

EYE BOLTS & LIFTING STUDS

EYE BOLT DIN 580 - CAST IRONED STEEL / 409	IV/14
EYE BOLT DIN 580/ DIN 582 - FORGED STEEL / 410	IV/15
REVOLVING EYE BOLT / 420	IV/16
“RUD” EYE BOLT / 421	IV/17
LIFTING STUD “ET1” / 417	IV/18
LIFTING STUD “ET2” / 418	IV/19
LIFTING STUD “ET3” / 419	IV/20

GAUGED STRIPS

CASE GAUGED STRIP BAND / 422	IV/22
SPOOLED GAUGED STRIP / 423	IV/23
VARIABLE WIDTH SPOOLED GAUGED STRIP / 424	IV/24
SELECTION OF GAUGED STRIP / 425	IV/25

GUIDE STOP & STOPPER BOLTS

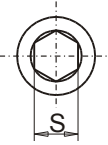
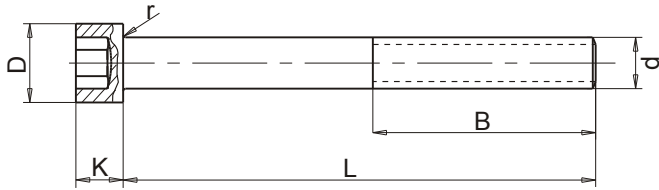
GUIDE STOP “TGM” / 407	IV/ 8
GUIDE STOP “TGH” / 408	IV/ 9
SHOULDER BOLT “TLM” / 405	IV/ 6
SHOULDER BOLT “TLH” / 406	IV/ 7
STOPPER BOLT “KRT” / 414	IV/10

SCREWS

SOCKET HEAD CAP SCREWS DIN 912-8.8 / 401	IV/ 1
SOCKET HEAD CAP SCREWS DIN 912-12.9 / 402	IV/ 2
SOCKET HEAD CAP SCREWS DIN 7991 / 403	IV/ 3
SCREW PLUGS DIN 913 / 404	IV/ 4
SOCKET SCREW ALLEN KEY DIN 911 / 411	IV/ 5

OTHER ITEMS

BALL PLUNGER / SFERIC PIVOT PLUNGER / 412	IV/12
EXPANDER SEALING PLUGS / 415	IV/13
GROWER RING DIN 7980 / 416	IV/21
STOP FOR EJECTION PLATE “TPE” / 413	IV/11
SUPPORT PILLAR / 499	IV/26

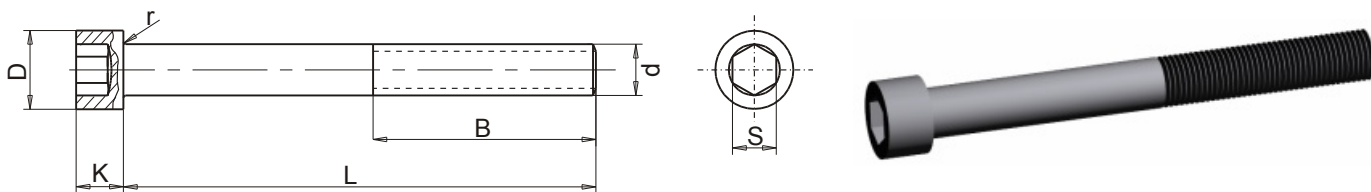
TORNILLO ALLEN DIN 912 - 8.8
SOCKET HEAD CAP SCREWS DIN 912 - 8.8
401

RESISTENCIA A LA TRACCION / TENSILE STRENGTH : (80-100 Kp/mm2)

d	M- 3	M- 4	M- 5	M- 6	M- 8	M- 10	M-12	M-14	M-16	M-18	M-20	M-24	M-30
b	18	20	22	24	28	32	36	40	44	52	52	60	72
D	5.5	7	8.5	10	13	16	18	21	24	27	30	36	45
K	3	4	5	6	8	10	12	14	16	18	20	24	30
S	2.6	3	4	5	6	8	10	12	14	14	17	19	22
r	0.2	0.2	0.2	0.3	0.5	0.5	1	1	1	1	1	1.6	2

L	M- 3	M- 4	M- 5	M- 6	M- 8	M- 10	M-12	M-14	M-16	M-18	M-20	M-24	M-30
6	*	*	*										
8	*	*	*	*									
10	*	*	*	*	*								
12	*	*	*	*	*								
14	*	*	*	*	*								
16	*	*	*	*	*	*							
18	*	*	*	*	*	*							
20	*	*	*	*	*	*	*						
22	*	*	*	*	*	*	*						
25	*	*	*	*	*	*	*	*	*				
30	*	*	*	*	*	*	*	*	*	*	*		
35	*	*	*	*	*	*	*	*	*	*	*		
40	*	*	*	*	*	*	*	*	*	*	*	*	
45		*	*	*	*	*	*	*	*	*	*	*	*
50		*	*	*	*	*	*	*	*	*	*	*	*
55		*	*	*	*	*	*	*	*	*	*	*	*
60		*	*	*	*	*	*	*	*	*	*	*	*
65		*	*	*	*	*	*	*	*	*	*	*	*
70		*	*	*	*	*	*	*	*	*	*	*	*
80			*	*	*	*	*	*	*	*	*	*	*
90			*	*	*	*	*	*	*	*	*	*	*
100			*	*	*	*	*	*	*	*	*	*	*
110					*	*	*	*	*	*	*	*	*
120					*	*	*	*	*	*	*	*	*
130					*	*	*	*	*	*	*	*	*
140					*	*	*	*	*	*	*	*	*
150					*	*	*	*	*	*	*	*	*
160					*	*	*	*	*	*	*	*	*
170					*	*	*	*	*	*	*	*	*
180					*	*	*	*	*	*	*	*	*
190						*	*	*	*	*	*	*	*
200						*	*	*	*	*	*	*	*
220						*	*	*	*	*	*	*	*
240						*	*	*	*	*	*	*	*
260						*	*	*	*	*	*	*	*
280						*	*	*	*	*	*	*	*
300						*	*	*	*	*	*	*	*

FORMA DE PEDIDO / ORDER FORM : d x L.

SOCKET HEAD CAP SCREWS DIN 912 - 12.9

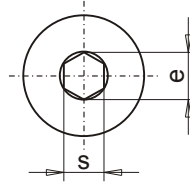
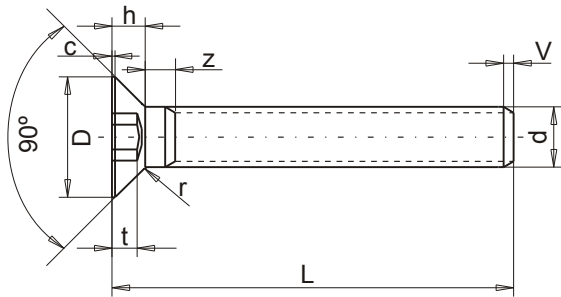


RESISTENCIA A LA TRACCION / TENSILE STRENGTH: (120-140 Kp/mm2)

d	M- 3	M- 4	M- 5	M- 6	M- 8	M- 10	M-12	M-14	M-16	M-18	M-20	M-24	M-30
b	18	20	22	24	28	32	36	40	44	52	52	60	72
D	5.5	7	8.5	10	13	16	18	21	24	27	30	36	45
K	3	4	5	6	8	10	12	14	16	18	20	24	30
S	2.6	3	4	5	6	8	10	12	14	14	17	19	22
r	0.2	0.2	0.2	0.3	0.5	0.5	1	1	1	1	1	1.6	2

L	M- 3	M- 4	M- 5	M- 6	M- 8	M- 10	M-12	M-14	M-16	M-18	M-20	M-24	M-30
6	*	*	*										
8	*	*	*	*									
10	*	*	*	*	*								
12	*	*	*	*	*								
14	*	*	*	*	*								
16	*	*	*	*	*	*							
18	*	*	*	*	*	*							
20	*	*	*	*	*	*	*						
22	*	*	*	*	*	*	*						
25	*	*	*	*	*	*	*	*	*				
30	*	*	*	*	*	*	*	*	*	*	*		
35	*	*	*	*	*	*	*	*	*	*	*		
40	*	*	*	*	*	*	*	*	*	*	*	*	
45		*	*	*	*	*	*	*	*	*	*	*	
50		*	*	*	*	*	*	*	*	*	*	*	
55		*	*	*	*	*	*	*	*	*	*	*	
60		*	*	*	*	*	*	*	*	*	*	*	*
65		*	*	*	*	*	*	*	*	*	*	*	*
70		*	*	*	*	*	*	*	*	*	*	*	*
80			*	*	*	*	*	*	*	*	*	*	*
90			*	*	*	*	*	*	*	*	*	*	*
100			*	*	*	*	*	*	*	*	*	*	*
110					*	*	*	*	*	*	*	*	*
120					*	*	*	*	*	*	*	*	*
130					*	*	*	*	*	*	*	*	*
140					*	*	*	*	*	*	*	*	*
150					*	*	*	*	*	*	*	*	*
160					*	*	*	*	*	*	*	*	*
170					*	*	*	*	*	*	*	*	*
180					*	*	*	*	*	*	*	*	*
190						*	*	*	*	*	*	*	*
200						*	*	*	*	*	*	*	*
220						*	*	*	*	*	*	*	*
240						*	*	*	*	*	*	*	*
260						*	*	*	*	*	*	*	*
280						*	*	*	*	*	*	*	*
300						*	*	*	*	*	*	*	*

FORMA DE PEDIDO / ORDER FORM : d x L.

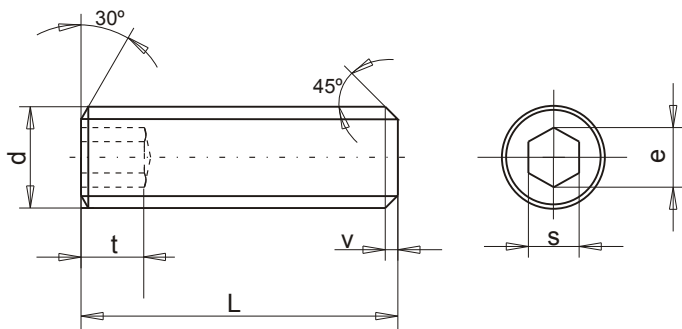
**TORNILLO AVELLANADO DIN 7991
 SOCKET HEAD CAP SCREWS DIN 7991**

RESISTENCIA A LA TRACCION / TENSILE STRENGTH : (100-120 Kp/mm2)

d	M- 3	M- 4	M- 5	M- 6	M- 8	M- 10	M-12	M-14	M-16	M-20
D	6	8	10	12	16	20	24	27	30	36
h	1.7	2.3	2.8	3.3	4.4	5.5	6.5	7	7.5	8.5
c	0.2	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5
r	0.1	0.2	0.2	0.3	0.5	0.5	1	1	1	1
s	2	2.5	3	4	5	6	8	10	10	12
t	1.3	2	2.4	2.8	3.8	4.8	5	5.3	5.8	6.8
e	2.3	2.9	3.5	4.7	5.8	7	9.4	11.7	11.7	14
v	0.5	0.7	0.8	1	1.25	1.5	1.75	2	2	2.5
z	1	1.4	1.6	2	2.5	3	3.5	4	4.5	5

L	M- 3	M- 4	M- 5	M- 6	M- 8	M- 10	M-12	M-14	M-16	M-20
8	*	*	*							
10	*	*	*	*						
12	*	*	*	*						
16	*	*	*	*	*	*				
18	*	*	*	*	*	*				
20	*	*	*	*	*	*	*			
25	*	*	*	*	*	*	*	*		
30	*	*	*	*	*	*	*	*	*	
35		*	*	*	*	*	*	*	*	*
40		*	*	*	*	*	*	*	*	*
45			*	*	*	*	*	*	*	*
50			*	*	*	*	*	*	*	*
55				*	*	*	*	*	*	*
60				*	*	*	*	*	*	*
70					*	*	*	*	*	*
80					*	*	*	*	*	*
90						*	*	*	*	*
100						*	*	*	*	*

FORMA DE PEDIDO / ORDER FORM : d x L.

SCREW PLUGS DIN 913

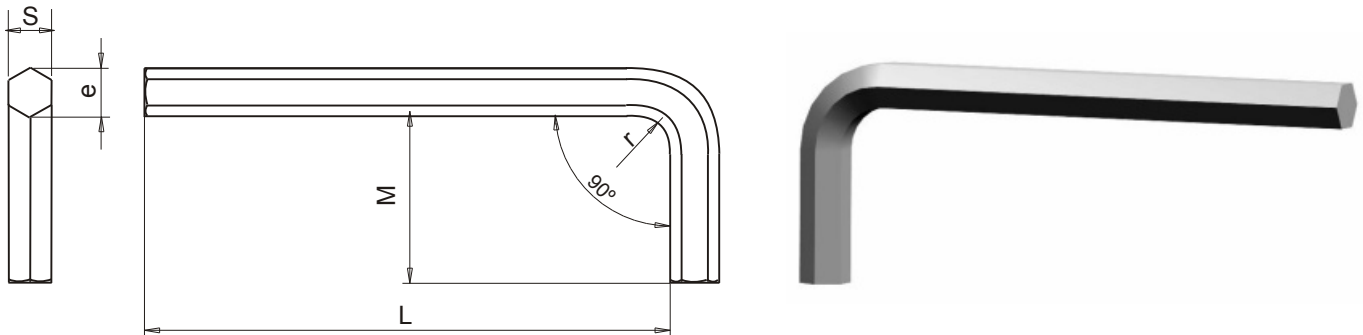


RESISTENCIA A LA TRACCION / TENSILE STRENGTH: (120 Kp/mm²)

d	M-2,5	M-3	M-4	M-5	M-6	M-8	M-10	M-12	M-14	M-16	M-20	M-24
peso	0.45	0.5	0.7	0.8	1	1.25	1.5	1.75	2	2	2.5	3
e	1.5	1.8	2.3	2.9	3.5	4.7	5.8	7	7	9.4	11.7	14
s	1.3	1.5	2	2.5	3	4	5	6	6	8	10	12
t	2	2	2.5	3	3.5	5	6	8	8	10	12	15
v	0.5	0.5	0.75	0.75	1	1.25	1.5	1.75	2	2	2.5	3

L	M-2,5	M-3	M-4	M-5	M-6	M-8	M-10	M-12	M-14	M-16	M-20	M-24
3	*	*	*									
4	*	*	*	*								
5	*	*	*	*	*							
6	*	*	*	*	*	*						
8	*	*	*	*	*	*						
10	*	*	*	*	*	*	*					
12	*	*	*	*	*	*	*	*	*			
16		*	*	*	*	*	*	*	*	*		
20		*	*	*	*	*	*	*	*	*	*	*
25		*	*	*	*	*	*	*	*	*	*	*
30		*	*	*	*	*	*	*	*	*	*	*
35			*	*	*	*	*	*	*	*	*	*
40			*	*	*	*	*	*	*	*	*	*
45				*	*	*	*	*	*	*	*	*
50				*	*	*	*	*	*	*	*	*
55					*	*	*	*	*	*	*	*
60					*	*	*	*	*	*	*	*
70						*	*	*	*	*	*	*
80						*	*	*	*	*	*	*
90						*	*	*	*	*	*	*
100						*	*	*	*	*	*	*

FORMA DE PEDIDO / ORDEN FORM: d x L.

LLAVE ALLEN ACODADA DIN 911
SOCKET SCREW ALLEN KEY DIN 911
411


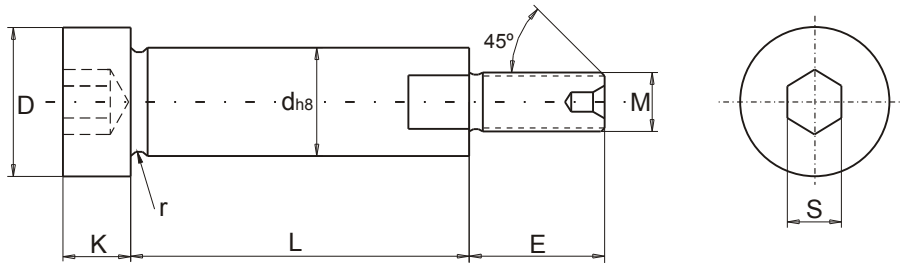
MATERIAL : 50 Cr V4.
DUREZA / HARDNESS : 45-50 Hrc.
RESISTENCIA / RESISTANCE : 140 - 165 Kg/mm2.

S	e	L	M	r
1.5	1.73	50	12	2
2	2.3	55	15	2
2.5	2.9	60	18	2.5
3	3.5	65	20	3
4	4.6	72	25	4
5	5.8	80	28	5
6	6.9	90	32	6
8	9.2	100	36	8
10	11.5	112	40	10
12	13.8	125	45	12
14	16.2	140	55	14
17	19.6	160	60	16
18	22	180	70	18

FORMA DE PEDIDO / ORDER FORM : S.

TORNILLO LIMITE MACHO “ TLM “

SHOULDER BOLT “ TLM “



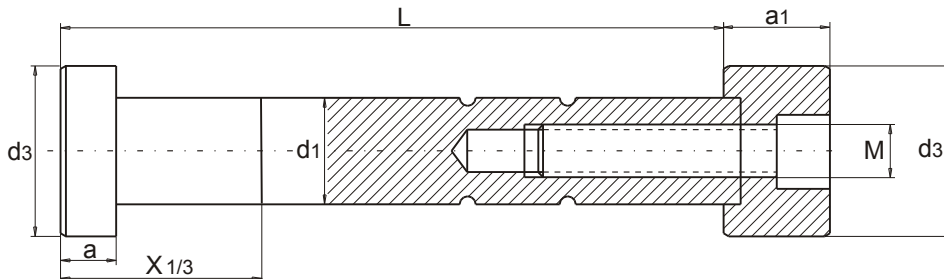
MATERIAL : Acero aleado Cromo-Níquel-Molibdeno.
Special alloyed steel Cr-Ni-Mo.

RESISTENCIA A LA TRACCION: 120 - 140 Kp/mm2.
TENSILE STRENGTH :

M	M- 5	M- 6	M- 8	M-10	M-12	M-16	M-20	M-24
d (h8)	6	8	10	12	16	20	25	32
D (h13)	9	11	14	18	22	28	36	45
K (h14)	4	5	6	8	10	12	16	20
E	8	10	12	16	20	25	32	40
S	3	4	5	6	8	10	14	17
r	0.4	0.5	0.6	0.8	0.9	1	1.2	1.5

M	M- 5	M- 6	M- 8	M-10	M-12	M-16	M-20	M-24
d (h8)	6	8	10	12	16	20	25	32
L								
6	*	*	*					
8	*	*	*	*				
10	*	*	*	*	*			
12	*	*	*	*	*			
14	*	*	*	*	*			
16	*	*	*	*	*	*		
20	*	*	*	*	*	*	*	
25	*	*	*	*	*	*	*	
30	*	*	*	*	*	*	*	
32	*	*	*	*	*	*	*	
40	*	*	*	*	*	*	*	
50	*	*	*	*	*	*	*	*
60	*	*	*	*	*	*	*	*
63	*	*	*	*	*	*	*	*
70		*	*	*	*	*	*	*
80		*	*	*	*	*	*	*
90		*	*	*	*	*	*	*
100		*	*	*	*	*	*	*
110		*	*	*	*	*	*	*
120			*	*	*	*	*	*
125			*	*	*	*	*	*
140			*	*	*	*	*	*
160			*	*	*	*	*	*
200				*	*	*	*	*
250					*	*	*	*

FORMA DE PEDIDO / ORDER FORM : M x d x L.

TORNILLO LIMITE HEMBRA “ TLH “
SHOULDER BOLT “ TLH “
406


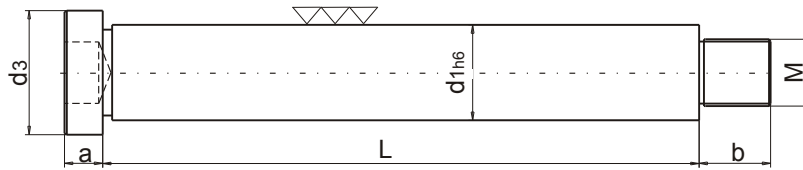
MATERIAL : Acero aleado al Cromo Molibdeno.
Special alloyed steel Cr-Ni-Mo.

RESISTENCIA A LA TRACCION : 110-120 Kg/mm2.
TENSILE STRENGTH :

d1	d3	a	a1	M	L									
					100	120	140	160	180	200	220	240	260	
F7	-0.1	-0.1	-0.1											
16	26	5	16	8	*	*	*	*	*					
20	32	6	20	10		*	*	*	*	*	*	*	*	
25	38	7	24	12		*	*	*	*	*	*	*	*	*

FORMA DE PEDIDO / ORDER FORM : d1 x L.

GUIDE STOP " TGM "

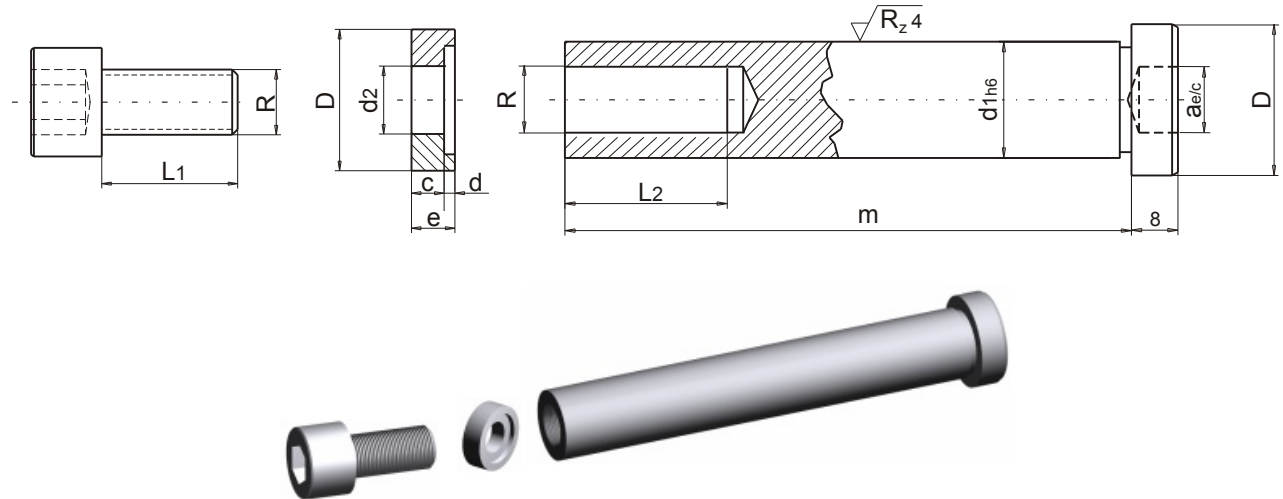


MATERIAL : Acero 1.7242 / Steel 1.7242

DUREZA / HARDNESS : 46-48 Hrc

d1 h6	d3	a	b	M	L									
					40	50	60	80	100	125	150	175	200	
14	20	8	12	10	*	*	*	*	*	*	*	*	*	*
20	26	8	15	14	*	*	*	*	*	*	*	*	*	*

FORMA DE PEDIDO / ORDER FORM : d1 x L.

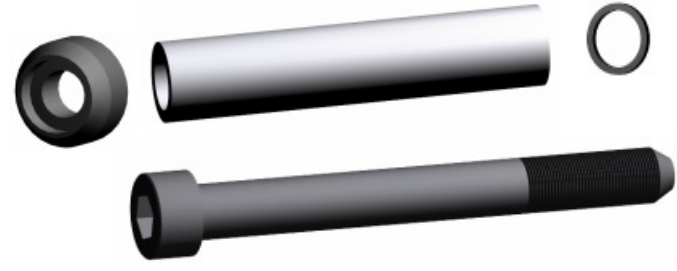
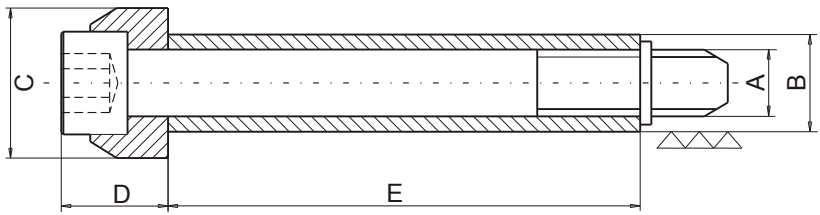
TOPE GUIA HEMBRA “ TGH “
GUIDE STOP “ TGH “
408

MATERIAL : Acero 1.1730 / Steel 1.1730

DUREZA / HARDNESS : 50-52 HRC

d1	D	d2	a	c	d	e	L1	L2	R	m								
										40	50	60	80	100	125	150	175	200
h6																		
14	20	8.5	8	4	2	6	20	18	M- 8	*	*	*	*	*	*	*	*	*
20	26	12.5	10	6	2	8	25	25	M-12	*	*	*	*	*	*	*	*	*

FORMA DE PEDIDO / ORDER FORM : d1 x m.

TORNILLO LIMITADOR “ KRT “
STOPPER BOLT “ KRT “

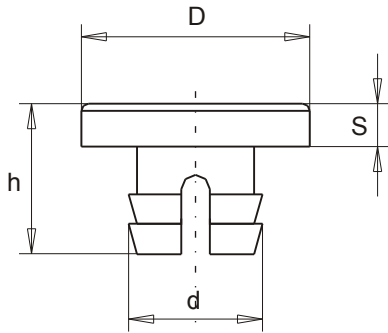


MATERIAL : Acero 1.7242 / Steel 1.7242
DUREZA / HARDNESS : 46-48 Hrc

A	B	C	D	E														
				20	25	30	35	40	45	50	55	60	70	80	90	100	110	120
6MA	10	15	10	*	*	*	*	*	*	*	*	*	*					
8MA	12.5	19	13			*	*	*	*	*	*	*	*	*				
10MA	15	23	15			*	*	*	*	*	*	*	*	*	*			
12MA	17.5	27	18					*	*	*	*	*	*	*	*	*	*	*
16MA	23	34	24							*	*	*	*	*	*	*	*	*

FORMA DE PEDIDO / ORDER FORM : A x E.

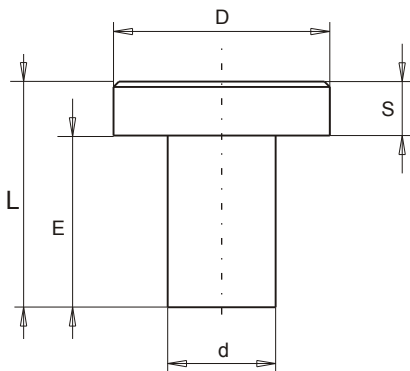
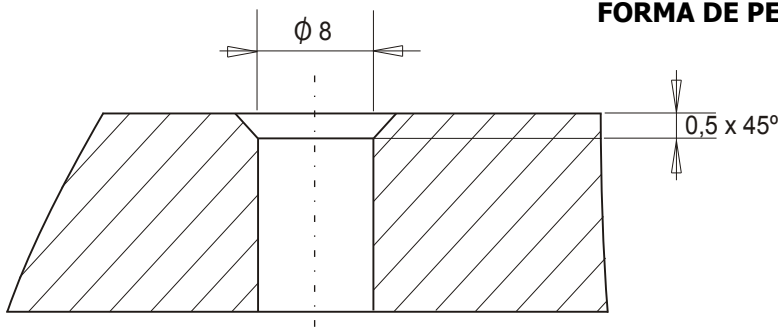
TOPE PLACA EXPULSORA " TPE "
STOP FOR EJECTION PLATE " TPE "



MATERIAL : Acero 1.7242 / Steel 1.7242

D	d	h	S
16	8.2	11	3
25	8.2	11	3

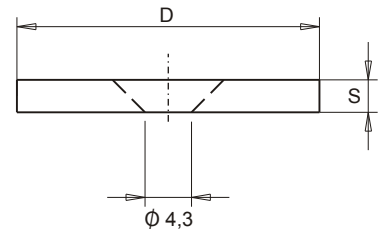
FORMA DE PEDIDO / ORDER FORM : D.



MATERIAL : Acero 1.7242 / Steel 1.7242

d	D	S	E	L
8	15	4	16	20
10	20	5	10	15

FORMA DE PEDIDO / ORDER FORM : d.

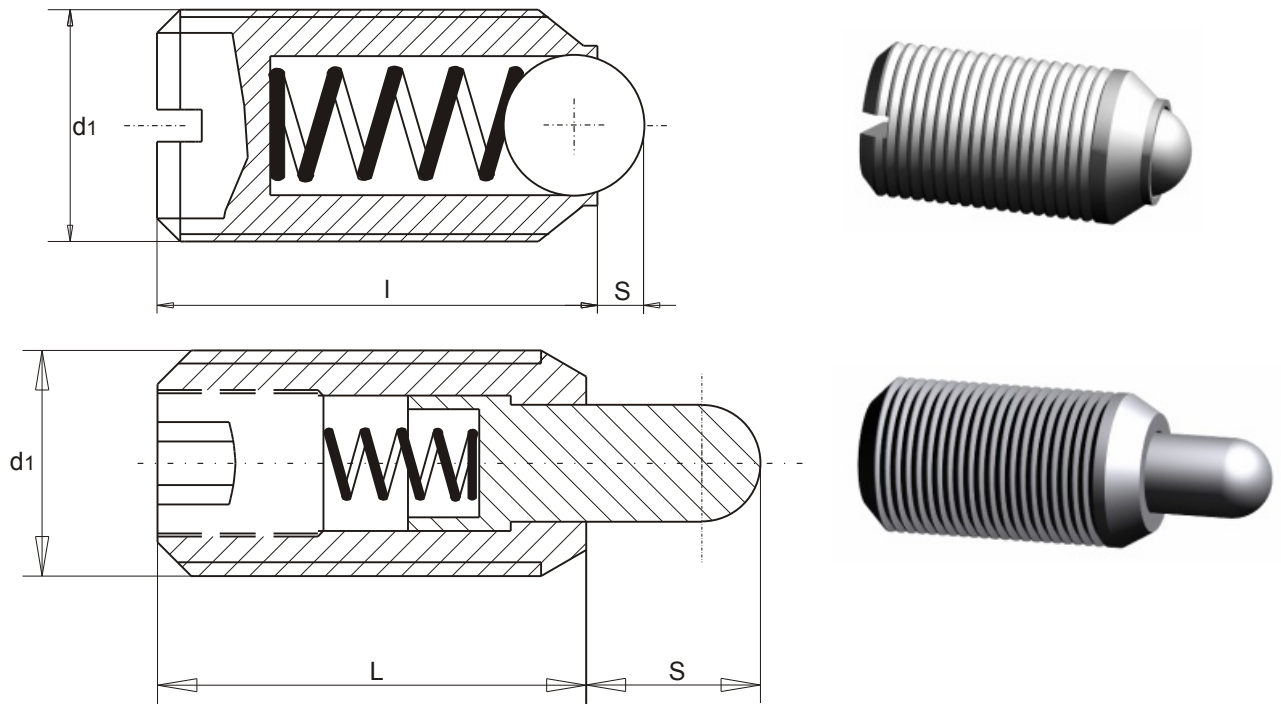


MATERIAL : Acero 1.7242 / Steel 1.7242

D	S
18	3
28	3

FORMA DE PEDIDO : D.
ORDER FORM : D.

BALL PLUNGER / SFERIC PIVOT PLUNGER



MATERIAL: Acero F-114. Pavonado.
MATERIAL: Steel F-114

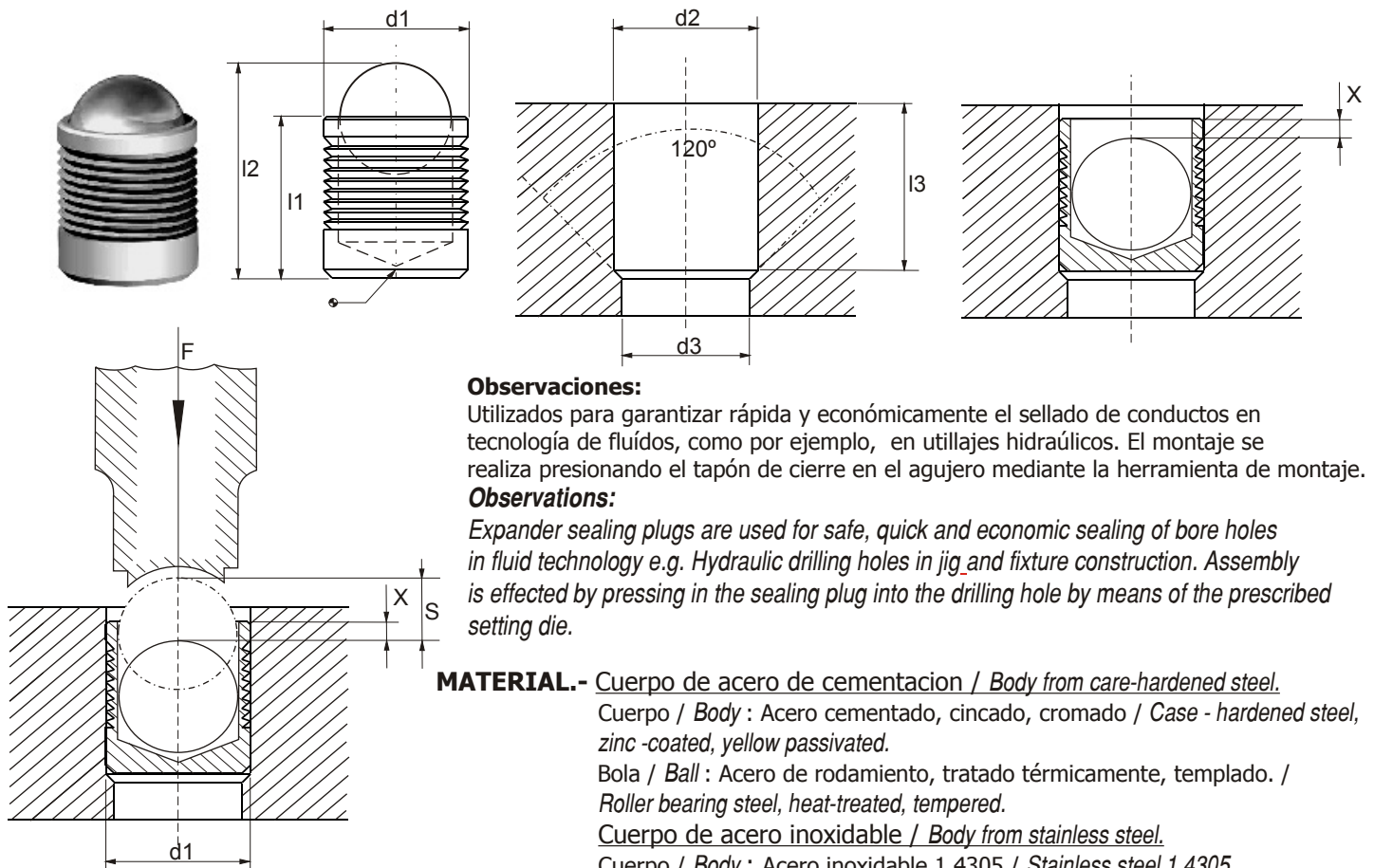
d1	l	s	Diam.Bola Ball Diam.
M- 3	7	0.5	1.5
M- 4	9	0.8	2.5
M- 5	12	0.9	3
M- 6	14	1	3.5
M- 8	16	1.5	5
M-10	19	2	6
M-12	22	2.5	8
M-16	24	3.5	10
M-20	30	4.5	12
M-24	34	5.5	15

FORMA DE PEDIDO : d1/bola.
ORDER FORM : d1/ball

MATERIAL: Acero F-114. Pavonado.
MATERIAL: Steel F-114

d1	l	s	Diam. Pivote Sferic pivot Diam.
M- 4	9	1.5	1.8
M- 5	12	2	2.4
M- 6	14	2	2.7
M- 8	16	2	4
M-10	19	2.5	4.5
M-12	22	3.5	6
M-16	24	4.5	8.5
M-20	30	6.5	10
M-24	34	8	12

FORMA DE PEDIDO : d1/pivote.
FORMA DE PEDIDO : d1/Sferic pivot

TAPONES DE CIERRE A EXPANSION EXPANDER®
EXPANDER® SEALING PLUGS
415

Observaciones:

Utilizados para garantizar rápida y económicamente el sellado de conductos en tecnología de fluidos, como por ejemplo, en utillajes hidráulicos. El montaje se realiza presionando el tapón de cierre en el agujero mediante la herramienta de montaje.

Observations:

Expander sealing plugs are used for safe, quick and economic sealing of bore holes in fluid technology e.g. Hydraulic drilling holes in jig and fixture construction. Assembly is effected by pressing in the sealing plug into the drilling hole by means of the prescribed setting die.

MATERIAL.- Cuerpo de acero de cementación / Body from case-hardened steel.

Cuerpo / Body : Acero cementado, cincado, cromado / Case - hardened steel, zinc -coated, yellow passivated.

Bola / Ball : Acero de rodamiento, tratado térmicamente, templado. / Roller bearing steel, heat-treated, tempered.

Cuerpo de acero inoxidable / Body from stainless steel.

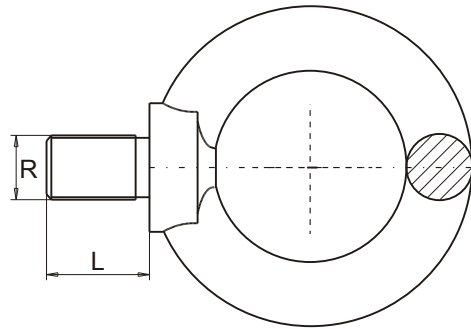
Cuerpo / Body : Acero inoxidable 1.4305 / Stainless steel 1.4305.

Bola / Ball : Acero de rodamiento, tratado térmicamente, templado / Roller bearing steel, heat-treated, tempered.

d1	l1	l2	d2 +0,1	d3 max.	l3 Min.	x ±0,2	s	Peso gr. Weight gr.
3	3,6	4,6	3	2,2	3,4	0,4	1,2	0,2
4	4	5,2	4	3,3	3,8	0,2	1,5	0,4
5	5,5	7	5	4,3	5,3	0,4	2	0,7
6	6,5	8,6	6	5,3	6,3	0,4	2,5	1,2
7	7,5	10,1	7	6,4	7,3	0,4	3	1,9
8	8,5	11,7	8	7,4	8,3	0,3	3,5	3,1
9	10	13,7	9	8,4	9,8	0,4	4	4,1
10	11	15,2	10	9,4	10,8	0,4	4,5	6
12	13	18	12	10,6	12,8	0,4	5,5	9,4
14	15	20,8	14	12,7	14,5	0,4	6,35	14,4
16	17	23,7	16	14,7	16,5	0,6	7	21,7
18	19	26,3	18	16,7	18,5	0,6	8	32,4
20	22	30,5	20	18,7	21,5	0,8	9	44,7
22	25	34,2	22	20,7	24,5	0,8	10	59,3

FORMA DE PEDIDO / ORDER FORM : Material x d1

EYE BOLT DIN 580



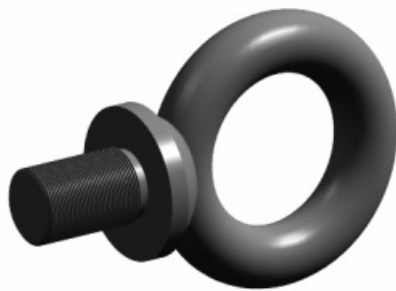
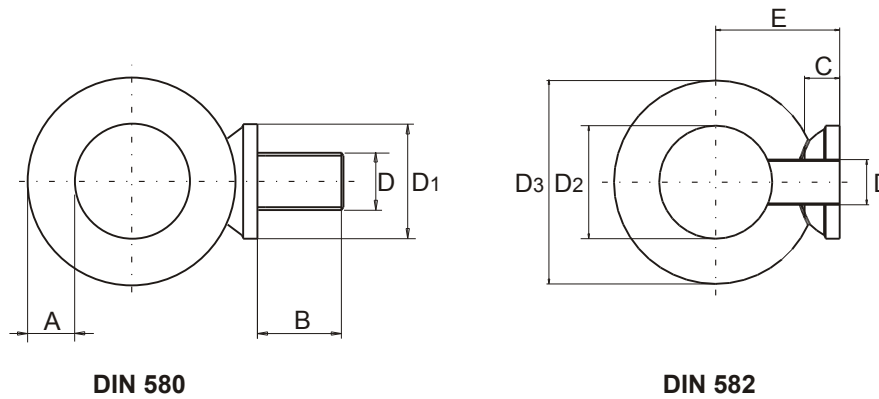
MATERIAL : Acero de fundición. / *Cast ironed steel.*

R	M- 8	M-10	M-12	M-14	M-16	M-18	M-20	M-22	M-24	M-30	M-36	M-42	M-48
Carga max. en Kgs. <i>Maximum load Kgs.</i>	85	150	220	220	380	450	570	800	1050	1700	2500	3400	5200
L	15	18	22	22	26	30	30	32	38	45	55	65	70

FORMA DE PEDIDO / ORDER FORM : R.

CANCAMO FORJADO DIN 580 (Macho) / DIN 582 (Hembra)
EYE BOLT DIN 580 (Male) DIN 582 (Female)

410



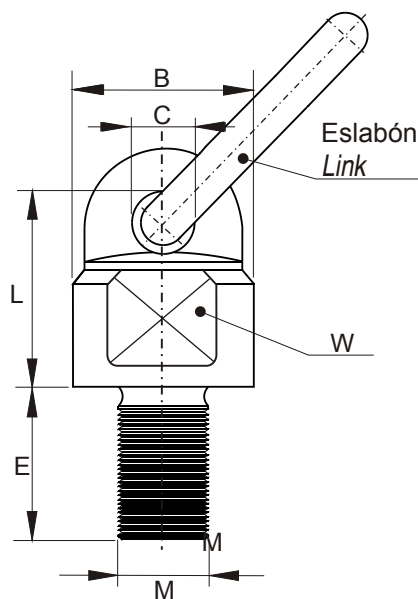
MATERIAL : Acero de forja. / *Forged Steel.*

D	D1	D2	D3	A	B	C	E	Carga Max en Kgs. <i>Maximum load Kgs.</i>	DIN580	DIN582
M- 8	20	20	36	8	15	8.5	18	140	*	*
M-10	25	25	45	10	18	10	22	230	*	*
M-12	30	30	54	12	22	11	28	340	*	*
M-14	30	30	54	12	22	11	28	340	*	*
M-16	35	35	63	14	28	13	30	700	*	*
M-18	35	35	63	14	28	13	30	900	*	*
M-20	40	40	72	16	30	16	35	1200	*	*
M-22	40	40	72	16	30	16	35	1500	*	*
M-24	50	50	90	20	38	20	45	1800	*	*
M-27	50	50	90	20	38	20	45	2200	*	*
M-30	65	60	108	24	45	25	55	3600	*	*
M-36	75	70	126	28	56	30	65	5100	*	*
M-42	85	80	144	32	65	35	75	7000	*	*
M-48	100	90	166	38	70	40	85	8600	*	*
M-56	110	100	184	42	78	45	95	11500	*	*

FORMA DE PEDIDO / ORDER FORM : D - DIN580 O OR DIN582.

CANCAMO GIRATORIO

REVOLVING EYE BOLT



Coefficiente de seguridad contra rotura 4 en todas las direcciones de las fuerzas. Giro de 360°.

Giro máximo de la anilla : 180°

Security coefficient against break 4 in all strength directions. 360° rotation.

Maximum ring rotation: 180°

Carga de trabajo en toneladas Working load in tones	Peso en Kg Weight in Kg	Eslabon oval mm. Oval ring mm.	B	C	M	E	W	L
0,5	0,30	Ø13x 55x30	36	14	M12	18	30	40
1,12	0,34	Ø13x 55x30	36	14	M16	20	30	40
2	1,04	Ø16x 70x34	49	19	M20	30	41	56
3,15	1,40	Ø18x 85x40	57	20	M24	30	46	61
5,3	2,20	Ø20x 85x40	66	24	M30	35	55	83
8 *	3,50	Ø22x115x50	80	27	M30	35	65	88
10 *	3,70	Ø22x115x50	80	27	M36	50	65	88
15 *	6,80	Ø26x140x65	104	32	M45	60	80	107
Medidas espaciales sobre pedido / Special sizes under request.								
20	14,20	Ø36x170x75	129	45	M64	110	105	150
25	14,80	Ø36x170x75	129	45	M80	150	105	150
30	22,50	Ø40x170x80	148	50	M90	150	115	172

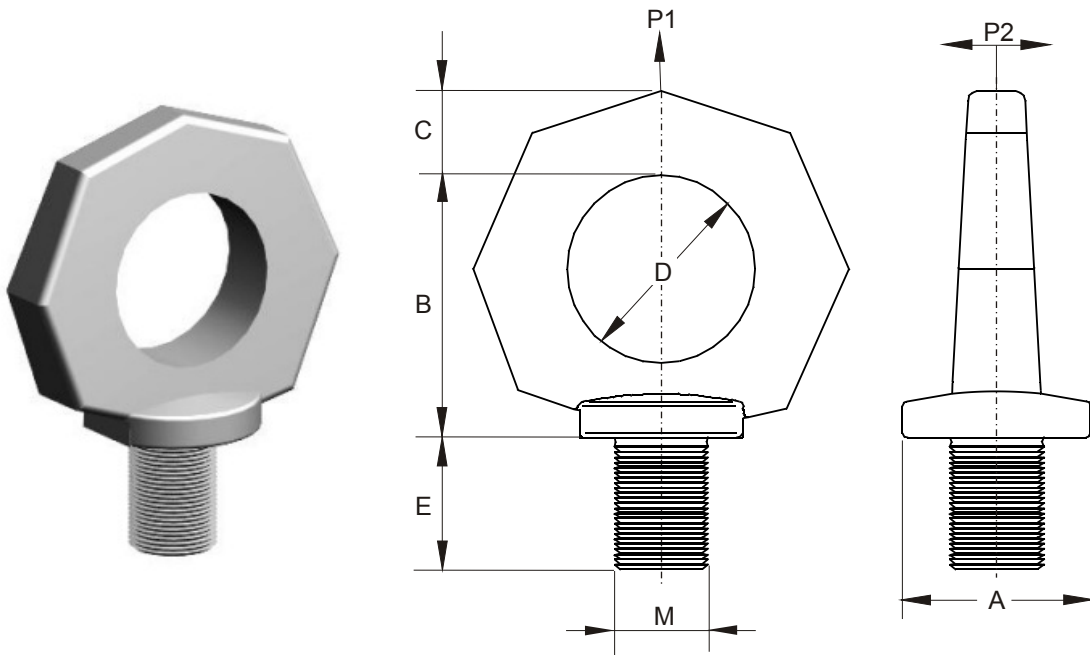
Otras medidas especiales: M14 - M39 - M42 - M48 - M52 - M56 - M60

Other special sizes: M14 - M39 - M42 - M48 - M52 - M56 - M60

* En caso de uso incorrecto, la carga de trabajo debe reducirse a 1 tonelada.

* If not use correctly, work load must be reduced to 1 tone.

FORMA DE PEDIDO / ORDER FORM : M

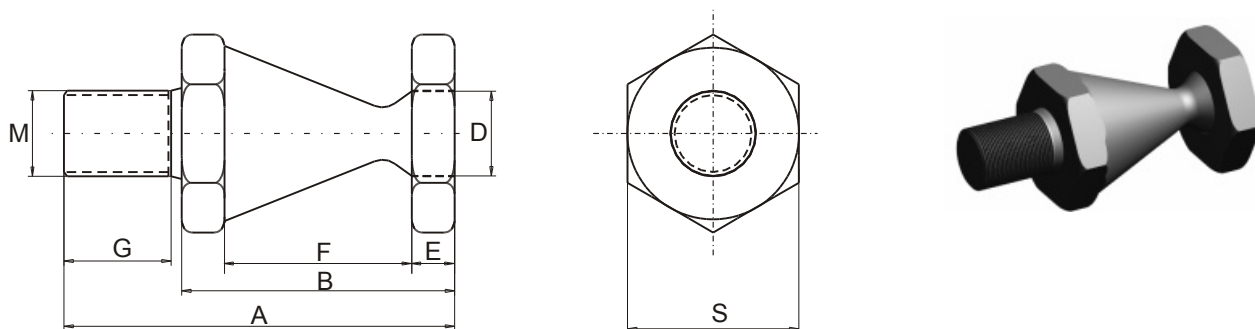


MATERIAL : Acero 1.6541 forjado / 1.6541 Forged steel.

M	P1 (Kg.)	P2 (Kg.)	B	C	E	D	A	Peso Weight
M.6	400	100	35	10	12	25	25	0,1
M.8	800	200						
M.10	1.000	250			15			
M.12	1.600	400	41	12	18	30	30	0,2
M.14	3.000	750	48	14	21	35	35	0,25
M.16	4.000	1.000	48	16	24			0,3
M.20	6.000	1.500	55	20	30	40	40	0,45
M.24	8.000	2.000	70		36	50	50	0,7
M.30	12.000	3.000	85	24	45	60	60	1,6
M.36	16.000	4.000	130	43	54	90	100	6,0
M.42	24.000	6.000	130	43	63	90	100	6,2
M.48	32.000	8.000			68			6,4

FORMA DE PEDIDO / ORDER FORM : M

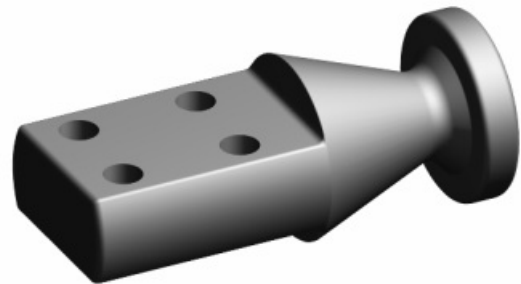
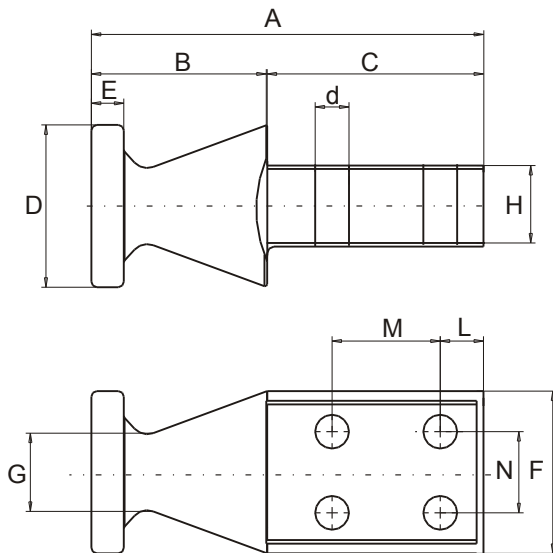
LIFTING STUD “ ET1 “



MATERIAL : F1140 pavonado. / F1140

M	S	D	A	B	E	F	G	Kg.
16	32	16	76	51	8	35	20	100
20	41	20	90	60	10	40	25	150

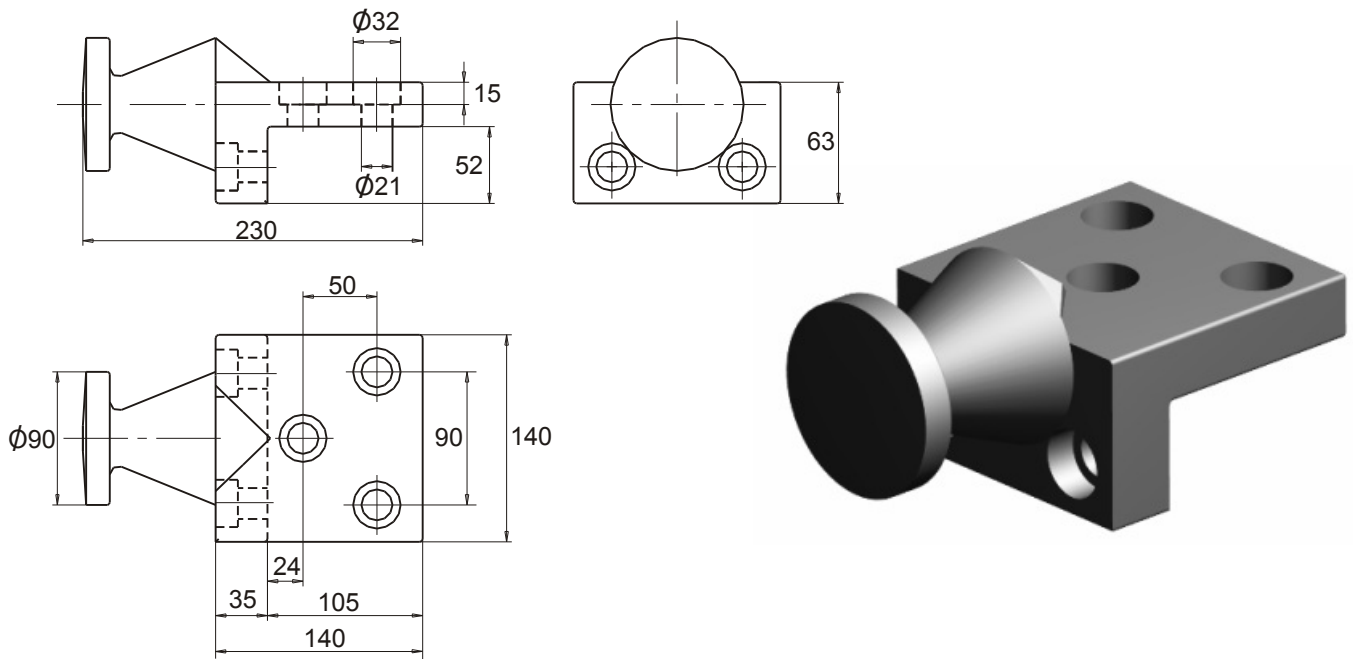
FORMA DE PEDIDO / ORDER FORM : ET1/M.

ELEMENTOS FORJADOS DE TRANSPORTE “ ET2 “
LIFTING STUD “ ET2 “
418

MATERIAL: Acero forjado pavonado. / *Forged steel.*

D	A	B	C	F	G	H	L	M	N	d	Kg.
38	115	52	63	38	16	12	13	30	20	10.5	150
50	120	50	70	50	18	20	15	35	25	10.5	300
60	145	65	80	60	22	30	16	40	30	12.5	600
70	155	65	90	70	30	30	20	40	34	16.5	1000
80	165	65	100	80	37	40	20	50	40	16.5	1500
100	195	75	120	100	50	40	38	52	55	20.5	2000

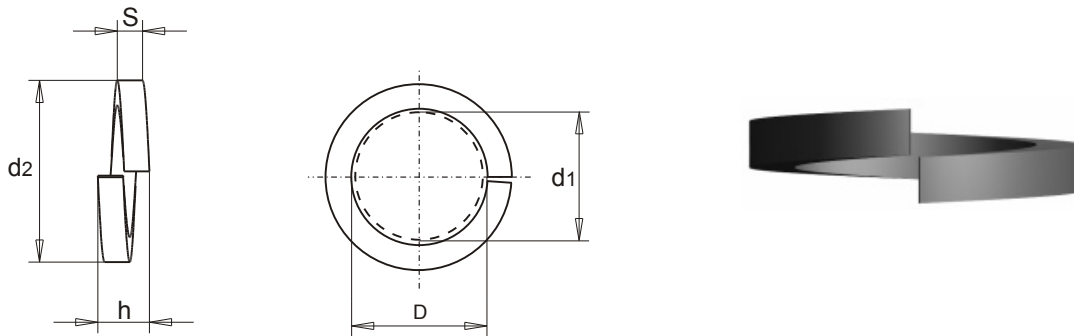
FORMA DE PEDIDO / ORDER FORM : ET2/D.

LIFTING STUD “ ET3 “



MATERIAL : Acero forjado pavonado. / *Forged steel.*

FORMA DE PEDIDO / ORDER FORM : ET3.

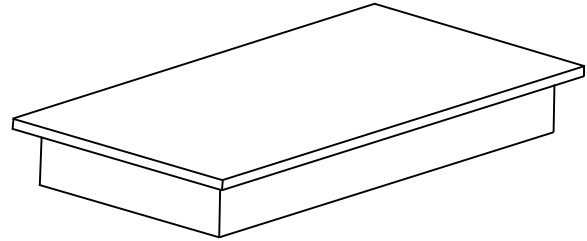
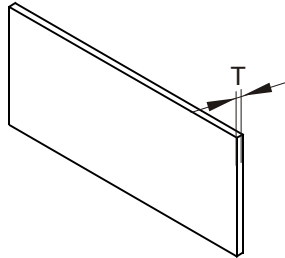
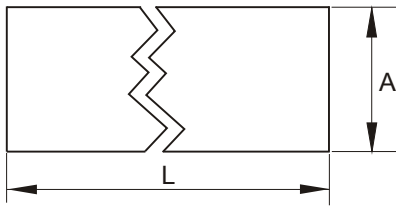
ARANDELA GROWER DIN 7980
GROWER RING DIN 7980
416

MATERIAL: 100-120 Kp/mm².

D	h	d1	d2	S
4	2,4-2,83	4.1	7	1.2
5	3,2-3,78	5.1	8.8	1.6
6	3,2-3,78	6.1	9.9	1.6
8	4-4,78	8.1	12.7	2
10	5-5,9	10.2	16	2.5
12	5-5,9	12.2	18	2.5
16	7-8,25	16.2	24.4	2.5

FORMA DE PEDIDO / ORDER FORM : D.

CINTA DE PRECISION EN ESTUCHE

CASE GAUGED STRIP BAND

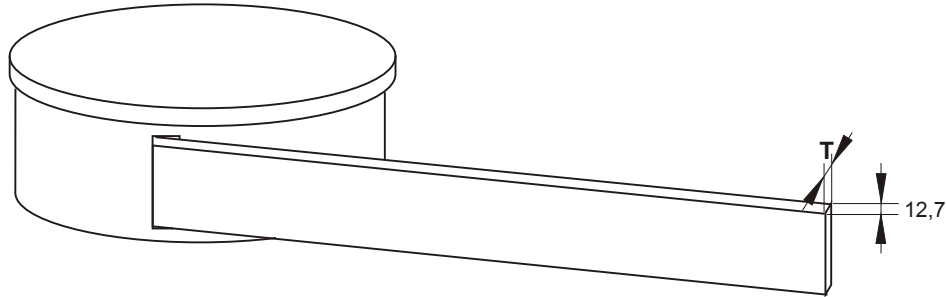


MATERIAL : 1.1274 Acero Carbono / Carbon Steel
1.4310 Acero Inoxidable / Stainless Steel

T	Tol.	Resist.	A x L			
			25x300	50x300	100x500	150x500
Material			1.1274	1.1274	1.4310	1.4310
Nº Hojas Nº of Strips			10	10	5	5
0.01	±0.002	1.600 - 1.800	*	*	*	
0.02			*	*		
0.025						*
0.03			*	*		
0.04			*	*		
0.05	±0.003	1.400 - 1.600	*	*	*	*
0.06			*	*		
0.07			*	*		
0.075						*
0.08			*	*		
0.09	±0.004	1.400 - 1.600	*	*		
0.10			*	*	*	*
0.12				*		
0.15			*	*	*	*
0.18				*		
0.20	±0.006	1.400 - 1.600	*	*	*	*
0.25			*	*	*	*
0.30			*	*	*	*
0.35				*	*	*
0.40			*	*	*	*
0.45				*	*	*

T	Tol.	Resist.	A x L			
			25x300	50x300	100x500	150x500
Material			1.1274	1.1274	1.4310	1.4310
Nº Hojas Nº of Strips			10	10	5	5
0.50	±0.010	1.600 - 1.800	*	*	*	*
0.55					*	
0.60			*	*	*	*
0.65					*	
0.70			*	*	*	*
0.75	±0.012	1.400 - 1.600			*	
0.80			*	*	*	*
0.85					*	
0.90			*	*	*	*
0.95					*	
1.00	±0.013	1.400 - 1.600	*	*	*	*
1.10					*	
1.20					*	
1.30					*	
1.40					*	
1.50	±0.020	1.400 - 1.600			*	
1.60					*	
1.70					*	
1.80					*	
1.90					*	
2.00					*	

FORMA DE PEDIDO / ORDER FORM : T x A x L x Material

CINTA DE PRECISION EN ROLLO
SPOOLED GAUGED STRIP
423


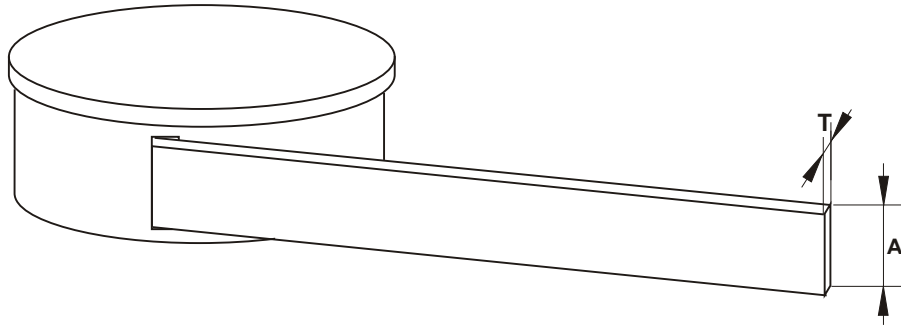
MATERIAL : 1.1274 Acero Carbono / *Carbon Steel*
 1.4310 Acero Inoxidable / *Stainless Steel*

T	Tol.	Resist.	L			
			1m.	2m.	5m.	10m.
Material			1.1274	1.1274	1.4310	1.1274
0.005	±0.002 - 0.003	2.000 - 2.200	*	*	*	*
0.01			*	*	*	*
0.02			*	*	*	*
0.03			*	*	*	*
0.04			*	*	*	*
0.05			*	*	*	*
0.06	±0.003 - 0.004	2.000 - 2.200	*	*	*	*
0.07			*	*	*	*
0.08			*	*	*	*
0.09			*	*	*	*
0.10			*	*	*	*
0.12	±0.004 - 0.007	1.400 - 1.600	*	*	*	*
0.15			*	*	*	*
0.18			*	*	*	*
0.20			*	*	*	*
0.25			*	*	*	*
0.30			*	*	*	*
0.35	±0.007 - 0.010	1.400 - 1.600	*	*	*	*
0.40			*	*	*	*
0.45			*	*	*	*
0.50			*	*	*	*

T	Tol.	Resist.	L			
			1m.	2m.	5m.	10m.
Material			1.1274	1.1274	1.4310	1.1274
0.55	±0.0010	1.600 - 1.800	*	*	*	*
0.60			*	*	*	*
0.65			*	*	*	*
0.70			*	*	*	*
0.75			*	*	*	*
0.80			±0.013	1.400 - 1.600	*	*
0.85	*	*			*	*
0.90	*	*			*	*
0.95	*	*			*	*
1.00	*	*			*	*
1.10	±0.017	1.400 - 1.600	*	*	*	*
1.20			*	*	*	*
1.30			*	*	*	*
1.40			*	*	*	*
1.50			*	*	*	*
1.60			±0.020	1.400 - 1.600	*	*
1.70	*	*			*	*
1.80	*	*			*	*
1.90	*	*			*	*
2.00	*	*			*	*

FORMA DE PEDIDO / ORDER FORM : T x L x Material

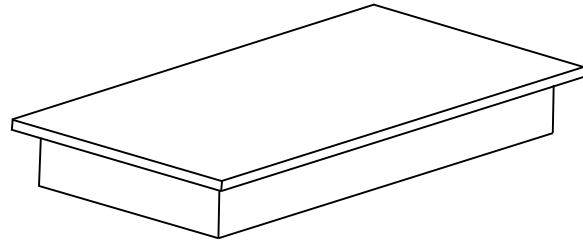
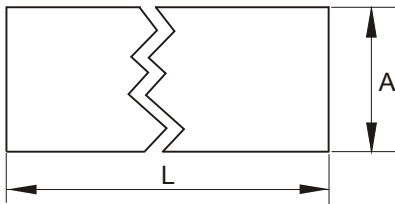
VARIABLE WIDTH SPOOLED GAUGED STRIP



1.1274 Acero Carbono / Carbon Steel
MATERIAL : 1.4310 Acero Inoxidable / Stainless Steel
 Latón / Brass

T	Tol.	Resist.	L	A					150	305
				6	25	50	100	150		
Material				1.1274	1.1274	1.4310	1.4310	1.4310	Latón Brass	Latón Brass
0.01	±0.002 - 0.003	2.000 - 2.200	5.000		*	*				
0.02				*	*	*				
0.025							*	*		
0.03				*	*					
0.04				*	*					
0.05	*	*	*	*	*	*	*			
0.06	±0.003 - 0.004	2.000 - 2.200	5.000		*	*				
0.07				*	*					
0.075							*	*		
0.08				*	*					
0.09				*	*					
0.10	*	*	*	*	*	*	*			
0.12	±0.007 - 0.010	1.400 - 1.600	5.000		*	*				
0.15				*	*	*	*	*	*	
0.18							*	*		
0.20				*	*	*	*	*	*	*
0.25				*	*	*	*	*	*	*
0.30	±0.010 - 0.010	1.400 - 1.600	5.000		*	*				
0.35				*	*	*	*	*	*	
0.40				*	*	*	*	*	*	
0.45							*	*	*	
0.50				*	*	*	*	*	*	
0.55	±0.010	1.600 - 1.800	5.000		*	*				
0.60				*	*	*	*	*	*	
0.65							*	*	*	
0.70				*	*	*	*	*	*	
0.75							*	*	*	
0.80	±0.013	1.400 - 1.600	5.000		*	*				
0.85				*	*	*	*	*	*	
0.90				*	*	*	*	*	*	
0.95							*	*	*	
1.00				*	*	*	*	*	*	

FORMA DE PEDIDO / ORDER FORM : T x A x Material

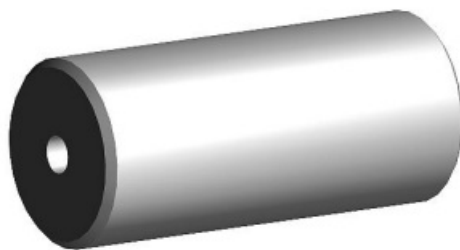
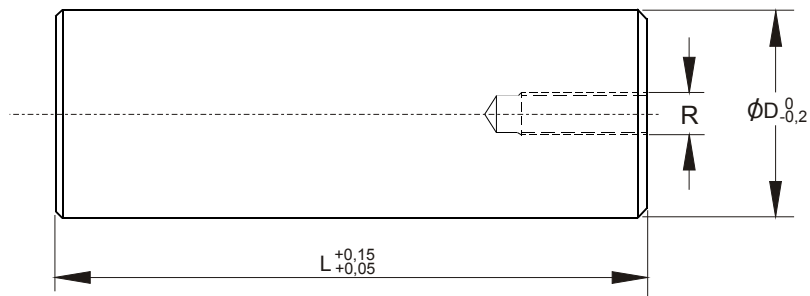
**SURTIDO DE CINTA DE PRECISION
SELECTION OF GAUGED STRIP**
425

 1.1274 Acero Carbono / *Carbon Steel*
MATERIAL : 1.4310 Acero Inoxidable / *Stainless Steel*

 Latón / *Brass*

A x L	n° Hojas Nr. Strips	Material	Contenido / Content
100x500	9	1.4310	0.02/0.05/0.10/0.15/0.20/0.30/0.40/0.50/1.00
100x500	11	1.4310	0.02/0.05/0.10/0.15/0.20/0.25/0.30 0.35/0.40/0.45
100x500	11	1.4310	0.50/0.55/0.60/0.65/0.70/0.75/0.80 0.85/0.90/0.95/1.00
150x500	10	1.4310	0.025/0.05/0.075/0.10/0.15/0.20/0.25 0.30/0.40/0.50
150x500	10	Latón Brass	0.025/0.05/0.075/0.10/0.15/0.20/0.25 0.30/0.40/0.50
25x300	21	1.1274	0.01/0.02/0.03/0.04/0.05/0.06/0.07/0.08/0.09 0.10/0.15/0.20/0.25/0.30/0.40/0.50/0.60/0.70 0.80/0.90/1.00
50x300	25	1.1274	0.01/0.02/0.03/0.04/0.05/0.06/0.07/0.08/0.09 0.10/0.12/0.15/0.18/0.20/0.25/0.30/0.35/0.40 0.45/0.50/0.60/0.70/0.80/0.90/1.00
50x300	23	1.1274	0.03/0.04/0.05/0.06/0.07/0.08/0.09/0.10/0.12 0.15/0.18/0.20/0.25/0.30/0.35/0.40/0.45/0.50 0.60/0.70/0.80/0.90/1.00
50x300	11	1.1274	0.02/0.03/0.05/0.10/0.15/0.20/0.25/0.30/0.40 0.50/1.00

FORMA DE PEDIDO / ORDER FORM : A x L x Material

SUPPORT PILLAR



MATERIAL : Acero para trabajo en frío / Alloy cold formed steel

D	R	L						
		50	60	70	90	110	120	150
30	M10	*	*	*	*	*		
40	M10	*	*	*	*	*		
50	M10	*	*	*	*	*		
60	M12		*	*	*	*	*	
80	M12			*	*	*	*	*
100	M16			*	*	*	*	*

FORMA DE PEDIDO / ORDER FORM : CA / D x L.