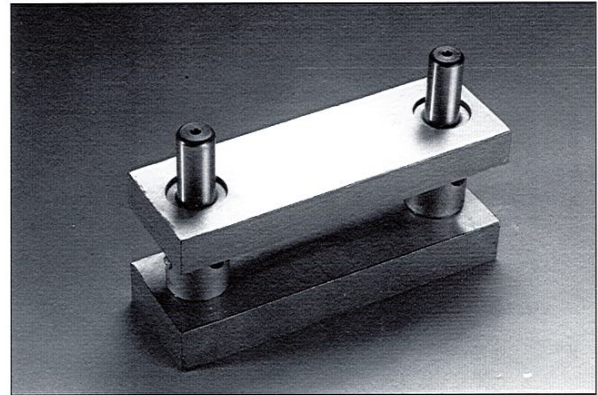
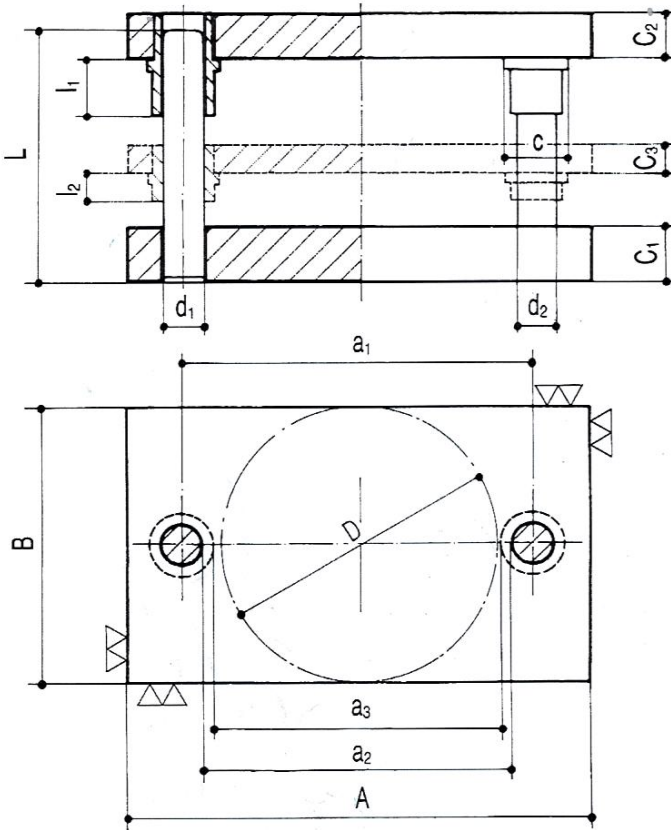


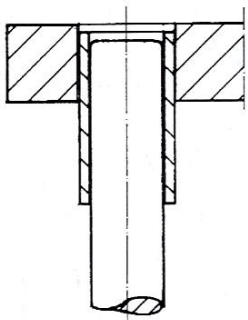
# PORTAMATRICES DE ACERO

## MODELO SR

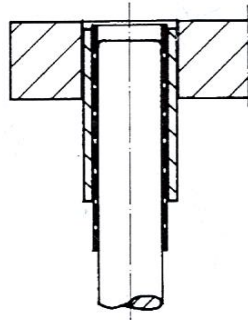


MATERIAL.- Acero F-112 / F-114

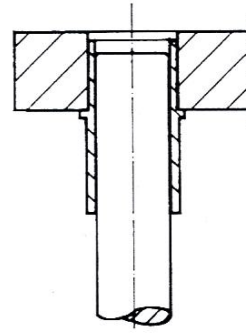
Montaje normalizado



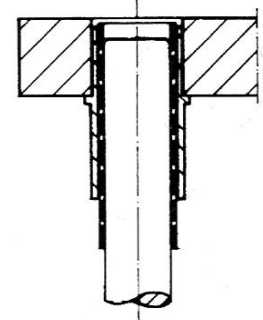
Ref. 323  
Casq. liso



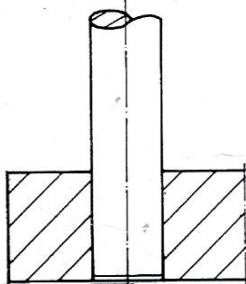
Ref. 324  
Casq. jaula de bolas



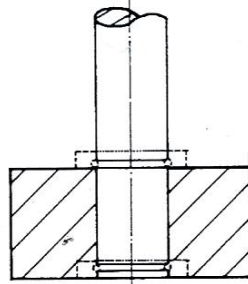
Ref. 313 / 317  
Casq. con valona



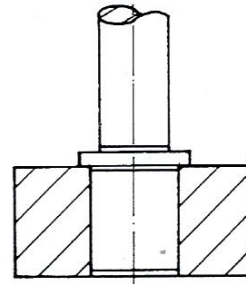
Ref. 314 / 318  
Casq. jaula de bolas



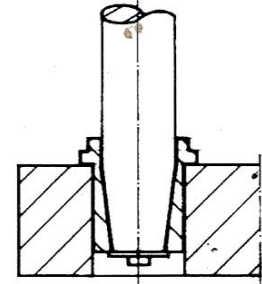
Ref. 300  
Columna lisa



Ref. 301  
Col. retención inferior / intermedia



Ref. 303  
Columnas de dos diámetros



Ref. 305  
Columna con asiento cónico

Bajo demanda fabricamos cualquier medida o material especial.

# PORTAMATRICES DE ACERO



## MODELO SR

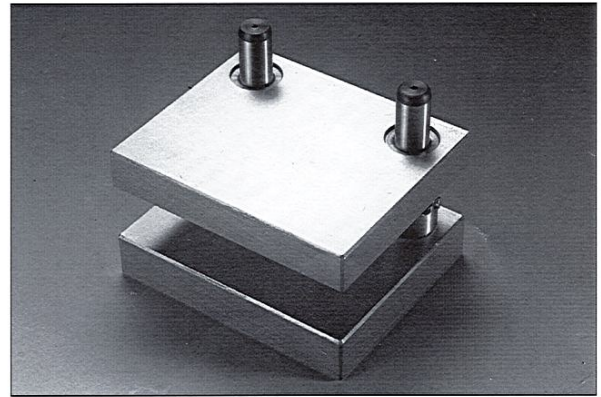
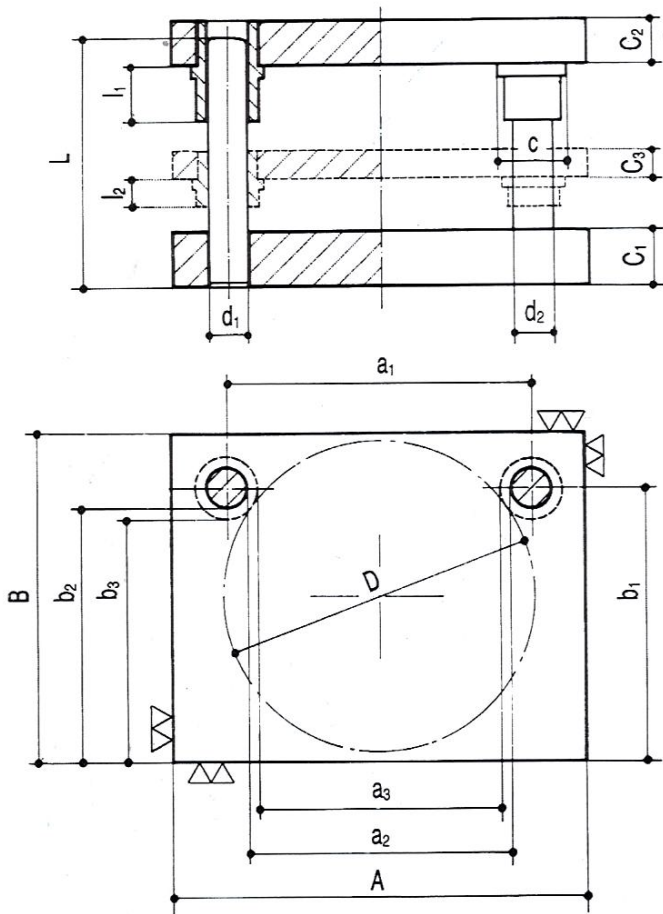
N.º	DIMENSIONES				ESPEORES			COL / CASQ.						SUP. UTIL			
	A	B	a <sub>1</sub>	a <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	L	c	l <sub>1</sub>	l <sub>2</sub>	a <sub>3</sub>	x	B	D
1	175		125	106										85			
2	200	65	150	131	32	27	18	18	19	130	38	35	18	110	x	65	65
3	225		163	138										135			
4	250	80	188	163	32	27	23	18	19	140	38	35	18	160	x	80	80
5	225		163	138										115			
6	250	100	188	163	37	32	23	24	25	140	48	45	18	140	x	100	100
7	285		223	198										175			
8	325		263	238										215			
12	235		188	148										125			
13	275	125	213	188	37	32	23	24	25	140	48	45	18	165	x	125	125
14	325		263	238										215			
15	365		313	278										255			
18	275	165	213	188	37	32	23	24	25	140	48	45	18	165	x	165	165
20	325		263	238										215			
22	400		323	292										265			
23	450	165	373	342	37	32	28	30	32	160	58	50	18	315	x	165	165
28	350		273	242										215			
29	400	200	323	292	42	32	28	30	32	160	58	50	18	265	x	200	200
30	450		373	342										315			
31	500		423	392										365			
43	450		362	321										290			
44	500	250	412	371	47	37	32	40	42	180	72	50	18	340	x	250	250
45	550		462	421										390			
46	600		512	471										440			
54	500		412	371										340			
55	550	300	462	421	47	42	32	40	42	180	72	50	18	390	x	300	300
56	600		512	471										440			
57	650		562	521										490			
61	500		412	371										340			
62	550		462	421										390			
63	600	350	512	471	47	42	32	40	42	180	72	50	18	440	x	350	350
64	650		562	521										490			
65	700		612	571										540			
67	500		412	371										340			
68	600	400	512	471	47	42	32	40	42	180	72	50	18	440	x	400	400
69	700		612	571										540			
70	800		712	671										640			
71	500		412	371										340			
72	600	450	512	471	57	47	32	40	42	200	72	50	18	440	x	450	450
73	700		612	571										540			
74	800		712	671										640			
76	600		512	471										440			
77	700		612	571										540			
78	800	500	712	671	57	47	32	40	42	220	72	50	18	640	x	500	500
79	900		812	771										740			
80	1000		912	871										840			
81	700		602	551										520			
82	800		702	651										620			
83	900	600	802	751	57	47	38	50	52	220	82	55	18	720	x	600	600
84	1000		902	851										820			
85	1200		1102	1051										1020			

Bajo demanda fabricamos cualquier medida o material especial.

FORMA DE PEDIDO.- Se indica el modelo, el número y el tipo de montaje.

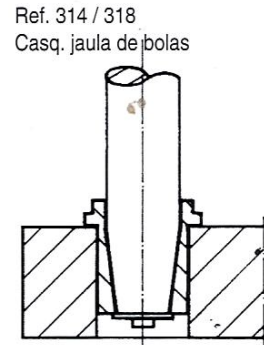
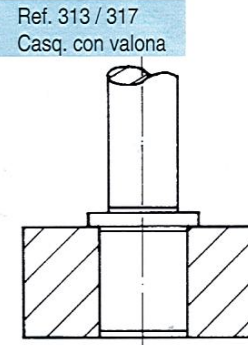
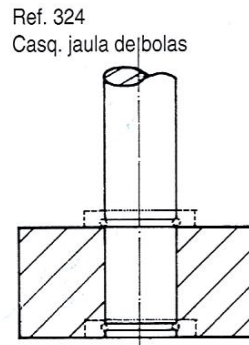
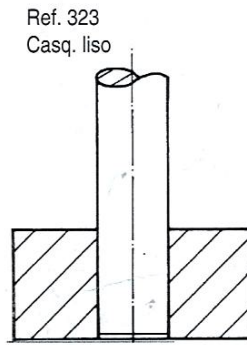
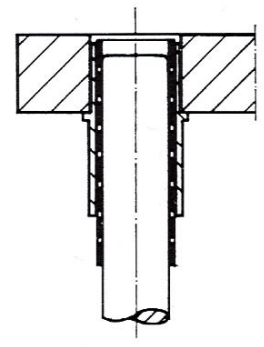
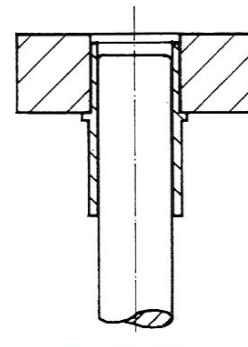
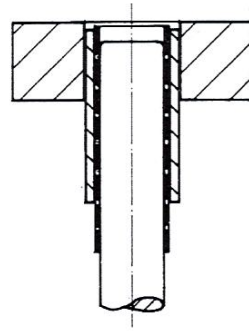
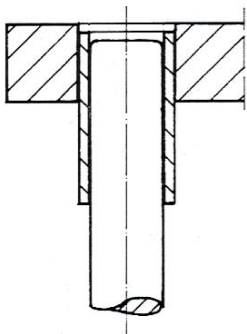
# PORTAMATRICES DE ACERO

## MODELO SRA



MATERIAL.- Acero F-112 / F-114

Montaje normalizado



Bajo demanda fabricamos cualquier medida o material especial.

# PORTAMATRICES DE ACERO



## MODELO SRA

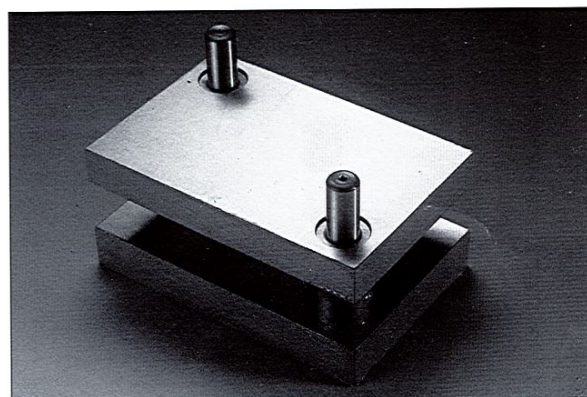
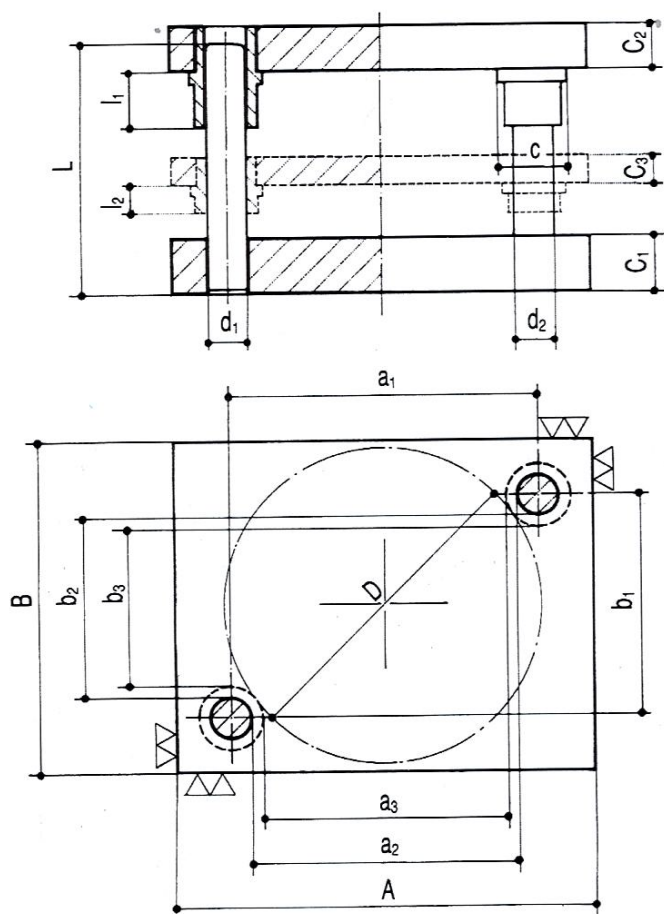
N.º	DIMENSIONES								ESPEORES			COL / CASQ.					SUP. UTIL			
	A	B	a <sub>1</sub>	a <sub>2</sub>	a <sub>3</sub>	b <sub>1</sub>	b <sub>2</sub>		C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	d	L	c	l <sub>1</sub>	l <sub>2</sub>	b <sub>3</sub> x	A	D	
9	150		100	81	60				32	27	18	19	130	38	35	18	80 x	150	100	
10	175	125	125	106	85	100	90											175	110	
16	200		138	113	90													200	135	
17	250	165	188	163	140	134	121	37	32	23							110 x	250	165	
19	300		238	213	190													300	165	
21	350		288	263	240													350	165	
24	200		123	91	65													200	150	
25	225		148	116	90													225	160	
26	250	200	173	141	115	161	145	42	32	28							132 x	250	170	
27	300		223	191	165													300	195	
28	350		273	241	215													350	200	
32	225		148	116	90													225	180	
33	250		173	141	115													250	190	
34	275	225	198	166	140	186	170	42	32	28							157 x	275	200	
35	300		223	191	165													300	210	
36	350		273	241	215													350	225	
38	250		173	141	115													250	210	
39	275	250	198	166	140	211	195	42	37	28							182 x	275	220	
40	300		223	191	165													300	230	
41	350		273	241	215													350	240	
42	400	250	312	272	240	206	186	47	37	32							170 x	400	250	
43	450		362	322	290													450	250	
47	300		212	172	140													300	235	
48	350	275	262	222	190	231	211	47	37	32							195 x	350	255	
49	400		312	272	240													400	275	
50	450		362	322	290													450	275	
51	350		262	222	190													350	275	
52	400	300	312	272	240	256	236	47	42	32							220 x	400	300	
53	450		362	322	290													450	300	
59	400		312	272	240													400	335	
60	450	350	362	322	290	306	286	47	42	32							270 x	450	350	
61	500		412	372	340													500	350	
66	450		362	322	290													450	400	
67	500	400	412	372	340	356	336	47	42	32							320 x	500	400	
68	600		512	472	440													600	400	
71	500		412	372	340													500	450	
72	600	450	512	472	440	406	386	52	47	32							370 x	600	450	
73	700		612	572	540													700	450	
75	500		412	372	340													500	500	
76	600	500	512	472	440	456	436	57	47	32							420 x	600	500	
77	700		612	572	540													700	500	
78	800		712	672	650													800	500	
80	600		502	452	420													600	600	
81	700	600	602	552	520	551	526	57	47	38							510 x	700	600	
82	800		702	652	620													800	600	
83	900		802	752	720													900	600	

Bajo demanda fabricamos cualquier medida o material especial.

FORMA DE PEDIDO.- Se indica el modelo, el número y el tipo de montaje.

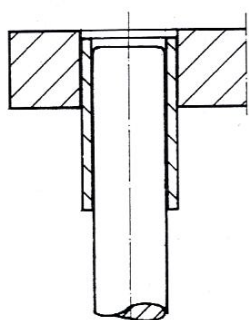
# PORTAMATRICES DE ACERO

## MODELO SRD

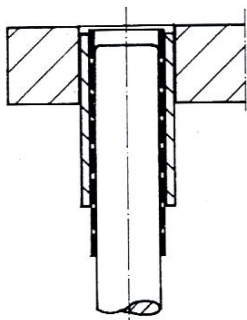


MATERIAL.- Acero F-112 / F-114

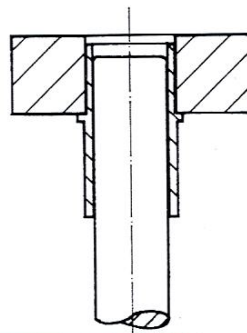
Montaje normalizado



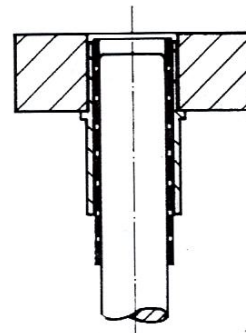
Ref. 323  
Casq. liso



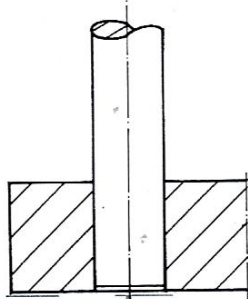
Ref. 324  
Casq. jaula de bolas



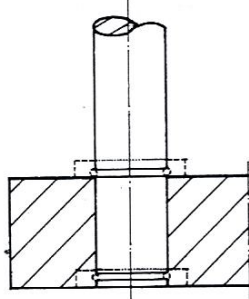
Ref. 313 / 317  
Casq. con valona



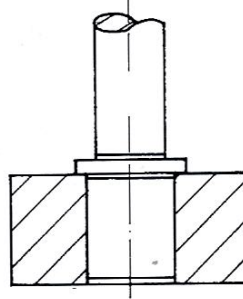
Ref. 314 / 318  
Casq. jaula de bolas



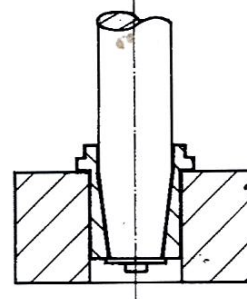
Ref. 300  
Columna lisa



Ref. 301  
Col. retención inferior / intermedia



Ref. 303  
Columnas de dos diámetros



Ref. 305  
Columna con asiento cónico

Bajo demanda fabricamos cualquier medida o material especial.

# PORTAMATRICES DE ACERO



## MODELO SRD

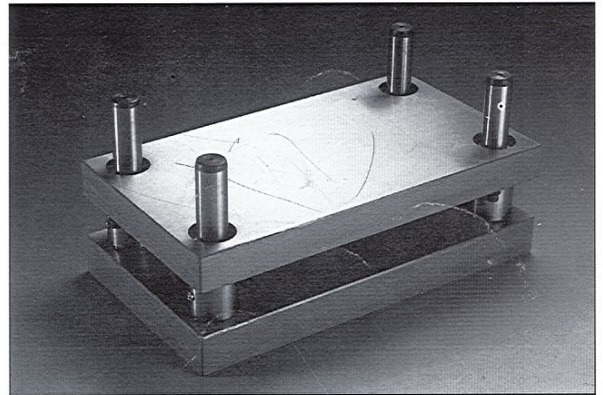
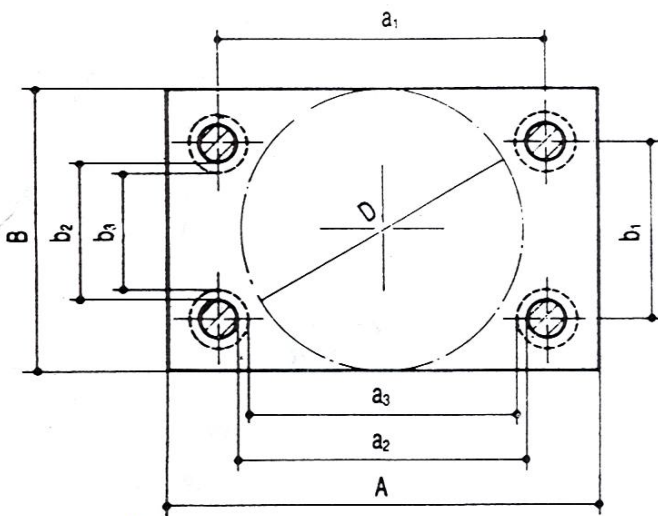
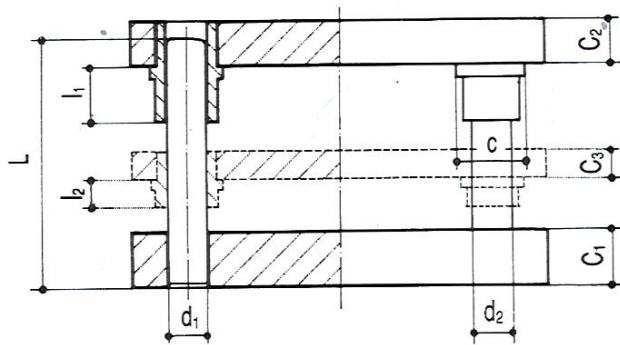
N.º	DIMENSIONES						ESPEORES			COL / CASQ.						SUP. UTIL			
	A	B	a <sub>1</sub>	a <sub>2</sub>	b <sub>1</sub>	b <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	d <sub>1</sub>	d <sub>2</sub>	L	ċ	l <sub>1</sub>	l <sub>2</sub>	a <sub>3</sub> x B	A x b <sub>3</sub>	D	
9	150		100	81												60		80	
11	200	125	150	131	75	56	32	27	18	18	19	130	38	35	18	110 x 125	150 x 35	125	
16	200		138	113												90	200	120	
17	250	165	188	163	103	78	37	32	23	24	25	140	48	45	18	140 x 165	250 x 55	165	
19	300		238	213												190	300	165	
24	200		123	91												65	200	115	
25	225		148	116												90	225	130	
26	250	200	173	141	123	92	42	32	28	30	32	160	58	50	18	115 x 200	250 x 65	150	
27	300		223	191												165	300	195	
28	350		273	241												215	350	200	
32	225		148	116												90	225	150	
33	250		173	141												115	250	165	
35	300	225	223	191	148	117	42	32	28	30	32	160	58	50	18	165 x 225	300 x 90	210	
36	350		273	241												215	350	225	
37	400		323	291												265	400	225	
38	250		173	141												115	250	185	
40	300	250	223	191	173	142	42	37	28	30	32	180	58	50	18	165 x 250	300 x 115	225	
41	350		273	241												215	350	250	
42	400		312	272												240	400	250	
43	450	250	362	322	162	121	47	37	32	40	42	180	72	50	18	290 x 250	450 x 90	250	
44	500		412	372												340	500	250	
46	600		512	472												440	600	250	
51	350		262	222												190	350	260	
52	400		312	272												240	400	300	
53	450	300	362	322	212	171	47	42	32	40	42	180	72	50	18	290 x 300	450 x 140	300	
54	500		412	372												340	500	300	
56	600		512	472												440	600	300	
59	400		312	272												240	400	330	
60	450		362	322												290	450	350	
61	500	350	412	372	262	221	47	42	32	40	42	180	72	50	18	340 x 350	500 x 190	350	
63	600		512	472												440	600	350	
65	700		612	572												540	700	350	
66	450		362	322												290	450	400	
67	500		412	372												340	500	400	
68	600	400	512	472	312	271	47	42	32	40	42	180	72	50	18	440 x 400	600 x 240	400	
69	700		612	572												540	700	400	
70	800		712	672												640	800	400	
71	500		412	372												340	500	450	
72	600	450	512	472	362	321	52	47	32	40	42	200	72	50	18	440 x 450	600 x 290	450	
73	700		612	572												540	700	450	
74	800		712	672												640	800	450	
76	600		512	472												440	600	500	
77	700	500	612	572	412	371	57	47	32	40	42	220	72	50	18	540 x 500	700 x 340	500	
78	800		712	672												640	800	500	
79	900		812	772												740	900	500	
81	700		602	551												520	700	600	
82	800	600	702	651	502	451	57	47	38	50	52	220	82	55	18	620 x 600	800 x 420	600	
83	900		802	751												720	900	600	

Bajo demanda fabricamos cualquier medida o material especial.

FORMA DE PEDIDO.- Se indica el modelo, el número y el tipo de montaje.

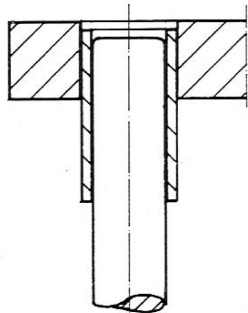
# PORTAMATRICES DE ACERO

## MODELO SR-4

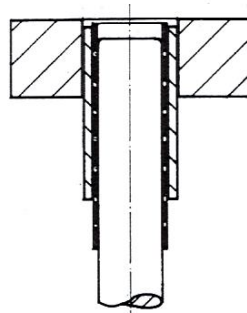


MATERIAL.- Acero F-112 / F-114

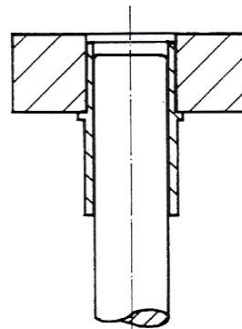
Montaje normalizado



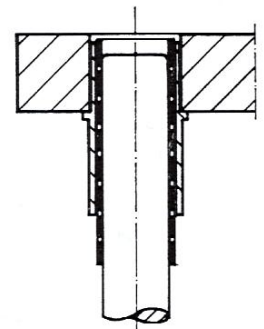
Ref. 323  
Casq. liso



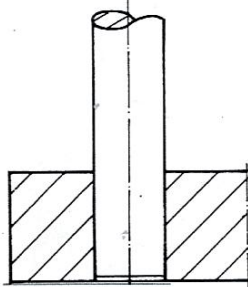
Ref. 324  
Casq. jaula de bolas



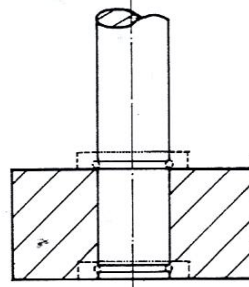
Ref. 313 / 317  
Casq. con valona



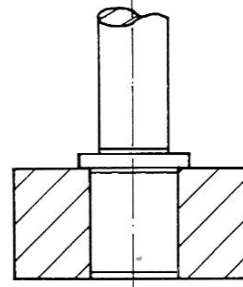
Ref. 314 / 318  
Casq. jaula de bolas



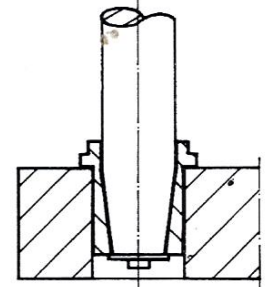
Ref. 300  
Columna lisa



Ref. 301  
Col. retención inferior / intermedia



Ref. 303  
Columnas de dos diámetros



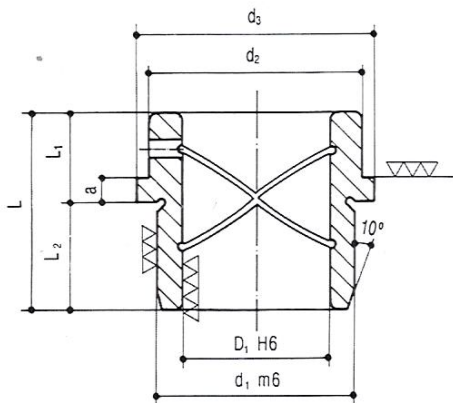
Ref. 305  
Columna con asiento cónico

Bajo demanda fabricamos cualquier medida o material especial.

# CASQUILLOS GUIA



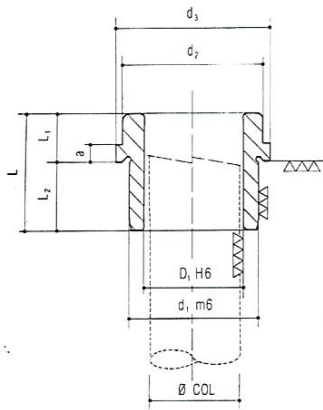
## CASQUILLOS CON VALONA R-315 / R-315 B



R-315  
 MATERIAL.- Acero de cementación  
 DUREZA.- 60-62 HRC  
 R-313 B  
 MATERIAL.- Bronce al aluminio. DIN 1714  
 DUREZA.- HB >180

D <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	L	L <sub>1</sub>	L <sub>2</sub>	a
15	28	26	34	31	16	15	5
16							
18	32	34	38	33	18	17	5
19							
24	40	43	48	40	18	22	5
25							
30	48	53	58	45	18	27	5
32							
40	58	66	77	48	18	30	5
42							
50	68	77	82	57	22	35	5
52							

## CASQUILLOS CON VALONA R-316. PARA JAULA DE BOLAS



MATERIAL.- Acero de cementación  
 DUREZA.- 60-62 HRC

D <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	L	L <sub>1</sub>	L <sub>2</sub>	a	Ø COL
21	28	26	34	31	16	15	5	15
22								16
24	32	34	38	33	18	17	5	18
25								19
30	40	43	48	40	18	22	5	24
31								25
38	48	53	58	45	18	27	5	30
40								32
48	58	66	77	48	18	30	5	40
50								42
58	68	77	82	57	22	35	5	50
60								52

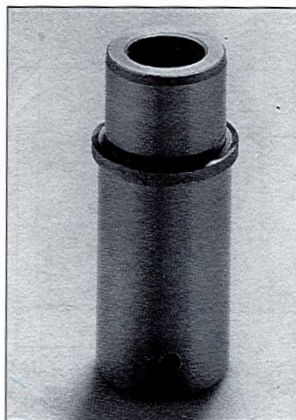
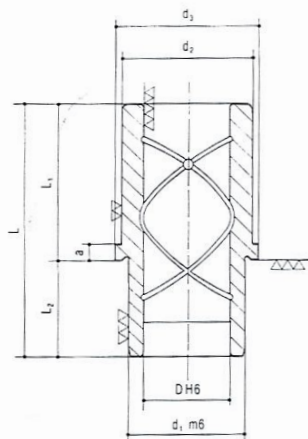
Bajo demanda fabricamos cualquier medida o material especial.

FORMA DE PEDIDO.- Se indica la referencia, el diámetro (D) y la longitud (L).



# CASQUILLOS GUIA

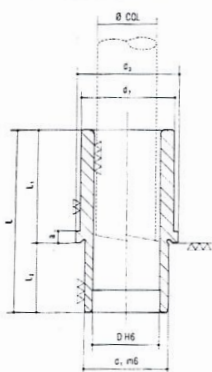
## CASQUILLOS CON VALONA R-317 / R-317 B



R-317  
 MATERIAL.- Acero de cementación  
 DUREZA.- 60-62 HRc  
 R-317 B  
 MATERIAL.- Bronce al aluminio. DIN 1714  
 DUREZA.- HB >180

D <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	L	L <sub>1</sub>	L <sub>2</sub>	a
24	40	43	48	110/130	80/100	30	5
25							
30	48	53	58	110/130	80/100	30	5
32							
40	58	66	72	115/135	80/100	35	5
42							
50	68	77	82	125/145	80/100	45	5
52							

## CASQUILLOS CON VALONA R-318. PARA JAULA DE BOLAS



MATERIAL.- Acero de cementación  
 DUREZA.- 60-62 HRc

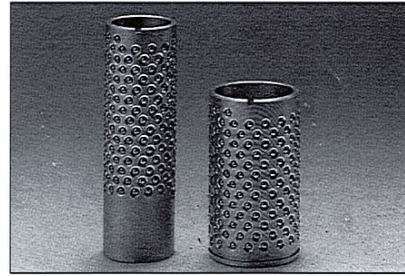
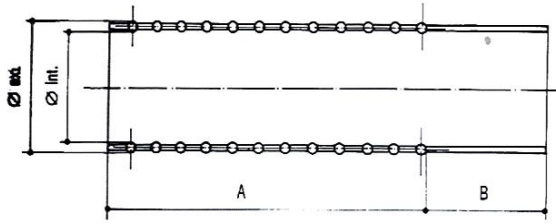
D <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	L	L <sub>1</sub>	L <sub>2</sub>	a	b	ø COL
30	40	43	48	110/130	80/100	30	5	20	24
31									25
38	48	53	58	110/130	80/100	30	5	20	30
40									32
48	58	66	72	115/125	80/100	35	5	25	40
50									42
58	68	77	82	125/145	80/100	45	5	25	50
60									52

Bajo demanda fabricamos cualquier medida o material especial.

# JAULAS DE BOLAS



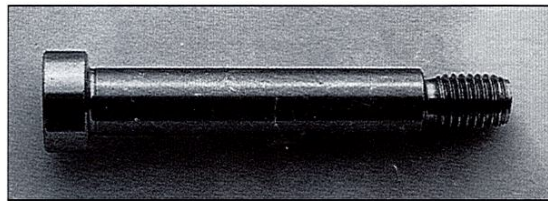
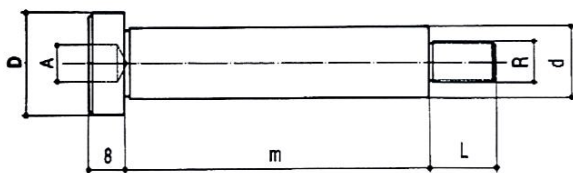
## JAULAS DE BOLAS (ALUMINIO / BRONCE)



$\varnothing_{int}$	$\varnothing_{ext}$	A	B
15	21	60	18
16	22	60	18
18	24	40	
18	24	72	22
19	25	40	
19	25	72	22
24	30	45	
24	30	78	25
25	31	45	
25	31	78	25
30	38	50	
30	38	75	
30	38	90	32
32	40	50	
32	40	75	
32	40	90	32
40	48	50	
40	48	80	
40	48	100	40
42	50	50	
42	50	80	
42	50	100	40
50	58	58	
50	58	112	
50	58	140	
50	58	160	
52	60	58	
52	60	112	

# TOPES DE GUIA

## TOPE GUIA REF. TGM.



MATERIAL.- Acero especial carbonitrurado.  
DUREZA.- 60-62 HRc

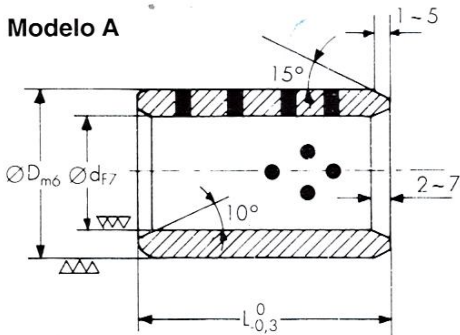
$d_1$	6	8	12	16	20	25	32	$M_{+0,1}$
R	M5	M6	M10	M12	M16	M20	M24	
L	8	10	16	20	25	32	40	
A	4	5	8	10	12	16	20	
D	9	11	18	22	28	36	45	
10	•	•	•	•	•	•	•	10
12	•	•	•	•	•	•	•	12
16	•	•	•	•	•	•	•	16
20	•	•	•	•	•	•	•	20
25	•	•	•	•	•	•	•	25
30	•	•	•	•	•	•	•	30
32	•	•	•	•	•	•	•	32
40	•	•	•	•	•	•	•	40
50	•	•	•	•	•	•	•	50
60	•	•	•	•	•	•	•	60
63	•	•	•	•	•	•	•	63
70	•	•	•	•	•	•	•	70
80	•	•	•	•	•	•	•	80
90	•	•	•	•	•	•	•	90
100	•	•	•	•	•	•	•	100
110	•	•	•	•	•	•	•	110
120	•	•	•	•	•	•	•	120
125	•	•	•	•	•	•	•	125
150	•	•	•	•	•	•	•	150
160	•	•	•	•	•	•	•	160
175	•	•	•	•	•	•	•	175
200	•	•	•	•	•	•	•	200
250	•	•	•	•	•	•	•	250

Bajo demanda se fabrican todos los diámetros y longitudes.

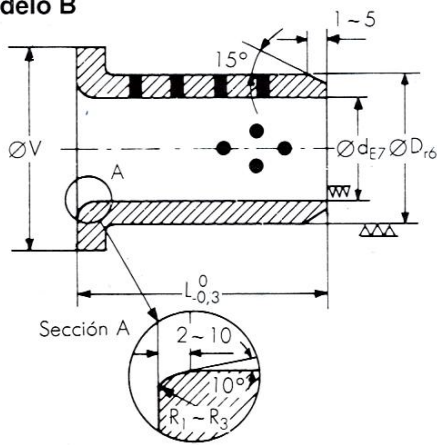
# CASQUILLOS BRONCE

## CASQUILLOS GRAFITADOS BG

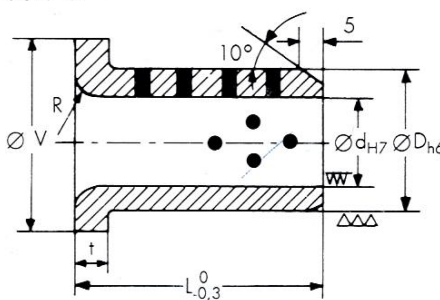
Modelo A



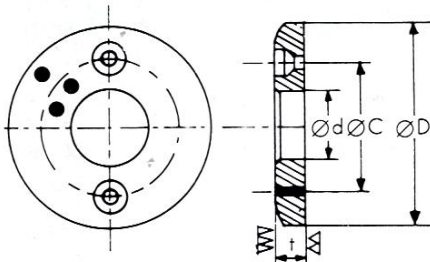
Modelo B



Modelo C



Modelo D



Medidas Standard

REFERENCIA	d	D	L	REFERENCIA	d	D	L
BGA - 1616	16	22	16	BGA - 4040	40	50	40
BGA - 1620	16	22	20	BGA - 4060	40	50	60
BGA - 1625	16	22	25	BGA - 5030	50	60	30
BGA - 1630	16	22	30	BGA - 5050	50	60	50
BGA - 2016	20	30	16	BGA - 5060	50	60	60
BGA - 2020	20	30	20	BGA - 6040	60	75	40
BGA - 2025	20	30	25	BGA - 6060	60	75	60
BGA - 2030	20	30	30	BGA - 6080	60	75	80
BGA - 2520	25	35	20	BGA - 7040	70	85	40
BGA - 2525	25	35	25	BGA - 7070	70	85	70
BGA - 2540	25	35	40	BGA - 70100	70	85	100
BGA - 3020	30	40	20	BGA - 8060	80	100	60
BGA - 3030	30	40	30	BGA - 8080	80	100	80
BGA - 3050	30	40	50	BGA - 80100	80	100	100
BGA - 4030	40	50	30	BGA - 100100	100	120	100

REFERENCIA	d	D	V	L	REFERENCIA	d	D	V	L
BGB - 1615	16	22	29	15	BGB - 4040	40	50	65	40
BGB - 1620	16	22	29	20	BGB - 4050	40	50	65	50
BGB - 1625	16	22	29	25	BGB - 5040	50	60	75	40
BGB - 2015	20	30	40	15	BGB - 5060	50	60	75	60
BGB - 2020	20	30	40	20	BGB - 6040	60	75	90	40
BGB - 2030	20	30	40	30	BGB - 6050	60	75	90	50
BGB - 2520	25	35	45	20	BGB - 6080	60	75	90	80
BGB - 2525	25	35	45	25	BGB - 7050	70	85	105	50
BGB - 2540	25	35	45	40	BGB - 7080	70	85	105	80
BGB - 3030	30	40	50	30	BGB - 8060	80	100	120	60
BGB - 3050	30	40	50	50	BGB - 8080	80	100	120	80
BGB - 4030	40	50	50	30	BGB - 80100	80	100	120	100
					BGB - 100100	100	120	150	100

REFERENCIA	d	D	V	L	t	R
BGC - 20	20	28	36	35	8	2
BGC - 32	32	40	50	55	8	6
BGC - 40	40	50	60	70	8	6
BGC - 42	42	50	60	70	8	6
BGC - 50	50	63	75	75	12	8
BGC - 52	52	63	75	75	12	8
BGC - 63	63	80	90	80	12	8
BGC - 80	80	100	110	100	12	8
BGC - 100	100	125	135	125	12	8

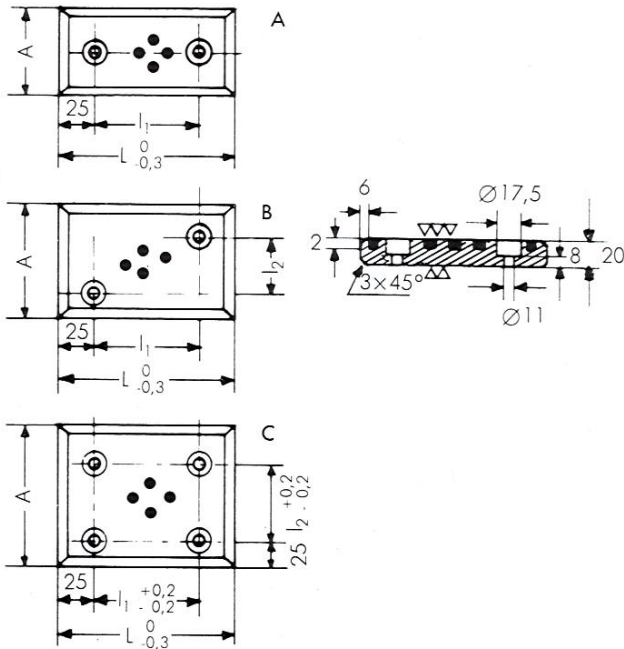
REFERENCIA	d	D	C	t	AGUJERO
BGD - 16	12,2	50	35	3	M 3
BGD - 20	20,2	50	35	5	M 5
BGD - 25	25,2	55	40	5	M 5
BGD - 30	30,2	60	45	5	M 5
BGD - 40	40,2	80	60	7	M 6
BGD - 50	50,2	100	75	8	M 6
BGD - 60	60,3	120	90	8	M 8
BGD - 70	70,3	130	100	10	M 8
BGD - 80	80,3	150	120	10	M 8
BGD - 100	100,5	190	160	10	M 10

# REGLETAS BRONCE



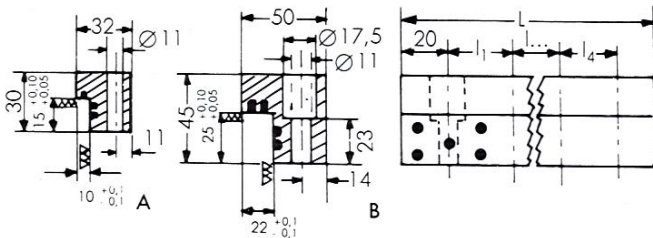
## REGLETAS GRAFITADAS BG

### Modelo RA



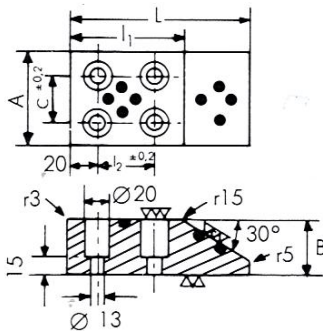
REFERENCIA	A	L	l <sub>1</sub>	l <sub>2</sub>	FORMA
BGRA - 1	48	75	45	—	A
BGRA - 2	48	100	50	—	A
BGRA - 3	48	125	75	—	A
BGRA - 4	48	150	100	—	A
BGRA - 5	75	75	25	25	B
BGRA - 6	75	100	50	25	B
BGRA - 7	75	125	75	—	A
BGRA - 8	75	150	100	—	A
BGRA - 9	75	200	150	—	A
BGRA - 10	100	100	50	50	C
BGRA - 11	100	125	75	50	C
BGRA - 12	100	150	100	50	C
BGRA - 13	100	200	150	50	C
BGRA - 14	100	250	200	50	C
BGRA - 15	125	150	100	50	C
BGRA - 16	125	200	150	50	C
BGRA - 17	125	250	200	50	C
BGRA - 18	150	150	100	100	C
BGRA - 19	150	200	150	100	C
BGRA - 20	150	250	200	100	C

### Modelo RB



REFERENCIA	L	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	FORMA
BGRB - 100	100	60	—	—	—	A
BGRB - 150	150	55	55	—	—	A
BGRB - 200	200	55	50	55	—	A
BGRB - 250	250	70	70	70	—	A-B
BGRB - 300	300	65	65	65	65	B
BGRB - 350	350	80	75	75	80	B

### Modelo RC



REFERENCIA	A	L	B	C	l <sub>1</sub>	l <sub>2</sub>
BGRC - 1	100	130	30	60	95	50
BGRC - 2	100	150	45	60	90	45
BGRC - 3	100	170	60	60	90	45
BGRC - 4	125	130	30	85	95	50
BGRC - 5	125	150	45	85	90	45
BGRC - 6	125	170	60	85	90	45

**NOTA:** Fabricamos cualquier otra forma y dimensión bajo plano, como cojinetes hasta  $\varnothing$  1000 mm y placas hasta 200x1000 mm. para aplicaciones hidráulicas, plantas off-shore, instalaciones siderúrgicas, maquinaria, etc...