8.
10-24 X 1/2.
10-24 X 5/8.
10-24 X 3/4.
10-24 X 7/8.
10-24 X 1".
10-24 X 1. 1/4.
10-24 X 1. 1/2.
10-24 X 2".

DESCRIPCION

10-32 X 3/16.
10-32 X 1/4.
10-32 X 5/16.
10-32 X 3/8.
10-32 X 1/2.
10-32 X 5/8.
10-32 X 3/4.
10-32 X 1".

1/4-20 X 3/16.
1/4-20 X 1/4.
1/4-20 X 5/16.
1/4-20 X 3/8.
1/4-20 X 1/2.
1/4-20 X 5/8.
1/4-20 X 3/4.
1/4-20 X 7/8.
1/4-20 X 1".
1/4-20 X 1. 1/4.
1/4-20 X 1. 1/2.
1/4-20 X 2".

1/4-28 X 1/4.
1/4-28 X 5/16.
1/4-28 X 3/8.
1/4-28 X 1/2.
1/4-28 X 3/4.
1/4-28 X 1".
1/4-28 X 1. 1/4.
1/4-28 X 1. 1/2.

5/16-18 X 1/4.
5/16-18 X 5/16.
5/16-18 X 3/8.
5/16-18 X 1/2.
5/16-18 X 5/8.
5/16-18 X 3/4.
5/16-18 X 7/8.
5/16-18 X 1".
5/16-18 X 1. 1/4.
5/16-18 X 1. 1/2.
5/16-18 X 2".

5/16-24 X 1/4.
5/16-24 X 5/16.
5/16-24 X 3/8.
5/16-24 X 1/2.
5/16-24 X 3/4.

DESCRIPCION

5/16-24 X 1".
5/16-24 X 1. 1/4.
5/16-24 X 1. 1/2.

3/8-16 X 5/16.
3/8-16 X 3/8.
3/8-16 X 7/16.
3/8-16 X 1/2.
3/8-16 X 5/8.
3/8-16 X 3/4.
3/8-16 X 7/8.
3/8-16 X 1".
3/8-16 X 1. 1/4.
3/8-16 X 1. 1/2.
3/8-16 X 2".
3/8-16 X 2. 1/2.
3/8-16 X 3".

3/8-24 X 3/8.
3/8-24 X 1/2.
3/8-24 X 3/4.
3/8-24 X 1".
3/8-24 X 1. 1/4.
3/8-24 X 1. 1/2.

7/16-14 X 7/16.
7/16-14 X 1/2.
7/16-14 X 3/4.
7/16-14 X 1".
7/16-14 X 1. 1/4.
7/16-14 X 1. 1/2.
7/16-14 X 2".

1/2-13 X 1/2.
1/2-13 X 5/8.
1/2-13 X 3/4.
1/2-13 X 1".
1/2-13 X 1. 1/4.
1/2-13 X 1. 1/2.
1/2-13 X 2".
1/2-13 X 2. 1/2.
1/2-13 X 3".

1/2-20 X 12.
1/2-20 X 3/4.
1/2-20 X 1".
1/2-20 X 1. 1/4.
1/2-20 X 1. 1/2.
1/2-20 X 2".

DESCRIPCION

5/8-11 X 5/8.
5/8-11 X 3/4.
5/8-11 X 1".
5/8-11 X 1. 1/4.
5/8-11 X 1. 1/2.
5/8-11 X 2".
5/8-11 X 2. 1/2.
5/8-11 X 3".

3/4-10 X 3/4.
3/4-10 X 1".
3/4-10 X 1. 1/4.
3/4-10 X 1. 1/2.
3/4-10 X 2".
3/4-10 X 2. 1/2.
3/4-10 X 3".

OPRESOR MOLETEADO

8-32 X 3/16.
8-32 X 1/4.
8-32 X 5/16.
8-32 X 3/8.

10-24 X 3/16.
10-24 X 1/4.
10-24 X 3/8.
10-24 X 1/2.

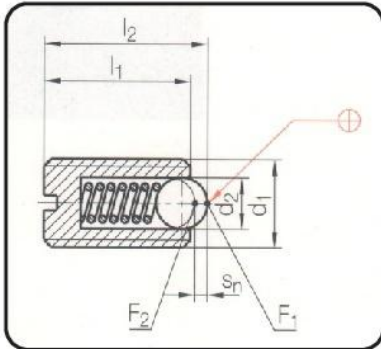
1/4-20 X 1/4.
1/4-20 X 5/16.
1/4-20 X 3/8.
1/4-20 X 1/2.
1/4-20 X 3/4.
1/4-20 X 1".

5/16-18 X 5/16.
5/16-18 X 3/8.
5/16-18 X 1/2.
5/16-18 X 3/4.
5/16-18 X 1".

3/8-16 X 5/16.
3/8-16 X 3/8.
3/8-16 X 1/2.
3/8-16 X 3/4.
3/8-16 X 1".

1/2-13 X 1/2.
1/2-13 X 3/4.
1/2-13 X 1".

OPRESOR DE ACERO CON BALIN DE ACERO INOXIDABLE MM.


VENTAJAS:

La punta de la nariz es de acero inoxidable, el sistema de fijación es (mm) en todos los opresores, manteniendo el cuerpo del mismo fijo en su lugar, sin necesidad de usar tuercas u otros accesorios.



max.°C	d ₂	s _n	F ₁ (N)	F ₂ (N)	l ₂	d ₁	l ₁	Nr. /No.
250	2,5	0,64	6	11,6	9,8	M 4	9	37 / 4x 9
	3	0,72	8,8	13,3	12,9	M 5	12	5x 12
	3,5	0,8	11,2	15,1	15	M 6	14	6x 14
	5	1,2	18,5	29,5	17,5	M 8	16	8x 16
	6	1,6	23,9	43	21	M 10	19	10x 19
	8	2	35,9	59,8	24,5	M 12	22	12x 22
	10	2,4	74	101,6	27,5	M 16	24	16x 24

OPRESOR DE ACERO

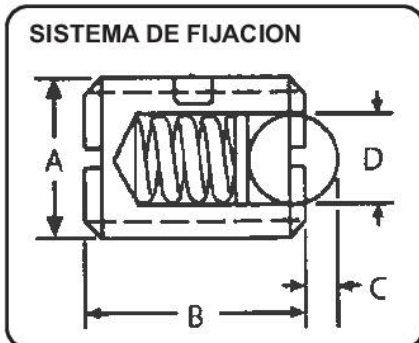
CON BALIN DE ACERO INOXIDABLE STD.


VENTAJAS:

- La punta de la nariz es de acero inoxidable.
- El sistema de fijación es estándar en todos los opresores, manteniendo el cuerpo del mismo, fijo en su lugar, sin necesidad de usar tuercas u otros accesorios.

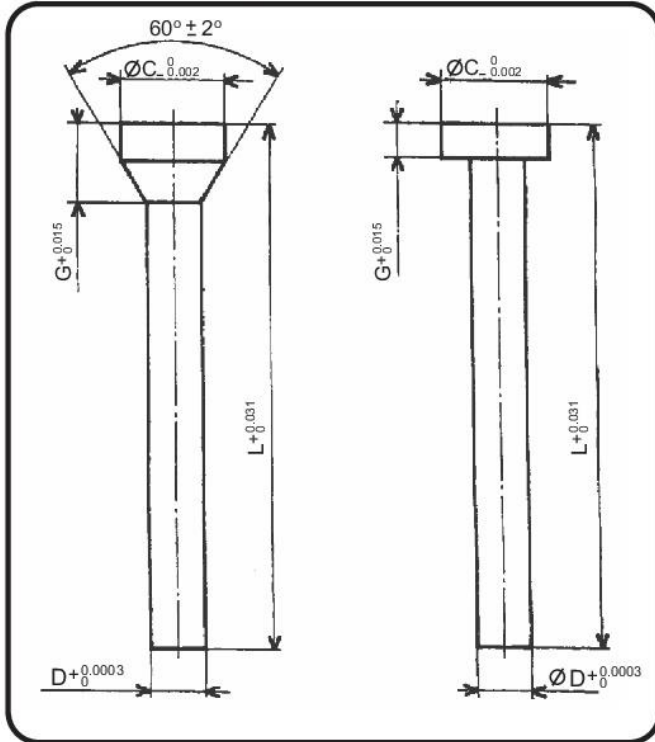
CODIGO DE COLORES

Negra = Fuerza Estándar

SISTEMA DE FIJACION


CODIGO COLOR	PRESION FINAL		DIMENSIONES				No. DE MODELO
	INICIO	FINAL	A	B	C	D	
Negro	1.5	3.0	#10-32	33/64	.025	.093	B-3
Negro	3.0	7.0	1/4 -20	17/32	.035	.125	B-4
Negro	4.0	9.0	5/16 -18	37/64	.040	.156	B-5
Negro	5.0	10.0	3/8 -16	5/8	.048	.187	B-6
Negro	6.0	12.0	1/2 -13	3/4	.072	.281	B-7
Negro	9.0	18.0	5/8 -11	63/64	.096	.375	B-8

PUNZON PERFORADOR

TIPO "A" con ángulo
TIPO "C" Cilíndrica


Para Ordenar Sirvase Indicar: Ejemplos

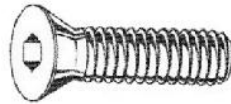
CANTIDAD	CATALOGO	DIAMETRO	LARGO	TIPO DE CABEZA
50	P-7	0.125	X 2 1/2"	A
100	P-11	0.1875	X 3"	C

MATERIAL ACERO RAPIDO M-2
DUREZA 60-62 RC
 TEMPLADOS CON PROCESO BAJO CERO
 PARA MAYOR RENDIMIENTO

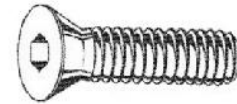
TIPO DE CABEZA *A* CON ANGULO
 TIPO DE CABEZA *C* CILINDRICA

LARGOS DISPONIBLES EN:
 2" 2 1/2" 3" Y 3 1/2"

CATALOGO	D		C	G
	DIAMETRO		CABEZA	GRUESO
P- 4/00	.010	.014	0.030	1/16
P- 3/00	.015	.019	0.035	1/16
P- 2/00	.020	.024	0.055	1/16
P- 1/00	.025	.029	0.060	3/32
P- 1	.030	.040	0.070	3/32
P- 2	.041	.055	0.085	3/32
P- 3	.056	.070	0.100	3/32
P- 4	.071	.085	0.115	3/32
P- 5	.086	.100	0.130	3/32
P- 6	.101	.115	0.145	3/32
P- 7	.116	.130	0.160	3/32
P- 8	.131	.145	0.175	3/32
P- 9	.146	.160	0.190	3/32
P- 10	.161	.175	0.205	1/8
P- 11	.176	.190	0.220	1/8
P- 12	.191	.205	0.235	1/8
P- 13	.206	.220	0.250	1/8
P- 14	.221	.235	0.265	1/8
P- 15	.236	.250	0.280	1/8
P- 16	.251	.265	0.295	1/8
P- 17	.266	.280	0.310	1/8
P- 18	.281	.295	0.325	1/8
P- 19	.296	.310	0.340	1/8
P- 20	.311	.325	0.355	3/16
P- 21	.326	.340	0.370	3/16



TORNILLO ALLEN CABEZA PLANA STD.



DESCRIPCION
4-40 X 1/4.
4-40 X 3/8.
4-40 X 1/2.
4-40 X 3/4.

5-40 X 1/4.
5-40 X 3/8.
5-40 X 1/2.
5-40 X 3/4.
5-40 X 1".

6-32 X 1/4.
6-32 X 3/8.
6-32 X 1/2.
6-32 X 3/4.
6-32 X 1".

8-32 X 3/8.
8-32 X 1/2.
8-32 X 5/8.
8-32 X 3/4.
8-32 X 1".

10-24 X 3/8.
10-24 X 1/2.
10-24 X 5/8.
10-24 X 3/4.
10-24 X 1".
10-24 X 1. 1/4.
10-24 X 1. 1/2.
10-24 X 2".
10-24 X 2. 1/2.
10-24 X 3".

10-32 X 3/8.
10-24 X 1/2.
10-24 X 3/4.
10-24 X 1".

1/4-20 X 1/2.
1/4-20 X 5/8.
1/4-20 X 3/4.
1/4-20 X 1".
1/4-20 X 1. 1/4.
1/4-20 X 1. 1/2.
1/4-20 X 1. 3/4.
1/4-20 X 2".
1/4-20 X 2. 1/2.
1/4-20 X 3".

DESCRIPCION
1/4-28 X 1/2.
1/4-28 X 3/4.
1/4-28 X 1".
1/4-28 X 1. 1/4.
1/4-28 X 1. 1/2.

5/16-18 X 1/2.
5/16-18 X 5/8.
5/16-18 X 3/4.
5/16-18 X 1".
5/16-18 X 1. 1/4.
5/16-18 X 1. 1/2.
5/16-18 X 1. 3/4.
5/16-18 X 2".
5/16-18 X 2. 1/2.
5/16-18 X 3".
5/16-18 X 3. 1/2.
5/16-18 X 4".

5/16-24 X 1/2.
5/16-24 X 3/4.
5/16-24 X 1".
5/16-24 X 1. 1/2.

3/8-16 X 1/2.
3/8-16 X 3/4.
3/8-16 X 1".
3/8-16 X 1. 1/4.
3/8-16 X 1. 1/2.
3/8-16 X 1. 3/4.
3/8-16 X 2".
3/8-16 X 2. 1/2.
3/8-16 X 3".
3/8-16 X 3. 1/2.
3/8-16 X 4".
3/8-16 X 5".
3/8-16 X 6".

3/8-24 X 3/4.
3/8-24 X 1".
3/8-24 X 1. 1/4.
3/8-24 X 1. 1/2.

DESCRIPCION
1/2-13 X 1".
1/2-13 X 1 1/4.
1/2-13 X 1. 1/2.
1/2-13 X 1. 3/4.
1/2-13 X 2".
1/2-13 X 2. 1/2.
1/2-13 X 3".
1/2-13 X 3. 1/2.
1/2-13 X 4".
1/2-13 X 4. 1/2.

1/2-20 X 1".
1/2-20 X 1. 1/2.
1/2-20 X 2".

DESCRIPCION
5/8-11 X 1. 1/4.
5/8-11 X 1. 1/2.
5/8-11 X 1. 3/4.
5/8-11 X 2".
5/8-11 X 2. 1/2.
5/8-11 X 3".
5/8-11 X 4".

3/4-11 X 1. 1/2.
3/4-11 X 2".
3/4-11 X 2. 1/2.
3/4-11 X 3".
3/4-11 X 3. 1/2.
3/4-11 X 4".

TORNILLO ALLEN MM.



DESCRIPCION
3 X 6.
3 X 8.
3 X 10.
3 X 12.
3 X 16.
3 X 20.
3 X 25.
3 X 30.
3 X 35.
3 X 40.

4 X 6.
4 X 8.
4 X 10.
4 X 12.
4 X 16.
4 X 20.
4 X 25.
4 X 30.
4 X 35.
4 X 40.
4 X 45.
4 X 50.

5 X 6.
5 X 8.
5 X 10.
5 X 12.
5 X 16.
5 X 20.
5 X 25.
5 X 30.
5 X 35.
5 X 40.
5 X 45.
5 X 50.
5 X 55.
5 X 60.
5 X 65.
5 X 70.
5 X 80.
5 X 90.
5 X 100.

6 X 10.
6 X 12.
6 X 14.
6 X 16.
6 X 20.

DESCRIPCION
6 X 25.
6 X 30.
6 X 35.
6 X 40.
6 X 45.
6 X 50.
6 X 55.
6 X 60.
6 X 65.
6 X 70.
6 X 75.
6 X 80.
6 X 90.
6 X 100.
6 X 110.
6 X 120.

8 X 10.
8 X 12.
8 X 16.
8 X 20.
8 X 25.
8 X 30.
8 X 35.
8 X 40.
8 X 45.
8 X 50.
8 X 55.
8 X 60.
8 X 65.
8 X 70.
8 X 75.
8 X 80.
8 X 90.
8 X 100.
8 X 110.
8 X 120.
8 X 130.
8 X 140.
8 X 150.
8 X 160.

10 X 12.
10 X 16.
10 X 20.
10 X 25.
10 X 30.
10 X 35.
10 X 40.

DESCRIPCION
10 X 45.
10 X 50.
10 X 55.
10 X 60.
10 X 65.
10 X 70.
10 X 75.
10 X 80.
10 X 90.
10 X 100.
10 X 110.
10 X 120.
10 X 130.
10 X 140.
10 X 150.
10 X 160.
10 X 180.
10 X 200.

12 X 20.
12 X 25.
12 X 30.
12 X 35.
12 X 40.
12 X 45.
12 X 50.
12 X 55.
12 X 60.
12 X 65.
12 X 70.
12 X 75.
12 X 80.
12 X 90.
12 X 100.
12 X 110.
12 X 120.
12 X 130.
12 X 140.
12 X 150.
12 X 160.
12 X 180.
12 X 200.

14 X 25.
14 X 30.
14 X 35.
14 X 40.
14 X 45.
14 X 50.

DESCRIPCION
14 X 55.
14 X 60.
14 X 65.
14 X 70.
14 X 75.
14 X 80.
14 X 90.
14 X 100.
14 X 110.
14 X 120.
14 X 130.
14 X 140.
14 X 150.
14 X 160.
14 X 180.
14 X 200.

16 X 25.
16 X 30.
16 X 35.
16 X 40.
16 X 45.
16 X 50.
16 X 55.
16 X 60.
16 X 65.
16 X 70.
16 X 75.
16 X 80.
16 X 90.
16 X 100.
16 X 110.
16 X 120.
16 X 130.
16 X 140.
16 X 150.
16 X 160.
16 X 180.
16 X 190.
16 X 200.

18 X 35.
18 X 40.
18 X 45.
18 X 50.
18 X 55.
18 X 60.
18 X 70.
18 X 80.



TORNILLO ALLEN MM.

DESCRIPCION
18 X 90.
18 X 100.
18 X 110.
18 X 120.
18 X 130.
18 X 140.
18 X 150.

20 X 35.
20 X 40.
20 X 45.
20 X 50.
20 X 55.
20 X 60.
20 X 65.
20 X 70.
20 X 75.
20 X 80.
20 X 90.
20 X 100.
20 X 110.
20 X 120.
20 X 130.
20 X 140.
20 X 150.
20 X 160.
20 X 180.
20 X 200.
20 X 220.
20 X 230.
20 X 240.
20 X 250.
20 X 260.
20 X 270.
20 X 280.
20 X 290.
20 X 300.

22 X 40.
22 X 45.
22 X 50.
22 X 55.
22 X 60.
22 X 65.
22 X 70.
22 X 80.
22 X 90.
22 X 100.

DESCRIPCION
22 X 110.
22 X 120.
22 X 130.
22 X 140.
22 X 150.
22 X 180.
22 X 200.

24 X 40.
24 X 45.
24 X 50.
24 X 55.
24 X 60.
24 X 65.
24 X 70.
24 X 75.
24 X 80.
24 X 90.
24 X 100.
24 X 110.
24 X 120.
24 X 130.
24 X 140.
24 X 150.
24 X 160.
24 X 180.
24 X 200.
24 X 220.
24 X 230.
24 X 240.
24 X 250.
24 X 260.
24 X 270.
24 X 280.
24 X 300.

30 X 60.
30 X 70.
30 X 80.
30 X 90.
30 X 100.
30 X 110.
30 X 120.
30 X 130.
30 X 140.
30 X 150.
30 X 160.
30 X 180.
30 X 200.



OPRESOR ALLEN MM.

DESCRIPCION
3 X 3.
3 X 6.
3 X 8.
3 X 10.
3 X 12.
3 X 16.

4 X 4.
4 X 6.
4 X 8.
4 X 10.
4 X 12.
4 X 16.
4 X 20.

5 X 6.
5 X 8.
5 X 10.
5 X 12.
5 X 16.
5 X 20.
5 X 25.
5 X 30.
5 X 35.
5 X 40.

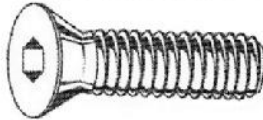
6 X 6.
6 X 8.
6 X 10.
6 X 12.
6 X 16.
6 X 20.
6 X 25.
6 X 30.
6 X 35.
6 X 40.

8 X 8.
8 X 10.
8 X 12.
8 X 16.
8 X 20.
8 X 25.
8 X 30.
8 X 35.
8 X 40.
8 X 45.
8 X 50.

DESCRIPCION
10 X 10.
10 X 12.
10 X 16.
10 X 20.
10 X 25.
10 X 30.
10 X 35.
10 X 40.
10 X 45.
10 X 50.
10 X 55.
10 X 60.

12 X 12.
12 X 16.
12 X 20.
12 X 25.
12 X 30.
12 X 35.
12 X 40.
12 X 45.
12 X 50.
12 X 55.
12 X 60.

12 X 16.
12 X 20.
12 X 25.
12 X 30.
12 X 35.
12 X 40.
12 X 50.
12 X 60.



TORNILLO CABEZA PLANA MM.

DESCRIPCION
3 X 6.
3 X 8.
3 X 10.
3 X 12.
3 X 16.
3 X 20.
3 X 25.
3 X 30.

4 X 8.
4 X 10.
4 X 12.
4 X 16.
4 X 20.
4 X 25.
4 X 30.
4 X 35.
4 X 40.

5 X 8.
5 X 10.
5 X 12.
5 X 16.
5 X 20.
5 X 25.
5 X 30.
5 X 35.
5 X 40.
5 X 45.
5 X 50.

6 X 10.
6 X 12.
6 X 16.
6 X 20.
6 X 25.
6 X 30.
6 X 35.
6 X 40.
6 X 45.
6 X 50.
6 X 60.
6 X 70.

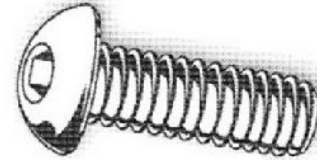
8 X 10.
8 X 12.
8 X 16.
8 X 20.
8 X 25.

DESCRIPCION
8 X 30.
8 X 35.
8 X 40.
8 X 45.
8 X 50.
8 X 55.
8 X 60.
8 X 65.
8 X 70.
8 X 80.

10 X 12.
10 X 16.
10 X 20.
10 X 25.
10 X 30.
10 X 35.
10 X 40.
10 X 45.
10 X 50.
10 X 55.
10 X 60.
10 X 65.
10 X 70.
10 X 80.
10 X 90.
10 X 100.

12 X 20.
12 X 25.
12 X 30.
12 X 35.
12 X 40.
12 X 45.
12 X 50.
12 X 55.
12 X 60.
12 X 70.
12 X 80.
12 X 90.
12 X 100.

16 X 30.
16 X 35.
16 X 40.
16 X 45.
16 X 50.
16 X 60.



TORNILLO BOTON ALLEN MM.

DESCRIPCION
4 X 6.
4 X 8.
4 X 10.
4 X 12.
4 X 16.
4 X 20.
4 X 25.

5 X 8.
5 X 10.
5 X 12.
5 X 16.
5 X 20.
5 X 25.
5 X 30.

6 X 10.
6 X 12.
6 X 16.
6 X 20.
6 X 25.
6 X 30.
6 X 35.
6 X 40.

DESCRIPCION
8 X 10.
8 X 12.
8 X 16.
8 X 20.
8 X 25.
8 X 30.
8 X 35.
8 X 40.

10 X 20.
10 X 25.
10 X 30.
10 X 35.
10 X 40.
10 X 45.
10 X 50.

12 X 20.
12 X 25.
12 X 30.
12 X 35.
12 X 40.
12 X 45.
12 X 50.

RANGO DE DEFORMACION RECOMENDABLE	25% - 35%	20% - 25%	15% - 20%	15% - 17%
COLOR	AZUL	ROJO	DORADO	VERDE
CLAVE + MEDIDA	RA	RR	RD	RV

L	DIA EXT 3/8 DIA INT 3/16	1/2 9/32	5/8 11/32	3/4 3/8	1" 1/2	1 1/4 5/8	1 1/2 3/4	2" 1"
1"	RA 3/8 *1"	RA 1/2 *1"	RA 5/8 *1"	RA 3/4 *1"	RA 1" *1"	RA 1 1/4 *1"	RA 1 1/2 *1"	RA 2" *1"
1 1/4	RA 3/8 *1 1/4	RA 1/2 *1 1/4	RA 5/8 *1 1/4	RA 3/4 *1 1/4	RA 1" *1 1/4	RA 1 1/4 *1 1/4	RA 1 1/2 *1 1/4	RA 2" *1 1/4
1 1/2	RA 3/8 *1 1/2	RA 1/2 *1 1/2	RA 5/8 *1 1/2	RA 3/4 *1 1/2	RA 1" *1 1/2	RA 1 1/4 *1 1/2	RA 1 1/2 *1 1/2	RA 2" *1 1/2
1 3/4	RA 3/8 *1 3/4	RA 1/2 *1 3/4	RA 5/8 *1 3/4	RA 3/4 *1 3/4	RA 1" *1 3/4	RA 1 1/4 *1 3/4	RA 1 1/2 *1 3/4	RA 2" *1 3/4
2"	RA 3/8 *2"	RA 1/2 *2"	RA 5/8 *2"	RA 3/4 *2"	RA 1" *2"	RA 1 1/4 *2"	RA 1 1/2 *2"	RA 2" *2"
2 1/4	RA 3/8 *2 1/4	RA 1/2 *2 1/4	RA 5/8 *2 1/4	RA 3/4 *2 1/4	RA 1" *2 1/4	RA 1 1/4 *2 1/4	RA 1 1/2 *2 1/4	RA 2" *2 1/4
2 1/2	RA 3/8 *2 1/2	RA 1/2 *2 1/2	RA 5/8 *2 1/2	RA 3/4 *2 1/2	RA 1" *2 1/2	RA 1 1/4 *2 1/2	RA 1 1/2 *2 1/2	RA 2" *2 1/2
2 3/4	RA 3/8 *2 3/4	RA 1/2 *2 3/4	RA 5/8 *2 3/4	RA 3/4 *2 3/4	RA 1" *2 3/4	RA 1 1/4 *2 3/4	RA 1 1/2 *2 3/4	RA 2" *2 3/4
3"	RA 3/8 *3"	RA 1/2 *3"	RA 5/8 *3"	RA 3/4 *3"	RA 1" *3"	RA 1 1/4 *3"	RA 1 1/2 *3"	RA 2" *3"
3 1/4	RA 3/8 *3 1/4	RA 1/2 *3 1/4	RA 5/8 *3 1/4	RA 3/4 *3 1/4	RA 1" *3 1/4	RA 1 1/4 *3 1/4	RA 1 1/2 *3 1/4	RA 2" *3 1/4
3 1/2	RA 3/8 *3 1/2	RA 1/2 *3 1/2	RA 5/8 *3 1/2	RA 3/4 *3 1/2	RA 1" *3 1/2	RA 1 1/4 *3 1/2	RA 1 1/2 *3 1/2	RA 2" *3 1/2
3 3/4	RA 3/8 *3 3/4	RA 1/2 *3 3/4	RA 5/8 *3 3/4	RA 3/4 *3 3/4	RA 1" *3 3/4	RA 1 1/4 *3 3/4	RA 1 1/2 *3 3/4	RA 2" *3 3/4
4"	RA 3/8 *4"	RA 1/2 *4"	RA 5/8 *4"	RA 3/4 *4"	RA 1" *4"	RA 1 1/4 *4"	RA 1 1/2 *4"	RA 2" *4"
4 1/2	RA 3/8 *4 1/2	RA 1/2 *4 1/2	RA 5/8 *4 1/2	RA 3/4 *4 1/2	RA 1" *4 1/2	RA 1 1/4 *4 1/2	RA 1 1/2 *4 1/2	RA 2" *4 1/2
5"	RA 3/8 *5"	RA 1/2 *5"	RA 5/8 *5"	RA 3/4 *5"	RA 1" *5"	RA 1 1/4 *5"	RA 1 1/2 *5"	RA 2" *5"
5 1/2	RA 3/8 *5 1/2	RA 1/2 *5 1/2	RA 5/8 *5 1/2	RA 3/4 *5 1/2	RA 1" *5 1/2	RA 1 1/4 *5 1/2	RA 1 1/2 *5 1/2	RA 2" *5 1/2
6"	RA 3/8 *6"	RA 1/2 *6"	RA 5/8 *6"	RA 3/4 *6"	RA 1" *6"	RA 1 1/4 *6"	RA 1 1/2 *6"	RA 2" *6"
7"	RA 3/8 *7"	RA 1/2 *7"	RA 5/8 *7"	RA 3/4 *7"	RA 1" *7"	RA 1 1/4 *7"	RA 1 1/2 *7"	RA 2" *7"
8"	RA 3/8 *8"	RA 1/2 *8"	RA 5/8 *8"	RA 3/4 *8"	RA 1" *8"	RA 1 1/4 *8"	RA 1 1/2 *8"	RA 2" *8"
9"	RA 3/8 *9"	RA 1/2 *9"	RA 5/8 *9"	RA 3/4 *9"	RA 1" *9"	RA 1 1/4 *9"	RA 1 1/2 *9"	RA 2" *9"
10"	RA 3/8 *10"	RA 1/2 *10"	RA 5/8 *10"	RA 3/4 *10"	RA 1" *10"	RA 1 1/4 *10"	RA 1 1/2 *10"	RA 2" *10"
11"	RA 3/8 *11"	RA 1/2 *11"	RA 5/8 *11"	RA 3/4 *11"	RA 1" *11"	RA 1 1/4 *11"	RA 1 1/2 *11"	RA 2" *11"
12"	RA 3/8 *12"	RA 1/2 *12"	RA 5/8 *12"	RA 3/4 *12"	RA 1" *12"	RA 1 1/4 *12"	RA 1 1/2 *12"	RA 2" *12"



CONFIRME SUS PEDIDOS COMO EL SIGUIENTE EJEMPLO

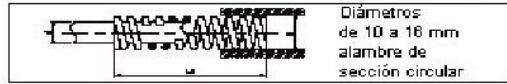
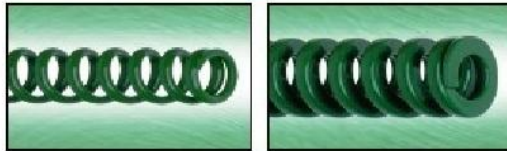
CLAVE DESCRIPCION
RA 5/8 * 1 RESORTE AZUL 5/8 * 1

INDIQUE EL COLOR CONFORME LO INDICA LA TABLA
RA=AZUL RR=ROJO RD=DORADO RV=VERDE

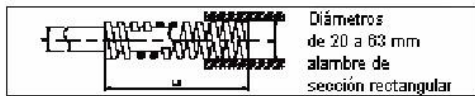
NOTA IMPORTANTE:

FABRICAMOS CUALQUIER TIPO DE RESORTE EN LA MEDIDA QUE USTED LO REQUIERA Y EN LAS DIMENSIONES QUE USTED LO NECESITE

Resortes para cargas ligeras COLOR VERDE



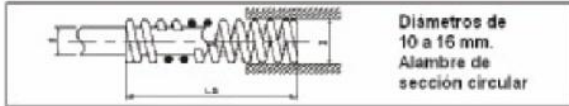
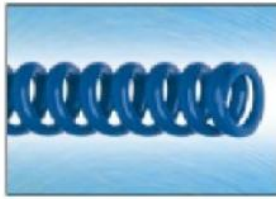
D mm	d mm	Lo mm	No. de catálogo	Const. elástica daN nec. para comp. 1 mm	Tabla de cargas			
					Carrera máxima de trabajo (40% de L0)		Carrera hasta el sólido	
					Carga daN	Carr. mm	Carga daN	Carr. mm
10 3/8	5 3/16	25	DCG.010.025	0.45	4.6	10.2	5.8	13
		32	DCG.010.032	0.35	4.4	12.5	5.6	16
		38	DCG.010.038	0.28	4.2	15	5.6	20
		44	DCG.010.044	0.24	4.3	18	5.6	23
		51	DCG.010.051	0.21	4.2	20	5.6	27
		64	DCG.010.064	0.16	4	25	5.5	34
		76	DCG.010.076	0.13	3.9	30	5.3	40
		305	DCG.010.305	0.03	3.7	122	4.9	163
12.5 1/2	6.3 9/32	25	DCG.012.025	0.89	9.1	10.2	11.6	13
		32	DCG.012.032	0.67	8.4	12.5	11.4	17
		38	DCG.012.038	0.55	8.3	15	11	20
		44	DCG.012.044	0.46	8.3	18	10.6	23
		51	DCG.012.051	0.39	7.8	20	10.5	27
		64	DCG.012.064	0.30	7.5	25	10.5	35
		76	DCG.012.076	0.25	7.5	30	10.3	41
		305	DCG.012.305	0.06	7.3	122	10	166
16 5/8	8 11/32	25	DCG.016.025	1.79	18.3	10.2	23	13
		32	DCG.016.032	1.34	16.8	12.5	21	16
		38	DCG.016.038	1.06	15.9	15	21	20
		44	DCG.016.044	0.87	15.7	18	20	23
		51	DCG.016.051	0.76	15.2	20	20	27
		64	DCG.016.064	0.59	14.8	25	20	34
		76	DCG.016.076	0.48	14.4	30	19.7	41
		305	DCG.016.305	0.11	13.4	122	18.7	170



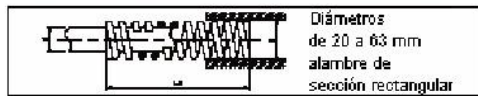
D Mm	d mm	Lo mm	No. de catálogo	Const. elástica daN nec. para comp. 1 mm	Tabla de cargas			
					Carrera máxima de trabajo (40% de L0)		Carrera hasta el sólido	
					Carga daN			
20 3/4	10 3/8	25	DCG.020.025	5.50	57	10.2	73	13
		32	DCG.020.032	4.20	54	12.5	69	16
		38	DCG.020.038	3.30	51	15	65	19
		44	DCG.020.044	2.77	51	18	64	23
		51	DCG.020.051	2.45	50	20	64	26
		64	DCG.020.064	1.90	49	25	62	32
		76	DCG.020.076	1.61	48	30	62	40
		89	DCG.020.089	1.34	47	35	62	46
		102	DCG.020.102	1.18	48	41	62	53
		115	DCG.020.115	1.04	48	46	62	60
		127	DCG.020.127	0.93	47	51	62	67
		140	DCG.020.140	0.85	48	56	62	73
		152	DCG.020.152	0.79	48	61	62	81
		305	DCG.020.305	0.38	46	122	61	162

D mm	d mm	Lo mm	No. de catálogo	Const. elástica daN nec. para comp. 1 mm	Tabla de cargas					
					Carrera máxima de trabajo (40% de L0)		Carrera hasta el sólido			
					Carga daN	Carr. mm	Carga daN	Carr. mm		
25 1	12.5 1/2	25	DCG.025.025	10.7	109	10.2	139	13		
		32	DCG.025.032	8.1	101	12.5	130	16		
		38	DCG.025.038	6.5	98	15	124	19		
		44	DCG.025.044	5.3	95	18	122	23		
		51	DCG.025.051	4.6	92	20	115	25		
		64	DCG.025.064	3.6	90	25	112	31		
		76	DCG.025.076	2.92	88	30	112	39		
		89	DCG.025.089	2.46	86	35	112	46		
		102	DCG.025.102	2.12	87	41	110	52		
		115	DCG.025.115	1.87	86	46	110	59		
		127	DCG.025.127	1.67	85	51	110	66		
		140	DCG.025.140	1.52	85	56	112	74		
		152	DCG.025.152	1.4	85	61	110	80		
		178	DCG.025.178	1.2	85	71	110	93		
		203	DCG.025.203	1.05	85	81	110	107		
		305	DCG.025.305	0.7	85	122	110	160		
32 1 1/4	16 5/8	38	DCG.032.038	10.1	152	15	192	19		
		44	DCG.032.044	8.3	149	18	183	22		
		51	DCG.032.051	7.1	142	20	178	25		
		64	DCG.032.064	5.5	138	25	176	32		
		76	DCG.032.076	4.6	138	30	175	39		
		89	DCG.032.089	3.9	137	35	175	45		
		102	DCG.032.102	3.4	139	41	175	52		
		115	DCG.032.115	3.0	138	46	174	58		
		127	DCG.032.127	2.62	134	51	170	65		
		140	DCG.032.140	2.38	133	56	171	72		
		152	DCG.032.152	2.19	134	61	170	78		
		178	DCG.032.178	1.82	129	71	165	88		
		203	DCG.032.203	1.59	129	81	165	104		
		254	DCG.032.254	1.25	128	102	163	130		
		305	DCG.032.305	1.04	127	122	161	155		
		40 1 1/2	20 3/4	51	DCG.040.051	10.6	212	20	265	25
64	DCG.040.064			8	200	25	256	32		
76	DCG.040.076			6.6	198	30	250	38		
89	DCG.040.089			5.6	196	35	250	45		
102	DCG.040.102			4.8	197	41	245	51		
115	DCG.040.115			4.2	193	46	243	58		
127	DCG.040.127			3.8	194	51	243	65		
140	DCG.040.140			3.4	190	56	241	71		
152	DCG.040.152			3.1	189	61	241	78		
178	DCG.040.178			2.6	185	71	240	92		
203	DCG.040.203			2.3	186	81	240	105		
254	DCG.040.254			1.8	184	102	236	131		
305	DCG.040.305			1.48	181	122	226	157		
50 2	25 1			64	DCG.050.064	15.7	393	25	502	32
				76	DCG.050.076	12.6	378	30	491	39
				89	DCG.050.089	10.5	368	35	473	45
		102	DCG.050.102	9.0	369	41	468	52		
		115	DCG.050.115	7.8	359	46	455	58		
		127	DCG.050.127	7.0	357	51	455	65		
		140	DCG.050.140	6.3	353	56	446	72		
		152	DCG.050.152	5.7	348	61	445	78		
		178	DCG.050.178	4.8	341	71	441	92		
		203	DCG.050.203	4.2	340	81	437	104		
		254	DCG.050.254	3.3	337	102	429	130		
		305	DCG.050.305	2.7	329	122	421	156		
		63 2 1/2	38 1 1/2	76	DCG.063.076	19.3	579	30	733	38
				89	DCG.063.089	15.8	553	35	695	44
				102	DCG.063.102	13.4	549	41	670	50
				115	DCG.063.115	11.6	534	46	661	57
127	DCG.063.127			10.2	520	51	653	64		
152	DCG.063.152			8.4	512	61	638	76		
178	DCG.063.178			7.0	497	71	623	89		
203	DCG.063.203			6.0	486	81	612	102		
254	DCG.063.254			4.7	479	102	592	126		
305	DCG.063.305			3.9	476	122	592	152		

Resortes para cargas medianas COLOR AZUL



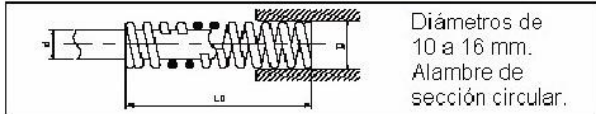
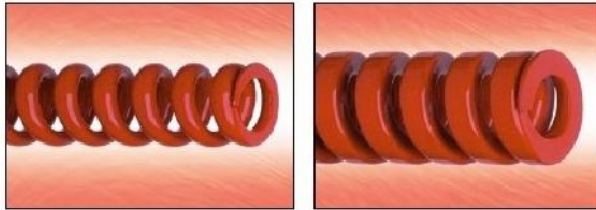
D mm	d mm	Lo mm	No. de catálogo	Const. elástica daN nec. para comp. 1 mm	Tabla de cargas			
					Carrera máxima de trabajo 37.5% de L0		Carrera hasta el sólido	
					Carga daN	Carr. mm	Carga daN	Carr. mm
10 3/8	5 3/16	25	DCB.010.025	1.26	11.8	9.4	13	11
		32	DCB.010.032	0.98	11.8	12	12.8	13
		38	DCB.010.038	0.79	11.1	14	12.6	16
		44	DCB.010.044	0.66	10.9	16.5	12.5	19
		51	DCB.010.051	0.57	10.8	19	12.2	21
		64	DCB.010.064	0.45	10.8	24	12.2	27
		76	DCB.010.076	0.37	10.4	28	12.2	33
305	DCB.010.305	0.09	10.3	114	12.2	136		
12.5 1/2	6.3 9/32	25	DCB.012.025	2.28	21.4	9.4	23	11
		32	DCB.012.032	1.75	21	12	22.8	13
		38	DCB.012.038	1.43	20	14	22.8	16
		44	DCB.012.044	1.18	19.5	16.5	22.5	19
		51	DCB.012.051	1.02	19.4	19	22.4	22
		64	DCB.012.064	0.79	19	24	22.1	28
		76	DCB.012.076	0.65	18.2	28	22	34
89	DCB.012.089	0.55	18.2	33	22.6	41		
305	DCB.012.305	0.15	17.1	114	21.6	144		
16 5/8	8 11/32	25	DCB.016.025	3.38	31.8	9.4	33.8	11
		32	DCB.016.032	2.5	30	12	32.8	13
		38	DCB.016.038	2.01	28.1	14	32.2	16
		44	DCB.016.044	1.67	27.6	16.5	30.9	19
		51	DCB.016.051	1.42	27	19	30	21
		64	DCB.016.064	1.1	26.4	24	29.7	27
		76	DCB.016.076	0.9	25.2	28	29.7	33
		89	DCB.016.089	0.76	25.1	33	29.6	39
		102	DCB.016.102	0.66	25.1	38	29.6	45
		305	DCB.016.305	0.21	23.9	114	29	138



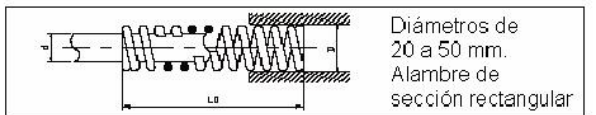
D mm	d mm	Lo mm	No. de catálogo	Const. elástica daN nec. para comp. 1 mm	Tabla de cargas			
					Carrera máxima de trabajo 37.5% de L0		Carrera hasta el sólido	
					Carga daN	Carr. mm	Carga daN	Carr. mm
20 3/4	10 3/8	25	DCB.020.025	9.02	84.8	9.4	99	11
		32	DCB.020.032	6.67	80	12	90	13
		38	DCB.020.038	5.48	76.7	14	88	16
		44	DCB.020.044	4.45	73.4	16.5	85	19
		51	DCB.020.051	3.94	74.9	19	83	21
		64	DCB.020.064	3.03	72.7	24	82	27
		76	DCB.020.076	2.49	69.7	28	82	33
		89	DCB.020.089	2.14	70.6	33	82	39
		102	DCB.020.102	1.84	69.9	38	81	44
		115	DCB.020.115	1.63	70.1	43	80	49
		127	DCB.020.127	1.46	70.1	48	80	55
		140	DCB.020.140	1.32	69	52	80	61
		152	DCB.020.152	1.21	69	57	80	66
		305	DCB.020.305	0.61	69.5	114	80	136

D mm	d mm	Lo mm	No. de catálogo	Const. elástica daN nec. para comp. 1 mm	Tabla de cargas			
					Carrera máxima de trabajo 37.5% de L0		Carrera hasta el sólido	
					Carga daN	Carr. mm	Carga daN	Carr. mm
25 1	12.5 1/2	25	DCB.025.025	16.7	157	9.4	184	11
		32	DCB.025.032	12.5	150	12	170	13
		38	DCB.025.038	9.9	139	14	158	16
		44	DCB.025.044	8.3	137	16.5	158	19
		51	DCB.025.051	7.2	137	19	156	21
		64	DCB.025.064	5.5	132	24	151	27
		76	DCB.025.076	4.5	126	28	148	33
		89	DCB.025.089	3.8	125	33	148	39
		102	DCB.025.102	3.3	125	38	145	44
		115	DCB.025.115	2.91	125	43	145	50
		127	DCB.025.127	2.63	126	48	145	56
		140	DCB.025.140	2.36	123	52	149	63
		152	DCB.025.152	2.17	124	57	145	67
		178	DCB.025.178	1.84	123	67	145	79
		203	DCB.025.203	1.6	122	76	144	90
		305	DCB.025.305	1.05	120	114	142	135
		32 1 1/4	16 5/8	38	DCB.032.038	16.6	232	14
44	DCB.032.044			13.6	224	16.5	258	19
51	DCB.032.051			11.6	220	19	244	21
64	DCB.032.064			8.8	211	24	238	27
76	DCB.032.076			7.1	199	28	227	32
89	DCB.032.089			6	198	33	222	37
102	DCB.032.102			5.2	198	38	222	43
115	DCB.032.115			4.6	198	43	222	49
127	DCB.032.127			4.2	202	48	222	55
140	DCB.032.140			3.7	192	52	222	60
152	DCB.032.152			3.4	194	57	222	66
178	DCB.032.178			2.91	195	67	222	77
203	DCB.032.203			2.52	192	76	222	88
254	DCB.032.254	2	190	95	220	110		
305	DCB.032.305	1.66	189	114	220	133		
40 1 1/2	20 3/4	51	DCB.040.051	17.1	325	19	359	21
		64	DCB.040.064	12.9	310	24	335	26
		76	DCB.040.076	10.5	294	28	335	32
		89	DCB.040.089	8.8	290	33	326	37
		102	DCB.040.102	7.6	289	38	326	43
		115	DCB.040.115	6.7	288	43	322	48
		127	DCB.040.127	6	288	48	322	54
		140	DCB.040.140	5.4	281	52	319	59
		152	DCB.040.152	4.9	279	57	318	65
		178	DCB.040.178	4.2	281	67	318	76
		203	DCB.040.203	3.6	274	76	315	87
254	DCB.040.254	2.89	275	95	315	110		
305	DCB.040.305	2.38	271	114	312	131		
50 2	25 1	64	DCB.050.064	21.2	509	24	566	27
		76	DCB.050.076	16.7	468	28	532	32
		89	DCB.050.089	14	462	33	525	37
		102	DCB.050.102	12.2	464	38	525	43
		115	DCB.050.115	10.7	460	43	525	49
		127	DCB.050.127	9.5	456	48	513	54
		140	DCB.050.140	8.6	447	52	507	59
		152	DCB.050.152	7.8	445	57	508	66
		178	DCB.050.178	6.6	442	67	506	77
		203	DCB.050.203	5.7	433	76	506	88
		229	DCB.050.229	5.1	439	86	506	100
		254	DCB.050.254	4.6	437	95	506	117
		305	DCB.050.305	3.8	433	114	504	134
63 2 1/2	38 1 1/2	76	DCB.063.076	30.4	851	28	973	32
		89	DCB.063.089	25	825	33	950	38
		102	DCB.063.102	21.2	806	38	933	44
		115	DCB.063.115	18.6	800	43	930	50
		127	DCB.063.127	16.4	787	48	918	56
		152	DCB.063.152	13.3	758	57	891	67
		178	DCB.063.178	11.2	750	67	874	78
		203	DCB.063.203	9.6	730	76	865	90
		229	DCB.063.229	8.5	731	86	865	102
		254	DCB.063.254	7.7	732	95	865	115
305	DCB.063.305	6.3	718	114	865	138		

Resortes para cargas pesadas COLOR ROJO



D mm	d mm	Lo mm	No. de catálogo	Const. elástica daN nec. para comp. 1 mm	Tabla de cargas			
					Carrera máxima de trabajo 30% de L0		Carrera hasta el sólido	
					Carga daN	Carr. mm	Carga daN	Carr. mm
10 3/8	5 3/16	25	DCR.010.025	2.13	16	7.5	19	8.9
		32	DCR.010.032	1.64	15.5	9.6	19	11.7
		38	DCR.010.038	1.33	14.5	11	18.5	14
		44	DCR.010.044	1.13	14.5	13	18.5	17
		51	DCR.010.051	0.98	14.5	15	18.5	19
		64	DCR.010.064	0.78	14.5	19	18.5	25
		76	DCR.010.076	0.63	14.5	23	18	29
		305	DCR.010.305	0.15	13.5	9.1	18	120
12.5 1/2	6.3 9/32	25	DCR.012.025	3.9	29	7.5	34	8.7
		32	DCR.012.032	3	29	9.6	33	11
		38	DCR.012.038	2.42	27	11	32	13.5
		44	DCR.012.044	2.01	26	13	32	16
		51	DCR.012.051	1.77	27	15	32	19
		64	DCR.012.064	1.38	26	19	32	24
		76	DCR.012.076	1.14	26	23	32	29
		305	DCR.012.305	0.27	24.5	9.1	32	120
16 5/8	8 11/32	25	DCR.016.025	8.7	65	7.5	76	8.7
		32	DCR.016.032	6.4	61	9.6	70	11
		38	DCR.016.038	5.2	57	11	70	13.7
		44	DCR.016.044	4.2	55	13	66	15.7
		51	DCR.016.051	3.64	55	15	66	18.5
		64	DCR.016.064	2.84	54	19	66	23.5
		76	DCR.016.076	2.33	54	23	66	29
		89	DCR.016.089	1.98	53	27	66	34.5
		102	DCR.016.102	1.72	53	31	66	40
		305	DCR.016.305	0.54	49	9.1	66	122



D mm	d mm	Lo mm	No. de catálogo	Const. elástica daN nec. para comp. 1 mm	Tabla de cargas			
					Carrera máxima de trabajo 30% de L0		Carrera hasta el sólido	
					Carga daN	Carr. mm	Carga daN	Carr. mm
20 3/4	10 3/8	25	DCR.020.025	23.1	173	7.5	194	8.4
		32	DCR.020.032	17.4	167	9.6	183	10.5
		38	DCR.020.038	13.9	153	11	174	12.5
		44	DCR.020.044	11.4	148	13	165	14.5
		51	DCR.020.051	9.8	147	15	162	16.5
		64	DCR.020.064	7.7	146	19	162	21
		76	DCR.020.076	6.3	145	23	162	26
		89	DCR.020.089	5.4	145	27	162	30
		102	DCR.020.102	4.7	145	31	162	35
		115	DCR.020.115	4.1	144	35	162	40
		127	DCR.020.127	3.7	141	38	162	44
		140	DCR.020.140	3.4	143	42	167	49
		152	DCR.020.152	3.08	141	46	162	53
		305	DCR.020.305	1.5	137	9.1	162	108

D mm	d mm	Lo mm	No. de catálogo	Const. elástica daN nec. para comp. 1 mm	Tabla de cargas					
					Carrera máxima de trabajo 30% de L0		Carrera hasta el sólido			
					Carga daN	Carr. mm	Carga daN	Carr. mm		
25 1	12.5 1/2	32	DCR.025.032	27.6	265	9.6	290	10.5		
		38	DCR.025.038	22	242	11	286	13		
		44	DCR.025.044	18.4	239	13	285	15.5		
		51	DCR.025.051	15.7	236	15	283	18		
		64	DCR.025.064	12.2	232	19	275	22.5		
		76	DCR.025.076	10	230	23	275	27.5		
		89	DCR.025.089	8.4	227	27	275	32.5		
		102	DCR.025.102	7.4	229	31	275	37.5		
		115	DCR.025.115	6.5	228	35	275	42.7		
		127	DCR.025.127	5.8	220	38	273	47		
		140	DCR.025.140	5.2	218	42	270	52		
		152	DCR.025.152	4.8	221	46	273	57.5		
		178	DCR.025.178	4.1	217	53	273	68		
		203	DCR.025.203	3.59	219	61	273	77		
		305	DCR.025.305	3.42	220	91	273	115		
		32 1 1/4	16 5/8	38	DCR.032.038	37.6	414	11	451	12
				44	DCR.032.044	31	403	13	440	14
				51	DCR.032.051	26.3	394	15	435	16.5
64	DCR.032.064			25	389	19	435	21.5		
76	DCR.032.076			16.6	382	23	430	26		
89	DCR.032.089			13.9	375	27	425	30.5		
102	DCR.032.102			21.1	375	31	425	35.5		
115	DCR.032.115			10.6	371	35	425	40.5		
127	DCR.032.127			9.6	365	38	425	45		
140	DCR.032.140			8.6	361	42	430	50		
152	DCR.032.152			7.9	363	46	425	54		
178	DCR.032.178			6.7	355	53	420	63		
203	DCR.032.203			5.8	354	61	420	72		
254	DCR.032.254			4.6	350	76	420	92		
305	DCR.032.305			3.8	346	91	420	110		
40 1 1/2	20 3/4	51	DCR.040.051	34.9	524	15	593	17		
		64	DCR.040.064	26.6	505	19	585	22		
		76	DCR.040.076	21.5	495	23	580	27		
		89	DCR.040.089	18	486	27	575	32		
		102	DCR.040.102	15.7	487	31	575	37		
		115	DCR.040.115	13.8	483	35	575	42		
		127	DCR.040.127	12.4	471	38	575	47		
		140	DCR.040.140	11.3	475	42	588	52		
		152	DCR.040.152	10.2	469	46	575	57.5		
		178	DCR.040.178	8.7	461	53	575	67		
		203	DCR.040.203	7.6	464	61	575	76		
		254	DCR.040.254	6	456	76	575	97		
		305	DCR.040.305	5	455	91	575	116		
		50 2	25 1	64	DCR.050.064	42.3	804	19	910	21.5
				76	DCR.050.076	33.8	777	23	879	26
89	DCR.050.089			28.1	759	27	860	30.5		
102	DCR.050.102			24.5	760	31	860	35		
115	DCR.050.115			21.5	753	35	860	40		
127	DCR.050.127			18.9	718	38	850	45		
140	DCR.050.140			16.9	710	42	845	50		
152	DCR.050.152			15.4	708	46	830	54		
178	DCR.050.178			13.2	700	53	830	64		
203	DCR.050.203			11.5	701	61	830	72.5		
254	DCR.050.254	9	684	76	825	92				
305	DCR.050.305	7.5	683	91	825	112				

Tabla de conversión de colores en resortes para troquel Associated Spring Raymond

AZUL ROJO AMARILLO VERDE

IMPORTADO

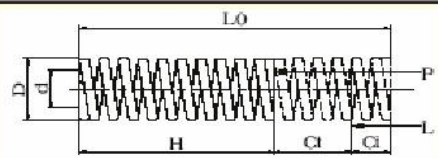
GREEN BLUE RED YELLOW

Resortes para cargas extraspesadas COLOR AMARILLO


Diámetros de 10 a 50 mm.
Alambres de sección rectangular

D mm	d mm	Lo mm	No. de catálogo	Const. elástica daN nec. para comp. 1 mm	Tabla de cargas			
					Carrera máxima de trabajo 25% de L0		Carrera hasta el sólido	
					Carga daN	Carr. mm	Carga daN	Carr. mm
10 3/8	5 3/16	25	DCY.010.025	3.27	20.3	6.2	29.5	8.7
		32	DCY.010.032	2.5	20	8	27	10.5
		38	DCY.010.038	2.12	20.1	9.5	27	13.2
		44	DCY.010.044	1.77	19.5	11	26.5	15
		51	DCY.010.051	1.53	19.9	13	26.5	17
		64	DCY.010.064	1.22	19.5	16	26.5	21.5
		76	DCY.010.076	1.01	19.2	19	26.5	26.5
		305	DCY.010.305	0.25	19	76	26	106
12.5 1/2	6.3 9/32	25	DCY.012.025	5.87	36.4	6.2	53	9
		32	DCY.012.032	4.43	35.4	8	48	10.8
		38	DCY.012.038	3.63	34.5	9.5	47	13
		44	DCY.012.044	3.06	33.7	11	47	11.5
		51	DCY.012.051	2.71	35.2	13	47	18
		64	DCY.012.064	2.17	34.7	16	47	22
		76	DCY.012.076	1.77	33.6	19	47	27
		305	DCY.012.305	0.42	31.9	76	47	112
16 5/8	8 11/32	25	DCY.016.025	12.6	78	6.2	113	9
		32	DCY.016.032	9.3	74	8	103	10.8
		38	DCY.016.038	7.5	71	9.5	98	13
		44	DCY.016.044	6.3	69	11	96	15
		51	DCY.016.051	5.5	72	13	96	18
		64	DCY.016.064	4.3	69	16	95	22
		76	DCY.016.076	3.52	67	19	94	26.5
		305	DCY.016.305	0.85	65	76	94	110
20 3/4	10 3/8	25	DCY.020.025	32.2	202	6.2	248	7.7
		32	DCY.020.032	24.2	194	8	237	9.8
		38	DCY.020.038	19.5	185	9.5	234	12
		44	DCY.020.044	16.3	179	11	228	14
		51	DCY.020.051	14	182	13	225	16
		64	DCY.020.064	10.9	174	16	225	21
		76	DCY.020.076	9	171	19	225	25
		89	DCY.020.089	7.6	167	22	225	30
		102	DCY.020.102	6.6	172	26	225	34
		115	DCY.020.115	5.8	168	29	220	38
		127	DCY.020.127	5.2	166	32	220	43
		140	DCY.020.140	4.7	165	35	221	47
		152	DCY.020.152	4.3	163	38	220	51
		305	DCY.020.305	2.12	161	76	220	105

D mm	d mm	Lo mm	No. de catálogo	Const. elástica daN nec. para comp. 1 mm	Tabla de cargas			
					Carrera máxima de trabajo 25% de L0		Carrera hasta el sólido	
					Carga daN	Carr. mm	Carga daN	Carr. mm
25 1	12.5 1/2	32	DCY.025.032	35.4	283	8	354	10
		38	DCY.025.038	28	266	9.5	336	12
		44	DCY.025.044	23.2	255	11	325	14
		51	DCY.025.051	19.8	257	13	317	16
		64	DCY.025.064	15.4	246	16	316	21
		76	DCY.025.076	12.5	238	19	313	25
		89	DCY.025.089	10.5	231	22	310	29
		102	DCY.025.102	9.1	237	26	310	34
		115	DCY.025.115	8.1	235	29	310	39
		127	DCY.025.127	7.2	230	32	310	43
		140	DCY.025.140	6.6	231	35	317	48
		152	DCY.025.152	6	228	38	310	53
		178	DCY.025.178	5.1	224	44	310	62
		203	DCY.025.203	4.5	230	51	310	70
305	DCY.025.305	2.96	225	76	310	108		
32 1 1/4	16 5/8	38	DCY.032.038	48.9	465	9.5	558	11
		44	DCY.032.044	40.5	446	11	547	13
		51	DCY.032.051	34.6	450	13	535	15
		64	DCY.032.064	26.7	427	16	535	20
		76	DCY.032.076	21.6	410	19	525	24
		89	DCY.032.089	18.2	400	22	525	29
		102	DCY.032.102	15.6	406	26	520	33
		115	DCY.032.115	13.6	394	29	500	36
		127	DCY.032.127	12.2	390	32	500	41
		140	DCY.032.140	11.2	392	35	526	47
		152	DCY.032.152	10.1	384	38	500	50
		178	DCY.032.178	8.6	378	44	500	59
		203	DCY.032.203	7.5	383	51	500	68
		254	DCY.032.254	6	384	64	500	85
305	DCY.032.305	5	380	76	500	103		
40 1 1/2	20 3/4	51	DCY.040.051	56	714	13	840	15
		64	DCY.040.064	42.2	675	16	820	19
		76	DCY.040.076	34.3	652	19	815	24
		89	DCY.040.089	28.2	620	22	800	28
		102	DCY.040.102	24.4	634	26	800	33
		115	DCY.040.115	21.4	621	29	792	37
		127	DCY.040.127	19	608	32	780	41
		140	DCY.040.140	17.1	599	35	787	46
		152	DCY.040.152	15.6	593	38	780	50
		178	DCY.040.178	13.2	581	44	765	58
		203	DCY.040.203	11.4	581	51	765	67
		254	DCY.040.254	9.1	582	64	765	85
		305	DCY.040.305	7.5	570	76	760	102
		50 2	25 1	64	DCY.050.064	72.4	1158	16
76	DCY.050.076			57.3	1089	19	1318	23
89	DCY.050.089			47.4	1043	22	1280	27
102	DCY.050.102			40.4	1050	26	1252	31
115	DCY.050.115			35.3	1024	29	1235	35
127	DCY.050.127			31.2	998	32	1217	39
140	DCY.050.140			28.2	987	35	1241	44
152	DCY.050.152			25.5	969	38	1200	47
178	DCY.050.178			21.5	946	44	1200	56
203	DCY.050.203			18.6	949	51	1190	64
254	DCY.050.254			14.6	934	64	1170	80
305	DCY.050.305			12.1	920	76	1170	97


Sugerencias

D = Diámetro del agujero (mm)
L0 = Longitud libre (mm)
d = Diámetro del perno (mm)
H = Longitud comprimida (mm)

Ci = Compresión inicial (mm)
L = Precarga (daN)
Ct = Carrera de operación (mm)
P = Máxima compresión de operación Ci + Ct (daN)

Ci > 20% Ct

Ci + Ct > Carrera Máx. de trabajo

Llave Hexagonal Brazo Corto

B111 - FRACCIONAL

Clave B111		
15800	.028	100
15801	.035	100
15802	.050	100
15803	1/16	100
15804	5/64	100
15805	3/32	100
15806	7/64	100
15807	1/8	100
15808	9/64	100
15809	5/32	100
15810	3/16	100
15811	7/32	50
15812	1/4	50
15813	5/16	50
15814	3/8	25
15815	7/16	10
15816	1/2	10
15817	9/16	10
15818	5/8	10
15819	3/4	5
15820	7/8	5
15821	1"	5
15822	1 1/4	1
15823	1 1/2	1
15831	1 3/4	1
15833	2"	1

Nota: Llaves en medidas mayores se cotizan a solicitud del cliente.

EXHIBIDOR LLAVE CORTA FRACCIONAL

No Pzas	
50 c/u:	1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16
25 c/u:	7/32, 1/4, 5/16
15 pz:	3/8
5 pz:	1/2



B112 - MÉTRICA

Clave B112		
15847	0.7	100
15848	0.9	100
15849	1.3	100
15850	1.5	100
15852	2.0	100
15854	2.5	100
15856	3.0	100
15858	3.5	100
15860	4.0	100
15862	4.5	100
15864	5.0	100
15866	5.5	50
15868	6.0	50
15870	7.0	50
15872	8.0	50
15874	9.0	50
15876	10.0	25
15878	11.0	10
15880	12.0	10
15884	14.0	10
15886	17.0	1
15888	19.0	1
15890	22.0	1
15892	24.0	1
12295	27.0	1
12296	32.0	1
12298	36.0	1



EXHIBIDOR LLAVE CORTA MÉTRICO

No Pzas	
50 c/u:	1.5, 2.0, 2.5, 3.0, 4.0, 5.0 mm
25 c/u:	6.0, 8.0 mm
15 pz:	10 mm

B113 - JUEGOS DE LLAVE CORTA FRACCIONAL EN ESTUCHE BONDHEX

Clave B113	No. Piezas	
12232	8	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32"
12236	12	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16"
12237	13	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8"
12238	10	1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4"
12245	7	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16"



B114 - JUEGOS DE LLAVE CORTA MÉTRICO EN ESTUCHE BONDHEX

Clave B114	No. Piezas	
12246	6	1.5, 2.0, 2.5, 3.0, 4.0, 5.0mm
12292	7	1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0mm
12299	9	1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 8.0, 10.0mm



B115 - JUEGO LLAVE CORTA FRACCIONAL EN ESTUCHE DE VINIL

Clave B115	Modelo (piezas)	
00007	T-7	1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32"
00010	T-10	1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4"
00012	T-12	1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8"
00014	T-14	1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2"



B116 - JUEGO LLAVE CORTA FRACCIONAL EN ESTUCHE DE VINIL

Clave B116	Modelo (piezas)	
00009	T-9	1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 8.0, 10.0mm.



Acero Protanium™



Acabado Proguard™



Nota: Todas las herramientas Bondhus estan fabricadas con su exclusivo Acero Protanium y Acabado Proguard

LLAVE HEXAGONAL PUNTA DE BOLA

B121 - FRACCIONAL

Clave B121	Largo (mm)	
15702	.050	10
15703	1/16	10
15704	5/64	10
15705	3/32	10
15706	7/64	10
15707	1/8	10
15708	9/64	10
15709	5/32	10
15710	3/16	10
15711	7/32	10
15712	1/4	10
15713	5/16	10
15714	3/8	10
15715	7/16	2
15716	1/2	2
15717	9/16	2
15718	5/8	2
15719	3/4	1


B132 - MÉTRICO

Clave B132	Largo (mm)	
15749	1.27	10
15750	1.5	10
15752	2	10
15754	2.5	10
15756	3	10
15758	3.5	10
15760	4	10
15762	4.5	10
15764	5	10
15766	5.5	10
15768	6	10
15770	7	10
15772	8	10
15774	9	10
15776	10	10
15778	11	2
15780	12	2
15784	14	2
15786	17	1
15788	19	1


EXHIBIDOR LLAVE PUNTA DE BOLA FRACCIONAL

No Pzas	
10 c/u:	1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16
5 c/u:	7/32, 1/4, 5/16, 3/8
3 pz:	1/2


EXHIBIDOR LLAVE PUNTA DE BOLA MÉTRICO

No Pzas	
10 c/u:	1.5, 2.0, 2.5, 3.0, 4.0, 5.0 mm
5 c/u:	6.0, 8.0, 10 mm


B123 - JUEGO LLAVE HEXAGONAL PUNTA DE BOLA

Clave B123		
10945	5/64 - 3/16"	
10932	.050 - 5/32"	
10938	1/16 - 1/4"	
10936	.050 - 5/16"	
10937	.050 - 3/8"	


B124 - JUEGO LLAVE HEXAGONAL PUNTA DE BOLA

Clave B124	No de Piezas
10946	1.5 - 5.0mm 6
10992	1.5 - 6.0mm 7
10999	1.5 - 10.0mm 9
10995	1.27 - 10.0mm 15


B129 - JUEGOS EN "L" Y GORILLA GRIP

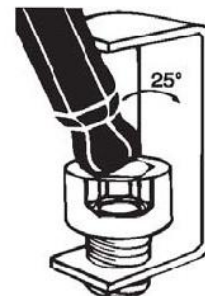
Clave B129		
14189	10937 + 12589	


B129 - JUEGOS EN "L" Y GORILLA GRIP

Clave B129		
14187	10999 + 12587	


B128 - JUEGOS EN "L" FRACCC.Y MM.

Clave B128		
20196	10936 + 10999	
20199	10937 + 10999	



LLAVE HEXAGONAL BRAZO LARGO

PUNTA RECTA BISELADA

B131 - FRACCIONAL

Clave B131		LARGO (MM)	
15900	0.028"		10
15901	0.035"	66.0	10
15902	0.050"	71.1	10
15903	1/16	76.2	10
15904	5/64	81.2	10
15905	3/32	86.3	10
15906	7/64	91.4	10
15907	1/8	93.9	10
15908	9/64	99.0	10
15909	5/32	104.1	10
15910	3/16	114.3	10
15911	7/32	124.4	5
15912	1/4	132.0	10
15913	5/16	152.4	5
15914	3/8	170.1	5
15915	7/16	190.5	5
15916	1/2	208.2	5
15917	9/16	228.6	2
15918	5/8	246.3	2
15919	3/4	284.4	2
15920	7/8	322.5	1
15921	1"	360.6	1
15925	1 1/4	436.8	1
15929	1 1/2	513.0	1

B132 - MÉTRICO

Clave B132		LARGO (MM)	
15947	0.7	66.0	10
15948	0.9	68.0	10
15949	1.3	72.0	10
15950	1.5	77.0	10
15952	2.0	82.0	10
15954	2.5	88.0	10
15956	3.0	98.0	10
15958	3.5	100.0	5
15960	4.0	110.0	10
15962	4.5	114.0	5
15964	5.0	119.0	10
15966	5.5	124.0	5
15968	6.0	139.0	10
15970	7.0	150.0	5
15972	8.0	162.0	5
15974	9.0	175.0	5
15976	10.0	187.0	5
15978	11.0	200.0	5
15980	12.0	220.0	5
15984	14.0	260.0	5
15986	17.0	280.0	2
15988	19.0	295.0	2
15991	22.0	330.0	1
15993	24.0	370.0	1
15996	32.0	435.0	1
15998	36.0	520.0	1

B133 - JUEGO LLAVE HEXAGONAL BRAZO LARGO

Clave B133	No. Piezas.	
12137	13	.050 - 3/8"
12138	10	1/16 - 1/4"

B134 - JUEGO LLAVE HEXAGONAL BRAZO LARGO

Clave B134	No. Piezas.	
12192	7	1.5 - 6.0mm.
12199	9	1.5 - 10.0mm.

LLAVE HEXAGONAL LARGO 12"

B121 - FRACCIONAL

Clave B121		Largo (mm)	
25404	5/64	305	10
25405	3/32	305	10
25406	7/64	305	10
25407	1/8	305	10
25408	9/64	305	10
25409	5/32	305	10
25410	3/16	305	10
25411	7/32	305	10
25412	1/4	305	10

B221 - FRACCIONAL

Clave B221		
10602	.050	2
10603	1/16	2
10604	5/64	2
10605	3/32	2
10606	7/64	2
10607	1/8	2
10608	9/64	2
10609	5/32	2
10610	3/16	2
10611	7/32	2
10612	1/4	2
10613	5/16	2
10614	3/8	2
10615	7/16	1
10616	1/2	1

B222 - MÉTRICO

Clave B222		
10649	1.27	2
10650	1.5	2
10652	2	2
10654	2.5	2
10656	3	2
10658	3.5	1
10660	4	2
10662	4.5	1
10664	5	2
10666	5.5	1
10668	6	2
10670	7	1
10672	8	2
10674	9	1
10676	10	2

B223 - JGO DESARMADORES HEXAGONAL P/BOLA - fracciona

Clave B223	No. Piezas.	
10645	7	5/64 - 3/16
10632	8	.050 - 5/32
10633	8	7/64 - 5/16"
10637	13	.050 - 3/8"
10737	11	5/64 - 3/8" extra largo

B224 - JGO DESARMADORES HEXAGONAL P/BOLA - métrico

Clave B224	No. Piezas.	
10686	6	1.5 - 5.0mm.
10687	7	1.27 - 5.0mm.
10699	9	1.5 - 10.0mm.
10733	8	2.0 - 10.0mm. extra largo

DESARMADOR HEXAGONAL PUNTA DE BOLA

Comfort Grip

MANGO DE DISEÑO EXCLUSIVO PARA UN MÁXIMO TORQUE Y CONFORT SIN COMPETENCIA



LLAVE HEXAGONAL PUNTA DE BOLA PLATEADA

ACABADO BRITEGUARD

B121 - FRACCIONAL

Clave B121	Largo (mm)	
16902	.050	72 10
16903	1/16	76 10
16904	5/64	81 10
16905	3/32	86 10
16906	7/64	90 10
16907	1/8	95 10
16908	9/64	101 10
16909	5/32	107 10
16910	3/16	114 10
16911	7/32	124 10
16912	1/4	133 10
16913	5/16	152 10
16914	3/8	171 10
16915	7/16	191 2
16916	1/2	210 2
16917	9/16	229 2
16918	5/8	248 2
16919	3/4	286 1

B132 - METRICO

Clave B132	Largo (mm)	
17049	1.27	72 10
17050	1.5	77 10
17052	2	82 10
17054	2.5	88 10
17056	3	98 10
17058	3.5	100 10
17060	4	110 10
17062	4.5	114 10
17064	5	119 10
17066	5.5	124 10
17068	6	139 10
17070	7	150 10
17072	8	162 10
17074	9	175 10
17076	10	187 10
17078	11	200 2
17080	12	220 2
17084	14	260 2
17086	17	280 1
17088	19	

B123 - JUEGO LLAVE HEXAG. P/BOLA PLATEADA

Clave B123	
16937	.050 - 3/8"

B124 - JUEGO LLAVE HEXAG. P/BOLA PLATEADA

Clave B124	
17099	1.27 - 10.0mm

GoldGuard
FINISH

LLAVE HEXAGONAL PUNTA DE BOLA DORADA

ACABADO GOLDDGUARD EN ORO 14K

B123 - JUEGO LLAVE HEXAG. CORTA P/BOLA GOLD

Clave B123	
37832	.050 - 5/32"

B124 - JUEGO LLAVE HEXAG. CORTA P/BOLA GOLD

Clave B124	
37846	1.5 - 5.0mm

B123 - JUEGO LLAVE HEXAG. P/BOLA GOLD

Clave B123	
37937	.050 - 3/8"

B124 - JUEGO LLAVE HEXAG. P/BOLA GOLD

Clave B124	
38099	1.27 - 10.0mm



Llave Hexagonal En "T"

PUNTA DE BOLA

B213 - PUNTA DE BOLA FRACCIONAL

B213			
13205	3/32"	2	
13206	7/64"	2	
13207	1/8"	2	
13208	9/64"	2	
13109	5/32	2	
13110	3/16	2	
13111	7/32	2	
13112	1/4	2	
13113	5/16	2	
13114	3/8	2	

* Medidas con punta recta para evitar rupturas de la bola.

B215 - JUEGO PUNTA DE BOLA FRACCIONAL

Clave		
B215		
13146	5/32 - 3/8 (sin base)	
13190	3/32 - 3/8 (con base)	

B214 - PUNTA DE BOLA MÉTRICO

Clave		
B214		
13252	2.0"	2
13254	2.5"	2
13256	3.0"	2
13160	4.0	2
13164	5.0	2
13168	6.0	2
13172	8.0	2
13176	10.0	2

* Medidas con punta recta para evitar rupturas de la bola.

B216 - JUEGO PUNTA DE BOLA MÉTRICO

Clave		
B216		
13148	4.0 - 10.0mm (sin base)	
13189	2.0 - 10mm (con base)	

PUNTA RECTA BISELADA

B201 - LARGO GRADUAL FRACCIONAL

Clave		Largo	
B201			
13305	3/32	4.2" - 105mm	2
13306	7/64	4.4" - 112mm	2
13307	1/8	4.6" - 119mm	2
13308	9/64	4.9" - 124mm	2
13309	5/32	5.2" - 132mm	2
13310	3/16	5.6" - 141mm	2
13311	7/32	6.1" - 154mm	2
13312	1/4	6.5" - 165mm	2
13313	5/16	7.4" - 189mm	2
13314	3/8	8.3" - 211mm	2

B203 - JUEGO LARGO GRADUAL

Clave		
B203		
13332	3/32 - 1/4 (sin base)	
13390	3/32 - 3/8 (con base)	

B205 - LARGO 152mm (6") FRACCIONAL

Clave		
B205		
15205	3/32	2
15206	7/64	2
15207	1/8	2
15208	9/64	2
15209	5/32	2
15210	3/16	2
15211	7/32	2
15212	1/4	2
15213	5/16	2
15214	3/8	2
15216	1/2	1

B207 - JUEGO LARGO 152mm (6") FRACCIONAL

Clave		
B207		
15232	3/32 - 1/4 (sin base)	
15290	3/32 - 3/8 (con base)	

B209 - LARGO 229mm (9") FRACCIONAL

Clave		
B209		
15305	3/32	2
15306	7/64	2
15307	1/8	2
15308	9/64	2
15309	5/32	2
15310	3/16	2
15311	7/32	2
15312	1/4	2
15313	5/16	2
15314	3/8	2
15316	1/2	1

B211 - JUEGO LARGO 229mm (9") FRACCIONAL

Clave		
B211		
15332	3/32 - 1/4 (sin base)	
15390	3/32 - 3/8 (con base)	

B202 - LARGO GRADUAL MÉTRICO

Clave		Largo	
B202			
13352	2.0	4.0" - 100mm	2
13354	2.5	4.3" - 110mm	2
13356	3.0	4.7" - 120mm	2
13360	4.0	5.3" - 136mm	2
13364	5.0	5.9" - 150mm	2
13368	6.0	6.8" - 173mm	2
13372	8.0	7.9" - 202mm	2
13376	10.0	9.1" - 232mm	2

B204 - JUEGO LARGO GRADUAL MÉTRICO

Clave		No. Piezas
B204		
13348	2.0 - 6.0mm (sin base)	6
13389	2.0 - 10mm (con base)	8

B206 - LARGO 152mm (6") MÉTRICO

Clave		
B206		
15252	2.0	2
15254	2.5	2
15256	3.0	2
15260	4.0	2
15264	5.0	2
15268	6.0	2
15272	8.0	2
15276	10.0	2

B208 - JUEGO LARGO 152mm (6") MÉTRICO

Clave		No. Piezas
B208		
15248	2.0 - 6.0mm (sin base)	6
15289	2.0 - 10mm (con base)	8

B210 - LARGO 229mm (9") MÉTRICO

Clave		
B210		
15352	2.0	2
15354	2.5	2
15356	3.0	2
15360	4.0	2
15364	5.0	2
15368	6.0	2
15372	8.0	2
15376	10.0	2

B212 - JUEGO LARGO 229mm (9") MÉTRICO

Clave		No. Piezas
B212		
15348	2.0 - 6.0mm (sin base)	6
15389	2.0 - 10mm (con base)	8

El mango soldado garantiza la solidez de la llave y la seguridad del usuario.

JUEGOS DE LLAVE TIPO NAVAJA



B301 - FRACCIONAL PUNTA RECTA

Clave B301	No. Piezas.	
12591	9	.050 - 3/16"
12589	9	5/64 - 1/4"
12585	5	3/16 - 3/8"



B302 - MÉTRICO PUNTA RECTA

Clave B302	No. Piezas.	
12592	7	1.5 - 6.0 mm.
12587	7	2.0 - 8.0 mm.
12595	6	3.0 - 10.0 mm



B301 - FRACCIONAL PUNTA DE BOLA

Clave B301	No. Piezas.	
12894	5	3/16 - 3/8"



B302 - MÉTRICO PUNTA DE BOLA

Clave B302	No. Piezas.	
12897	5	5.0 - 10.0 mm



B303 - TORX PUNTA RECTA

Clave B303	No. Piezas.	
12632	8	T-6 - T-25.
12634	8	T-9 - T-40.



B303 - TORX PUNTA SEGURIDAD

Clave B303	No. Piezas.	
12636	7	TR-7 - TR-25.
12638	8	TR-9 - TR-40.



B312 - COMBINADA FRACCIONAL Y MILIMÉTRICO

Clave B312	No. Piezas.	
12550	12	5/64 - 5/32" y 1.5 - 5mm



B320 - COMBINADA PLANO CRUZ Y HEXAGONAL

Clave B320	No. Piezas.	
12540	5	Plano 3/16", Cruz 1, y Hex. 4.0, 5.0, 6.0mm.
12545	5	Plano 1/8, 3/16", Cruz #1, #2, y Ponzón
12547	5	Plano 1/8, 3/16", 1/4, y Cruz #1, #2.



B300 - DOBLE Y TRIPLE PACK

Clave B300	No. Piezas.	
12522	2 Jgos.	12589 + 12587
12533	3 Jgos.	12589 + 12587 + 12634



CUALIDADES ÚNICAS DE GORILLA-GRIP:

Puntas Biseladas
para un fácil acceso.



Mango de resina irrompible
40% más resistente que los de acero.
Diseño ergonómico y muy ligera.
Código de colores para una fácil identificación.

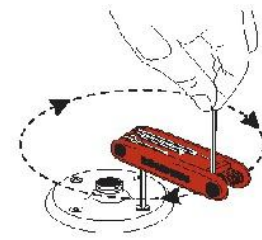


270°
La llave seleccionada gira independientemente hasta 270° para evitar machucos.

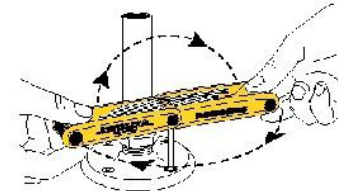
Medida
La medida de la llave está marcada en el mango.

Maximo Torque
Todas las llaves están fabricadas con nuestro exclusivo acero industrial de alto torque "Protanium" y nuestro exclusivo acabado en seco "Proguard"

Manivela



Vuelta y Giro



LLAVE HEXAGONAL PUNTA DE BOLA BRAZO EXTRA CORTO - "STUBBY"
B141 - LLAVE PUNTA DE BOLA "STUBBY" FRACCIONAL

Clave B141		Largo brazo corto (mm)	
16502	.050	4.05	10
16503	1/16	5.5	10
16504	5/64	9	10
16505	3/32	9.5	10
16506	7/64	11	10
16507	1/8	11.2	10
16508	9/64	11.6	10
16509	5/32	13	10
16510	3/16	14.8	10
16511	7/32	17.5	10
16512	1/4	18.4	10
16513	5/16	22	2
16514	3/8	27.5	2

B142 - LLAVE PUNTA DE BOLA "STUBBY" METRICO

Clave B142		Largo brazo corto (mm)	
16549	1.3		10
16550	1.5 MM	5.5	10
16552	2.0 MM	9	10
16554	2.5 MM	9.5	10
16556	3.0 MM	11	10
16560	4.0 MM	13	10
16564	5.0 MM	15	10
16568	6.0 MM	18	10
16572	8.0 MM	22	2
16576	10.0 MM	28	2

B143 - JUEGO LLAVE PUNTA DE BOLA "STUBBY"

Clave B143		No. Piezas
16537	.050 - 3/8	13
16538	1/16 - 1/4	10

JGOS EN "L" FRACC. Y MM. "STUBBY"

Clave		
20599	16537 + 16599	


B144 - JUEGO LLAVE PUNTA DE BOLA "STUBBY"

Clave B144		No. Piezas
16592	1.5 - 6.0MM	7
16599	1.5 - 10.0MM	9



Para tornillos
inaccesibles
con una llave común


LLAVE HEXAGONAL PUNTA DE BOLA CON SUJETA TORNILLOS "PRO-HOLD"
B145 - LLAVE SUJETA TORNILLOS PROHOLD FRACCIONAL

Clave B145		Largo (mm)	
75702	0.05	72	10
75703	1/16	76	10
75704	5/64	81	10
75705	3/32	86	10
75706	7/64	90	10
75707	1/8	95	10
75708	9/64	101	10
75709	5/32	107	10
75710	3/16	114	10
75711	7/32	124	10
75712	1/4	133	10
75713	5/16	152	2
75714	3/8	171	2

B146 - LLAVE SUJETA TORNILLOS METRICO

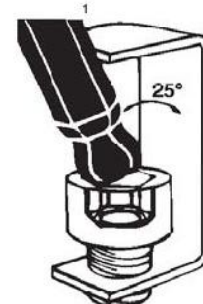
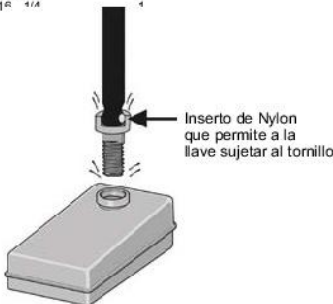
Clave B146		Largo (mm)	
75749	1.27 MM	72	10
75750	1.5 MM	77	10
75752	2.0 MM	82	10
75754	2.5 MM	88	10
75756	3.0 MM	98	10
75760	4.0 MM	110	10
75764	5.0 MM	119	10
75768	6.0 MM	139	10
75772	8.0 MM	162	2
75776	10.0 MM	187	2

B147 - JUEGO LLAVE PUNTA DE BOLA "PRO HOLD"

Clave B147		No. Piezas
74937	.050 - 3/8	1
74938	1/16 - 1/4	4

B148 - JUEGO LLAVE PUNTA DE BOLA "PRO-HOLD"

Clave B148		No. Piezas
74992	1.5 - 6.0MM	1
74999	1.5 - 10.0MM	1



LINEA TORX BONDHUS
B411 - LLAVE TORX CORTA

Clave B411		Largo	
32705	T-5	23 mm	25
32706	T-6	29 mm	25
32707	T-7	35 mm	25
32708	T-8	42 mm	25
32709	T-9	48 mm	25
32710	T-10	55 mm	25
32715	T-15	59 mm	25
32720	T-20	66 mm	25
32725	T-25	72 mm	25
32727	T-27	81 mm	25
32730	T-30	90 mm	25
32740	T-40	99 mm	25
32745	T-45	98 mm	10
32750	T-50	97 mm	10
32755	T-55	95 mm	10
32760	T-60	93 mm	10


B421 - LLAVE TORX LARGA

Clave B421		Largo	
-	T-6	55 mm	-
32806	T-6	55 mm	25
32807	T-7	61 mm	25
32808	T-8	67 mm	25
32809	T-9	74 mm	25
32810	T-10	80 mm	25
32815	T-15	84 mm	25
32820	T-20	91 mm	25
32825	T-25	98 mm	25
32827	T-27	106 mm	25
32830	T-30	116 mm	25
32840	T-40	125 mm	25
32845	T-45	138 mm	10
32850	T-50	156 mm	10
32855	T-55	171 mm	10
32860	T-60	182 mm	10


B412 - JUEGO TORX CORTA

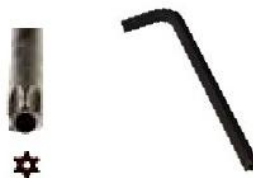
Clave B412	No Piezas	
31732	8 pzas	T6 - T25
31734	8 pzas	T9 - T40


B422 - JUEGO TORX LARGA

Clave B422	No Piezas	
31832	8 pzas	T6 - T25
31834	8 pzas	T9 - T40


B451 - LLAVE TORX SEGURIDAD - LARGA

Clave B451		Largo	
-	TR- 6	55 mm	25
33406	TR- 6	55 mm	25
33407	TR- 7	61 mm	25
33408	TR- 8	67 mm	25
33409	TR- 9	74 mm	25
33410	TR-10	80 mm	25
33415	TR-15	84 mm	25
33420	TR-20	91 mm	25
33425	TR-25	98 mm	25
33427	TR-27	106 mm	25
33430	TR-30	116 mm	25
33440	TR-40	125 mm	25


B431 - LLAVE TORX PUNTA DE BOLA

Clave B431		Largo	
11706	T-6	55 m	5
11707	T-7	61 mm	5
11708	T-8	67 mm	5
11709	T-9	74 mm	5
11710	T-10	80 mm	5
11715	T-15	84 mm	5
11720	T-20	91 mm	5
11725	T-25	98 mm	5
11727	T-27	106 mm	5
11730	T-30	116 mm	5
11740	T-40	125 mm	5
11745	T-45	138 mm	1
11750	T-50	156 mm	1
11755	T-55	171 mm	1


B452 - JUEGO TORX SEGURIDAD - LARGA

Clave B452	No Piezas	
32432	8 pzas	TR6 - TR25
32434	8 pzas	TR9 - TR40


B432 - JUEGO TORX PUNTA DE BOLA

Clave B432	No Piezas	
11332	8	T9 - T40
11346	6	T6 - T15


B433 - LLAVE TORX EN "T"

Clave B433		Largo	
33009	T- 9	155 mm	2
33010	T-10	161 mm	2
33015	T-15	168 mm	2
33020	T-20	174 mm	2
33025	T-25	180 mm	2
33027	T-27	187 mm	2
33030	T-30	193 mm	2
33040	T-40	199 mm	2
33045	T-45	206 mm	2
33050	T-50	212 mm	2
33055	T-55	218 mm	2



ProGuard™
 DRY SURFACE
 TECHNOLOGY **DST**
5 VECES MÁS RESISTENTE A LA
CORROSIÓN QUE LA COMPETENCIA

B434 - JUEGO TORX EN "T"

Clave B434	No Piezas	
33034	8	T9 - T40

B461 - TORX ALA

Clave B461		Largo	
34706	TW-6	37 mm	2
34707	TW-7	37 mm	2
34708	TW-8	37 mm	2
34709	TW-9	37 mm	2
34710	TW-10	37 mm	2
34715	TW-15	37 mm	2
34720	TW-20	37 mm	2


B463 - TORX BANDERA

Clave B463		Largo	
34405	TF-5	37 mm	2
34406	TF-6	37 mm	2
34407	TF-7	37 mm	2
34408	TF-8	37 mm	2
34409	TF-9	37 mm	2
34410	TF-10	37 mm	2
34415	TF-15	37 mm	2
34420	TF-20	37 mm	2


B462 - JUEGO TORX ALA

Clave B462	No Piezas	
34745	7 pzas	TW6 - TW 20

B464 - JUEGO TORX BANDERA

Clave B464	No Piezas	
34445	7 pzas	TF6 - TF20