



Vasos de impacto

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Vasos de Impacto

□ 1/4" □ 3/8" □ 1/2" □ 3/4" □ 1" □ 1-1/2" □ 2-1/2" □ 3-1/2"



El logotipo de Koken y el diámetro del vaso se identifican fácilmente con letras blancas sobre el pavonado permaneciendo indeleblemente estampadas.

Surface Drive



Los Vasos de Contacto Curvo se diseñan para mantener el contacto con las caras planas de la tuerca y transmitir un alto par reduciendo el desgaste de la tuerca. Estos vasos son ideales para utilizarse en tuercas pulidas, tuercas de aluminio y tuercas con puntas desgastadas.



Vasos de pared delgada

Con el fin de trabajar con la herramienta adecuada para cada aplicación, Koken ofrece vasos de pared delgada con tres longitudes distintas.



Standard



Mediano



Largo

Pathfinder®



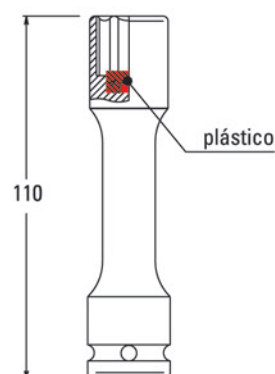
Las caras biseladas de la boca hexagonal del Vaso Guía acoplan el vaso inmediatamente. Los Vasos Guía son ideales para su utilización con herramientas mecánicas en procesos de montaje automáticos, ya que no es necesario que la herramienta esté completamente parada para acoplar el vaso a la tuerca.



Vasos de impacto para tuercas de rueda

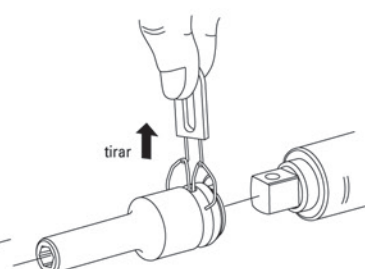
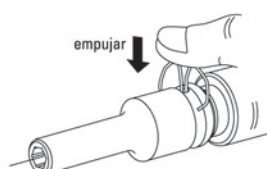
Diseño especial para trabajos de ruedas.

- La longitud de 110 mm proporciona al vaso mayor profundidad de acceso para tuercas muy metidas dentro de la rueda y es ideal para tuercas de llantas de aluminio que tienen un acceso muy estrecho a la tuerca.
- Los códigos de color de las cañas azul (17 mm), rojo (19 mm), amarillo (21 mm) y blanco (22 mm), facilitan la identificación de los diámetros.
- La inserción de plástico contribuye a prevenir el dañado de la tuerca.



Aro de acero elástico de una pieza

Colocación sencilla apretando con el dedo y fácilmente extraíble con el extractor. Mucho más cómodo que la combinación de pasador y junta tórica.





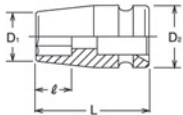
Korken
Korken



Vasos hexagonales.

■ 12400M ■ 12400A

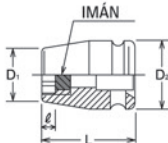
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4		7,5	13	4	23	14	12400M4	3,63		
4,5	3/16	8,1	13	4	23	14	12400M45	4,15	12400A3/16	3,63
5		8,8	13	4	23	14	12400M5	3,63		
5,5		9,4	13	4	23	14	12400M55	4,15		
6	1/4	10	13	5	23	14	12400M6	3,63	12400A1/4	3,63
7	9/32	11,3	13	5	23	14	12400M7	3,63	12400A9/32	3,63
8	5/16	12,5	13	6	23	14	12400M8	3,63	12400A5/16	3,63
9	11/32	13,8	13	7	23	14	12400M9	3,63	12400A11/32	3,76
10	3/8	15	13	7	23	15	12400M10	3,91	12400A3/8	3,91
11	7/16	16,3	13	8	23	18	12400M11	3,91	12400A7/16	3,91
12		17,5	13	8	23	19	12400M12	3,91		
13	1/2	18,8	13	8	23	19	12400M13	3,91	12400A1/2	3,91
14	9/16	20	13	9	23	20	12400M14	4,27	12400A9/16	4,27



Vasos hexagonales con imán.

■ 12400MG ■ 12400AG

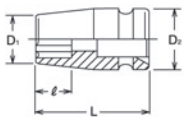
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4		7,5	13	2,1	23	12	12400MG4	8,55		
4,5	3/16	8,1	13	2,1	23	13	12400MG45	8,55	12400AG3/16	8,66
5		8,8	13	2,1	23	15	12400MG5	8,55		
5,5		9,4	13	2,1	23	15	12400MG55	8,55		
6	1/4	10	13	2,4	23	16	12400MG6	8,55	12400AG1/4	8,66
7		11,3	13	2,8	23	16	12400MG7	8,89		
8	5/16	12,5	13	3,5	23	17	12400MG8	9,03	12400AG5/16	9,16
9	11/32	13,8	13	3,8	23	18	12400MG9	9,03	12400AG11/32	9,16
10	3/8	15	13	4,2	23	18	12400MG10	9,40	12400AG3/8	9,54
11	7/16	16,3	13	4,9	23	21	12400MG11	9,73	12400AG7/16	9,80
12		17,5	13	5,6	25	21	12400MG12	9,73		
13	1/2	18,8	13	6	25	21	12400MG13	9,73	12400AG1/2	9,80
14	9/16	20	13	6,4	25	20	12400MG14	15,28	12400AG9/16	15,33



Vasos Surface Drive (de contacto curvo).

■ 12410M

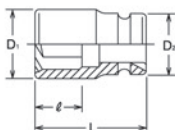
mm	D ₁	D ₂	ℓ	L		Ref	€
6	10	13	5	23	14	12410M6	4,28
7	11,3	13	5	23	15	12410M7	4,28
8	12,5	13	6	23	15	12410M8	4,28
9	13,8	13	7	23	14	12410M9	4,28
10	15	13	7	23	14	12410M10	4,38
11	16,3	13	8	23	17	12410M11	4,77
12	17,5	13	8	23	19	12410M12	4,77
13	18,8	13	8	23	19	12410M13	4,77



Vasos Pathfinder (guía).

■ 12465M

mm	D ₁	D ₂	ℓ	L		Ref	€
10	15	13	8	23	17	12465M10	9,16
11	16,3	13	8	23	18	12465M11	9,16
12	17,5	13	9	23	18	12465M12	9,16
13	18,8	13	9	23	20	12465M13	9,16

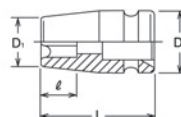




Vasos TORX®.

12425

TORX®	D1	D2	ℓ	L		Ref	€
E4	6,6	13	3,2	23	14	12425E4	5,81
E5	7,7	13	3,2	23	15	12425E5	5,81
E6	8,7	13	4	23	15	12425E6	5,81
E7	9,2	13	4,8	23	15	12425E7	5,28
E8	9,7	13	5,6	23	15	12425E8	5,28
E10	12,2	13	6,4	23	15	12425E10	5,28



Para tornillos autorroscantes.

12460M 12460A

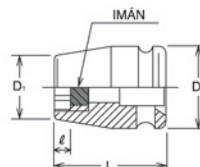
mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
5,5		9,7	13	4	23	15	12460M55	6,19		
6	1/4	10,3	13	5	23	15	12460M6	6,19	12460A1/4	6,57
7		11,6	13	5	23	16	12460M7	6,19		
8	5/16	12,8	13	6	23	16	12460M8	6,19	12460A5/16	6,57
10	3/8	15,3	13	7	23	19	12460M10	6,19	12460A3/8	6,57
13	1/2	19,1	13	8	23	23	12460M13	6,96	12460A1/2	7,23



Con imán para tornillos autorroscantes.

12460MG 12460AG

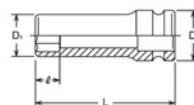
mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
5,5		9,7	13	2,1	23	16	12460MG55	10,61		
6	1/4	10,3	13	2,4	23	16	12460MG6	10,61	12460AG1/4	11,10
7		11,6	13	2,8	23	16	12460MG7	10,98		
8	5/16	12,8	13	3,5	25	18	12460MG8	11,10	12460AG5/16	11,58
10	3/8	15,3	13	4,2	28	20	12460MG10	11,23	12460AG3/8	11,87
	7/16	16,6	13	4,9	29	27			12460AG7/16	12,51
13	1/2	19,1	13	6	30	23	12460MG13	12,00	12460AG1/2	12,51
14		20	13	6,4	30	24	12460MG14	17,44		



Vasos hexagonales largos.

12300M

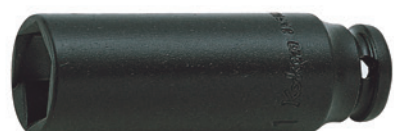
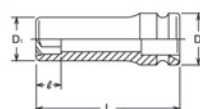
mm	D1	D2	ℓ	L		Ref	€
8	12,5	13	8	48	32	12300M8	7,90
10	15	13	10	48	34	12300M10	9,73
12	17,5	13	12	48	49	12300M12	9,73
13	18,8	13	13	48	52	12300M13	10,34



Vasos Pathfinder (guía) largos.

12365M

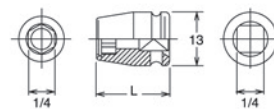
mm	D1	D2	ℓ	L		Ref	€
10	15	13	8	48	34	12365M10	11,50
11	16,3	13	8	48	46	12365M11	11,50
12	17,5	13	9	48	49	12365M12	11,50
13	18,8	13	9	48	52	12365M13	11,50



Porta punta.

12139

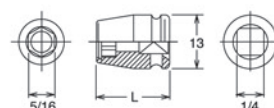
Ref	L		€
12139	26	15	10,48



Porta punta.

12140

Ref	L		€
12140	26	17	10,48



Alargaderas.

12760-55P 12760-75P

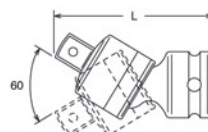
Ref	L		€
12760-55P	55	26	11,88
12760-75P	75	45	11,88



Articulación universal.

12770-P

Ref	L		€
12770-P	39	30	29,02



Adaptador.

12233A-P

Ref	L		€
12233A-P	22	15	11,02

1/4" x 3/8"

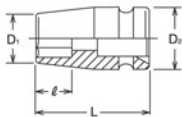




Vasos hexagonales.

13400M 13400A

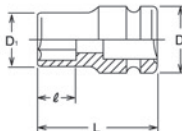
mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
6	1/4	10,8	19	5	32	40	13400M6	4,92	13400A1/4	6,05
7		12	19	5	32	40	13400M7	4,92		
8	5/16	13,3	19	6	32	40	13400M8	4,92	13400A5/16	6,21
9		14,5	19	7	32	40	13400M9	4,92		
10	3/8	15,8	19	7	32	40	13400M10	4,92	13400A3/8	4,91
11	7/16	17	19	8	32	41	13400M11	4,92	13400A7/16	4,91
12		18,3	19	9	32	43	13400M12	4,92		
13	1/2	19,5	22	10	32	56	13400M13	4,92	13400A1/2	4,91
14	9/16	20,8	22	10	32	56	13400M14	4,92	13400A9/16	5,43
15		22	22	11	32	56	13400M15	5,43		
16	5/8	23,3	22	11	32	57	13400M16	5,43	13400A5/8	5,43
17	11/16	24,5	22	12	32	60	13400M17	5,42	13400A11/16	5,43
18		25,8	22	12	32	62	13400M18	5,43		
19	3/4	27	22	12	32	67	13400M19	5,42	13400A3/4	5,41
20		28,3	22	12	32	70	13400M20	6,44		
21	13/16	29,5	22	12	32	71	13400M21	6,44	13400A13/16	6,43
22	7/8	30,8	22	13	32	72	13400M22	6,85	13400A7/8	8,03
23		32	22	13	32	75	13400M23	8,03		
24		33,3	22	13	32	78	13400M24	10,61		



Vasos hexagonales de pared delgada.

13401M 13401A

mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
6	1/4	9,8	18,5	5	32	28	13401M6	7,03	13401A1/4	7,31
7		11	18,5	5	32	30	13401M7	7,03		
8	5/16	12,3	18,5	6	32	31	13401M8	7,03	13401A5/16	7,31
9		13,5	18,5	7	32	32	13401M9	7,03		
10	3/8	14,8	18,5	7	32	34	13401M10	7,03	13401A3/8	7,31
11	7/16	16	18,5	8	32	35	13401M11	7,03	13401A7/16	7,31
12		17,3	18,5	9	32	36	13401M12	7,03		
13	1/2	18,5	21,5	10	32	43	13401M13	7,53	13401A1/2	7,90
14	9/16	19,8	21,5	10	32	49	13401M14	7,53	13401A9/16	7,90
15		21	21,5	11	32	49	13401M15	7,53		
16	5/8	22,3	21,5	11	32	51	13401M16	7,53	13401A5/8	7,90
17	11/16	23,5	21,5	12	32	54	13401M17	7,53	13401A11/16	8,40
18		24,8	21,5	12	32	57	13401M18	8,01		
19	3/4	26	21,5	12	32	60	13401M19	8,01	13401A3/4	8,40
20		27,3	21,5	12	32	65	13401M20	8,25		
21	13/16	28,5	21,5	12	32	70	13401M21	8,56	13401A13/16	9,01
22	7/8	29,8	21,5	13	32	73	13401M22	9,51	13401A7/8	9,92
23		31	21,5	13	32	73	13401M23	10,89		
24		32,3	21,5	13	32	75	13401M24	11,73		



Juego de vasos en regleta.

RS13401M/9

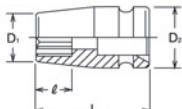
Ref					€
13401M	250	505	9	8, 10, 11, 12, 13, 14, 17, 19, 21, 22	69,72



Vasos bihexagonales.

13405M

mm	D1	D2	ℓ	L		Ref	€
8	13,3	19	6	32	40	13405M8	7,03
10	15,8	19	7	32	40	13405M10	7,03
12	18,3	19	9	32	43	13405M12	7,03
13	19,5	22	10	32	56	13405M13	7,53
14	20,8	22	10	32	56	13405M14	7,53
17	24,5	22	12	32	60	13405M17	7,53

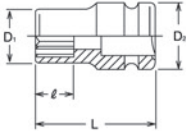




Vasos bihexagonales de pared delgada.

■ 13406M

mm	D ₁	D ₂	ℓ	L		Ref	€
6	9,8	18,5	5	32	28	13406M6	7,03
7	11	18,5	5	32	30	13406M7	7,03
8	12,3	18,5	6	32	31	13406M8	7,03
9	13,5	18,5	7	32	32	13406M9	7,03
10	14,8	18,5	7	32	34	13406M10	7,03
11	16	18,5	8	32	35	13406M11	7,03
12	17,3	18,5	9	32	36	13406M12	7,03
13	18,5	21,5	10	32	43	13406M13	7,53
14	19,8	21,5	10	32	49	13406M14	7,53
15	21	21,5	11	32	49	13406M15	7,53
16	22,3	21,5	11	32	51	13406M16	7,53
17	23,5	21,5	12	32	54	13406M17	7,53
18	24,8	21,5	12	32	57	13406M18	8,01
19	26	21,5	12	32	60	13406M19	8,01



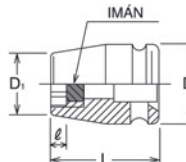
Vasos hexagonales con imán.

■ 13400MG ■ 13400AG

mm	pulgadas	D ₁	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
6	1/4	10,8	19	2,4	32	46	13400MG6	10,55	13400AG1/4	10,63
7		12	19	2,8	32	45	13400MG7	10,55		
8	5/16	13,3	19	3,5	32	45	13400MG8	10,55	13400AG5/16	10,98
9	11/32	14,5	19	3,8	32	44	13400MG9	10,55	13400AG11/32	10,98
10	3/8	15,8	19	4,2	32	49	13400MG10	10,55	13400AG3/8	10,55
11	7/16	17	19	4,9	32	50	13400MG11	10,55	13400AG7/16	10,55
12		18,3	19	5,6	32	55	13400MG12	10,55		
13	1/2	19,5	22	6	32	70	13400MG13	10,55	13400AG1/2	10,55
14	9/16	20,8	22	6,4	32	76	13400MG14	11,38	13400AG9/16	12,65
15		22	22	6,8	32	76	13400MG15	12,65		
16	5/8	23,3	22	7	32	88	13400MG16	12,65	13400AG5/8	12,65
17	11/16	24,5	22	7,5	32	95	13400MG17	12,65	13400AG11/16	12,65
18		25,8	22	7,8	32	105	13400MG18	12,65		
19	3/4	27	22	8	32	116	13400MG19	12,62	13400AG3/4	12,65



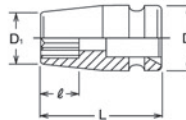
Patentado



Vasos Surface Drive (de contacto curvo).

■ 13410M

mm	D ₁	D ₂	ℓ	L		Ref	€
6	10,8	19	5	32	40	13410M6	6,06
7	12	19	5	32	40	13410M7	6,06
8	13,3	19	6	32	40	13410M8	6,06
9	14,5	19	7	32	40	13410M9	6,06
10	15,8	19	7	32	40	13410M10	6,06
11	17	19	8	32	42	13410M11	6,06
12	18,3	19	9	32	50	13410M12	6,06
13	19	22	10	32	56	13410M13	6,58
14	20,8	22	10	32	56	13410M14	6,58
15	22	22	11	32	56	13410M15	6,58
16	23,3	22	11	32	57	13410M16	6,58
17	24,5	22	12	32	60	13410M17	6,58
19	27	22	12	32	67	13410M19	6,84
22	30,8	22	13	32	72	13410M22	8,27

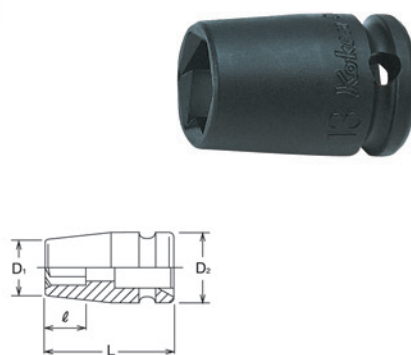




Vasos Pathfinder (guía).

13465M

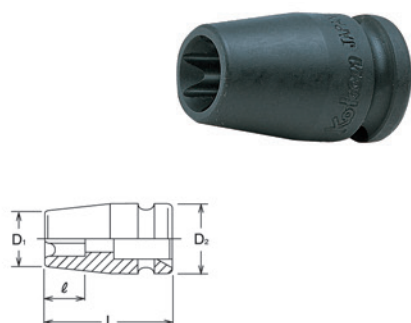
mm	D ₁	D ₂	ℓ	L		Ref	€
10	15,8	19	8	32	43	13465M10	9,56
11	17	19	8	32	44	13465M11	9,56
12	18,3	19	9	32	47	13465M12	9,56
13	19,5	22	9	32	55	13465M13	9,81
14	20,8	22	11	32	56	13465M14	9,81
15	22	22	11	32	56	13465M15	9,81
16	23,3	22	11	32	57	13465M16	9,81
17	24,5	22	12	32	60	13465M17	9,81
18	25,8	22	13	32	63	13465M18	10,23
19	27	22	13	32	66	13465M19	10,23



Vasos TORX®.

13425

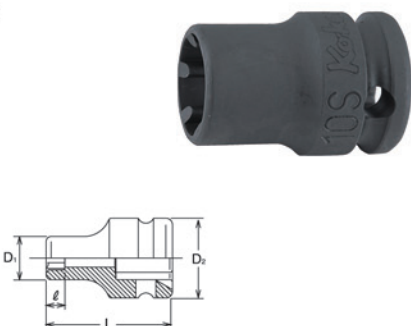
TORX®	D ₁	D ₂	ℓ	L		Ref	€
E4	9,7	19	3,2	32	44	13425E 4	7,48
E5	10,2	19	3,2	32	43	13425E 5	5,88
E6	10,7	19	4	32	44	13425E 6	5,88
E7	11,2	19	4,8	32	44	13425E 7	5,88
E8	11,7	19	5,6	32	44	13425E 8	5,88
E10	12,2	19	6,4	32	42	13425E10	5,88
E12	14,2	19	8	32	43	13425E12	5,88
E14	17,2	19	8,8	32	44	13425E14	5,88
E16	18,2	19	9,6	32	42	13425E16	5,88



Vasos LHS.

13401LH

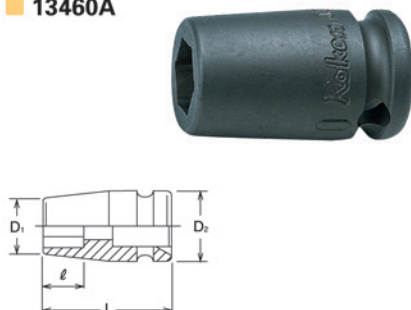
LHS	D ₁	D ₂	ℓ	L		Ref	€
5S	11	19	5	32	32	13401LH5S	11,44
6S	12,3	19	5,6	32	34	13401LH6S	11,44
8S	16	19	6,8	32	36	13401LH8S	11,44
10S	18,5	22	8	32	50	13401LH10S	11,44
12S	22,3	22	9,2	32	58	13401LH12S	12,36
14S	24,8	22	10,4	32	63	13401LH14S	13,26
16S	28,5	22	11,6	32	77	13401LH16S	14,28



Para tornillos autorroscantes.

13460M 13460A

mm	pulgadas	D ₁	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
6	1/4	11,4	19	5	32	43	13460M6	7,74	13460A1/4	8,14
7		12,8	19	5	32	44	13460M7	7,74		
8		14,1	19	6	32	44	13460M8	7,74		
10	3/8	16,6	19	7	32	45	13460M10	7,74	13460A3/8	8,14
13	1/2	20,3	22	10	32	60	13460M13	7,74	13460A1/2	8,90

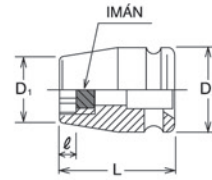




Con imán para tornillos autorroscantes.

13460MG 13460AG

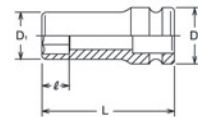
mm	pulgadas	D ₁	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
6	1/4	11,4	19	2,4	32	44	13460MG6	12,13	13460AG1/4	12,64
7		12,8	19	2,8	32	46	13460MG7	12,36		
8	5/16	14,1	19	3,5	32	48	13460MG8	12,52	13460AG5/16	13,16
10	3/8	16,6	19	4,2	32	54	13460MG10	12,80	13460AG3/8	13,39
13	1/2	20,3	22	6	34	81	13460MG13	13,56	13460AG1/2	14,18



Vasos hexagonales medianos de pared delgada.

13301X

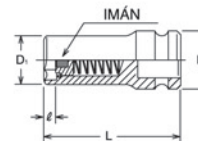
mm	D ₁	D ₂	ℓ	L		Ref	€
8	12,3	18,5	8	50	40	13301X8	12,07
10	14,8	18,5	10	50	46	13301X10	12,07
11	16	18,5	11	50	49	13301X11	12,07
12	17,3	18,5	12	50	53	13301X12	12,07
13	18,5	21,5	13	50	67	13301X13	13,35
14	19,8	21,5	14	50	70	13301X14	13,35
15	21	21,5	15	50	75	13301X15	13,35
16	22,3	21,5	16	50	78	13301X16	13,35
17	23,5	21,5	17	50	82	13301X17	13,35
19	26	21,5	19	50	93	13301X19	15,80
21	28,5	21,5	21	50	104	13301X21	17,99
22	29,8	21,5	22	50	110	13301X22	17,99
23	31	21,5	23	50	115	13301X23	19,89
24	32,3	21,5	24	50	120	13301X24	19,89



Vasos de impacto con imán corredizo.

13300XG

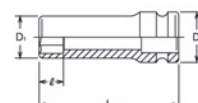
mm	D ₁	D ₂	ℓ	L	Ref	€
8	13,3	19	4	50	13300XG8	38,02
10	15,8	19	4,5	50	13300XG10	38,02
12	18,3	19	6	50	13300XG12	38,02
13	19,5	22	6,5	50	13300XG13	40,03
14	20,8	22	7	50	13300XG14	42,18



Vasos hexagonales largos.

13300M 13300A

mm	pulgadas	D ₁	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
6	1/4	10,8	19	6	80	77	13300M6	8,72	13300A1/4	8,72
7		12	19	7	80	82	13300M7	8,72		
8	5/16	13,3	19	8	80	88	13300M8	8,72	13300A5/16	10,73
9		14,5	19	9	80	88	13300M9	8,72		
10	3/8	15,8	19	10	80	94	13300M10	8,72	13300A3/8	8,71
11	7/16	17	19	11	80	110	13300M11	8,72	13300A7/16	8,71
12		18,3	19	12	80	111	13300M12	8,72		
13	1/2	19,5	22	13	80	138	13300M13	9,21	13300A1/2	8,71
14	9/16	20,8	22	14	80	148	13300M14	9,68	13300A9/16	9,69
15		22	22	15	80	157	13300M15	9,68		
16	5/8	23,3	22	16	80	156	13300M16	9,68	13300A5/8	9,69
17	11/16	24,5	22	17	80	168	13300M17	9,68	13300A11/16	9,69
18		25,8	22	18	80	190	13300M18	9,68		
19	3/4	27	22	19	80	192	13300M19	10,70	13300A3/4	10,68
20		28,3	22	20	80	224	13300M20	11,55		
21	13/16	29,5	22	21	80	226	13300M21	12,52	13300A13/16	12,54
22	7/8	30,8	22	22	80	231	13300M22	12,52	13300A7/8	12,91

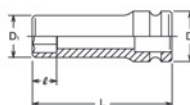




Vasos hexagonales largos de pared delgada.

■ 13301M ■ 13301A

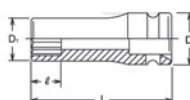
mm	pulgadas	D ₁	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
6	1/4	10	18,5	6	80	65	13301M6	12,16	13301A1/4	12,88
8	5/16	12,3	18,5	8	80	68	13301M8	12,16	13301A5/16	12,88
10	3/8	14,8	18,5	10	80	72	13301M10	12,16	13301A3/8	12,88
11	7/16	16	18,5	11	80	80	13301M11	12,16	13301A7/16	12,88
12		17,3	18,5	12	80	85	13301M12	12,16		
13	1/2	18,5	21,5	13	80	100	13301M13	13,47	13301A1/2	14,17
14	9/16	19,8	21,5	14	80	110	13301M14	13,47	13301A9/16	14,17
15		21	21,5	15	80	120	13301M15	13,47		
16	5/8	22,3	21,5	16	80	130	13301M16	13,47	13301A5/8	14,17
17	11/16	23,5	21,5	17	80	136	13301M17	13,47	13301A11/16	14,17
19	3/4	26	21,5	19	80	155	13301M19	15,96	13301A3/4	16,73
21	13/16	28,5	21,5	21	80	181	13301M21	16,94	13301A13/16	17,82
22	7/8	29,8	21,5	22	80	190	13301M22	18,13	13301A7/8	19,02



Vasos bihexagonales largos.

■ 13305M

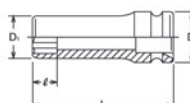
mm	D ₁	D ₂	ℓ	L		Ref	€
8	13,3	19	8	80	88	13305M8	12,17
10	15,8	19	10	80	94	13305M10	12,17
12	18,3	19	12	80	111	13305M12	12,17
13	19,5	22	13	80	138	13305M13	13,47
14	20,8	22	14	80	148	13305M14	13,47



Vasos Surface Drive (de contacto curvo) largos.

■ 13310M

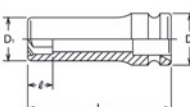
mm	D ₁	D ₂	ℓ	L		Ref	€
8	13,3	19	8	80	90	13310M8	10,61
9	14,5	19	9	80	90	13310M9	10,61
10	15,8	19	10	80	97	13310M10	10,61
11	17	19	11	80	110	13310M11	10,61
12	18,3	19	12	80	105	13310M12	10,61
13	19,5	22	13	80	135	13310M13	11,58
14	20,8	22	14	80	145	13310M14	11,58
15	22	22	15	80	160	13310M15	11,58
16	23,3	22	16	80	156	13310M16	11,76
17	24,5	22	17	80	168	13310M17	13,68
19	27	22	19	80	190	13310M19	13,68



Vasos Pathfinder (guía) largos.

■ 13365M

mm	D ₁	D ₂	ℓ	L		Ref	€
10	15,8	19	8	80	99	13365M10	13,95
11	17	19	8	80	108	13365M11	13,95
12	18,3	19	9	80	110	13365M12	13,95
13	19,5	22	9	80	142	13365M13	14,45
14	20,8	22	11	80	144	13365M14	14,45
15	22	22	11	80	150	13365M15	14,45
16	23,3	22	11	80	159	13365M16	14,45
17	24,5	22	12	80	170	13365M17	14,45
18	25,8	22	13	80	201	13365M18	15,24
19	27	22	13	80	203	13365M19	15,24





Vasos con articulación universal.

■ 13440M ■ 13440A

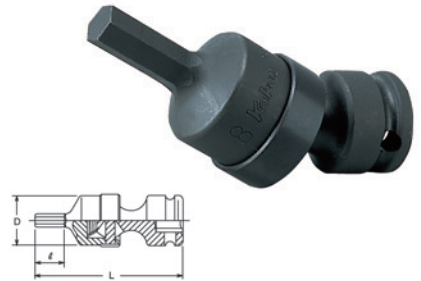
mm	pulgadas	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
10	3/8	15,8	5	57	115	13440M10	31,71	13440A3/8	33,28
11	7/16	17	6	57	115	13440M11	31,71	13440A7/16	33,28
12		18,3	6	57	115	13440M12	31,71		
13	1/2	19,5	6	57	115	13440M13	31,71	13440A1/2	33,28
14	9/16	20,8	7	59	120	13440M14	31,71	13440A9/16	33,28
15		22	7	59	120	13440M15	31,71		
16	5/8	23,3	8	59	120	13440M16	31,71	13440A5/8	33,28
17	11/16	24,5	8	59	120	13440M17	31,71	13440A11/16	33,28
18		25,8	9	61	126	13440M18	31,71		
19	3/4	27	10	61	130	13440M19	31,71	13440A3/4	33,28
20		29,5	10	65	135	13440M20	34,74		
22		32	13	65	185	13440M22	34,74		
24		34,5	13	67	190	13440M24	34,74		



Vasos inhex con articulación universal.

■ 13430M

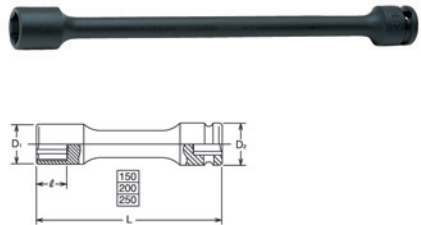
mm	D	ℓ	L		Ref	€
5	24	15	74	120	13430M5	34,35
6	24	15	74	131	13430M6	34,35
8	24	20	74	136	13430M8	34,35
10	24	20	74	141	13430M10	34,35
17	24	7	53	150	13430M17	34,35



Vasos extra largos.

■ 13145M-150/-200/-250

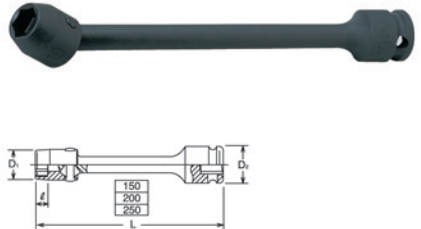
mm	D ₁	D ₂	ℓ				Ref L-150	€	Ref L-200	€	Ref L-250	€
				150	200	250						
10,8	19	6	105	136	167	13145M-1506		23,73	13145M-2006	26,31	13145M-2506	28,58
13,3	19	8	110	141	172	13145M-1508		25,17	13145M-2008	27,88	13145M-2508	28,58
15,8	19	10	120	151	182	13145M-15010		25,17	13145M-20010	27,88	13145M-25010	28,58
18,3	19	12	128	159	190	13145M-15012		25,17	13145M-20012	27,88	13145M-25012	28,58
19,5	19	13	137	168	199	13145M-15013		25,69	13145M-20013	27,88	13145M-25013	30,40
20,8	19	14	146	177	208	13145M-15014		25,69	13145M-20014	27,88	13145M-25014	30,40
22	19	15	155	186	217	13145M-15015		25,69	13145M-20015	27,88	13145M-25015	30,40
24,5	19	17	163	194	225	13145M-15017		25,69	13145M-20017	27,88	13145M-25017	30,40



Vasos extra largos con articulación universal.

■ 13146M-150/-200/-250

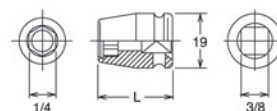
mm	D ₁	D ₂	ℓ				Ref L-150	€	Ref L-200	€	Ref L-250	€
				150	200	250						
12	19	6	128	159	190	13146M-1508		50,59	13146M-2008	53,17	13146M-2508	54,00
14,3	19	7	131	162	193	13146M-15010		50,59	13146M-20010	53,17	13146M-25010	54,00
18	19	8	133	164	195	13146M-15012		50,59	13146M-20012	53,17	13146M-25012	54,00
19,3	19	8,5	132	163	194	13146M-15013		50,59	13146M-20013	53,17	13146M-25013	54,00
20	19	9	132	163	194	13146M-15014		50,59	13146M-20014	53,17	13146M-25014	54,00



Porta punta.

13139

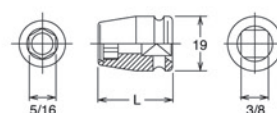
Ref	L		€
13139	30	32	11,22



Porta punta.

13140

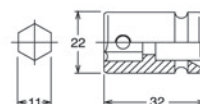
Ref	L		€
13140	30	33	11,22



Porta punta.

13105

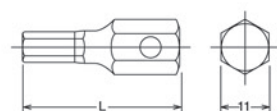
Ref	L		€
13105	32	70	10,63



Puntas para tornillos Inhex.

107-11

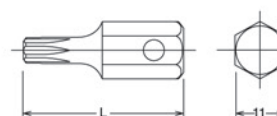
mm	pulgadas	L		Ref Métrica	€	Ref Pulgadas	€
3		35	15	107113	5,29		
4		35	16	107114	5,29		
5		35	16	107115	5,29		
6	1/4	35	18	107116	5,29	107111/4	5,28
7		35	19	107117	5,67		
8	5/16	35	20	107118	5,67	107115/16	5,62
10	3/8	35	26	1071110	5,67	107113/8	5,62
11		35	28	1071111	5,67		
12		35	31	1071112	5,67		
14	1/2	35	38	1071114	5,67	107111/2	5,62
16		35	47	1071116	7,75		
17		35	50	1071117	7,24		
18		35	53	1071118	7,89		
19	3/4	35	56	1071119	7,74	107113/4	7,75



Puntas TORX®.

107-11T

TORX®	L		Ref	€
T30	35	18	10711T30	6,94
T40	35	20	10711T40	6,94
T45	35	22	10711T45	6,94
T50	35	26	10711T50	7,09
T55	35	31	10711T55	7,09
T60	35	38	10711T60	8,91





Puntas XZN.

■ 107-11 (XZN)

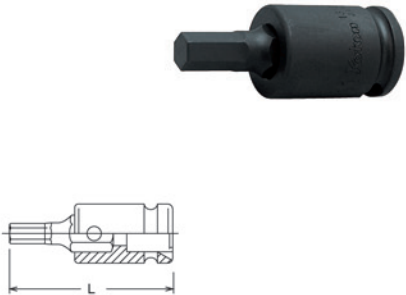
XZN	L		Ref	€
M4	35	18	10711M4	7,14
M5	35	20	10711M5	7,14
M6	35	22	10711M6	7,14
M8	35	26	10711M8	7,14
M10	35	31	10711M10	8,17
M12	35	38	10711M12	11,17



Vasos con punta Hexagonal.

■ 13105-11

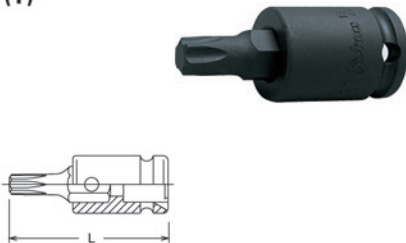
mm	pulgadas	L		Ref Métrica	€	Ref Pulgadas	€
3		54	87	13105-113	17,05		
4		54	87	13105-114	17,05		
5		54	88	13105-115	17,05		
6	1/4	54	89	13105-116	17,05	13105-111/4	17,02
7		54	90	13105-117	17,46		
8	5/16	54	92	13105-118	17,46	13105-115/16	17,39
10	3/8	54	96	13105-1110	17,46	13105-113/8	17,39
12		54	101	13105-1112	17,46		
14	1/2	54	108	13105-1114	17,46	13105-111/2	17,39
17		54	120	13105-1117	18,95		
19	3/4	54	128	13105-1119	19,49	13105-113/4	19,03



Vasos con punta TORX®.

■ 13105-11 (T)

T	L		Ref	€
T30	54	87	13105-11T30	18,72
T40	54	87	13105-11T40	18,72
T45	54	87	13105-11T45	18,72
T50	54	92	13105-11T50	18,85
T55	54	96	13105-11T55	18,85
T60	54	101	13105-11T60	20,64



Alargaderas.

■ 13760-75P/-100P/-125P/-150P/-250P

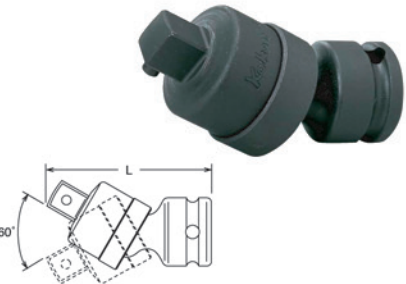
Ref	L		€
13760-75P	75	95	8,34
13760-100P	100	115	14,86
13760-125P	125	141	9,96
13760-150P	150	165	17,08
13760-250P	250	210	18,62



Articulación universal.

■ 13770P

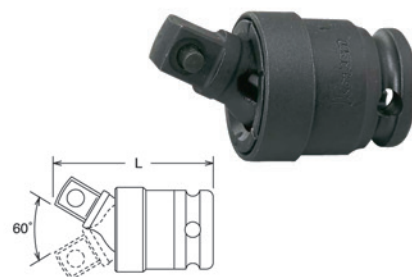
Ref	L		€
13770P	56	110	31,71



Articulación universal.

13771P

Ref	L		€
13771P	48	92	23,59



Adaptador.

13322A-P

Ref	L		€
13322A	25	25	12,64



Adaptador.

13344A-P

Ref	L		€
13344A-P	32.5	53	12,02



Juego de vasos.

13241M

Ref					€
13241M	240 x 30 x 35	800	11	9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19	65,01



NUEVO

Vaso con protector plástico.

13400MFR

mm	D ₁	D ₂	ℓ	L		Ref	€
8	13,3	19	5	32	42	13400M8FR	55,74
10	15,8	19	7	32	42	13400M10FR	55,74
12	18,3	19	9	32	45	13400M12FR	55,74
14	20,8	22	10	32	58	13400M14FR	63,76
15	22	22	11	32	58	13400M15FR	63,76
16	23,3	22	11	32	59	13400M16FR	63,76
17	24,5	22	12	32	62	13400M17FR	63,76



NUEVO

Alargaderas con protector plástico

13760FR

Ref	L	€
13760-125P.FR	125	113,65
13760-250P.FR	250	148,54





Vasos hexagonales.

■ 14400M ■ 14400A

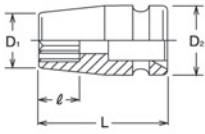
mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
	1/4	12	25	5	38	80			14400 A1/4	8,04
8	5/16	14,5	25	6	38	85	14400M8	6,08	14400A5/16	7,74
9		15,7	25	7	38	85	14400M9	6,08		
10	3/8	17	25	7	38	85	14400M10	6,08	14400A3/8	6,08
11	7/16	18,2	25	8	38	85	14400M11	6,08	14400A7/16	6,08
12		19,5	25	9	38	85	14400M12	6,08		
13	1/2	20,7	25	10	38	85	14400M13	6,08	14400A1/2	6,08
14	9/16	22	25	10	38	85	14400M14	6,08	14400A9/16	6,08
15		23,2	30	11	38	130	14400M15	6,75		
16	5/8	24,5	30	11	38	130	14400M16	6,75	14400A5/8	6,75
17	11/16	25,7	30	12	38	130	14400M17	6,75	14400A11/16	6,75
18		27	30	13	38	130	14400M18	6,75		
19	3/4	28,2	30	13	38	125	14400M19	6,75	14400A3/4	6,75
20		29,5	30	13	38	127	14400M20	7,67		
21	13/16	30,7	30	14	38	120	14400M21	7,67	14400A13/16	7,67
22	7/8	32	30	14	38	130	14400M22	7,92	14400A7/8	7,92
23		33,2	30	14	38	130	14400M23	8,80		
24	15/16	34,5	30	14	38	135	14400M24	8,80	14400A15/16	8,80
25	1	35,7	30	14	38	135	14400M25	8,80	14400A1	9,44
26		37	30	14	38	160	14400M26	9,44		
27	1-1/16	38,2	30	16	40	160	14400M27	11,87	14400A1-1/16	11,87
28		39,5	30	16	40	170	14400M28	11,87		
29	1-1/8	40,7	30	17	42	190	14400M29	12,38	14400A1-1/8	12,38
30	1-3/16	42	30	17	42	190	14400M30	12,37	14400A1-3/16	12,37
31		43,2	30	17	42	213	14400M31	12,38		
32	1-1/4	44,5	30	18	42	216	14400M32	12,59	14400A1-1/4	12,59
33	1-5/16	45,7	30	19	46	260	14400M33	15,90	14400A1-5/16	18,43
34	1-3/8	47	30	19	46	263	14400M34	18,43	14400A1-3/8	19,31
35		48,2	30	19	46	275	14400M35	19,31		
36		49,5	30	20	46	285	14400M36	19,31		
41		55,7	30	21	55	411	14400M41	33,01		



Vasos bihexagonales.

■ 14405M ■ 14405A

mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
8		14,5	25	6	38	85	14405M8	7,38		
9		15,7	25	7	38	85	14405M9	7,38		
10		17	25	7	38	85	14405M10	7,38		
11		18,2	25	8	38	84	14405M11	7,38		
12		19,5	25	9	38	84	14405M12	7,38		
13	1/2	20,7	25	10	38	84	14405M13	7,38	14405A1/2	7,74
14	9/16	22	25	10	38	84	14405M14	7,38	14405A9/16	7,74
15		23,2	30	11	38	130	14405M15	8,39		
16	5/8	24,5	30	11	38	127	14405M16	8,39	14405A5/8	8,91
17		25,7	30	12	38	128	14405M17	9,05		
18		27	30	13	38	130	14405M18	9,05		
19	3/4	28,2	30	13	38	125	14405M19	10,04	14405A3/4	10,04
21	13/16	30,7	30	14	38	120	14405M21	10,04	14405A13/16	10,04
22	7/8	32	30	14	38	130	14405M22	10,04	14405A7/8	10,04
23		33,2	30	14	38	132	14405M23	10,07		
24	15/16	34,5	30	14	38	133	14405M24	10,84	14405A15/16	10,85
26		37	30	14	38	147	14405M26	11,55		
27		38,2	30	16	40	157	14405M27	14,74		
28		39,5	30	16	40	170	14405M28	16,90		
30		42	30	17	42	190	14405M30	17,66		
32		44,5	30	18	42	216	14405M32	17,66		

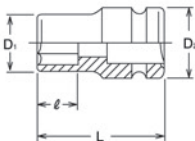




Vasos hexagonales de pared delgada.

14401M 14401A

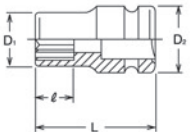
mm	pulgadas	D ₁	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
	1/4	10,5	24	5	38	55			14401A1/4	8,04
8	5/16	13	24	6	38	57	14401M8	8,64	14401A5/16	9,05
9		14,2	24	7	38	58	14401M9	8,64		
10	3/8	15,5	24	7	38	60	14401M10	8,64	14401A3/8	9,05
11	7/16	16,7	24	8	38	62	14401M11	8,64	14401A7/16	9,05
12		18	24	9	38	63	14401M12	8,64		
13	1/2	19,2	24	10	38	65	14401M13	11,87	14401A1/2	9,05
14	9/16	20,5	24	10	38	67	14401M14	11,87	14401A9/16	11,87
15		21,7	29	11	38	100	14401M15	11,87		
16	5/8	23	29	11	38	102	14401M16	13,12	14401A5/8	13,12
17	11/16	24,2	29	12	38	105	14401M17	13,12	14401A11/16	13,12
18		25,5	29	13	38	105	14401M18	13,12		
19	3/4	26,7	29	13	38	107	14401M19	13,12	14401A3/4	13,12
20		28	29	13	38	108	14401M20	16,53		
21	13/16	29,2	29	14	38	109	14401M21	16,92	14401A13/16	16,92
22	7/8	30,5	29	14	38	114	14401M22	17,78	14401A7/8	18,19
23		31,7	29	14	38	118	14401M23	18,18		
24	15/16	33	29	14	38	122	14401M24	20,31	14401A15/16	20,31
25	1	34,2	29	14	38	129	14401M25	20,31	14401A1	20,31
26	1-1/16	35,5	29	14	38	131	14401M26	21,77	14401A1-1/16	21,77
27		36,7	29	16	40	145	14401M27	27,37		
28		38	29	16	40	152	14401M28	27,37		
29	1-1/8	39,2	29	17	42	165	14401M29	28,59	14401A1-1/8	28,59
30	1-3/16	40,5	29	17	42	178	14401M30	28,56	14401A1-3/16	28,56
31		41,7	29	17	42	185	14401M31	28,59		
32	1-1/4	43	29	18	42	188	14401M32	29,05	14401A1-1/4	29,05
33	1-5/16	44,2	29	19	46	219	14401M33	36,70	14401A1-5/16	36,70
34	1-3/8	45,5	29	19	46	248	14401M34	42,52	14401A1-3/8	42,52
36		48	29	20	46	264	14401M36	44,57		



Vasos bihexagonales de pared delgada.

14406M 14406A

mm	pulgadas	D ₁	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
	1/4	10,5	24	5	38	55			14406A1/4	8,44
8	5/16	13	24	6	38	57	14406M8	8,64	14406A5/16	8,64
9		14,2	24	7	38	58	14406M9	8,64		
10	3/8	15,5	24	7	38	60	14406M10	8,64	14406A3/8	8,64
11	7/16	16,7	24	8	38	62	14406M11	8,64	14406A7/16	8,64
12		18	24	9	38	63	14406M12	8,64		
13	1/2	19,2	24	10	38	65	14406M13	11,87	14406A1/2	11,87
14	9/16	20,5	24	10	38	67	14406M14	11,87	14406A9/16	11,87
15		21,7	29	11	38	100	14406M15	11,87		
16	5/8	23	29	11	38	102	14406M16	13,12	14406A5/8	13,12
17	11/16	24,2	29	12	38	105	14406M17	13,12	14406A11/16	13,12
18		25,5	29	13	38	105	14406M18	13,12		
19	3/4	26,7	29	13	38	107	14406M19	13,12	14406A3/4	13,12
20		28	29	13	38	108	14406M20	16,53		
21	13/16	29,2	29	14	38	109	14406M21	16,92	14406A13/16	16,92
22	7/8	30,5	29	14	38	114	14406M22	17,78	14406A7/8	17,78
23		31,7	29	14	38	118	14406M23	18,19		
24	15/16	33	29	14	38	122	14406M24	20,31	14406A15/16	20,31
25	1	34,2	29	14	38	129	14406M25	20,31	14406A1	20,31
26	1-1/16	35,5	29	14	38	131	14406M26	21,77	14406A1-1/16	21,77
27		36,7	29	16	40	145	14406M27	27,37		
28		38	29	16	40	152	14406M28	27,37		
29	1-1/8	39,2	29	17	42	165	14406M29	28,59	14406A1-1/8	28,59
30	1-3/16	40,5	29	17	42	178	14406M30	28,56	14406A1-3/16	28,56
31		41,7	29	17	42	185	14406M31	28,59		
32	1-1/4	43	29	18	42	188	14406M32	29,05	14406A1-1/4	29,05
33	1-5/16	44,2	29	19	46	219	14406M33	36,70	14406A1-5/16	36,70
34	1-3/8	45,5	29	19	46	248	14406M34	42,51	14406A1-3/8	42,51
36		48	29	20	46	264	14406M36	44,57		

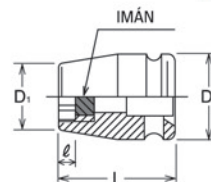




Vasos hexagonales con imán.

14400MG

mm	D ₁	D ₂	ℓ	L		Ref	€
8	14,5	25	3,5	38	95	14400MG8	11,54
10	17	25	4,2	38	95	14400MG10	15,43
12	19,5	25	5,6	38	100	14400MG12	15,43
13	20,7	25	6	38	100	14400MG13	15,43
14	22	25	6,4	38	105	14400MG14	15,43
15	23,2	30	6,8	38	140	14400MG15	17,05
16	24,5	30	7	38	145	14400MG16	17,05
17	25,7	30	7,5	38	145	14400MG17	17,05
18	27	30	7,8	38	147	14400MG18	17,05
19	28,2	30	8	38	147	14400MG19	17,05



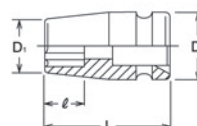
Patentado



Vasos Surface Drive (de contacto curvo).

14410M

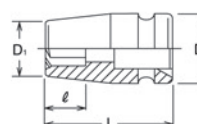
mm	D ₁	D ₂	ℓ	L		Ref	€
10	17	25	7	38	100	14410M10	7,50
11	18,2	25	8	38	103	14410M11	7,50
12	19,5	25	9	38	110	14410M12	7,50
13	20,7	25	10	38	113	14410M13	7,29
14	22	25	10	38	115	14410M14	7,29
15	23,2	30	11	38	120	14410M15	7,98
16	24,5	30	11	38	120	14410M16	10,45
17	25,7	30	12	38	126	14410M17	10,45
18	27	30	13	38	121	14410M18	10,45
19	28,2	30	13	38	124	14410M19	10,45
20	29,5	30	13	38	123	14410M20	11,50
21	30,7	30	14	38	120	14410M21	11,50
22	32	30	14	38	130	14410M22	11,50
24	34,5	30	14	38	134	14410M24	10,24
25	35,7	30	14	38	135	14410M25	11,88
26	37	30	14	38	160	14410M26	11,88
27	38,2	30	16	40	160	14410M27	11,88
28	39,5	30	16	40	170	14410M28	13,56
29	40,7	30	17	42	190	14410M29	13,56
30	42	30	17	42	190	14410M30	13,56
31	43,2	30	17	42	213	14410M31	15,11
32	44,5	30	18	42	216	14410M32	15,11
34	47	30	19	46	263	14410M34	24,64
36	49,5	30	20	46	285	14410M36	24,87



Vasos Pathfinder (guía).

14465M

mm	D ₁	D ₂	ℓ	L		Ref	€
10	17	25	8	38	38	14465M10	10,85
11	18,2	25	8	38	87	14465M11	10,85
12	19,5	25	9	38	87	14465M12	10,85
13	20,7	25	9	38	86	14465M13	10,85
14	22	25	11	38	86	14465M14	10,85
15	23,2	30	11	38	131	14465M15	12,12
16	24,5	30	11	38	131	14465M16	12,12
17	25,7	30	12	38	132	14465M17	12,12
18	27	30	13	38	128	14465M18	12,12
19	28,2	30	13	38	128	14465M19	12,12
20	29,5	30	14	38	125	14465M20	12,12
21	30,7	30	14	38	128	14465M21	12,80
22	32	30	15	38	130	14465M22	12,80
23	33,2	30	15	38	135	14465M23	12,80
24	34,5	30	15	38	135	14465M24	12,80
26	37	30	15	38	152	14465M26	14,02
27	38,2	30	16	40	169	14465M27	14,72

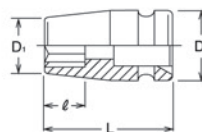




Vasos octogonales.

14415M

mm	D ₁	D ₂	ℓ	L		Ref	€
14	25,7	30	10	38	138	14415M14	12,53
15	27	30	11	38	145	14415M15	12,53
16	29,5	30	11	38	150	14415M16	12,53
17	30,7	30	12	38	155	14415M17	12,53
18	32	30	13	38	165	14415M18	12,53
19	33,2	30	14	38	170	14415M19	12,53
22	38,2	30	14	40	185	14415M22	14,98
24	42	30	14	42	215	14415M24	16,42
27	45,7	30	16	46	278	14415M27	26,74
28	47	30	16	46	285	14415M28	33,17



Vasos TORX®.

14425

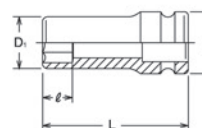
TORX®	D ₁	D ₂	ℓ	L		Ref	€
E10	14,2	25	6,4	38	86	14425E10	7,06
E12	15,2	25	8	38	85	14425E12	7,06
E14	18,2	25	8,8	38	88	14425E14	7,06
E16	19,2	25	9,6	38	88	14425E16	7,06
E18	22,2	25	11,1	38	89	14425E18	7,06
E20	24,2	30	12,7	38	134	14425E20	8,69
E22	26,2	30	15,5	40	140	14425E22	9,13
E24	28,2	30	17	40	138	14425E24	9,13



Vasos hexagonales medianos de pared delgada.

14301X

mm	D ₁	D ₂	ℓ	L		Ref	€
8	13	24	8	60	72	14301X8	16,20
10	15,5	24	10	60	79	14301X10	16,20
11	16,7	24	11	60	82	14301X11	16,20
12	18	24	12	60	88	14301X12	16,20
13	19,2	24	13	60	92	14301X13	16,20
14	20,5	24	14	60	97	14301X14	16,20
15	21,7	29	15	60	125	14301X15	17,30
16	23	29	16	60	135	14301X16	17,30
17	24,2	29	17	60	142	14301X17	17,30
19	26,7	29	19	60	151	14301X19	17,47
21	29,2	29	21	60	170	14301X21	18,82
22	30,5	29	22	65	187	14301X22	18,82
23	31,7	29	23	65	192	14301X23	19,88
24	33	29	24	65	202	14301X24	19,88
26	35,5	29	26	65	218	14301X26	22,30
27	36,7	29	27	65	231	14301X27	23,67

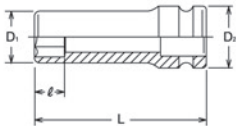




Vasos hexagonales largos.

■ 14300M ■ 14300A

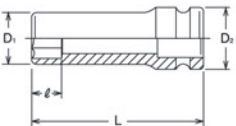
mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
8	5/16	14,5	25	8	80	137	14300M8	11,08	14300A5/16	14,45
9		15,7	25	9	80	138	14300M9	11,08		
10	3/8	17	25	10	80	140	14300M10	11,08	14300A3/8	11,08
11	7/16	18,2	25	11	80	156	14300M11	11,08	14300A7/16	11,08
12		19,5	25	12	80	162	14300M12	11,08		
13	1/2	20,7	25	13	80	162	14300M13	11,70	14300A1/2	11,70
14	9/16	22	25	14	80	174	14300M14	11,70	14300A9/16	11,70
15		23,2	30	15	80	220	14300M15	12,30		
16	5/8	24,5	30	16	80	232	14300M16	12,30	14300A5/8	12,30
17	11/16	25,7	30	17	80	232	14300M17	12,30	14300A11/16	12,30
18		27	30	18	80	232	14300M18	12,30		
19	3/4	28,2	30	19	80	259	14300M19	12,30	14300A3/4	12,30
20		29,5	30	20	80	265	14300M20	13,27		
21	13/16	30,7	30	21	80	272	14300M21	13,62	14300A13/16	13,27
22	7/8	32	30	22	85	290	14300M22	13,62	14300A7/8	13,62
23		33,2	30	23	85	300	14300M23	14,07		
24	15/16	34,5	30	24	85	329	14300M24	14,79	14300A15/16	14,79
25	1	35,7	30	25	85	345	14300M25	16,69	14300A1	16,69
26		37	30	26	85	350	14300M26	16,69		
27	1- 1/16	38,2	30	27	85	385	14300M27	16,69	14300A1- 1/16	16,69
28		39,5	30	28	85	390	14300M28	18,38		
29	1- 1/8	40,7	30	29	85	416	14300M29	21,93	14300A1- 1/8	18,38
30	1- 3/16	42	30	30	85	457	14300M30	21,93	14300A1- 3/16	21,93
31		43,2	30	31	85	505	14300M31	23,25		
32	1- 1/4	44,5	30	32	85	542	14300M32	23,25	14300A1- 1/4	23,25
33		45,7	30	33	85	562	14300M33	25,76		
34		47	30	33	85	570	14300M34	25,76		
36		49,5	30	36	85	635	14300M36	28,81		
41		55,7	30	38	85	686	14300M41	34,33		



Vasos hexagonales largos de pared delgada.

■ 14301M ■ 14301A

mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
8		13	24	8	80	87	14301M8	13,04		
9		14,2	24	9	80	92	14301M9	13,04		
10	3/8	15,5	24	10	80	98	14301M10	13,04	14301A3/8	13,63
11	7/16	16,7	24	11	80	104	14301M11	13,04	14301A7/16	13,63
12		18	24	12	80	111	14301M12	13,04		
13	1/2	19,2	24	13	80	120	14301M13	15,74	14301A1/2	13,63
14	9/16	20,5	24	14	80	127	14301M14	15,74	14301A9/16	15,74
15		21,7	29	15	80	169	14301M15	15,74		
16	5/8	23	29	16	80	173	14301M16	16,26	14301A5/8	15,74
17	11/16	24,2	29	17	80	182	14301M17	16,26	14301A11/16	16,26
18		25,5	29	18	80	192	14301M18	16,26		
19	3/4	26,7	29	19	80	197	14301M19	16,26	14301A3/4	16,26
20		28	29	20	80	203	14301M20	17,85		
21	13/16	29,2	29	21	80	218	14301M21	19,36	14301A13/16	17,85
22	7/8	30,5	29	22	85	219	14301M22	19,36	14301A7/8	19,36
23		31,7	29	23	85	220	14301M23	19,98		
24	15/16	33	29	24	85	230	14301M24	21,04	14301A15/16	21,04
25		34,2	29	25	85	240	14301M25	23,73		
26		35,5	29	26	85	253	14301M26	23,73		
27	1- 1/16	36,7	29	27	85	270	14301M27	23,73	14301A1- 1/16	23,73
30		40,5	29	30	85	285	14301M30	31,16		
32		43	29	32	85	393	14301M32	33,05		
34		45,5	29	34	85	411	14301M34	36,62		
35		46,7	29	35	85	450	14301M35	38,99		
36		48	29	36	85	460	14301M36	40,96		

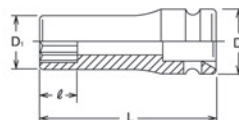




Vasos bihexagonales largos.

14305M

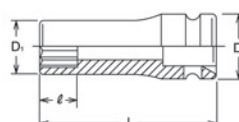
mm	D ₁	D ₂	ℓ	L	⚖	Ref	€
10	17	25	10	80	140	14305M10	15,68
12	19,5	25	12	80	162	14305M12	15,68
13	20,7	25	13	80	162	14305M13	15,68
14	22	25	14	80	174	14305M14	15,68
15	23,2	30	15	80	235	14305M15	15,68
16	24,5	30	16	80	232	14305M16	15,68
17	25,7	30	17	80	258	14305M17	15,68
18	27	30	18	80	272	14305M18	15,78
19	28,2	30	19	80	259	14305M19	15,78
21	30,7	30	21	80	272	14305M21	16,92
22	32	30	22	85	319	14305M22	16,92
24	34,5	30	24	85	329	14305M24	18,09
27	38,2	30	27	85	385	14305M27	21,38
30	42	30	30	85	457	14305M30	23,88
32	44,5	30	32	85	542	14305M32	27,76



Vasos bihexagonales largos de pared delgada.

14306M

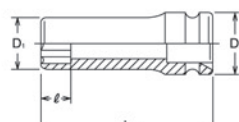
mm	D ₁	D ₂	ℓ	L	⚖	Ref	€
10	15,5	24	10	80	98	14306M10	16,90
12	18	24	12	80	111	14306M12	16,90
13	19,2	24	13	80	120	14306M13	16,90
14	20,5	24	14	80	127	14306M14	16,90
15	21,7	29	15	80	169	14306M15	18,05
16	23	29	16	80	173	14306M16	18,05
17	24,2	29	17	80	182	14306M17	18,05
18	25,5	29	18	80	192	14306M18	18,21
19	26,7	29	19	80	197	14306M19	18,21
21	29,2	29	21	80	218	14306M21	19,51
22	30,5	29	22	85	219	14306M22	19,51
24	33	29	24	85	230	14306M24	20,88
27	36,7	29	27	85	270	14306M27	24,63
30	40,5	29	30	85	285	14306M30	32,02
32	43	29	32	85	393	14306M32	52,09



Vasos Surface Drive (de contacto curvo) largos.

14310M

mm	D ₁	D ₂	ℓ	L	⚖	Ref	€
10	17	25	10	80	136	14310M10	14,20
11	18,2	25	11	80	148	14310M11	14,20
12	19,5	25	12	80	156	14310M12	14,20
13	20,7	25	13	80	158	14310M13	13,78
14	22	30	14	80	170	14310M14	13,78
15	23,2	30	15	80	225	14310M15	13,78
16	24,5	30	16	80	228	14310M16	14,61
17	25,7	30	17	80	250	14310M17	14,61
18	27	30	18	80	265	14310M18	14,61
19	28,2	30	19	80	252	14310M19	14,61
20	29,5	30	20	80	260	14310M20	16,06
21	30,7	30	21	80	235	14310M21	16,06
22	32	30	22	85	314	14310M22	16,06
24	34,5	30	24	85	322	14310M24	17,46
25	35,7	30	25	85	338	14310M25	18,79
26	37	30	26	85	395	14310M26	21,52
27	38,2	30	27	85	380	14310M27	21,98
30	42	30	30	85	450	14310M30	24,64
32	44,5	30	32	85	535	14310M32	27,81
34	47	30	34	85	563	14310M34	37,48
36	49,5	30	36	85	630	14310M36	46,55

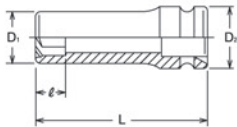




Vasos Pathfinder (guía) largos.

■ 14365M

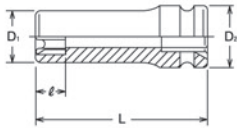
mm	D ₁	D ₂	ℓ	L		Ref	€
10	17	25	8	80	138	14365M10	17,74
11	18,2	25	8	80	144	14365M11	17,74
12	19,5	25	9	80	165	14365M12	17,74
13	20,7	25	9	80	170	14365M13	17,74
14	22	25	11	80	178	14365M14	17,74
15	23,2	30	11	80	237	14365M15	18,55
16	24,5	30	11	80	245	14365M16	18,55
17	25,7	30	12	80	263	14365M17	19,79
18	27	30	13	80	268	14365M18	19,64
19	28,2	30	13	80	270	14365M19	19,64
20	29,5	30	14	80	274	14365M20	20,45
21	30	30	14	80	287	14365M21	20,45
22	32	30	15	85	314	14365M22	20,45
23	33,2	30	15	85	320	14365M23	22,14
24	34,5	30	15	85	335	14365M24	22,14
26	37	30	15	85	388	14365M26	22,83
27	38,2	30	16	85	407	14365M27	24,60



Vasos TORX® largos.

■ 14325

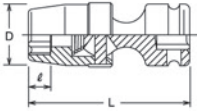
TORX®	D ₁	D ₂	ℓ	L		Ref	€
E10	14,2	25	7,4	80	136	14325E10	16,00
E12	15,2	25	9	80	141	14325E12	16,00
E14	18,2	25	9,8	80	147	14325E14	16,00
E16	19,2	25	10,6	80	151	14325E16	16,00
E18	22,2	25	12,1	80	218	14325E18	16,00
E20	24,2	30	13,7	80	225	14325E20	17,29



Vasos con articulación universal.

■ 14440M ■ 14440A

mm	pulgadas	D	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
13	1/2	20,7	6	67,5	210	14440M13	44,93	14440A1/2	47,01
14	9/16	22	7	69,5	210	14440M14	44,93	14440A9/16	47,01
15		23,2	7	69,5	210	14440M15	44,93		
16	5/8	24,5	8	69,5	206	14440M16	44,93	14440A5/8	47,01
17	11/16	25,7	8	69,5	220	14440M17	44,93	14440A11/16	47,01
18		27	9	69,5	218	14440M18	44,93		
19	3/4	28,2	10	73,5	220	14440M19	44,93	14440A3/4	47,01
20		29,5	10	73,5	225	14440M20	44,93		
21		30,7	11	73,5	230	14440M21	44,93		
22		32	13	73,5	134	14440M22	46,07		
24		34,5	14	75,5	258	14440M24	46,07		

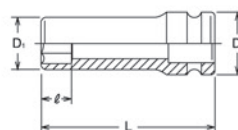




Vasos de impacto de aleación de aluminio, para tuercas de rueda de aluminio.

AN14300

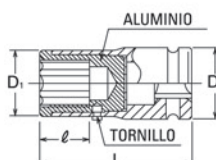
mm	D ₁	D ₂	ℓ	L		Ref	€
17	25,7	30	17	80	85	AN14300M17	21,45
19	28,2	30	19	80	89	AN14300M19	21,45
21	30,7	30	21	80	93	AN14300M21	21,45



Vasos de impacto con partes internas de aluminio intercambiables.

AR14300

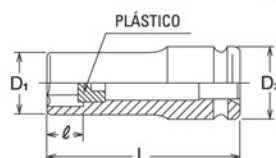
mm	D ₁	D ₂	ℓ	L		Ref	€
17	28	30	21	65	220	AR14300M17	24,40
19	30	30	24	65	223	AR14300M19	25,44
21	33	30	25	70	237	AR14300M21	28,14



Vasos de impacto con topes de plástico para tornillos de tapacubos.

14113J

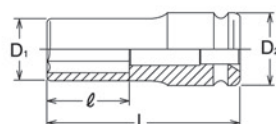
mm	D ₁	D ₂	ℓ	L		Ref	€
17	25,7	30	14	80	251	14113J17	19,79
19	28,2	30	16	80	286	14113J19	19,79
21	30,7	30	20	80	309	14113J21	21,79



Vasos de impacto para tornillos de tapacubos.

14113M

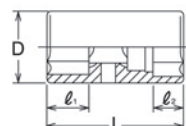
mm	D ₁	D ₂	ℓ	L		Ref	€
17	25,7	30	34	80	230	14113M17	16,62
19	28,2	30	38	80	262	14113M19	16,62
21	30,7	30	42	80	255	14113M21	19,60



Vasos para rueda, dos bocas.

14118M

mm	D ₁	ℓ ₁	ℓ ₂	L		Ref	€
17x19	28	15,5	13	48	150	14118M17x19	17,54
19x21	31	17,5	13	57	177	14118M19x21	16,53
19x22	31	17,5	15	57	187	14118M19x22	17,33

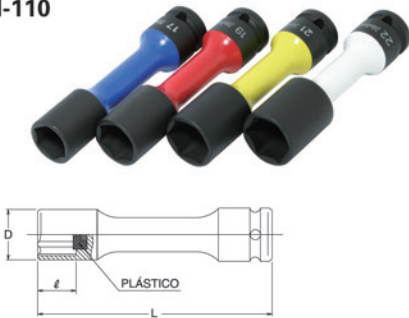




Vasos para rueda.

■ 14145PM-110

mm	D	ℓ	L		Ref	€
17	23,7	21	110	223	14145PM11017	27,84
19	25,7	23	110	231	14145PM11019	27,84
21	27,5	25	110	236	14145PM11021	29,30
22	29	26	110	248	14145PM11022	29,30



Juego de vasos para rueda.

■ 14201M

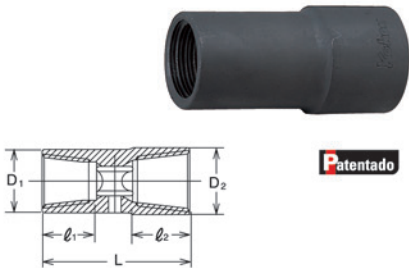
					€
14201M	125 x 95 x 34	690	3	17, 19, 21	80,66



Tronzador de tuercas (dos bocas).

■ 14124

Ø	D ₁	D ₂	ℓ ₁	ℓ ₂	L		Ref	€
21x24,5	28	29,5	24	25	65	157	1412421x24,5	27,92
26x27,5	31,5	35	24,5	24,5	65	197	1412426x27,5	40,36



Juego tronzador de tuercas (dos bocas).

■ 14124/3

				€
14124/3	125 x 91 x 43	3	580	89,16

Vasos

- 14124 ○ 21x24,5
14124 ○ 26x27,5

Accesorios

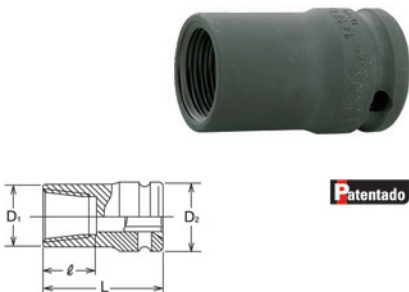
14760-75B 



Tronzador de tuercas.

■ 14124

Ø	D ₁	D ₂	ℓ	L		Ref	€
17	20,5	25	15	50	83	1412417	28,20
18	21	25	15	50	83	1412418	28,20
18,5	23	25	15	50	95	14124185	28,20
19	25	30	20,5	50	140	1412419	31,47
21	28	30	20,5	50	153	1412421	33,36
24,5	29,5	30	23	50	138	14124245	33,36
26	31,5	30	23	50	147	1412426	34,20
27,5	35	30	23	50	181	14124275	34,92





Juego de vasos en regleta.

RS14124/7



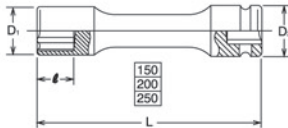
Ref					€
14124/7	250	980	7	Ø 18, 18,5, 19,21, 24,5, 26, 27,5	223,79



Vasos extra-largos.

14145M-150/-200/-250

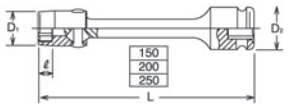
mm	D1	D2	ℓ				Ref L-150	€	Ref L-200	€	Ref L-250	€
				150	200	250						
10	17	25	10	190	234	278	14145M-15010	26,93	14145M-20010	29,83	14145M-25010	31,21
12	19,5	25	12	204	248	292	14145M-15012	26,93	14145M-20012	29,83	14145M-25012	31,21
13	20,7	25	13	216	260	304	14145M-15013	26,93	14145M-20013	29,83	14145M-25013	31,21
14	22	25	14	228	272	316	14145M-15014	26,93	14145M-20014	29,83	14145M-25014	31,21
15	23,2	25	15	240	284	328	14145M-15015	28,19	14145M-20015	31,07	14145M-25015	32,28
17	25,7	25	17	253	297	341	14145M-15017	28,19	14145M-20017	31,07	14145M-25017	32,28
19	28,2	25	19	267	311	355	14145M-15019	28,19	14145M-20019	31,07	14145M-25019	32,28



Vasos con articulación universal extra largos.

14146M-150/-200/-250

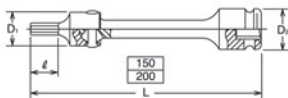
mm	D1	D2	ℓ				Ref L-150	€	Ref L-200	€	Ref L-250	€
				150	200	250						
10	16	25	7	197	241	285	14146M-15010	54,03	14146M-20010	56,63	14146M-25010	58,14
12	19,3	25	8	200	244	288	14146M-15012	54,03	14146M-20012	56,63	14146M-25012	58,14
13	20	25	8,5	201	245	289	14146M-15013	54,03	14146M-20013	56,63	14146M-25013	58,14
14	21	25	9	203	247	291	14146M-15014	54,03	14146M-20014	56,63	14146M-25014	58,14
15	22	25	9,5	201	245	289	14146M-15015	54,03	14146M-20015	56,63	14146M-25015	58,14
17	25	25	10	200	244	288	14146M-15017	54,03	14146M-20017	56,63	14146M-25017	58,14
19	28	25	10	210	254	299	14146M-15019	54,03	14146M-20019	56,63	14146M-25019	58,14



Vasos Inhex con articulación universal extra-largos.

14147M-150/-200

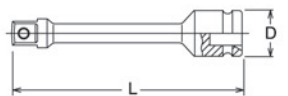
mm	D1	D2	ℓ			Ref L-150	€	Ref L-200	€
				150	200				
6	25	25	15	200	244	14147M-15006	55,53	14147M-2006	58,14
8	25	25	15	205	249	14147M-15008	55,53	14147M-2008	58,14
10	25	25	15	210	254	14147M-15010	55,53	14147M-20010	58,14
12	25	25	15	217	261	14147M-15012	55,53	14147M-20012	58,14



Alargaderas de torsión (solamente para apriete).

14112P

14112P	D	L		Ref	€
90Nm	25	208	206	14112P90	21,95
95Nm	25	202	200	14112P95	21,95
100Nm	25	196	198	14112P100	21,95
110Nm	25	213	220	14112P110	21,95
120Nm	25	201	219	14112P120	22,45
170Nm	25	195	257	14112P170	22,45





Barras de torsión (solamente para apriete).

■ 14101M

14101M	D	ℓ	L		Ref	€
14x95Nm	22	11	208	230	14101M14x95	21,33
15x110Nm	23,2	11	201	230	14101M15x110	21,33
17x60Nm	25,7	12	216	227	14101M17x60	21,33
17x75Nm	25,7	12	228	240	14101M17x75	21,33
17x95Nm	25,7	12	214	256	14101M17x95	21,33
17x110Nm	25,7	12	204	285	14101M17x110	21,33
17x120Nm	25,7	12	200	284	14101M17x120	21,33
19x60Nm	28,2	12	219	237	14101M19x60	23,19
19x90Nm	28,2	13	223	275	14101M19x90	23,19
19x110Nm	28,2	13	214	278	14101M19x110	23,19
19x120Nm	28,2	13	203	297	14101M19x120	23,19
19x135Nm	28,2	13	206	339	14101M19x135	23,19
19x170Nm	28,2	13	190	332	14101M19x170	23,19
21x100Nm	30,7	14	214	288	14101M21x100	23,88
21x120Nm	30,7	14	203	288	14101M21x120	24,66
22x160Nm	32	15	209	385	14101M22x160	26,58



Barras de torsión (solamente para apriete).

■ 14101MP

14101MP	D	ℓ	L	Ref	€
17x95Nm	25,7	12	214	14101MP17x95	29,31
17x110Nm	25,7	12	204	14101MP17x110	29,31
17x120Nm	25,7	12	200	14101MP17x120	29,31
19x90Nm	28,2	13	223	14101MP19x90	29,83
19x120Nm	28,2	13	203	14101MP19x120	29,83
19x170Nm	28,2	13	190	14101MP19x170	29,83
21x100Nm	30,7	14	214	14101MP21x100	31,88
21x120Nm	30,7	14	203	14101MP21x120	31,88



Juego de barras de torsión.

■ 14101MP-M/8

Ref			€
14101MP-M8	8	17 x 95 Nm, 17 x 110 Nm, 17 x 120 Nm, 19 x 90 Nm, 19 x 120 Nm, 19 x 170 Nm, 21 x 100 Nm, 21 x 120 Nm	258,54

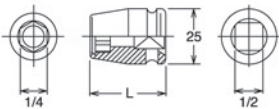
*Como el par puede variar según el tipo y el estado de la llave de impacto, se recomienda utilizar una llave dinamométrica.



Porta punta.

■ 14139

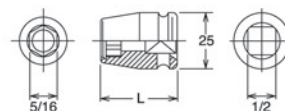
Ref	L		€
14139	38	62	13,09



Porta punta.

14140

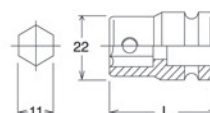
Ref	L		€
14140	38	70	13,09



Porta punta.

14105

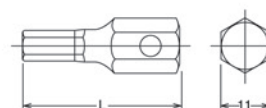
Ref	L		€
14105	38	126	14,71



Puntas para tornillos Inhex.

107-11

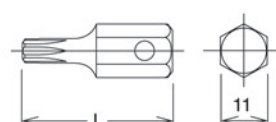
mm	pulgadas	L		Ref Métrica	€	Ref Pulgadas	€
3		35	15	107113	5,29		
4		35	16	107114	5,29		
5		35	16	107115	5,29		
6	1/4	35	18	107116	5,29	107111/4	5,28
7		35	19	107117	5,67		
8	5/16	35	20	107118	5,67	107115/16	5,62
10	3/8	35	26	1071110	5,67	107113/8	5,62
11		35	28	1071111	5,67		
12		35	31	1071112	5,67		
14	1/2	35	38	1071114	5,67	107111/2	5,62
16		35	47	1071116	7,75		
17		35	50	1071117	7,24		
18		35	53	1071118	7,89		
19	3/4	35	56	1071119	7,74	107113/4	7,75



Puntas TORX®.

107-11T

TORX®	L		Ref	€
T30	35	18	10711T30	6,94
T40	35	20	10711T40	6,94
T45	35	22	10711T45	6,94
T50	35	26	10711T50	7,09
T55	35	31	10711T55	7,09
T60	35	38	10711T60	8,91

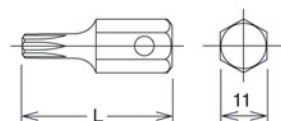




Puntas XZN.

107-11 (XZN)

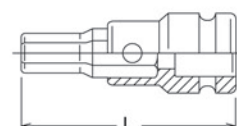
XZN	L		Ref	€
M4	35	18	10711M4	7,14
M5	35	20	10711M5	7,14
M6	35	22	10711M6	7,14
M8	35	26	10711M8	7,14
M10	35	31	10711M10	8,17
M12	35	38	10711M12	11,17



Vasos con punta hexagonal.

14105-11

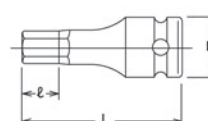
mm	L		Ref	€
3	61	141	14105113	22,24
4	61	142	14105114	22,24
5	61	142	14105115	22,24
6	61	144	14105116	22,24
7	61	145	14105117	22,52
8	61	146	14105118	22,52
10	61	152	141051110	22,52
11	61	154	141051111	22,52
12	61	157	141051112	22,52
14	61	164	141051114	22,52
16	61	173	141051116	22,52
17	61	176	141051117	24,39
18	61	179	141051118	24,39
19	61	182	141051119	24,97



Vasos Inhex.

14012M-60

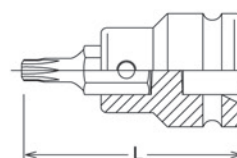
mm	D	ℓ	L		Ref	€
4	25	15,5	60	68	14012M604	9,87
5	25	15,5	60	71	14012M605	9,87
6	25	15,5	60	74	14012M606	9,87
7	25	15,5	60	80	14012M607	9,87
8	25	15,5	60	84	14012M608	9,87
10	30	15,5	60	140	14012M6010	9,87
12	30	15,5	60	150	14012M6012	9,87
14	30	15,5	60	170	14012M6014	10,37
17	30	15,5	60	190	14012M6017	10,37
19	30	15,5	60	210	14012M6019	10,68



Vasos con punta TORX®.

14105-11 (T)

TORX®	L		Ref	€
T30	61	144	1410511T30	22,61
T40	61	146	1410511T40	22,61
T45	61	152	1410511T45	22,61
T50	61	157	1410511T50	22,76
T55	61	160	1410511T55	22,76
T60	61	164	1410511T60	24,57



Juego de vasos Inhex en regleta.

RS14012M/10-L60

14200M-10					€
RS14012M/10-L60	300	1.300	10	4, 5, 6, 7, 8, 10, 12, 14, 17, 19	100,40



Juego de vasos.

14204M

				€
14204M	310 x 90 x 48	18	1.370	179,32

Vasos	Accesorios
107-11 4, 5, 6, 7, 8, 10, 12, 14	14105
107-11 (L80) 4, 5, 6, 7, 8, 10, 12, 14	168H-2.5 (40)



Juego de vasos.

14204T

				€
14204T	310 x 90 x 48	14	1.180	176,59

Vasos	Accesorios
107-11T T30, T40, T45, T50, T55, T60	14105
107-11T(L80) T30, T40, T45, T50, T55, T60	168H-2.5 (40)



Juego de vasos.

14204X

				€
14204X	310 x 90 x 48	14	1.180	143,08

Vasos	Accesorios
107-11(XZN) M4, M5, M6, M8, M10, M12	14105
107-11(XZN)(L80) M4, M5, M6, M8, M10, M12	168H-2.5 (40)



Alargaderas.

14760-75P/-125P/-175P/-250P

Ref	L		€
14760-75P	75	188	12,05
14760-125P	125	275	12,88
14760-175P	175	358	14,27
14760-250P	250	480	15,22



Articulación universal.

14770-P

Ref	L		€
14770P	74	210	35,43



Articulación universal.

14771-P

Ref	L		€
14771P	65	198	27,85



Adaptador.

■ 14433A-P

Ref	L		€
14433AP	36	68	10,88

1 1/2" x 3/8"



Adaptador.

■ 14455A

Ref	L		€
14455A	42	135	12,05

1 1/2" x 5/8"



Adaptador.

■ 14466A

Ref	L		€
14466A	44	146	16,51

1 1/2" x 3/4"



Adaptador (extracción rápida).

■ 14444AL

Ref	L		€
14444AL	55	128	54,99

1 1/2" x 1/2"



Juego de vasos de Surface Drive en regleta.

■ RS14200M-10

14200M-10					€
14410M/14310M	200	1.216	6	17, 19, 21	84,40



NUEVO



Vaso con protector plástico.

■ 14400MFR

mm	D1	D2	ℓ	L		Ref	€
10	17	25	7	38	87	14400M10FR	63,76
12	19,5	25	9	38	87	14400M12FR	63,76
13	20,7	25	10	38	87	14400M13FR	63,76
14	22	25	10	38	87	14400M14FR	63,76
16	24,5	30	11	38	135	14400M16FR	64,88
17	25,17	30	12	38	135	14400M17FR	64,88
19	28,2	30	13	38	130	14400M18FR	64,88



NUEVO

Alargaderas con protector plástico

■ 14760FR

Ref	L	€
14760-125P.FR	125	127,60
14760-250P.FR	250	150,69



Juego de vasos.

14241M

				€
14241M	196 x 100 x 45	13	2.000	105,53

Vasos

14400M ○ 10, 11, 12, 13, 14, 15, 16, 17, 19, 21, 22, 24, 27



Juego de vasos.

14242M

				€
14242M	310 x 90 x 48	12	1.890	96,03

Vasos

14400M ○ 10, 11, 12, 13, 14, 15, 16, 17, 19, 21, 22, 27



Juego de vasos.

14207M-6P

				€
14207M-6P	310 x 90 x 48	10	2.700	155,33

Vasos

14300M6 ○ 10,12,13,14,17,19,21,22,24,27



Juego de vasos.

14208M-6P

				€
14208M-6P	395 x 90 x 50	13	3.500	197,11

Vasos

14300M6 ○ 10,12,13,14,15,16,17,18,19,21,22,24,27



Juego de vasos.

14245M-12P

				€
14245M-12P	310 x 90 x 48	18	2.250	161,67

Vasos

14405M ○ 10,12,13,14,16,18,19,21,22,24,27

Accesorios

14760-125 
14770 
1401A, 1402A, 1401B, 1402B 

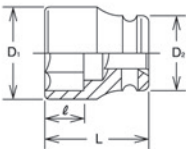




Vasos hexagonales.

■ 16400M ■ 16400A

mm	pulgadas	D ₁	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
17	11/16	30	44	12	50	355	16400M17	14,56	16400A11/16	14,56
18		31,3	44	13	50	372	16400M18	14,56		
19	3/4	32,5	44	13	50	360	16400M19	14,89	16400A3/4	14,89
20		33,8	44	14	50	375	16400M20	15,76		
21	13/16	35	44	15	50	374	16400M21	14,63	16400A13/16	15,76
22	7/8	36,3	44	15	50	373	16400M22	14,63	16400A7/8	15,76
23		37,5	44	16	50	373	16400M23	14,63		
24	15/16	38,8	44	16	50	370	16400M24	14,63	16400A15/16	14,63
25	1	40	44	16	50	374	16400M25	15,46	16400A1	15,46
26		41,3	44	16	50	378	16400M26	15,46		
27	1- 1/16	42,5	44	16	50	375	16400M27	15,87	16400A1- 1/16	15,87
28		43,8	44	16	50	383	16400M28	14,89		
29	1- 1/8	45	44	18	53	412	16400M29	14,89	16400A1- 1/8	15,87
30	1- 3/16	46,3	44	18	53	410	16400M30	14,89	16400A1- 3/16	14,89
31		47,5	44	18	53	426	16400M31	17,45		
32	1- 1/4	48,8	44	19	53	428	16400M32	16,35	16400A1- 1/4	17,45
33		50	44	20	55	470	16400M33	19,58		
34	1- 5/16	51,3	44	20	55	490	16400M34	20,16	16400A1- 5/16	20,95
35	1- 3/8	52,5	44	20	55	494	16400M35	21,56	16400A1- 3/8	21,56
36		53,8	44	20	55	498	16400M36	19,91		
37	1- 7/16	55	44	20	55	526	16400M37	22,56	16400A1- 7/16	21,56
38	1- 1/2	56,3	44	20	57	558	16400M38	21,07	16400A1- 1/2	21,07
39		57,5	44	20	57	579	16400M39	27,32		
40	1- 9/16	58,8	44	20	57	598	16400M40	25,36	16400A1- 9/16	25,39
41	1- 5/8	60	44	22	57	572	16400M41	24,32	16400A1- 5/8	24,32
42		61,3	44	22	57	617	16400M42	26,72		
43	1-11/16	62,5	44	23	62	720	16400M43	26,72	16400A1-11/16	26,72
44		63,8	44	23	62	761	16400M44	28,92		
45	1- 3/4	65	44	23	62	757	16400M45	32,74	16400A1- 3/4	28,92
46	1-13/16	66,3	44	23	62	755	16400M46	31,34	16400A1-13/16	31,33
47		67,5	54	23	62	805	16400M47	32,74		
48	1- 7/8	68,8	54	23	62	940	16400M48	37,36	16400A1- 7/8	32,74
49	1-15/16	70	54	23	62	912	16400M49	37,36	16400A1-15/16	37,36
50		71,3	54	30	62	930	16400M50	35,74		
	2	72,5	54	30	62	969			16400A2	45,56
52	2- 1/16	73,8	54	29	62	1.011	16400M52	39,70	16400A2- 1/16	39,70
54	2- 1/8	76,3	54	29	62	1.035	16400M54	46,04	16400A2- 1/8	46,04
55	2- 3/16	77,5	54	29	62	1.056	16400M55	45,84	16400A2- 3/16	48,19
56		78,8	54	29	62	1.091	16400M56	49,10		
57	2- 1/4	80	54	32	65	1.126	16400M57	49,34	16400A2- 1/4	49,34
58	2- 5/16	81,3	54	31	65	1.163	16400M58	50,25	16400A2- 5/16	50,25
59		82,5	54	31	65	1.185	16400M59	50,25		
60	2- 3/8	83,8	54	31	65	1.215	16400M60	56,70	16400A2- 3/8	66,48

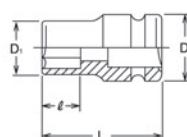




Vasos hexagonales de pared delgada.

■ 16401M ■ 16401A

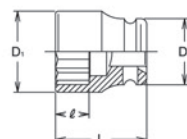
mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
17	11/16	28	43	12	50	300	16401M17	21,43	16401A11/16	21,43
18		29,3	43	13	50	300	16401M18	21,43		
19	3/4	30,5	43	13	50	300	16401M19	21,43	16401A3/4	21,43
20		31,8	43	14	50	302	16401M20	23,40		
21	13/16	33	43	15	50	305	16401M21	23,40	16401A13/16	23,40
22	7/8	34,3	43	15	50	310	16401M22	23,40	16401A7/8	23,40
23		35,5	43	16	50	315	16401M23	23,40		
24	15/16	36,8	43	16	50	325	16401M24	23,40	16401A15/16	23,40
25	1	38	43	16	50	326	16401M25	23,81	16401A1	23,81
26		39,3	43	16	50	330	16401M26	23,81		
27	1- 1/16	40,5	43	16	50	340	16401M27	25,37	16401A1- 1/16	25,37
28		41,8	43	16	50	345	16401M28	25,37		
29	1- 1/8	43	43	18	53	355	16401M29	25,37	16401A1- 1/8	25,37
30	1- 3/16	44,3	43	18	53	365	16401M30	25,37	16401A1- 3/16	25,37
31		45,5	43	18	53	375	16401M31	27,92		
32	1- 1/4	46,8	43	19	53	385	16401M32	27,92	16401A1- 1/4	27,92
34		49,3	43	20	55	420	16401M34	25,43		
35	1- 3/8	50,5	43	20	55	430	16401M35	32,10	16401A1- 3/8	32,10
36		51,8	43	20	55	440	16401M36	33,54		
37	1- 7/16	53	43	20	55	460	16401M37	36,10	16401A1- 7/16	33,82
38	1- 1/2	54,3	43	20	57	472	16401M38	37,25	16401A1- 1/2	36,10
40	1- 9/16	56,8	43	20	57	525	16401M40	41,73	16401A1- 9/16	40,60
41	1- 5/8	58	43	22	57	555	16401M41	41,73	16401A1- 5/8	41,73
46	1-13/16	64,3	43	23	62	710	16401M46	53,85	16401A1-13/16	53,85



Vasos bihexagonales.

■ 16405M

mm	D1	D2	ℓ	L		Ref	€
17	30	44	12	50	355	16405M17	22,78
18	31,3	44	13	50	372	16405M18	22,78
19	32,5	44	13	50	360	16405M19	22,78
20	33,8	44	14	50	375	16405M20	24,68
21	35	44	15	50	374	16405M21	24,68
22	36,3	44	15	50	373	16405M22	24,68
23	37,5	44	16	50	373	16405M23	24,68
24	38,8	44	16	50	370	16405M24	24,68
25	40	44	16	50	374	16405M25	26,10
26	41,3	44	16	50	378	16405M26	26,10
27	42,5	44	16	50	375	16405M27	26,74
28	43,8	44	16	50	383	16405M28	19,92
29	45	44	18	53	412	16405M29	26,74
30	46,3	44	18	53	410	16405M30	26,74
31	47,5	44	18	53	426	16405M31	35,32
32	48,8	44	19	53	428	16405M32	35,32
33	50	44	20	55	470	16405M33	35,32
34	51,3	44	20	55	490	16405M34	35,32
35	52,5	44	20	55	494	16405M35	35,32
36	53,8	44	20	55	498	16405M36	35,32
38	56,3	44	20	57	558	16405M38	38,05
39	57,5	44	20	57	579	16405M39	38,05
40	58,8	44	20	57	598	16405M40	44,01
41	60	44	22	57	572	16405M41	46,44
42	61,3	44	22	57	617	16405M42	46,44
43	62,5	44	23	62	720	16405M43	46,44
44	63,8	44	23	62	761	16405M44	51,39
45	65	44	23	62	757	16405M45	56,83
46	66,3	44	23	62	755	16405M46	56,83
47	67,5	54	23	62	805	16405M47	56,83
48	68,8	54	23	62	940	16405M48	66,09
49	70	54	23	62	912	16405M49	66,09
50	71,3	54	30	62	930	16405M50	66,09
52	73,8	54	29	62	1.011	16405M52	72,25
54	76,3	54	29	62	1.035	16405M54	83,75
55	77,5	54	29	62	1.056	16405M55	83,75

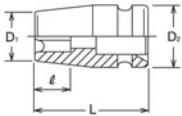




Vasos TORX®.

■ 16425

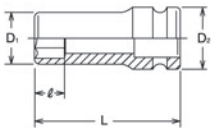
TORX®	D ₁	D ₂	ℓ	L		Ref	€
E18	26,3	44	12	50	355	16425E18	29,50
E20	28,8	44	14	50	370	16425E20	29,50
E22	31,3	44	15	50	390	16425E22	29,50
E24	32,5	44	17	50	390	16425E24	29,50



Vasos hexagonales medianos de pared delgada.

■ 16301X

mm	D ₁	D ₂	ℓ	L		Ref	€
17	28	43	17	75	370	16301X17	35,33
18	29,3	43	18	75	380	16301X18	35,33
19	30,5	43	19	75	393	16301X19	35,33
20	31,8	43	20	75	400	16301X20	35,33
21	33	43	21	75	408	16301X21	35,33
22	34,3	43	22	75	418	16301X22	35,33
23	35,5	43	23	75	425	16301X23	35,33
24	36,8	43	24	75	435	16301X24	35,33
25	38	43	25	75	449	16301X25	35,33
26	39,3	43	26	75	455	16301X26	35,33
27	40,5	43	27	75	464	16301X27	35,33
28	41,8	43	28	75	479	16301X28	35,33
29	43	43	29	75	489	16301X29	35,33
30	44,3	43	30	75	506	16301X30	35,33
32	46,8	43	32	75	535	16301X32	39,88
35	50,5	43	35	75	585	16301X35	39,88
36	51,8	43	36	75	603	16301X36	46,32
38	54,3	43	38	80	691	16301X38	46,32
41	58	43	38	80	755	16301X41	52,82
46	64,3	43	38	80	808	16301X46	54,39

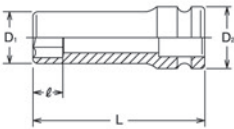




Vasos hexagonales largos.

16300M 16300A

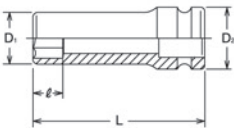
mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
17		30	44	17	100	544	16300M17	24,87		
18		31,3	44	18	100	642	16300M18	24,87		
19	3/4	32,5	44	19	100	655	16300M19	24,87	16300A3/4	24,87
20		33,8	44	20	100	680	16300M20	24,87		
21	13/16	35	44	21	100	700	16300M21	24,87	16300A13/16	24,87
22	7/8	36,3	44	22	100	700	16300M22	24,87	16300A7/8	24,87
23		37,5	44	23	100	720	16300M23	25,39		
24	15/16	38,8	44	24	100	705	16300M24	25,39	16300A15/16	25,39
25	1	40	44	25	100	715	16300M25	25,39	16300A1	25,39
26		41,3	44	26	100	760	16300M26	25,39		
27	1- 1/16	42,5	44	27	100	765	16300M27	25,39	16300A1- 1/16	25,39
28		43,8	44	28	100	800	16300M28	25,82		
29	1- 1/8	45	44	29	100	835	16300M29	25,82	16300A1- 1/8	25,82
30	1- 3/16	46,3	44	30	100	840	16300M30	25,82	16300A1- 3/16	25,82
31		47,5	44	31	100	815	16300M31	26,62		
32	1- 1/4	48,8	44	32	100	875	16300M32	26,62	16300A1- 1/4	30,76
33		50	44	33	100	920	16300M33	34,12		
34	1- 5/16	51,3	44	34	100	950	16300M34	34,12	16300A1- 5/16	34,12
35	1- 3/8	52,5	44	35	100	980	16300M35	34,12	16300A1- 3/8	34,12
36		53,8	44	36	100	960	16300M36	34,12		
37	1- 7/16	55	44	37	100	970	16300M37	36,56	16300A1- 7/16	34,12
38	1- 1/2	56,3	44	38	100	990	16300M38	36,56	16300A1- 1/2	36,56
40	1- 9/16	58,8	44	38	100	1.060	16300M40	39,01	16300A1- 9/16	39,01
41	1- 5/8	60	44	38	100	1.120	16300M41	40,30	16300A1- 5/8	40,30
42		61,3	44	38	100	1.153	16300M42	40,30		
43	1-11/16	62,5	44	38	100	1.200	16300M43	44,05	16300A1-11/16	44,05
	1- 3/4	65	44	38	100	1.284			16300A1- 3/4	50,40
46	1-13/16	66,3	44	38	100	1.305	16300M46	50,78	16300A1-13/16	50,40
	1- 7/8	68,8	54	38	100	1.561			16300A1- 7/8	50,40
50		71,3	54	61	100	1.469	16300M50	57,47		
	2	72,5	54	60	100	1.516			16300A2	57,47
55		77,5	54	59	100	1.620	16300M55	64,43		



Vasos hexagonales largos de pared delgada.

16301M 16301A

mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
17	11/16	28	43	17	100	470	16301M17	28,06	16301A11/16	28,06
18		29,3	43	18	100	475	16301M18	28,06		
19	3/4	30,5	43	19	100	480	16301M19	28,06	16301A3/4	28,06
20		31,8	43	20	100	491	16301M20	28,06		
21	13/16	33	43	21	100	505	16301M21	28,61	16301A13/16	28,54
22	7/8	34,3	43	22	100	528	16301M22	28,61	16301A7/8	28,61
23		35,5	43	23	100	542	16301M23	28,61		
24	15/16	36,8	43	24	100	560	16301M24	28,61	16301A15/16	28,61
25	1	38	43	25	100	581	16301M25	30,65	16301A1	30,65
26		39,3	43	26	100	600	16301M26	30,65		
27	1- 1/16	40,5	43	27	100	610	16301M27	30,65	16301A1- 1/16	30,65
28		41,8	43	28	100	639	16301M28	37,65		
29	1- 1/8	43	43	29	100	650	16301M29	37,65	16301A1- 1/8	37,65
30	1- 3/16	44,3	43	30	100	670	16301M30	37,65	16301A1- 3/16	37,65
31		45,5	43	31	100	690	16301M31	38,96		
32	1- 1/4	46,8	43	32	100	715	16301M32	38,96	16301A1- 1/4	38,96
33		48	43	33	100	740	16301M33	36,26		
34		49,3	43	34	100	760	16301M34	36,26		
35	1- 3/8	50,5	43	35	100	785	16301M35	49,85	16301A1- 3/8	49,85
36		51,8	43	36	100	830	16301M36	49,85		
37	1- 7/16	53	43	37	100	850	16301M37	53,51	16301A1- 7/16	49,85
38	1- 1/2	54,3	43	38	100	885	16301M38	53,51	16301A1- 1/2	53,51
40	1- 9/16	56,8	43	38	100	925	16301M40	58,71	16301A1- 9/16	58,71
41	1- 5/8	58	43	38	100	970	16301M41	60,68	16301A1- 5/8	60,68
46	1-13/16	64,3	43	38	100	1.150	16301M46	75,99	16301A1-13/16	75,99

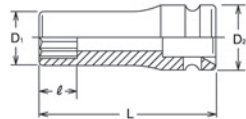




Vasos bihexagonales largos.

■ 16305M

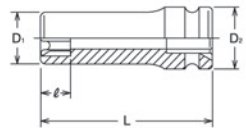
mm	D ₁	D ₂	ℓ	L		Ref	€
17	30	44	17	100	544	16305M17	30,21
19	32,5	44	19	100	655	16305M19	30,21
21	35	44	21	100	700	16305M21	30,21
22	36,3	44	22	100	700	16305M22	30,21
23	37,5	44	23	100	720	16305M23	30,21
24	38,8	44	24	100	715	16305M24	30,21
26	41,3	44	26	100	760	16305M26	30,21
27	42,5	44	27	100	765	16305M27	30,21
28	43,8	44	28	100	800	16305M28	30,21
29	45	44	29	100	835	16305M29	30,21
30	46,3	44	30	100	840	16305M30	30,21
32	48,8	44	32	100	875	16305M32	34,09
35	52,5	44	35	100	980	16305M35	34,09
36	53,8	44	36	100	960	16305M36	39,50
38	56,3	44	38	100	990	16305M38	42,20
41	60	44	38	100	1.120	16305M41	45,33
46	66,3	44	38	100	1.305	16305M46	58,22



Vasos TORX® largos.

■ 16325

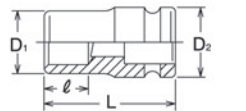
TORX®	D ₁	D ₂	ℓ	L		Ref	€
E18	26,3	44	12	100	610	16325E18	35,03
E20	28,8	44	14	100	650	16325E20	35,03
E22	31,3	44	15	100	680	16325E22	35,03
E24	32,5	44	17	100	690	16325E24	35,03



Vasos de tuerca de rueda trasera.

■ 16317M ■ 16317A

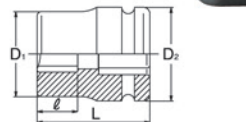
mm	pulgadas	D ₁	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
17		40	44	22,5	67	485	16317M17	32,17		
19		40	44	22,5	67	462	16317M19	38,37		
20		44	44	22,5	67	517	16317M20	51,87		
21	13/16	44	44	22,5	67	489	16317M21	51,87	16317A13/16	54,46
22		44	44	22,5	67	482	16317M22	51,87		



Vasos de tuerca de rueda trasera.

■ PW6

16325	D ₁	D ₂	ℓ	L		Ref	€
17	40	44	19	53	433	PW617	31,73
19	40	44	19	53	419	PW619	32,33
20	44	44	21	55	483	PW620	32,86
21	44	44	23	57	491	PW621	61,72





Barras de torsión (solamente para apriete)

16101M

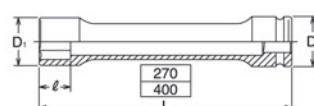
mm	D ₁	D ₂	ℓ	L	⚖	Ref	€
24x180Nm	38,8	44	24	235	850	16101M27450	93,30
27x450Nm	42,5	44	27	280	1.236	16101M27450	93,30
32x600Nm	48,8	44	32	280	1.370	16101M32600	100,97
33x600Nm	50	44	33	280	1.370	16101M33600	100,97



Vasos de impacto para rueda extra largos.

16102M-270/M-400

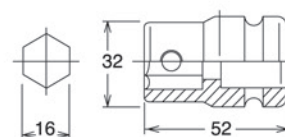
mm	D ₁	D ₂	ℓ	⚖		Ref L-270	€	Ref L-400	€
				270	400				
24	38,8	44	24	1.034	1.187	16102M-27024	83,36	16102M-40024	95,90
27	42,5	44	27	1.088	1.248	16102M-27027	83,36	16102M-40027	95,90
30	46,3	44	30	1.144	1.320	16102M-27030	83,36	16102M-40030	95,90
32	48,8	44	32	1.157	1.360	16102M-27032	88,53	16102M-40032	97,45
33	50	44	32	1.200	1.380	16102M-27033	88,53	16102M-40033	97,45
36	53,8	44	32	1.250	1.420	16102M-27036	89,59	16102M-40036	98,49



Porta punta.

16106

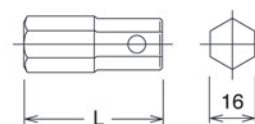
Ref	L	⚖	€
16106	52	370	23,48



Puntas para tornillos Inhex.

107-16

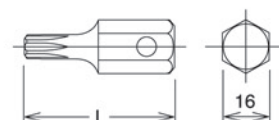
mm	pulgadas	L	⚖	Ref Métrica	€	Ref Pulgadas	€
10		40	46	107-1610	6,37		
12		40	52	107-1612	6,37		
13	1/2	40	56	107-1613	6,37	107-161/2	7,15
14	9/16	40	60	107-1614	6,37	107-169/16	7,15
16	5/8	40	69	107-1616	6,37	107-165/8	7,09
17		40	73	107-1617	6,96		
18		40	78	107-1618	7,24		
19	3/4	40	80	107-1619	7,24	107-163/4	7,18
22		40	97	107-1622	8,51		



Puntas TORX®.

107-16 (T)

TORX®	L	⚖	Ref	€
T55	50	57	107-16T55	11,08
T60	50	64	107-16T60	11,18
T70	50	73	107-16T70	11,18

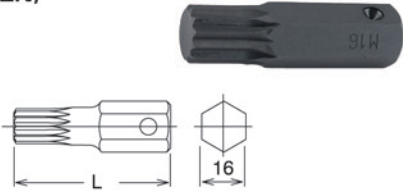




Puntas XZN.

107-16 (XZN)

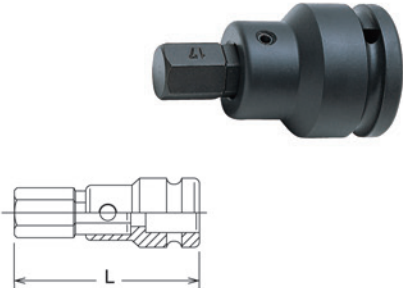
XZN	L		Ref	€
M14	60	83	107-16M14	8,00
M16	60	93	107-16M16	7,99
M18	60	103	107-16M18	8,98



Vasos con punta Hexagonal.

16106-16

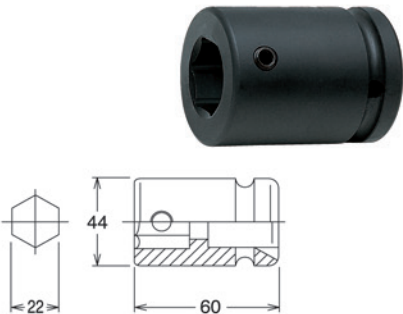
mm	pulgadas	L		Ref Métrica	€	Ref Pulgadas	€
10		76	416	16106-1610	33,14		
12		76	422	16106-1612	33,14		
13	1/2	76	426	16106-1613	33,14	16106-161/2	34,00
14	9/16	76	430	16106-1614	33,14	16106-169/16	34,00
16	5/8	76	439	16106-1616	33,14	16106-165/8	34,00
17		76	443	16106-1617	34,03		
18		76	448	16106-1618	34,03		
19	3/4	76	450	16106-1619	34,03	16106-163/4	34,07
22		76	473	16106-1622	35,57		



Porta punta.

16107

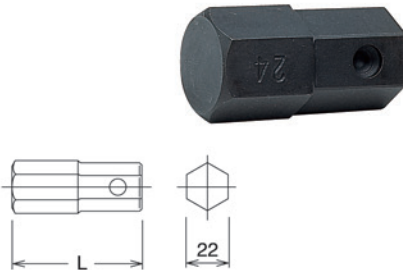
Ref	L		€
16107	60	530	25,44



Puntas para tornillos Inhex.

107-22

mm	L		Ref	€
17	50	120	107-2217	8,51
19	50	140	107-2219	8,51
22	50	162	107-2222	8,51
24	50	176	107-2224	9,28
27	50	200	107-2227	10,73
30	50	227	107-2230	12,89
32	50	243	107-2232	13,69



Puntas TORX®.

107-22 (T)

T	L		Ref	€
T80	60	141	107-22T80	20,32
T90	60	155	107-22T90	20,41
T100	60	170	107-22T100	20,57

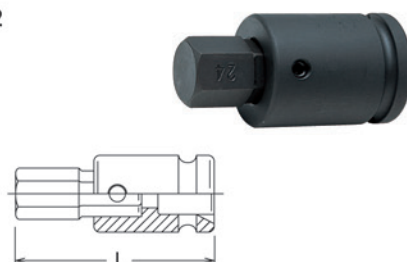




Vasos con punta hexagonal.

16107-22

mm	L		Ref	€
19	88	670	16107-2219	37,56
22	88	692	16107-2222	37,56
24	88	706	16107-2224	37,56
27	88	730	16107-2227	37,56
30	88	757	16107-2230	37,56
32	93	783	16107-2232	37,56



Alargaderas.

16760-175/-250/-330

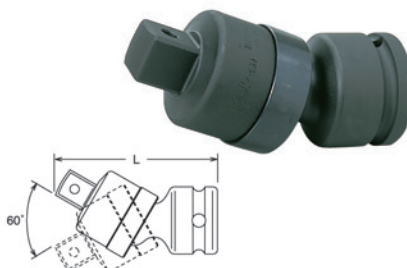
Ref	L		€
16760-175	175	870	39,31
16760-250	250	1.150	49,08
16760-330	330	1.460	51,28



Articulación universal.

16770

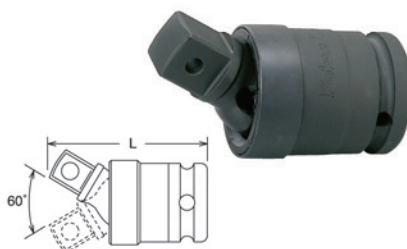
Ref	L		€
16770	106	720	67,52



Articulación universal.

16771

Ref	L		€
16771	95	720	48,12



Adaptador.

16644A-P

Ref	L		€
16644AP	52	310	21,41

3/4" x 1/2"



Adaptador.

16655A

Ref	L		€
16655A	53	336	22,76

3/4" x 5/8"



Adaptador.

16688A

Ref	L		€
16688A	62	435	30,78

3/4" x 1"



Juego de vasos.

■ 16201M

				€
16201M	320 x 110 x 70	13	6.800	261,07



Vasos

16400M ○ 19, 21, 22, 23, 24, 26, 27, 30, 32, 33, 36, 38, 41

Juego de vasos.

■ 16201A

				€
16201A	320 x 110 x 70	11	6.000	234,37



Vasos

16400A ○ 3/4, 7/8, 15/16, 1, 1.1/16, 1.1/8, 1.1/4, 1.5/16, 1.3/8, 1.7/16, 1.1/2

Juego de vasos.

■ 16201M-01

				€
16201M-01	320 x 110 x 70	13	6.000	261,07



Vasos

16401M ○ 19, 21, 22, 23, 24, 26, 27, 30, 32, 33, 36, 38, 41

Juego de vasos.

■ 16201A-01

				€
16201A-01	320 x 110 x 70	11	5.400	234,37



Vasos

16401A ○ 3/4, 7/8, 15/16, 1, 1.1/16, 1.1/8, 1.1/4, 1.5/16, 1.3/8, 1.7/16, 1.1/2

Juego de vasos.

■ 16245M

				€
16245M	580 x 200 x 85	17	12.000	427,39



Vasos

16400M ○ 19, 21, 22, 24, 27, 29, 30, 32, 33, 35, 36, 38, 41, 46, 50

Accesorios

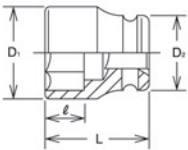
16760-175 
16760-330 



Vasos hexagonales.

18400M 18400A

mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
17	11/16	32,8	54	12	57	579	18400M17	29,31	18400A11/16	30,73
19	3/4	35,3	54	13	57	590	18400M19	23,93	18400A3/4	23,93
21	13/16	37,8	54	15	57	605	18400M21	23,93	18400A13/16	27,37
22	7/8	39	54	15	57	620	18400M22	23,93	18400A7/8	27,37
23		40,3	54	16	57	615	18400M23	23,93		
24	15/16	41,5	54	16	57	627	18400M24	24,99	18400A15/16	27,37
25	1	42,8	54	16	57	620	18400M25	24,99	18400A1	28,56
26		44	54	16	57	640	18400M26	24,99		
27	1-1/16	45,3	54	16	57	627	18400M27	24,99	18400A1-1/16	24,99
28		46,5	54	16	57	640	18400M28	24,99		
29	1-1/8	47,8	54	18	57	657	18400M29	24,99	18400A1-1/8	28,56
30	1-3/16	49	54	21	62	657	18400M30	24,99	18400A1-3/16	24,99
31		50,3	54	21	62	687	18400M31	24,99		
32	1-1/4	51,5	54	21	62	685	18400M32	24,99	18400A1-1/4	28,56
33		52,8	54	21	62	685	18400M33	24,99		
34	1-5/16	54	54	21	62	690	18400M34	27,79	18400A1-5/16	28,56
35	1-3/8	55,3	54	21	62	710	18400M35	27,79	18400A1-3/8	27,79
36		56,5	54	21	62	712	18400M36	27,79		
37	1-7/16	57,8	54	21	62	735	18400M37	27,79	18400A1-7/16	31,76
38	1-1/2	59	54	25	66	720	18400M38	27,79	18400A1-1/2	27,79
40	1-9/16	61,5	54	25	66	850	18400M40	32,91	18400A1-9/16	31,76
41	1-5/8	62,8	54	25	66	850	18400M41	32,91	18400A1-5/8	32,91
42		64	54	25	66	905	18400M42	32,91		
43	1-11/16	65,3	54	27	68	977	18400M43	35,81	18400A1-11/16	35,81
44		66,5	54	27	68	970	18400M44	35,81		
45	1-3/4	67,8	54	27	68	963	18400M45	37,71	18400A1-3/4	36,90
46	1-13/16	69	54	29	70	1010	18400M46	37,71	18400A1-13/16	37,71
47		70,3	54	36	70	997	18400M47	39,03		
48	1-7/8	71,5	54	35	70	990	18400M48	40,16	18400A1-7/8	40,16
	1-15/16	72,8	54	35	70	1.022			18400A1-15/16	43,25
50		74	54	35	70	1.065	18400M50	42,56		
	2	75,3	54	35	70	1.060			18400A2	52,89
52	2-1/16	76,5	54	40	75	1.185	18400M52	52,69	18400A2-1/16	52,69
54	2-1/8	79	54	40	75	1.252	18400M54	55,81	18400A2-1/8	55,81
55	2-3/16	80,3	54	39	75	1.260	18400M55	58,87	18400A2-3/16	58,87
56		81,5	54	39	75	1.277	18400M56	58,87		
	2-1/4	82,8	54	39	75	1.337			18400A2-1/4	60,33
58	2-5/16	84	54	39	75	1.340	18400M58	60,89	18400A2-5/16	60,89
60	2-3/8	86,5	54	39	75	1.400	18400M60	64,60	18400A2-3/8	72,91
62	2-7/16	89	54	38	75	1.410	18400M62	80,64	18400A2-7/16	80,64
63		90,3	54	38	75	1.383	18400M63	77,32		
	2-1/2	91,5	54	38	75	1.498			18400A2-1/2	87,82
65	2-9/16	92,8	54	38	75	1.630	18400M65	82,81	18400A2-9/16	82,81
67	2-5/8	95,3	54	38	75	1.580	18400M67	98,72	18400A2-5/8	98,72
68	2-11/16	96,5	54	37	75	1.583	18400M68	92,49	18400A2-11/16	105,18
70	2-3/4	99	54	37	75	1.625	18400M70	93,10	18400A2-3/4	93,10
	2-13/16	101,5	86	37	75	2.450			18400A2-13/16	105,18
	2-7/8	102,8	86	38	80	2.629			18400A2-7/8	121,79
75	2-15/16	105,3	86	37	80	2.675	18400M75	119,18	18400A2-15/16	119,18
	3	106,5	86	37	80	2.705			18400A3	134,75
	3-1/16	109	86	42	85	2.967			18400A3-1/16	143,91
80	3-1/8	111,5	86	41	85	2.996	18400M80	138,57	18400A3-1/8	143,97
	3-1/4	115,3	86	44	90	3.328			18400A3-1/4	175,30
85		117,8	86	37	90	3.378	18400M85	183,60		
	3-3/8	119	86	36	90	3.389			18400A3-3/8	183,60
90	3-1/2	124	86	40	95	3.871	18400M90	187,84	18400A3-1/2	209,83
95		130,3	86	43	100	4.500	18400M95	246,74		
100		136,5	86	47	105	5.000	18400M100	324,38		

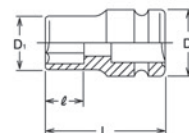




Vasos hexagonales de pared delgada.

18401M 18401A

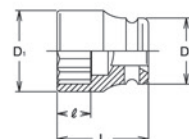
mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
17	11/16	29,8	53	12	57	481	18401M17	34,80	18401A11/16	36,55
19	3/4	32,3	53	13	57	492	18401M19	34,80	18401A3/4	36,55
21	13/16	34,8	53	15	57	512	18401M21	34,80	18401A13/16	36,55
22	7/8	36	53	15	57	520	18401M22	34,80	18401A7/8	36,55
24	15/16	38,5	53	16	57	520	18401M24	34,80	18401A15/16	36,55
27	1-1/16	42,3	53	16	57	540	18401M27	34,80	18401A1-1/16	36,55
30	1-3/16	46	53	21	62	572	18401M30	34,80	18401A1-3/16	36,55
32	1-1/4	48,5	53	21	62	600	18401M32	34,80	18401A1-1/4	36,55
33		49,8	53	21	62	613	18401M33	34,80		
35	1-3/8	52,3	53	21	62	630	18401M35	34,80	18401A1-3/8	36,55
36		53,5	53	21	62	635	18401M36	36,72		
38	1-1/2	56	53	25	66	705	18401M38	41,54	18401A1-1/2	43,98
41	1-5/8	59,8	53	25	66	740	18401M41	46,32	18401A1-5/8	48,60
46	1-13/16	66	53	29	70	900	18401M46	48,81	18401A1-13/16	51,62
50		71	53	35	70	940	18401M50	62,70		



Vasos bihexagonales.

18405M

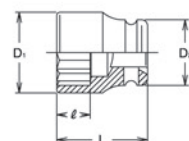
mm	D ₁	D ₂	ℓ	L		Ref	€
27	45,3	54	16	57	607	18405M27	41,02
35	55,3	54	21	62	690	18405M35	45,69
36	56,3	54	21	62	692	18405M36	45,69
38	59	54	25	66	700	18405M38	46,98
40	61,5	54	25	66	830	18405M40	54,06
41	62,8	54	25	66	905	18405M41	41,97
46	69	54	29	70	990	18405M46	59,00
50	74	54	35	70	1.021	18405M50	72,38
55	80,3	54	39	75	1.234	18405M55	87,35
56	81,5	54	39	75	1.250	18405M56	94,44
60	86,5	54	38	75	1.505	18405M60	114,06
65	92,8	54	38	75	1.600	18405M65	146,36



Vasos para ejes Cardan.

18405M (D)

mm	D ₁	D ₂	ℓ	L		Ref	€
50(D68)	68	54	35	70	890	18405MD50x68	63,49
55(D76)	76	54	39	75	1.130	18405MD55x76	69,03
65(D87)	87	54	38	75	1.344	18405MD65x87	96,07

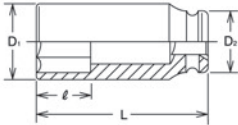




Vasos hexagonales largos.

18300M 18300A

mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
	11/16	32,8	54	17	108	978			18300A11/16	41,16
19	3/4	35,3	54	19	108	1.010	18300M19	36,63	18300A3/4	36,63
22	7/8	39	54	22	108	1.010	18300M22	36,63	18300A7/8	36,63
23		40,3	54	26	108	1.063	18300M23	36,63		
24	15/16	41,5	54	24	108	1.060	18300M24	36,63	18300A15/16	36,63
25	1	42,8	54	25	108	1.085	18300M25	36,63	18300A1	36,63
26		44	54	26	108	1.133	18300M26	36,63		
27	1-1/16	45,3	54	27	108	1.125	18300M27	38,58	18300A1-1/16	38,58
28		46,5	54	28	108	1.140	18300M28	38,58		
29	1-1/8	47,8	54	29	108	1.120	18300M29	38,58	18300A1-1/8	38,58
30	1-3/16	49	54	30	108	1.179	18300M30	38,82	18300A1-3/16	38,82
31		50,3	54	31	108	1.125	18300M31	38,82		
32	1-1/4	51,5	54	32	108	1.200	18300M32	38,82	18300A1-1/4	38,82
33		52,8	54	33	108	1.200	18300M33	40,46		
34	1-5/16	54	54	34	108	1.280	18300M34	42,26	18300A1-5/16	40,46
35	1-3/8	55,3	54	35	108	1.300	18300M35	42,26	18300A1-3/8	42,26
36		56,5	54	36	108	1.280	18300M36	42,26		
37	1-7/16	57,8	54	37	108	1.320	18300M37	47,49	18300A1-7/16	42,26
38	1-1/2	59	54	38	108	1.423	18300M38	47,49	18300A1-1/2	47,49
40	1-9/16	61,5	54	38	108	1.415	18300M40	50,67	18300A1-9/16	50,67
41	1-5/8	62,8	54	38	108	1.450	18300M41	50,67	18300A1-5/8	50,67
42		64	54	38	108	1.550	18300M42	51,55		
	1-11/16	65,3	54	38	108	1.577			18300A1-11/16	51,55
44		66,5	54	38	108	1.636	18300M44	56,29		
45	1-3/4	67,8	54	38	108	1.660	18300M45	59,59	18300A1-3/4	56,29
46	1-13/16	69	54	38	108	1.680	18300M46	59,59	18300A1-13/16	59,59
48	1-7/8	71,5	54	67	108	1.500	18300M48	65,28	18300A1-7/8	65,28
	1-15/16	72,8	54	67	108	1.570			18300A1-15/16	65,28
50		74	54	66	108	1.650	18300M50	60,25		
	2	75,3	54	66	108	1.605			18300A2	70,29
52	2-1/16	76,5	54	65	108	1.770	18300M52	70,29	18300A2-1/16	70,29
	2-1/8	79	54	64	108	1.812			18300A2-1/8	78,32
55	2-3/16	80,3	54	63	108	1.855	18300M55	72,29	18300A2-3/16	84,35
	2-1/4	82,8	54	62	108	1.916			18300A2-1/4	84,86
	2-5/16	84	54	61	108	1.987			18300A2-5/16	88,13
60	2-3/8	86,5	54	60	108	2.047	18300M60	97,95	18300A2-3/8	97,95
	2-7/16	89	54	59	108	2.041			18300A2-7/16	130,53
	2-1/2	91,5	54	58	108	2.250			18300A2-1/2	130,53
65	2-9/16	92,8	54	58	108	2.310	18300M65	130,53	18300A2-9/16	130,53
	2-5/8	95,3	54	56	108	2.370			18300A2-5/8	143,59
70	2-3/4	99	54	55	108	2.440	18300M70	143,59	18300A2-3/4	143,59
	2-7/8	102,8	86	53	108	3.600			18300A2-7/8	199,99
75	2-15/16	105,3	86	52	108	3.646	18300M75	211,03	18300A2-15/16	211,03
	3	106,5	86	51	108	3.677			18300A3	211,03
	3-1/16	109	86	50	108	3.939			18300A3-1/16	211,03
80	3-1/8	111,5	86	49	108	4.039	18300M80	237,15	18300A3-1/8	211,03
	3-3/16	112,8	86	48	108	4.170			18300A3-3/16	264,66

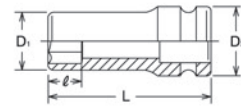




Vasos hexagonales largos de pared delgada.

18301M 18301A

mm	pulgadas	D ₁	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
17	11/16	29,8	53	17	108	692	18301M17	48,27	18301A11/16	60,06
19	3/4	32,3	53	19	108	725	18301M19	48,27	18301A3/4	60,06
21	13/16	34,8	53	21	108	750	18301M21	48,27	18301A13/16	60,06
22	7/8	36	53	22	108	770	18301M22	44,62	18301A7/8	47,62
24	15/16	38,5	53	24	108	800	18301M24	46,61	18301A15/16	47,62
27	1-1/16	42,3	53	27	108	860	18301M27	46,61	18301A1-1/16	46,61
30	1-3/16	46	53	30	108	910	18301M30	53,28	18301A1-3/16	53,28
32	1-1/4	48,5	53	32	108	970	18301M32	47,97	18301A1-1/4	54,83
33		49,8	53	33	108	980	18301M33	47,97		
34		54	53	34	108	983	18301M34	48,41		
35	1-3/8	52,3	53	35	108	986	18301M35	47,97	18301A1-3/8	47,97
36		53,5	53	36	108	992	18301M36	47,97		
38	1-1/2	56	53	38	108	1.025	18301M38	53,90	18301A1-1/2	53,90
41	1-5/8	59,8	53	38	108	1.213	18301M41	63,30	18301A1-5/8	63,30
46	1-13/16	66	53	38	108	1.400	18301M46	86,26	18301A1-13/16	86,26
50		71	53	38	108	1.435	18301M50	81,76		



Vasos de tuerca de rueda interna.

PW8P

mm	D	ℓ	L		Ref	€
35 x 17	50	13	83	935	PW8P3517	62,31
38 x 20	55	14	83	1.039	PW8P3820	67,91
41 x 19	58	14	87	1.100	PW8P4119	69,22
41 x 21	58	14	87	1.089	PW8P4121	69,22



Juego de vasos de tuerca de rueda interna.

PW8P/4

				€
PW8P	240 x 95 x 70	4	4.250	268,64

Vasos

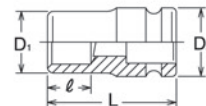
35x17, 38x20, 41x19, 41x21



Vasos de tuerca de rueda interna.

18317M 18317A

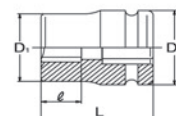
mm	pulgadas	D ₁	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
17		40	54	22,5	72	682	18317M17	69,16		
17,5		40	54	22,5	72	677	18317M175	69,16		
19		43	54	22,5	72	705	18317M19	69,16		
20		45	54	22,5	72	723	18317M20	69,16		
20,5		45	54	22,5	72	723	18317M205	69,16		
21	13/16	45	54	22,5	72	703	18317M21	69,16	18317A13/16	72,27
22		45	54	22,5	72	696	18317M22	69,16		



Vasos de tuerca de rueda interna.

PW8

mm	D ₁	D ₂	ℓ	L		Ref	€
17	40	54	19	60	621	PW817	37,15
19	43	54	19	60	648	PW819	50,88
20	45	54	21	62	687	PW820	50,88
21	45	54	23	64	696	PW821	37,15

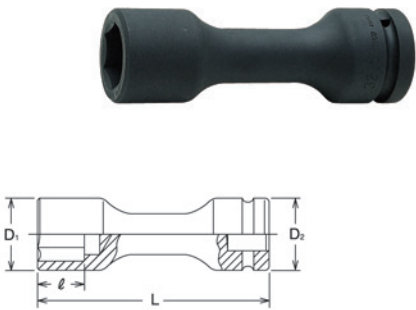




Vasos especiales para presillas.

18104M

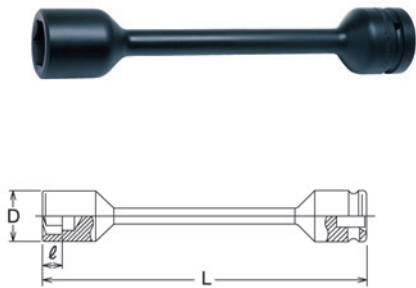
mm	D ₁	D ₂	ℓ	L		Ref	€
24	41,5	54	24	170	1.327	18104M24	70,59
27	45,3	54	27	170	1.375	18104M27	70,59
28	46,5	54	28	170	1.390	18104M28	70,59
30	49	54	30	170	1.407	18104M30	70,59
32	51,5	54	32	170	1.537	18104M32	79,60
33	52,8	54	33	170	1.590	18104M33	79,60
34	54	54	34	170	1.670	18104M34	84,70
36	56,5	54	36	170	1.800	18104M36	84,70



Barras de torsión (solamente para apriete)*.

18101M

mm	D ₁	D ₂	ℓ	L		Ref	€
24x350Nm	43,5	54	24	300	1.380	18101M24X350	83,07
27x350Nm	47	54	27	300	1.401	18101M27X350	93,06
27x450Nm	47	54	27	300	1.579	18101M27X450	93,06
30x500Nm	51	54	30	300	1.563	18101M30X500	96,35
32x450Nm	53,5	54	32	300	1.600	18101M32X450	96,35
32x550Nm	53,5	54	32	300	1.602	18101M32X550	96,35
32x600Nm	53,5	54	32	300	1.602	18101M32X600	96,35
33x550Nm	55	54	33	300	1.638	18101M33X550	96,35
33x600Nm	55	54	33	300	1.638	18101M33X600	96,35
36x600Nm	58,5	54	36	300	1.718	18101M36X600	111,71



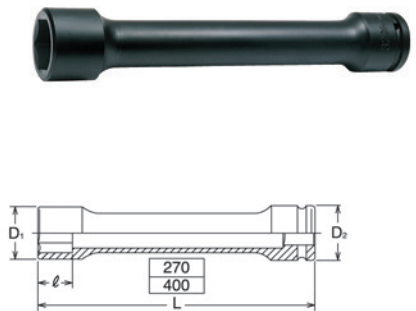
*Como el par puede variar según el tipo y el estado de la llave de impacto, se recomienda utilizar una llave dinamométrica.



Vasos extra largos para tuercas de rueda.

18102M-270/-400

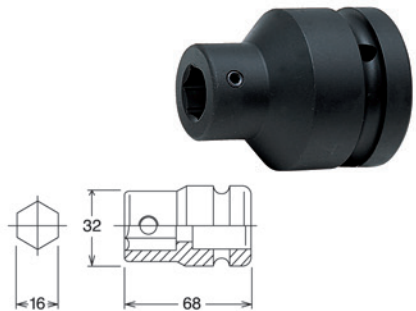
mm	D ₁	D ₂	ℓ			Ref L-270	€	Ref L-400	€
				270	400				
23	37,3	54	23	1.627	1.865	18102M-27023	111,91	18102M-40023	136,24
24	38,5	54	24	1.628	1.869	18102M-27024	111,91	18102M-40024	136,24
26	41	54	26	1.667	1.925	18102M-27026	111,91	18102M-40026	136,24
27	42,3	54	27	1.680	2.272	18102M-27027	111,91	18102M-40027	136,24
29	44,8	54	29	1.680	2.278	18102M-27029	111,91	18102M-40029	136,24
30	46	54	30	1.680	2.266	18102M-27030	111,91	18102M-40030	136,24
32	48,5	54	32	1.680	2.322	18102M-27032	118,48	18102M-40032	136,24
33	49,8	54	32	1.700	2.320	18102M-27033	118,48	18102M-40033	138,34
34	51	54	32	1.750	2.341	18102M-27034	118,48	18102M-40034	138,34
36	53,5	54	32	1.750	2.442	18102M-27036	118,48	18102M-40036	138,34
38	56	54	32	1.822	2.250	18102M-27038	126,36	18102M-40038	145,22



Porta punta.

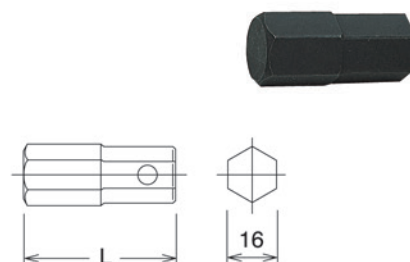
18106

Ref	L		€
18106	68	640	37,17




Puntas para tornillos Inhex.
  **107-16**

mm	pulgadas	L		Ref Métrica	€	Ref Pulgadas	€
10		40	46	107-1610	6,37		
12		40	52	107-1612	6,37		
13	1/2	40	56	107-1613	6,37	107-161/2	7,15
14	9/16	40	60	107-1614	6,37	107-169/16	7,15
16	5/8	40	69	107-1616	6,37	107-165/8	7,09
17		40	73	107-1617	6,96		
18		40	78	107-1618	7,24		
19	3/4	40	80	107-1619	7,24	107-163/4	7,18
22		40	97	107-1622	8,51		


Puntas TORX®.
 **107-16 (T)**

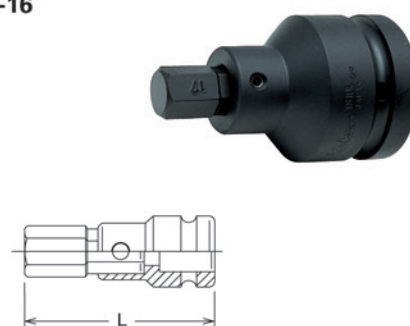
TORX®	L		Ref	€
T55	50	57	107-16T55	11,08
T60	50	64	107-16T60	11,18
T70	50	73	107-16T70	11,18


Puntas XZN.
 **107-16 (XZN)**

XZN	L		Ref	€
M14	60	83	107-16M14	8,00
M16	60	93	107-16M16	7,99
M18	60	103	107-16M18	8,98


Vasos con puna hexagonal.
  **18106-16**

mm	pulgadas	L		Ref Métrica	€	Ref Pulgadas	€
10		92	686	18106-1610	48,46		
12		92	692	18106-1612	48,46		
13	1/2	92	696	18106-1613	48,46	18106-161/2	49,22
14	9/16	92	700	18106-1614	48,46	18106-169/16	49,22
16	5/8	92	709	18106-1616	48,46	18106-165/8	49,17
17		92	713	18106-1617	49,20		
18		92	718	18106-1618	49,34		
19	3/4	92	764	18106-1619	49,34	18106-163/4	49,27
22		92	781	18106-1622	50,63		


Porta punta.
 **18107**

Ref	L		€
18107	70	770	37,17

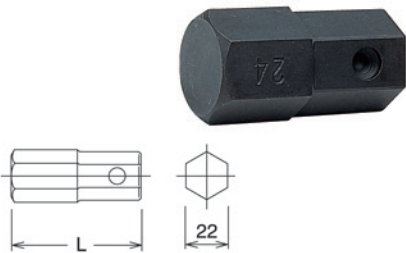




Puntas para tornillos Inhex.

107-22

mm	L		Ref	€
19	50	140	107-2219	8,51
22	50	162	107-2222	8,51
24	50	176	107-2224	9,28
27	50	200	107-2227	10,73
30	50	227	107-2230	12,89
32	50	243	107-2232	13,69



Puntas TORX®.

107-22 (T)

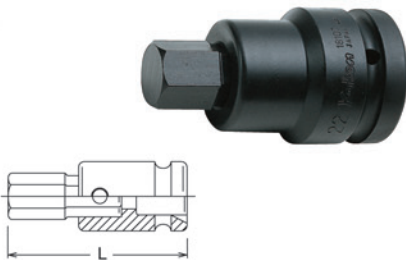
TORX®	L		Ref	€
T80	60	141	107-22T80	20,32
T90	60	155	107-22T90	20,41
T100	60	170	107-22T100	20,57



Vasos con punta hexagonal.

18107-22

mm	L		Ref	€
19	98	910	18107-2219	45,67
22	98	932	18107-2222	45,67
24	98	946	18107-2224	46,45
27	98	986	18107-2227	47,89
30	98	1.008	18107-2230	50,05
32	103	1.029	18107-2232	50,86



Alargaderas.

18760-175/-250/-330

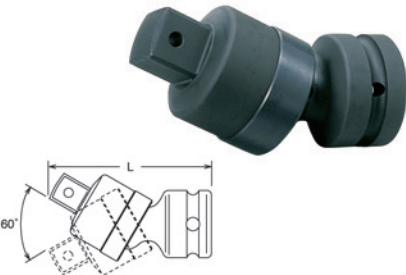
Ref	L		€
18760-175	175	1.400	62,12
18760-250	250	1.885	74,11
18760-330	330	2.380	87,14



Articulación universal.

18770

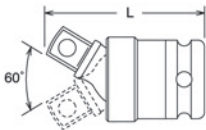
Ref	L		€
18770	127	1.210	103,89



Articulación universal.

■ 18771

Ref	L		€
18771	115	1.210	103,93



Adaptador.

■ 18866A-65/-200

Ref	L		€
18866A-65	65	580	38,23
18866A-200	200	1.100	57,95

□1"x □3/4"



Adaptador.

■ 18877A

Ref	L		€
18877A	80	935	71,45

□1"x □1-1/2"

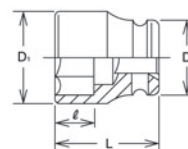




Vasos hexagonales.

17400M 17400A

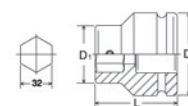
mm	pulgadas	D1	D2	ℓ	L	Ref	Métrica	€	Ref	Pulgadas	€
41	1-1/2	66	86	22	80	2.220			17400A1-1/2	103,80	
42	1-5/8	68	86	22	80	2.346	17400M41	103,80	17400A1-5/8	103,80	
46	1-3/4	70	86	22	80	2.330	17400M42	103,80			
50	1-11/16	71	86	22	80	2.300			17400A1-11/16	103,80	
52	1-3/4	73	86	22	80	2.290			17400A1-3/4	103,80	
54	1-13/16	74	86	26	84	2.360	17400M46	103,80	17400A1-13/16	103,80	
55	1-7/8	77	86	26	84	2.440			17400A1-7/8	105,98	
58	1-15/16	79	86	27	84	2.400	17400M50	105,98	17400A1-15/16	105,98	
60	2	80	86	27	84	2.420			17400A2	105,98	
65	2-1/16	82	86	38	84	2.340	17400M52	105,98	17400A2-1/16	105,98	
70	2-1/8	84	86	38	84	2.340	17400M54	105,98	17400A2-1/8	105,98	
75	2-3/16	85	86	44	90	2.450	17400M55	105,98	17400A2-3/16	108,23	
80	2-1/4	87	86	43	90	2.460			17400A2-1/4	118,30	
85	2-5/16	88	86	44	90	2.510	17400M58	118,30	17400A2-5/16	118,30	
90	2-3/8	91	86	43	90	2.640	17400M60	130,33	17400A2-3/8	130,33	
95	2-7/16	93	86	47	95	2.860			17400A2-7/16	130,33	
100	2-1/2	96	86	47	95	3.000			17400A2-1/2	145,15	
105	2-9/16	97	86	48	95	3.050	17400M65	145,15	17400A2-9/16	145,15	
110	2-5/8	100	86	51	100	3.300			17400A2-5/8	150,85	
115	2-11/16	101	86	51	100	3.330			17400A2-11/16	166,17	
120	2-3/4	103	86	52	100	3.350	17400M70	173,77	17400A2-3/4	173,77	
125	2-13/16	105	86	55	105	3.670			17400A2-13/16	210,17	
130	2-7/8	106	86	55	105	3.610			17400A2-7/8	228,21	
135	2-15/16	108	86	56	105	3.700	17400M75	183,97	17400A2-15/16	183,97	
140	3	108	86	55	105	3.680			17400A3	252,65	
145	3-1/8	115	86	60	110	4.240	17400M80	215,50	17400A3-1/8	277,07	
150	3-1/4	118	86	59	110	4.370			17400A3-1/4	285,40	
155	3-3/8	122	86	60	110	4.550	17400M85	244,35			
160	3-3/8	123	86	60	110	4.570			17400A3-3/8	309,87	
165	3-1/2	124	86	60	110	4.700	17400M86	248,35			
170	3-5/8	128	86	60	112	8.440	17400M90	266,48	17400A3-1/2	317,68	
175	3-5/8	132	86	52	112	5.230			17400A3-5/8	369,24	
180	3-3/4	135	127	52	112	5.590	17400M95	342,36	17400A3-3/4	342,36	
185	3-7/8	140	127	53	115	6.030	17400M100	383,45	17400A3-7/8	464,78	
190	4	146	127	57	120	6.460	17400M105	434,76	17400A4	418,75	
195	4-1/8	146	127	57	120	6.440			17400A4-1/8	434,76	
200	4-1/4	153	127	60	124	7.680	17400M110	449,60	17400A4-1/4	620,64	
205	4-1/2	160	127	62	128	8.150	17400M115	472,43	17400A4-1/2	599,46	
210	4-5/8	166	127	64	132	8.600	17400M120	495,21	17400A4-5/8	521,18	
215	4-3/4	168	127	64	132	8.660			17400A4-3/4	660,28	
220	4-7/8	173	127	67	136	9.660	17400M125	667,43	17400A4-7/8	667,43	
225	5	180	127	69	140	10.700	17400M130	703,29	17400A5	703,29	
230	5-1/4	186	127	73	145	11.920	17400M135	851,95	17400A5-1/4	1.112,15	
235		190	127	76	150	12.000	17400M140	1.059,10			
240		200	127	83	160	13.620	17400M150	1.484,01			
245	6	205	127	88	165	14.510			17400A6	1.557,78	
250	6-1/2	205	127	94	175	17.500			17400A6-1/2	2.120,62	



Porta Punta.

17108

Ref	D1	D2	L	Ref	€
17108	60	86	85	2.200	193,26



Puntas para Tornillos Inhex.

107-32

mm	L	Ref	€
19	60	107-3219	20,17
22	60	107-3222	20,17
24	60	107-3224	20,17
27	60	107-3227	20,17
30	60	107-3230	20,17
32	60	107-3232	20,17
36	60	107-3236	24,75



Alargaderas.

 17760-175/-250/-330

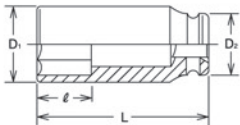
Ref	L		€
17760-175	175	3.300	339,35
17760-250	250	4.000	390,17
17760-330	330	5.200	434,03



Vasos hexagonales largos.

 17300M  17300A

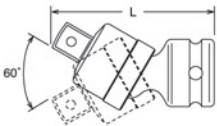
mm	pulgadas	D ₁	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
41	1-5/8	68	86	27	115	3.080	17300M41	206,95	17300A1-5/8	206,95
42		70	86	27	115	3.140	17300M42	217,26		
	1-11/16	71	86	27	115	3.180			17300A1-11/16	217,26
	1-3/4	72	86	27	115	3.210			17300A1-3/4	217,26
46	1-13/16	74	86	28	125	3.440	17300M46	217,26	17300A1-13/16	217,26
	1-7/8	77	86	28	125	3.550			17300A1-7/8	217,26
	1-15/16	78	86	28	125	3.590			17300A1-15/16	239,88
50		79	86	30	135	3.840	17300M50	239,88		
	2	80	86	30	135	3.916			17300A2	239,88
	2-1/16	82	86	30	135	4.030			17300A2-1/16	239,88
54	2-1/8	84	86	30	135	4.160	17300M54	274,13	17300A2-1/8	274,13
55		85	86	33	135	4.130	17300M55	274,13		
	2-3/16	86	86	33	135	4.200			17300A2-3/16	274,13
	2-1/4	87	86	33	135	4.160			17300A2-1/4	284,42
60	2-3/8	91	86	35	135	4.370	17300M60	322,12	17300A2-3/8	322,12
	2-7/16	93	86	35	135	4.490			17300A2-7/16	322,12
	2-1/2	95	86	35	135	4.630			17300A2-1/2	332,37
65	2-9/16	97	86	38	145	5.260	17300M65	342,68	17300A2-9/16	342,68
	2-5/8	98	86	38	145	5.320			17300A2-5/8	356,35
	2-11/16	101	86	38	145	5.670			17300A2-11/16	411,18
70	2-3/4	103	86	40	145	5.780	17300M70	435,21	17300A2-3/4	435,21
	2-13/16	105	86	40	145	6.000			17300A2-13/16	445,49
	2-7/8	106	86	40	145	6.080			17300A2-7/8	479,75
75	2-15/16	108	86	42	155	6.580	17300M75	479,75	17300A2-15/16	479,75
	3	110	86	42	155	6.850			17300A3	493,44
80	3-1/8	115	86	46	165	7.740	17300M80	514,02	17300A3-1/8	514,02
85		122	86	49	165	7.420	17300M85	589,39		
90		128	86	52	175	9.630	17300M90	698,38		
95	3-3/4	135	127	55	175	10.450	17300M95	647,66	17300A3-3/4	647,66
	3-7/8	139	127	56	175	11.080			17300A3-7/8	722,99
100		140	127	58	185	9.740	17300M100	783,23		
105		146	127	62	195	10.850	17300M105	777,31		
110		153	127	65	195	11.500	17300M110	849,51		
115		160	127	68	195	12.160	17300M115	872,09		
120		166	127	72	205	13.680	17300M120	885,66		
125		173	127	74	205	14.450	17300M125	903,73		
130		180	127	76	205	15.190	17300M130	935,35		



Articulación universal.

 17770

Ref	L		€
17770	200	4.700	861,80



Adaptadores.

 17788A  17799A

Ref	L		€
17788A	97	2.600	176,72
17799A	115	3.790	890,47

▣1-1/2"× ▣1"
▣1-1/2"× ▣2-1/2"

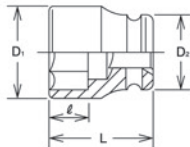




Vasos hexagonales.

19400M 19400A

mm	pulgadas	D ₁	D ₂	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
50		88	127	39	115	7.270	19400M50	564,99		
55		94	127	42	115	7.350	19400M55	586,42		
60	2-3/8	100	127	45	125	7.870	19400M60	586,42	19400A2-3/8	586,42
	2-7/16	102	127	46	125	7.840			19400A2-7/16	597,11
	2-1/2	103	127	47	125	7.810			19400A2-1/2	597,11
65	2-9/16	105	127	48	125	7.790	19400M65	597,11	19400A2-9/16	597,11
	2-5/8	107	127	49	125	7.790			19400A2-5/8	597,11
	2-11/16	108	127	50	125	7.790			19400A2-11/16	597,11
70	2-3/4	110	127	51	125	7.640	19400M70	596,31	19400A2-3/4	597,11
	2-13/16	113	127	52	125	4.690			19400A2-13/16	597,11
	2-7/8	115	127	53	125	7.730			19400A2-7/8	597,11
75	2-15/16	118	127	54	125	7.740	19400M75	596,32	19400A2-15/16	597,11
	3	120	127	55	125	7.740			19400A3	597,11
80	3-1/8	124	127	57	125	7.640	19400M80	596,32	19400A3-1/8	597,11
	3-1/4	125	127	59	125	7.740			19400A3-1/4	645,31
85	3-3/8	127	127	61	132	7.840	19400M85	645,31	19400A3-3/8	706,91
90	3-1/2	135	127	64	132	8.500	19400M90	706,91	19400A3-1/2	706,91
	3-5/8	138	127	64	132	9.330			19400A3-5/8	706,91
95	3-3/4	140	127	71	140	10.160	19400M95	752,44	19400A3-3/4	752,44
	3-7/8	143	127	70	140	10.830			19400A3-7/8	926,48
100	4	146	127	71	142	11.500	19400M100	926,48	19400A4	935,87
	4-1/8	155	127	70	142	11.250			19400A4-1/8	935,87
105		155	127	74	146	11.350	19400M105	935,87		
110	4-1/4	160	127	76	155	12.710	19400M110	955,70	19400A4-1/4	955,70
115	4-1/2	167	127	78	158	13.980	19400M115	1.054,56	19400A4-1/2	1.054,56
120	4-5/8	175	175	79	160	15.430	19400M120	1.200,50	19400A4-5/8	1.054,56
125	4-7/8	180	175	82	165	16.590	19400M125	1.239,35	19400A4-7/8	1.200,50
	5	183	175	81	165	17.090			19400A5	1.239,35
130		185	175	85	169	17.590	19400M130	1.475,90		
135	5-1/4	190	175	89	175	19.030	19400M135	1.475,90	19400A5-1/4	1.475,90
	5-3/8	198	175	94	180	20.880			19400A5-3/8	1.497,11
140	5-1/2	200	175	93	180	21.810	19400M140	1.497,11	19400A5-1/2	1.497,11
	5-5/8	203	175	94	182	22.480			19400A5-5/8	1.497,11
145		205	175	95	183	23.610	19400M145	1.776,35		
	5-3/4	207	175	103	192	24.440			19400A5-3/4	1.497,11
150		210	175	97	192	25.720	19400M150	1.906,49		
	6	217	175	100	196	28.510			19400A6	1.906,49
	6-1/8	218	175	99	196	29.720			19400A6-1/8	1.906,49
160		225	175	102	200	30.920	19400M160	2.206,60		
165		230	175	105	204	32.610	19400M165	2.206,60		
	6-5/8	233	175	105	205	33.500			19400A6-5/8	2.513,75
170		235	175	106	207	34.390	19400M170	2.513,75		
175		240	175	109	211	36.210	19400M175	3.008,03		
	7	248	175	110	213	39.160			19400A7	3.092,75
180		250	175	110	214	40.630	19400M180	3.092,75		
185		255	175	113	218	42.690	19400M185	3.375,18		
190		265	175	113	220	47.440	19400M190	3.572,90		
200		275	175	116	225	51.550	19400M200	4.109,56		
210		285	175	123	235	57.170	19400M210	4.575,58		
215		290	175	126	240	60.260	19400M215	5.295,25		
225		305	175	133	250	70.180	19400M225	5.295,25		
235		315	175	140	260	77.060	19400M235	6.001,29		

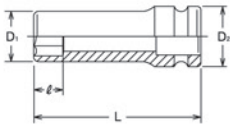




Vasos hexagonales largos.

■ 19300M

mm	D ₁	D ₂	ℓ	L		Ref	€
75	118	127	42	190	11.930	19300M75	861,23
80	124	127	46	190	12.280	19300M80	861,23
85	127	127	49	195	12.480	19300M85	861,23
90	135	127	52	205	14.000	19300M90	945,83
95	140	127	55	210	14.630	19300M95	1.058,74
100	146	127	58	215	15.520	19300M100	1.058,74
105	155	127	62	220	18.250	19300M105	1.199,94
110	160	127	65	225	18.740	19300M110	1.341,13
115	167	127	68	230	20.940	19300M115	1.341,13
120	175	175	72	235	23.530	19300M120	1.609,16
125	180	175	74	238	26.110	19300M125	1.736,20
130	185	175	76	243	25.320	19300M130	1.736,20
135	190	175	80	248	26.290	19300M135	1.882,09
140	200	175	82	248	28.940	19300M140	1.776,35
145	205	175	84	248	29.520	19300M145	1.776,35
150	210	175	88	255	30.600	19300M150	2.484,37
155	215	175	92	255	31.680	19300M155	2.484,37
160	225	175	95	260	35.560	19300M160	2.752,54
165	230	175	98	260	36.040	19300M165	2.823,10
170	235	175	100	265	37.230	19300M170	3.190,14
175	240	175	102	270	39.420	19300M175	3.754,74



Alargaderas.

■ 19760-250/-500

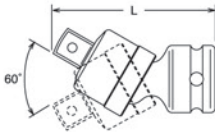
Ref	L		€
19760-250	250	17.800	1.416,06
19760-500	500	27.800	1.689,88



Articulación universal.

■ 19770

Ref	L		€
19770	303	21.360	2.173,25



Adaptadores.

■ 19977A

Ref	L		€
19977A	144	7.210	1.024,23



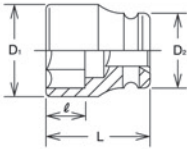
□2-1/2" x □1-1/2"



Vasos hexagonales.

10400M 10400A

mm	pulgadas	D1	D2	ℓ	L		Ref Métrica	€	Ref Pulgadas	€
105	4-1/8	165	175	86	176	19.370	10400M105	1.752,76	10400A4-1/8	1.751,93
	4-1/4	168	175	87	178	19.770			10400A4-1/4	1.751,93
110		170	175	88	179	20.160	10400M110	1.752,76		
	4-3/8	172	175	88	180	20.660			10400A4-3/8	1.801,18
	4-1/2	175	175	89	182	21.160			10400A4-1/2	1.801,18
115		175	175	90	183	21.160	10400M115	1.802,02		
	4-5/8	178	175	90	183	21.550			10400A4-5/8	1.945,77
120	4-3/4	180	175	91	185	21.930	10400M120	1.946,68	10400A4-3/4	1.945,77
125	4-7/8	188	175	94	190	23.940	10400M125	1.946,68	10400A4-7/8	1.945,77
	5	188	175	95	191	24.500			10400A5	1.945,77
130	5-1/8	193	175	97	194	25.050	10400M130	1.946,68	10400A5-1/8	1.945,77
	5-1/4	197	175	100	198	25.990			10400A5-1/4	1.945,77
135		200	175	101	199	26.930	10400M135	2.433,35		
	5-3/8	201	175	102	202	27.750			10400A5-3/8	2.432,22
140	5-1/2	205	175	105	205	28.560	10400M140	2.589,77	10400A5-1/2	2.588,58
145		210	200	106	207	29.600	10400M145	2.798,37		
	5-5/8	208	200	106	208	30.110			10400A5-5/8	2.797,07
	5-3/4	212	200	108	210	30.610			10400A5-3/4	2.797,07
150	5-7/8	215	200	109	212	31.240	10400M150	2.798,37	10400A5-7/8	2.797,07
	6	219	200	110	214	32.460			10400A6	2.988,16
	6-1/8	223	200	112	216	33.670			10400A6-1/8	2.988,16
	6-1/4	227	200	114	218	34.590			10400A6-1/4	3.318,26
160		228	200	114	220	35.500	10400M160	3.319,79		
	6-3/8	231	200	115	221	36.720			10400A6-3/8	3.318,26
165	6-1/2	235	200	117	224	37.940	10400M165	3.319,79	10400A6-1/2	3.318,26
	6-5/8	238	200	118	226	38.800			10400A6-5/8	3.839,46
170		240	200	118	227	39.660	10400M170	3.841,25		
	6-3/4	241	200	119	228	39.870			10400A6-3/4	3.839,46
	6-7/8	245	200	120	230	40.640			10400A6-7/8	3.839,46
175		245	200	121	231	41.400	10400M175	3.841,25		
	7	251	200	121	232	43.570			10400A7	4.551,72
180		255	200	122	234	45.740	10400M180	4.553,84		
	7-1/8	257	200	122	234	46.450			10400A7-1/8	4.551,72
	7-1/4	263	200	123	236	48.400			10400A7-1/4	4.551,72
185		265	200	125	238	50.350	10400M185	4.553,84		
	7-3/8	269	200	124	238	52.500			10400A7-3/8	4.812,30
190		275	200	125	239	54.650	10400M190	4.814,54		
	7-1/2	275	200	125	240	55.350			10400A7-1/2	4.812,30
	7-5/8	278	200	127	242	56.050			10400A7-5/8	4.812,30
	7-3/4	282	200	129	245	57.620			10400A7-3/4	5.211,92
200		285	200	128	245	59.190	10400M200	5.214,33		
	7-7/8	285	200	130	248	60.870			10400A7-7/8	5.211,92
	8	290	200	132	250	62.550			10400A8	5.211,92
	8-1/8	293	200	133	251	63.760			10400A8-1/8	6.253,66
210	8-1/4	295	200	135	255	64.970	10400M210	6.256,56	10400A8-1/4	6.253,66
	8-3/8	298	200	136	258	65.580			10400A8-3/8	6.253,66
215	8-1/2	300	200	138	260	68.150	10400M215	7.473,12	10400A8-1/2	7.469,66
	8-5/8	305	200	139	262	70.760			10400A8-5/8	4.487,74
	8-3/4	310	200	140	264	73.830			10400A8-3/4	7.469,66
	8-7/8	313	200	142	267	75.780			10400A8-7/8	7.469,66

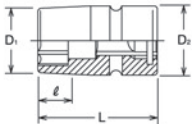




Vasos hexagonales con casquillo conductor.

 NV13400

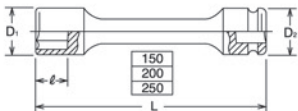
mm	D ₁	D ₂	ℓ	L		Ref	€
10	15,8	19	7	43	53	NV13400M10	22,97
11	17	19	8	43	54	NV13400M11	22,97
12	18,3	19	9	43	55	NV13400M12	22,97
13	19,5	22	10	43	80	NV13400M13	24,66
14	20,8	22	10	43	80	NV13400M14	24,66
15	22	22	11	43	81	NV13400M15	24,66
16	23,3	22	11	43	83	NV13400M16	24,66
17	24,5	22	11	43	85	NV13400M17	24,66
18	25,8	22	11	43	89	NV13400M18	27,25
19	27	22	11	43	98	NV13400M19	27,25
21	29,5	22	11	43	105	NV13400M21	28,27
22	30,8	22	11	43	112	NV13400M22	28,40



Vasos con alargadera con casquillo conductor.

 NV13145-100/-150/-200

mm	D ₁	D ₂	ℓ				Ref L-100	€	Ref L-150	€	Ref L-200	€
				150	150	200						
6	13	19	6	108	163	209	NV13145-1006	32,54	NV13145-1506	52,00	NV13145-2006	52,82
8	13	19	8	110	158	203	NV13145-1008	32,54	NV13145-1508	52,00	NV13145-2008	52,82
10	15,5	19	10	112	165	212	NV13145-10010	32,54	NV13145-15010	52,00	NV13145-20010	52,82
12	18	19	12	120	158	214	NV13145-10012	32,54	NV13145-15012	52,00	NV13145-20012	52,82
13	19	19	13	127	170	218	NV13145-10013	33,30	NV13145-15013	53,20	NV13145-20013	53,81
14	21	19	14	131	175	220	NV13145-10014	33,30	NV13145-15014	53,20	NV13145-20014	53,81
15	22	19	15	133	177	226	NV13145-10015	33,30	NV13145-15015	53,20	NV13145-20015	53,81
16	24	19	15	144	190	235	NV13145-10016	33,30	NV13145-15016	53,20	NV13145-20016	53,81
17	25	19	15	154	203	250	NV13145-10017	33,30	NV13145-15017	53,20	NV13145-20017	53,81



Alargaderas con casquillo conductor.

 NV13760-75P/-125P/-250P

Ref	L		€
NV13760-75P	75	93	32,65
NV13760-125P	125	147	38,17
NV13760-250P	250	253	40,78





Vasos hexagonales con casquillo conductor.

NV14400

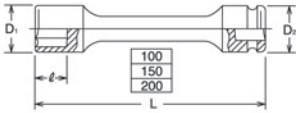
mm	D ₁	D ₂	ℓ	L	⚖	Ref	€
12	19,5	25	9	52	120	NV14400M12	25,67
13	20,7	25	10	52	120	NV14400M13	25,67
14	22	25	10	54	120	NV14400M14	25,67
15	23,2	30	11	54	188	NV14400M15	27,49
16	24,5	30	11	54	189	NV14400M16	27,49
17	25,7	30	12	54	190	NV14400M17	27,49
18	27	30	12	54	190	NV14400M18	27,49
19	28,2	30	12	54	190	NV14400M19	27,49
21	30,7	30	12	54	191	NV14400M21	30,84
22	32	30	12	54	192	NV14400M22	30,84
23	33,2	30	12	54	196	NV14400M23	31,23
24	34,5	30	12	54	200	NV14400M24	31,23



Vasos con alargadera con casquillo conductor.

NV14145-100/-150/-200

mm	D ₁	D ₂	ℓ	⚖			Ref L-100	€	Ref L-150	€	Ref L-200	€
				100	150	200						
10	15,5	25	10	161	200	236	NV14145-10010	35,11	NV14145-15010	54,61	NV14145-20010	55,37
12	18	25	12	178	215	250	NV14145-10012	35,11	NV14145-15012	54,61	NV14145-20012	55,37
13	19	25	13	175	220	260	NV14145-10013	35,11	NV14145-15013	54,61	NV14145-20013	55,37
14	21	25	14	181	225	270	NV14145-10014	35,11	NV14145-15014	54,61	NV14145-20014	55,37
15	22	25	15	185	230	275	NV14145-10015	36,79	NV14145-15015	56,53	NV14145-20015	57,56
16	24	25	15	193	240	287	NV14145-10016	36,79	NV14145-15016	56,53	NV14145-20016	57,56
17	25	25	15	201	250	300	NV14145-10017	36,79	NV14145-15017	56,53	NV14145-20017	57,56
18	26	25	15	211	262	310	NV14145-10018	36,79	NV14145-15018	56,53	NV14145-20018	57,56
19	28	25	15	221	275	320	NV14145-10019	36,79	NV14145-15019	56,53	NV14145-20019	57,56



Alargaderas con casquillo conductor.

NV14760-75P/-125P/-175P/-250P

Ref	L	⚖	€
NV14760-75P	75	149	38,18
NV14760-125P	125	230	43,36
NV14760-175P	175	308	45,33
NV14760-250P	250	422	47,12



Adaptadores con casquillo conductor.

NV14433A-75P/-100P/-150P

Ref	L	⚖	€
NV14433A-75P	75	120	30,12
NV14433A-100P	100	145	34,20
NV14433A-150P	150	187	36,92

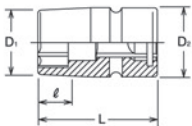




Vasos hexagonales con casquillo conductor.

 NV16400

mm	D ₁	D ₂	ℓ	L		Ref	€
17	30	44	12	65	448	NV16400M17	39,22
18	31,3	44	13	65	470	NV16400M18	39,22
19	32,5	44	13	65	455	NV16400M19	39,22
21	35	44	15	65	472	NV16400M21	39,22
22	36,3	44	16	65	471	NV16400M22	39,22
23	37,5	44	16	65	471	NV16400M23	39,22
24	38,8	44	16	65	467	NV16400M24	39,22
26	41,3	44	16	65	477	NV16400M26	39,22
27	42,5	44	16	65	473	NV16400M27	39,22
28	43,8	44	16	68	483	NV16400M28	39,22
29	45	44	18	68	494	NV16400M29	39,22
30	46,3	44	18	68	492	NV16400M30	39,22
32	48,8	44	19	70	514	NV16400M32	42,59
33	50	44	20	70	564	NV16400M33	46,06
34	51,3	44	20	70	588	NV16400M34	46,06
35	52,5	44	20	70	593	NV16400M35	50,47
36	53,8	44	20	70	598	NV16400M36	50,47
38	56,3	44	20	72	670	NV16400M38	50,47
41	60	44	22	72	687	NV16400M41	53,81
46	66,3	44	23	77	906	NV16400M46	59,12
50	69	44	23	77	1.116	NV16400M50	65,60



Alargaderas con casquillo conductor.

 NV16760-175/-250/-330

Ref	L		€
NV16760-175	175	685	61,68
NV16760-250	250	910	66,60
NV16760-330	330	1.320	74,08



Pasador.

N.	▣	Apertura	D ₁	ℓ	€
1200A	1/4		1,5	10,2	0,39
1301A	3/8	12	2,5	14,5	0,39
1302A	3/8	> 12	2,5	17,5	0,39
1401A	1/2	14	3,5	20	0,67
1402A	1/2	> 14	3,5	25	0,67
1500A	5/8		4	30	0,67
1601A	3/4	46	5,5	35	0,67
1602A	3/4	> 46	5,5	45	0,79
1801A	1	70	6	45	0,79
1802A	1	> 70	6	75	1,54
1701A	1-1/2	90	7	75	1,54
1702A	1-1/2	> 90	7	110	3,36
1901A	2-1/2	115	9	110	3,36
1902A	2-1/2	> 115	9	155	3,99
2001A	3-1/2	140	13	155	5,16
2002A	3-1/2	> 140	13	180	5,16



Junta Tórica.

N.	▣	Apertura	D ₁	D ₂	€
1200B	1/4		2,5	9	0,67
1301B	3/8	12	3,5	13	0,67
1302B	3/8	> 12	3,5	16	0,67
1401B	1/2	14	4	19	0,79
1402B	1/2	> 14	4	24	0,79
1500B	5/8		4,5	28	1,02
1601B	3/4	46	5	36	1,16
1602B	3/4	> 46	5	45	1,54
1801B	1	70	7	45	1,54
1802B	1	> 70	7	75	6,45
1701B	1-1/2	90	10	75	6,45
1702B	1-1/2	> 90	10	114	16,42
1901B	2-1/2	115	10,5	114	16,42
1902B	2-1/2	> 115	10,5	158	22,35
2001B	3-1/2	140	15	158	40,01
2002B	3-1/2	> 140	15	183	52,65



Aro en C.

N.		Apertura	€
1301C	3/8	12	0,79
1302C	3/8	> 12	0,79
1401C	1/2	14	0,99
1402C	1/2	> 14	0,99
1600C	3/4	46	1,71
1801C	1	70	1,86
1802C	1	> 70	5,66
1700C	1-1/2	90	6,34

Aro de acero elástico de una pieza. Colocación sencilla apretando con el dedo y fácilmente extraíble con el extractor. Mucho más cómodo y seguro que la combinación de pasador y junta tórica.



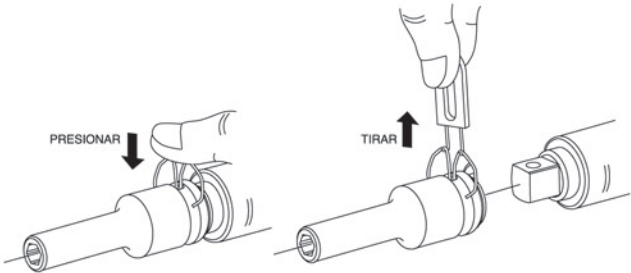
Extractor.

N.		€
149	3/8 1/2	1,38
152	3/4 1	1,53



Juego de Aro en C.

N. Juego		Aros en C	+	Extractor	€
PK1301C	3/8	1301C	+	149	12,26
PK1302C	3/8	1302C	+	149	12,26
PK1401C	1/2	1401C	+	149	15,35
PK1402C	1/2	1402C	+	149	15,35
PK1600C	3/4	1600C	+	152	23,62
PK1801C	1	1801C	+	152	24,02



Patentado

Vasos de IMPACTO Normalizados	Cuad. Cond	1/4"	3/8"		1/2"		3/4"		1"		1-1/2"	
	Aro C		1301C	1302C	1401C	1402C	1600C	1801C	1801C	1802C	1700C	
	Junta Tórica	1200A/B	1301A/B	1302A/B	1401A/B	1402A/B	1601A/B	1602A/B	1801A/B	1802A/B	1701A/B	1702A/B
4												
4,5	3/16											
5												
5,5												
6	1/4											
7	9/32											
8												
9	11/32											
10	3/8											
11	7/16											
12												
13	1/2											
14	9/16											
15												
16	5/8											
17	11/16											
18												
19	3/4											
20												
21	13/16											
22	7/8											
23												
24	15/16											
25	1											
26												
27	1- 1/16											
28												
29	1- 1/8											
30	1- 3/16											
31												
32	1- 1/4											
33	1- 5/16											
34	1- 3/8											
36												
37	1- 7/16											
38	1- 1/2											
39												
40	1- 9/16											
41	1- 5/8											
42												
43	1- 11/16											
44												
45	1- 3/4											
46	1- 13/16											

Vasos de IMPACTO Normalizados	Cuad. Cond	1/4"	3/8"		1/2"		3/4"		1"		1-1/2"	
	Aro C		1301C	1302C	1401C	1402C	1600C	1801C	1801C	1802C	1700C	
	Junta Tórica	1200A/B	1301A/B	1302A/B	1401A/B	1402A/B	1601A/B	1602A/B	1801A/B	1802A/B	1701A/B	1702A/B
47												
48	1- 7/8											
	1- 15/16											
50												
	2											
52	2- 1/16											
54	2- 1/8											
55	2- 3/16											
56												
	2- 1/4											
58	2- 5/16											
60	2- 3/8											
62	2- 7/16											
63												
	2- 1/2											
65	2- 9/16											
67	2- 5/8											
68	2- 11/16											
70	2- 3/4											
	2- 16/16											
	2- 7/8											
75	2- 15/16											
	3											
	3- 1/16											
80	3- 1/8											
	3- 1/4											
85												
	3- 3/8											
90	3- 1/2											
	3- 5/8											
95	3- 3/4											
100	3- 7/8											
105	4											
	4- 1/8											
110	4- 1/4											
115	4- 1/2											
120	4- 5/8											
	4- 3/4											
125	4- 7/8											
130	5											
135	5- 1/4											
140												
150												
	6											
	6- 1/2											