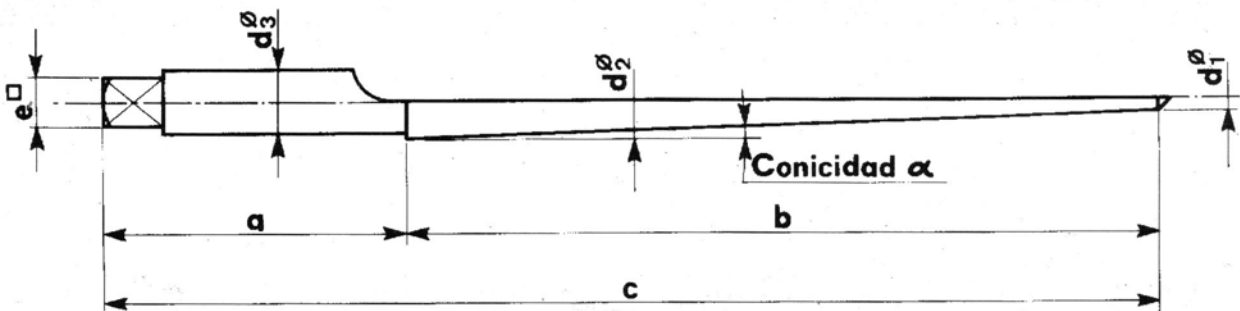


a	b	c	$d_1$	$d_2$	$d_3$	e	$\alpha$
40	100	140	3	10	8	6,5	2°
40	150	190	5	15,5	13	10	2°
40	120	160	3	7	6	5	1°
40	206	246	5	12	12	9	1°

**NEW PRODUCT**

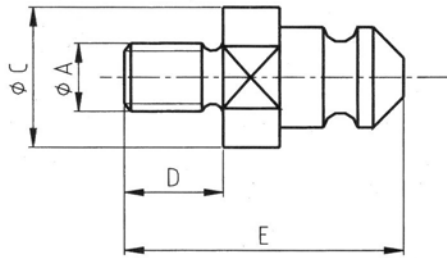
Order: Helical mandrel ESC /  $d_1 \times d_2$  – Example: Helical mandrel ESC / 3 x 10.



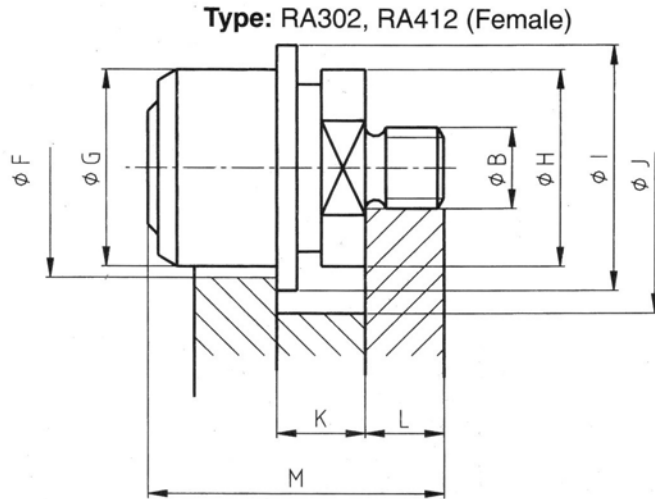
a	b	c	$d_1$	$d_2$	$d_3$	e	$\alpha$
40	100	140	3	10	8	6,5	2°
40	150	190	5	15,5	13	10	2°
40	120	160	3	7	6	5	1°
40	200	240	5	12	12	9	1°

**NEW PRODUCT**

Order: Mandrel half round ESC /  $d_1 \times d_2$  – Example: Mandrel half round ESC / 3 x 10.



Type: RA302, RA411 (Male)

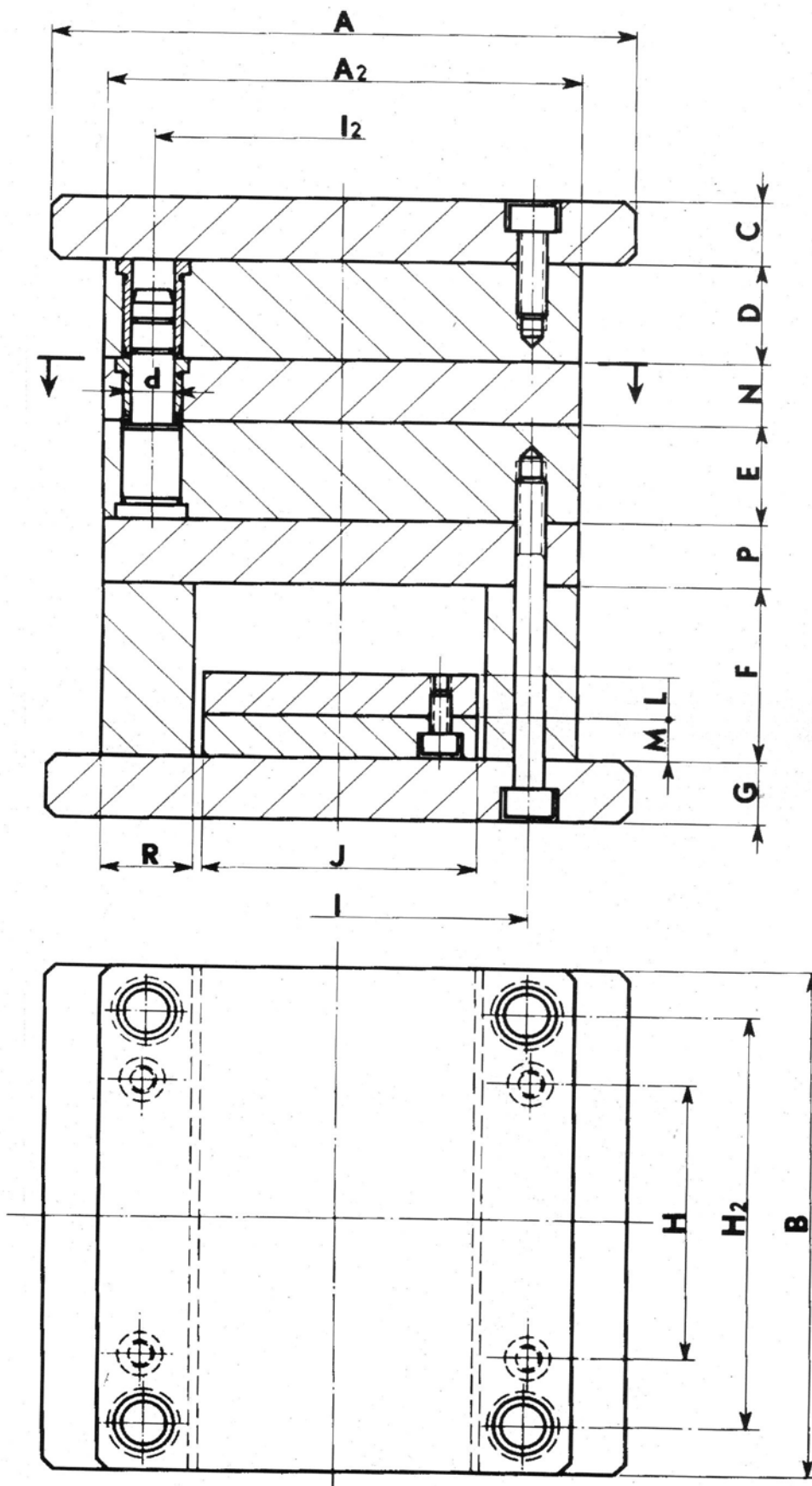


Type: RA302, RA412 (Female)

Type	A	C	D	E
RA301	M10 x 1,5	22,8	20	45,5
RA411	M16 x 2,0	35	25	68

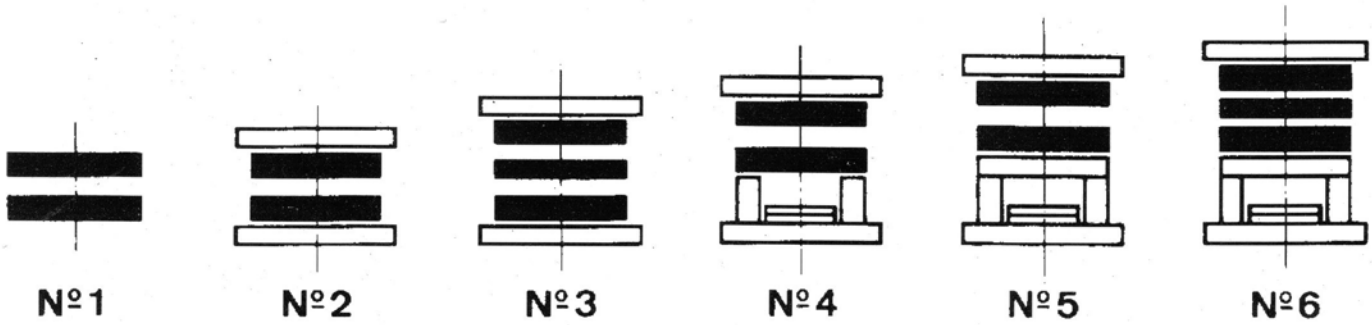
Description			
Name	Male	Female	Wt.
Micro	RA301	RA302	1500 Kg.
Normal	RA411	RA412	3200 Kg

Type	B	F	G	H	I	J	K	L	M
RA302	M16 x 1,5	34	32	32	39	43	9	15	42,5
RA412	M16 x 1,5	58	56	52	65	70	17	18	68



ASSEMBLY No. 6

*VAP*

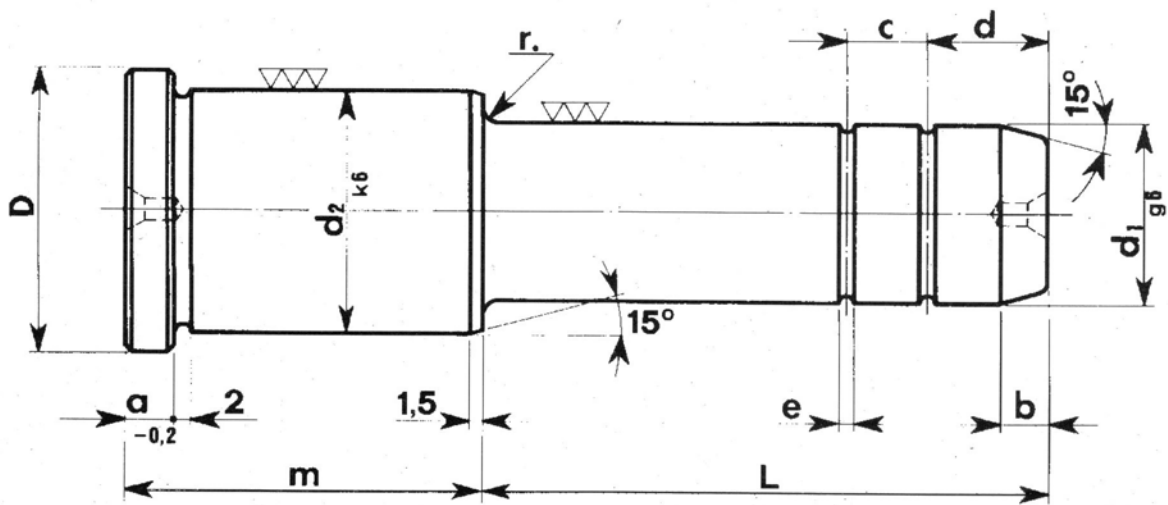


Selection of the number of plates for the mould assembly.

**MATERIAL:** D . N . E : -1.2311 -  
C . P . F . G . L . M : 1.1141 - 1.1730

TYPE	A	A <sub>2</sub>	B	C	D-N-E	F	G	H	H <sub>2</sub>	I	I <sub>2</sub>	J	L	M	P	R	d
130 x 145	160	130	145	18	18-27-36 46-56	50 60 70	18	79	119	104	104	75	12	14	27	26	12
145 x 195	175	145	195	22	22-27-36 46-56	50 60 70	22	117	165	119	115	90	12	16	27	26	16
175 x 175	210	175	175	22	22-27-36 46-56-76	50 70 90	22	90	140	149	140	120	12	18	27	26	16
196 x 196	246	196	196	22	22-27-36 46-56-76	50 60 80	22	100	152	154	154	118	12	17	27	38	18
175 x 260	210	175	260	22	22-27-36 46-56-76	50 70 90	22	176	225	149	140	120	12	18	32	26	16
215 x 215	250	215	215	22	22-27-36 46-56-76	50 70 90	22	130	180	183	180	148	12	18	32	32	16
215 x 295	250	215	295	22	22-27-36 46-56-76	60 70 90	22	202	255	183	175	148	12	18	32	32	18
245 x 245	280	245	245	22	27-36-46 56-76-96	60 70 90	22	148	203	209	203	170	12	18	32	36	18
246 x 296	296	246	296	27	27-36-46 56-76	60 80 90	27	186	244	200 206	200 203	158	12	17	36	43	22
245 x 360	280	245	360	22	27-36-46 56-76-96	60 70 90	22	260	318	209	203	170	12	18	32	36	18
296 x 296	346	296	296	27	22-27-36 46-56-76 96-116	56 76 96	27	186	244	250	250	208	12	17	46	43	22
346 x 346	396	346	346	27	22-27-36 46-56-76 96-116	56 76 96	27	224	294	294	294	258	17	22	46	43	22
396 x 396	446	396	396	36	22-27-36 46-56-76 96-116	56 76 96	36	230	324	324	324	268	17	22	46	62	30

Order: Assembly VAP - SP - Nr.... Type..... D . N . E . F .  
Example: VAP - SP - 6 / 175 x 260 27 . 22 . 36 . 50



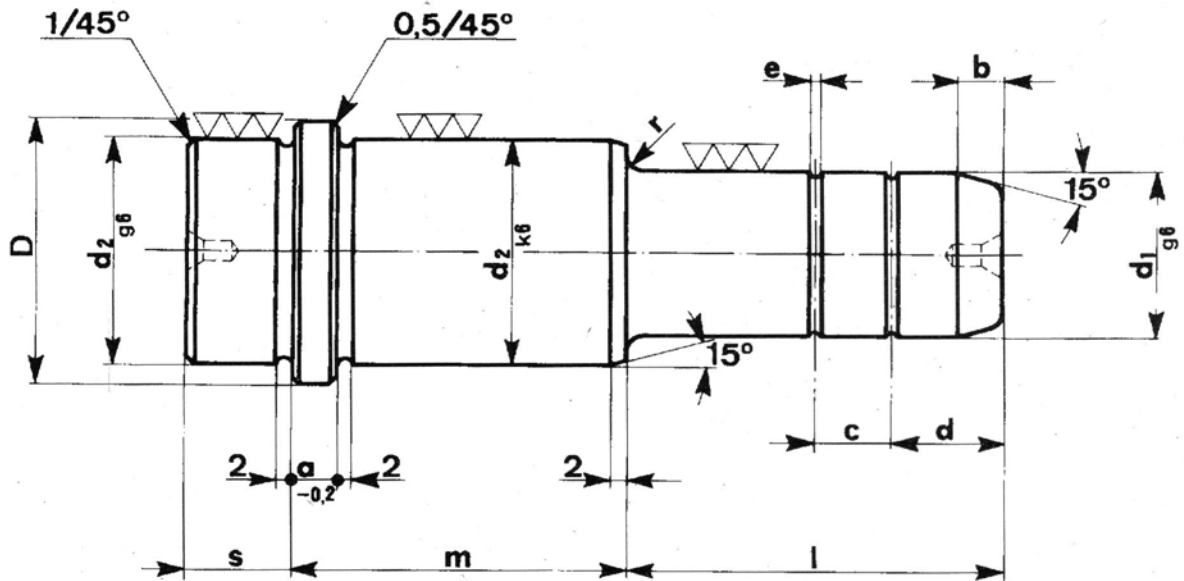
**MATERIAL:** 1.7264

**TREATMENT:** Carbonitrided prof. 0,6

**HARDNESS:** HRc

**Order:** Guide pin GC / d<sub>1</sub> x m x L – **Example:** GC / 16 x 44 x 36

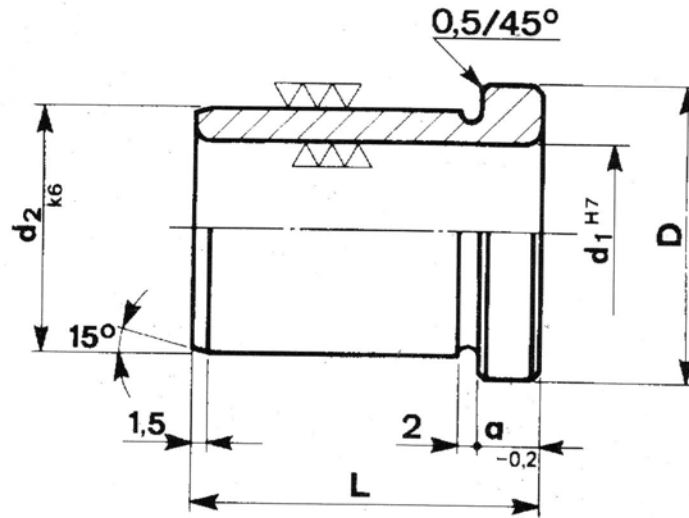




**MATERIAL:** 1.7264  
**TREATMENT:** Carbonitrided prof. 0,6  
**HARDNESS:** 60-62 HRc

d <sub>1</sub>	d <sub>2</sub>	D	a	b	c	d	e	r	s	m	L						
											26	36	45	50	65	70	100
12	16	20	4	4	8	10	1	1	12	26	●		●				
16	20	24	4	4	8	10	1	1	12	26	●		●				
										34		●					
										44		●					
										54		●					
18	25	30	6	6	10	12	1	1,5	14	34			●			●	
										44						●	
22	30	35	6	6	10	15	1,5	2	14	44				●		●	●
										54				●			●
										64				●		●	●

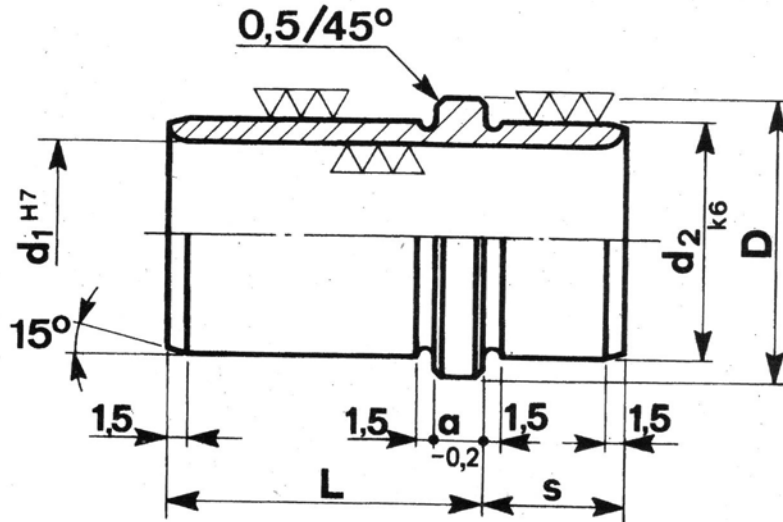
**Order:** Locating guide pin GC2 / d x m x L – **Example:** GC2 / 16 x 54 x 36



**MATERIAL:** 1.7264  
**TREATMENT:** Carbonitrided prof. 0,6  
**HARDNESS:** 60-62 HRc

d <sub>1</sub>	d <sub>2</sub>	D	a	L										
				17	21	26	35	45	55	65	75	85	95	
10	14	17	4	●		●								
12	16	20	4	●		●	●	●	●					
16	20	24	4		●	●	●	●	●	●	●			
18	25	30	6		●	●	●	●	●		●		●	
20	30	35	6						●					
22	30	35	6			●	●	●	●	●	●		●	
30	40	45	8			●	●	●	●	●	●		●	
40	50	54	10								●			

**Order:** Guide bush CV / d<sub>1</sub> x L – **Example:** CV / 16 x 35



**MATERIAL:** 1.7264  
**TREATMENT:** Carbonitrided prof. 0,6  
**HARDNESS:** 60-62 HRc.

d <sub>1</sub>	d <sub>2</sub>	D	a	s	L							
					17	21	26	35	45	55	74	94
12	16	20	4	8	●		●	●	●	●		
16	20	24	4	12		●	●	●	●	●	●	
18	25	30	6	17		●	●	●		●	●	●
22	30	35	6	17		●	●	●		●	●	●
30	40	45	8	21				●		●	●	

**Order:** Locating guide bush CV2 / d<sub>1</sub> x L – **Example:** CV2 / 16 x 26.

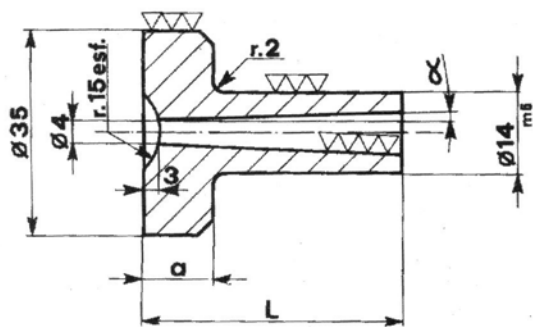
# VAP

## SPRUE BUSH

# B3

B3 = Non hardened

HARDNESS: 60-62 HRc



a	L							
	α = 2°						α = 1°	
	27	36	46	51	60	70	70	100
12	●	●	●				●	●
24				●	●	●		●

MATERIAL: 1.7264  
 Order: Sprue bush / a x L.  
 Example: B3 / 12 x 70.

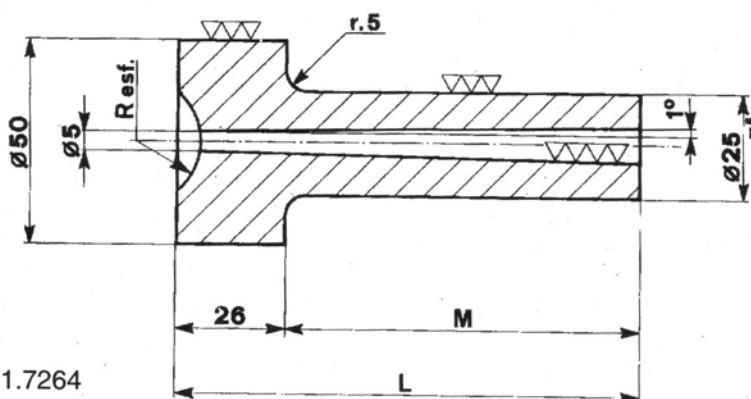
# VAP

## SPRUE BUSH

# B4

B4 = Non hardened

HARDNESS: 60-62 HRc



MATERIAL: 1.7264

M	26,5	36,5	46,5	56,5	66,5	76,5	86,5	96,5	106,5	116,5	126,5	136,5	156,5
L	52,5	62,5	72,5	82,5	92,5	102,5	112,5	122,5	132,5	142,5	152,5	162,5	182,5

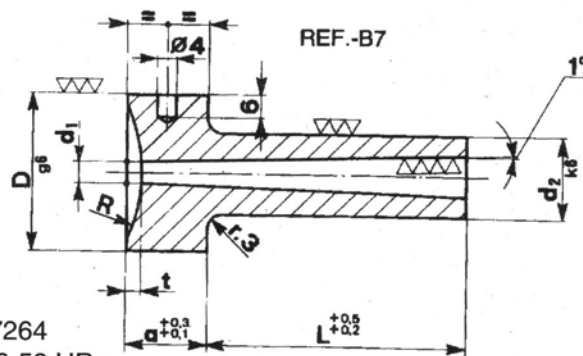
R = 15

Order: Sprue bush / L x R – Example: B4 / 72,5.

# VAP

## SPRUE BUSH

# B7

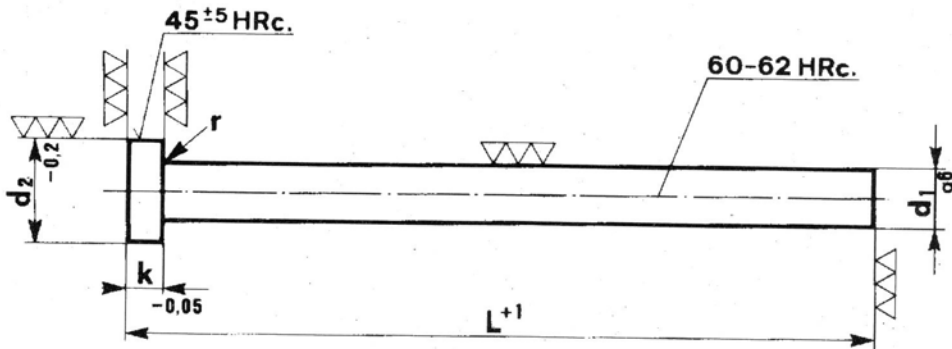


MATERIAL: 1.7264  
 HARDNESS: 56-58 HRc

D	a	d <sub>2</sub>	R	t	d <sub>1</sub>	L								
						22	27	36	46	56	76	96	116	
28	13	12	15,5	1,5	2,5	●	●	●	●					
					3,5	●	●	●	●	●				
38	18	18	15,5	3	3		●	●	●	●	●	●	●	
					4		●	●	●	●	●	●	●	

Order: Sprue bush / D x d<sub>1</sub> x L x R – Example: B7 / 28 x 2,5 x 27

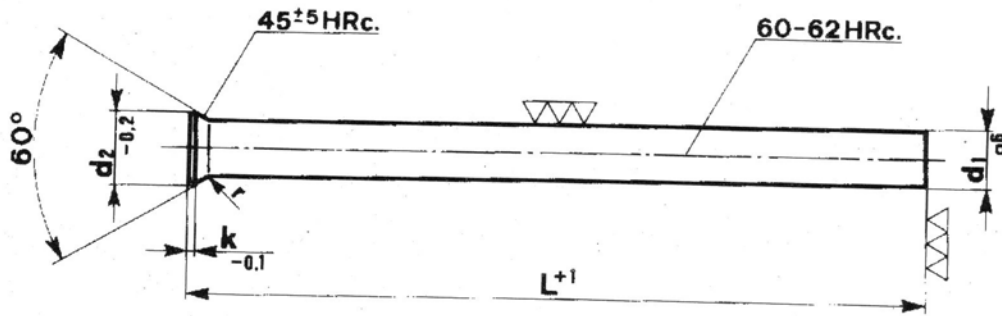
*VAP*



MATERIAL: 1.2510

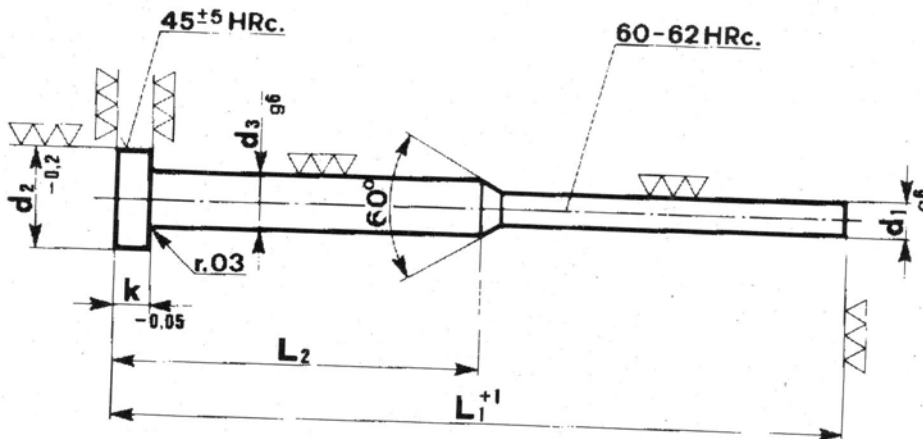
d <sub>1</sub>	d <sub>2</sub>	k	r	L						
				100	125	160	200	250	315	400
1,5	3	1,5	0,2	●	●	●				
2	4	2	0,2	●	●	●	●	●		
2,5	5	2	0,3	●	●	●	●	●		
3	6	3	0,3	●	●	●	●	●	●	●
3,2	6	3	0,3	●	●	●	●	●	●	
3,5	7	3	0,3	●	●	●	●	●	●	
4	8	3	0,3	●	●	●	●	●	●	●
4,2	8	3	0,3	●	●	●	●		●	●
4,5	8	3	0,3		●	●	●		●	●
5	10	3	0,3	●	●	●	●	●	●	●
5,2	10	3	0,3		●	●	●			
5,5	10	3	0,3	●	●	●	●		●	
6	12	5	0,5	●	●	●	●	●	●	●
6,2	12	5	0,5	●	●	●				
6,5	12	5	0,5	●	●		●			
7	12	5	0,5		●	●	●	●	●	
8	14	5	0,5	●	●	●	●	●	●	●
8,2	14	5	0,5		●	●	●			
8,5	14	5	0,5		●		●			
9	14	5	0,5					●		
10	16	5	0,5	●	●	●	●	●	●	●
10,2	16	5	0,5		●			●		
10,5	16	5	0,5			●	●	●		
11	16	5	0,5					●		
12	20	7	0,8	●	●	●	●	●	●	●
14	22	7	0,8		●	●	●	●	●	●
16	22	7	0,8	●	●	●	●	●	●	●

Order: Ejector AH / d<sub>1</sub> x L – Example: AH / 3 x 100.

**VAP****COUNTERSUNK EJECTOR PIN****D**

MATERIAL: 1.2510

d <sub>1</sub>	d <sub>2</sub>	k	L		
			100	125	150
1	1,8	0,5	●	●	●
1,5	2,2	0,5	●	●	●
2	3	0,5	●	●	●
2,5	3,5	0,5	●	●	●
3	4,5	0,5	●	●	●

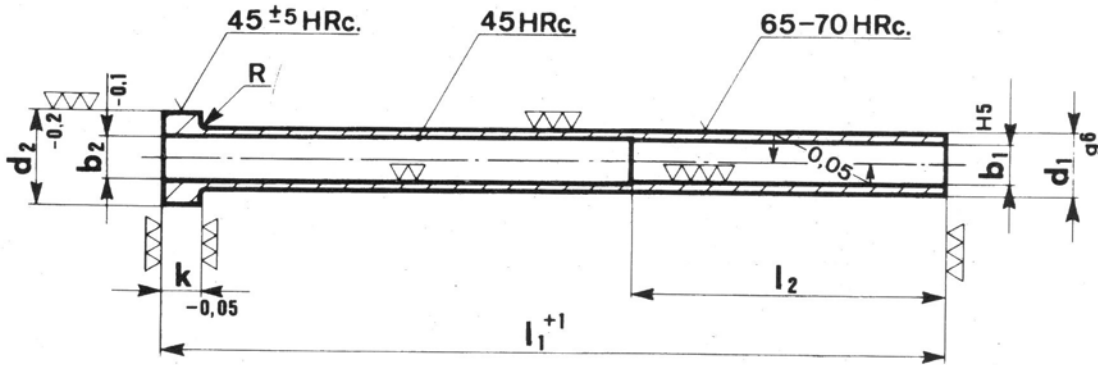
Order: Ejector D / d<sub>1</sub> x L – Example: D / 3 x 100.**VAP****STEPPED EJECTOR PIN****EC**

MATERIAL: 1.2510

L <sub>1</sub>	100	125	160	200	250
L <sub>2</sub>	50	50	75	75	75

d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	k	L			
				100	125	160	200
1	4	2	2	●	●	●	●
1,5	6	3	3	●	●	●	●
2	6	3	3	●	●	●	●
2,5	6	3	3	●	●	●	●

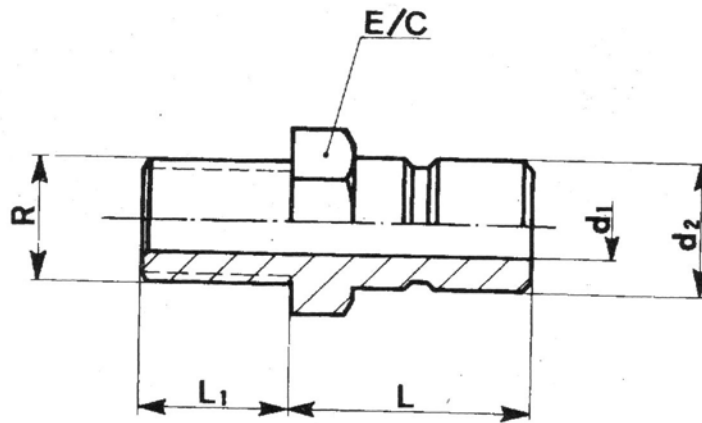
Order: Ejector EC / d<sub>1</sub> x L – Example: EC / 2 x 125*Vap*



**MATERIAL:** 1.2344  
**RESISTANCE TEMPERATURE:** 500° - 550° C.

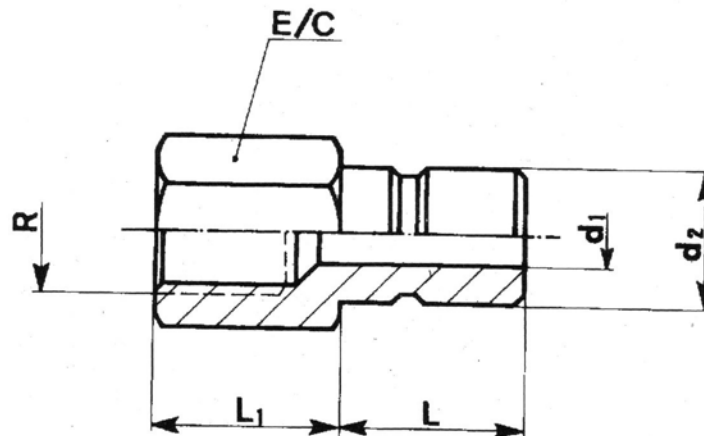
b <sub>1</sub>	d <sub>1</sub>	b <sub>2</sub>	d <sub>2</sub>	k	l <sub>2</sub>	R	l <sub>1</sub>							
							75	100	125	150	175	200	225	250
2	4	2,4	8	3	35	0,3	●	●	●					
2,2	4	2,4	8	3	35	0,3	●	●	●					
2,5	5	3	10	3	35	0,3	●	●	●					
2,7	5	3	10	3	45	0,3	●	●	●					
3	5	3,3	10	3	45	0,3	●	●	●	●				
3,2	5	3,5	10	3	45	0,3	●	●	●	●				
3,5	6	3,8	12	5	45	0,5	●	●	●	●				
3,7	6	4	12	5	45	0,5	●	●	●	●				
4	6	4,3	12	5	45	0,5	●	●	●	●	●			
4,2	8	4,8	14	5	45	0,5	●	●	●	●	●	●		
4,5	8	4,8	14	5	45	0,5	●	●	●	●	●	●		
5	8	5,3	14	5	45	0,5	●	●	●	●	●	●		
5,2	8	5,5	14	5	45	0,5	●	●	●	●	●	●		
5,5	9	5,8	16	5	45	0,5	●	●	●	●	●	●		
6	10	6,3	16	5	45	0,5	●	●	●	●	●	●	●	
6,2	10	6,5	16	5	45	0,5	●	●	●	●	●	●	●	
8	12	8,3	20	7	45	0,8	●	●	●	●	●	●	●	●
8,2	12	8,5	20	7	45	0,8	●	●	●	●	●	●	●	●
10	14	10,3	22	7	50	0,8	●	●	●	●	●	●	●	●
12	16	12,5	22	7	50	0,8		●	●	●	●	●	●	●

**Order:** Sleeve ejector ETN / b<sub>1</sub> x l<sub>1</sub> - **Example:** Sleeve ejector ETN / 6 x 100.

**VAP****WATER CONNECTOR****AEM****MATERIAL:** Brass

R	d <sub>1</sub>	d <sub>2</sub>	E/C	L	L <sub>1</sub>
1/8"	6	9	13	15	10
1/4"	6	9	13	15	10

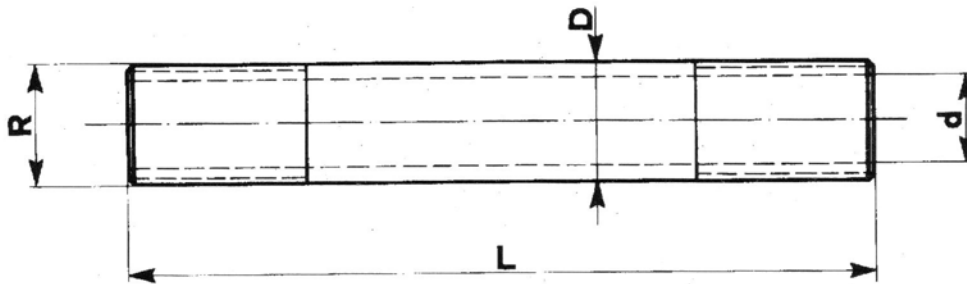
**Order:** Quick connection cooling nozzle AEM / R x d<sub>1</sub> – **Example:** AEM / 1/4" x 6.

**VAP****WATER CONNECTOR****AEH****MATERIAL:** Brass

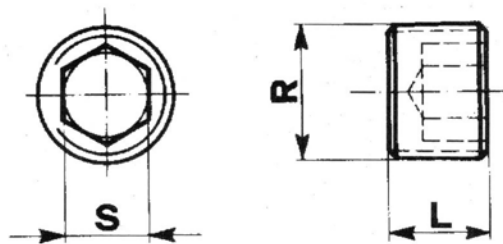
R	d <sub>1</sub>	d <sub>2</sub>	E/C	L	L <sub>1</sub>
1/8"	6	9	13	10	15
1/4"	6	9	17	10	15

**Order:** Quick connection cooling nozzle AEH / R x d<sub>1</sub> – **Example:** AEH / 1/4" x 6.

*VAP*

**VAP****WATER PIPE****TR****MATERIAL:** Steel

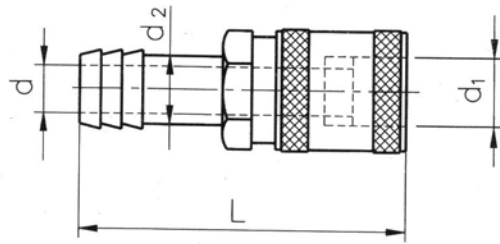
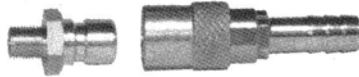
R	d	D	L				
			50	75	100	150	200
1/8"	7	10	●	●	●	●	●
1/4"	9	13	●	●	●	●	●

**Order:** Water pipe TR / R x L – **Example:** TR / 1/4" x 200.**VAP****PRESSURE PLUG****BSP****MATERIAL:** Steel

R	S	L
1/8"	5	8
1/4"	6	10

**Order:** Pressure plug – **Example:** / 1/4".

Material: Brass



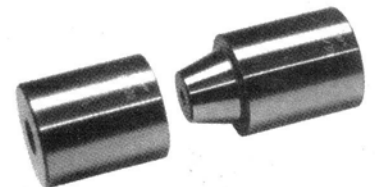
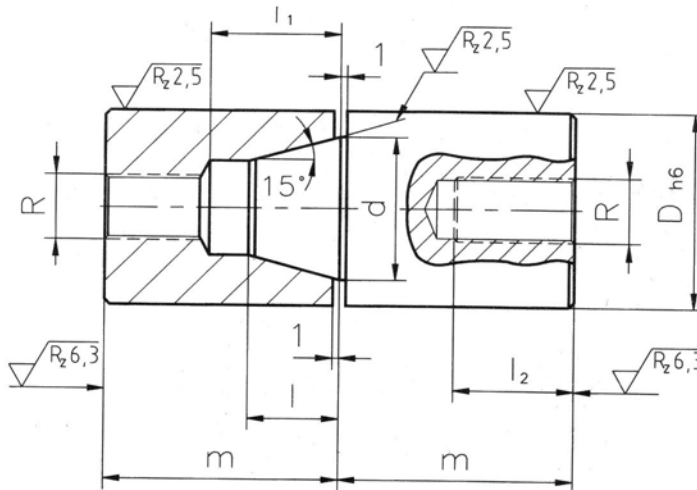
a	d1	d2	L
6	9	9	57

Order: Quick Release coupling

Material: DIN 1.7242

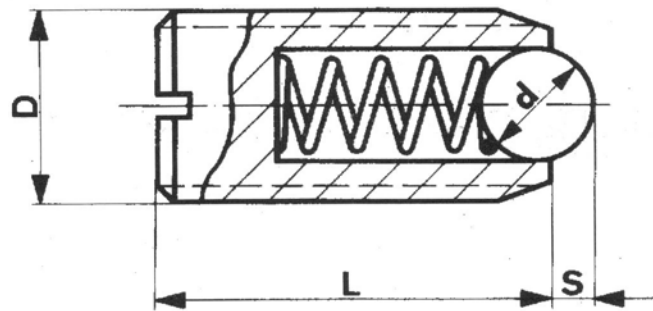
Treatment: Carbonitritado prof. 0.6 mm

Hardness: 60 - 62 HRC



D	d	R	l	l <sub>1</sub>	l <sub>2</sub>	m
20	16	M8	10	13	15	22
24	18	M8	10	15	16	27
30	22	M10	14	20	18	36
40	30	M12	18	24	20	46
50	40	M14	25	32	25	56
60	46	M16	30	40	30	76

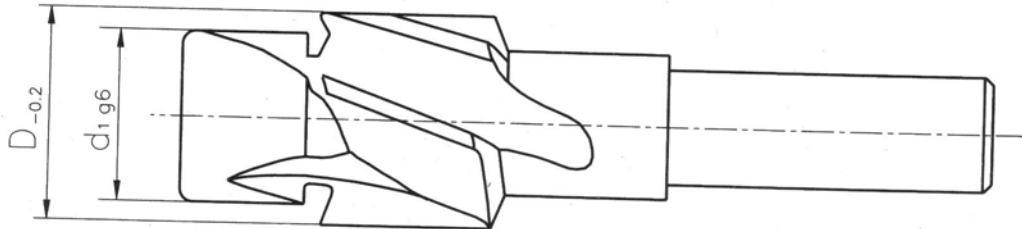
Order: Taper Intelock UC / D - Example: UC / 30



D	L	S	d	Pressure
M4	9	0,8	2,5	0,4 - 1
M6	14	1	3,5	0,9 - 1,3
M8	16	2	5	1,5 - 3
M10	19	2	6	2 - 2,5
M12	22	3	8	3 - 5,5
M16	24	3,5	10	6,5 - 12,5

**Order:** Spring loaded stop POS /D – **Example:** POS / M 10.

**Material:** R3. Quick steel.



d	D	d	D
1,5	3,2	8,0	14,5
2,0	4,3	10,0	12,5
2,5	5,3	10,0	15,5
3,0	6,3	10,0	16,5
3,5	6,3	12,0	15,5
3,5	7,3	12,0	17,5
4,0	8,3	12,0	20,5
4,5	8,3	14,0	17,5
5,0	8,3	14,0	20,5
5,0	10,5	14,0	22,5
5,5	8,3	16,0	19,5
5,5	10,5	16,0	20,5
6,0	10,5	16,0	22,5
6,0	12,5	18,0	22,5
6,5	10,5	20,0	24,5
6,5	12,5	20,0	26,5
7,0	12,5	25,0	30,5
7,5	12,5	25,0	32,5
7,5	14,5	30,0	35,5
8,0	12,5	40,0	45,5

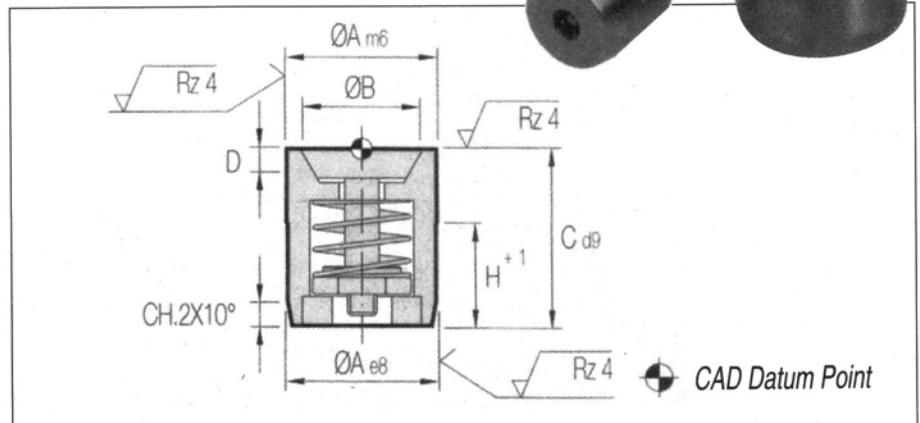
**Order:** Drill EJR / d x D - **Example:** EJR / 3 x 6,3

# VAP

## AIR VALVE

**Material: INOX. 1.4034 - 50 - 55 HRc.**  
**Maximum working pressure 8 BARS**

**Air Valve:** Manufactured completely from stainless steel this unit has the advantage of high airflow. It is manufactured in five standard dimensions.



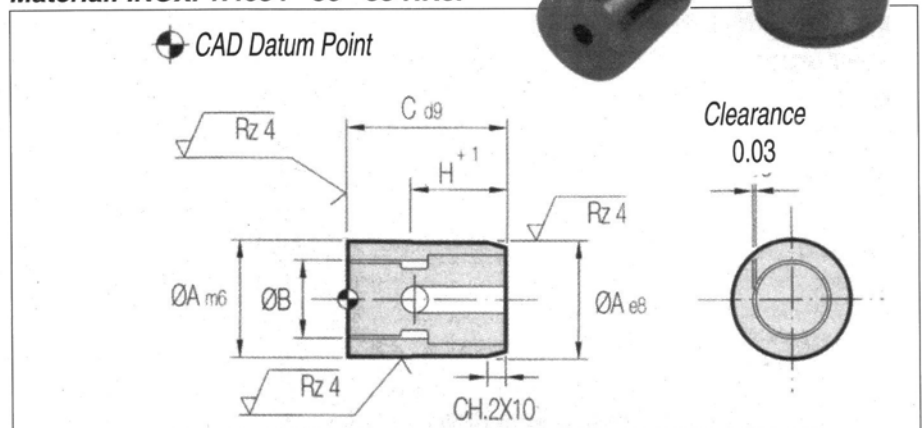
Ref	A	B	C	D	E	H
VA.086512	8	6,5	12	1,5	4	7
VA.100812	10	8	12	2	8	7
VA.121012	12	10	12	2,5	10	7
VA.161320	16	13	20	3	12	12
VA.201720	20	17	20	3,5	16	12

# VAP

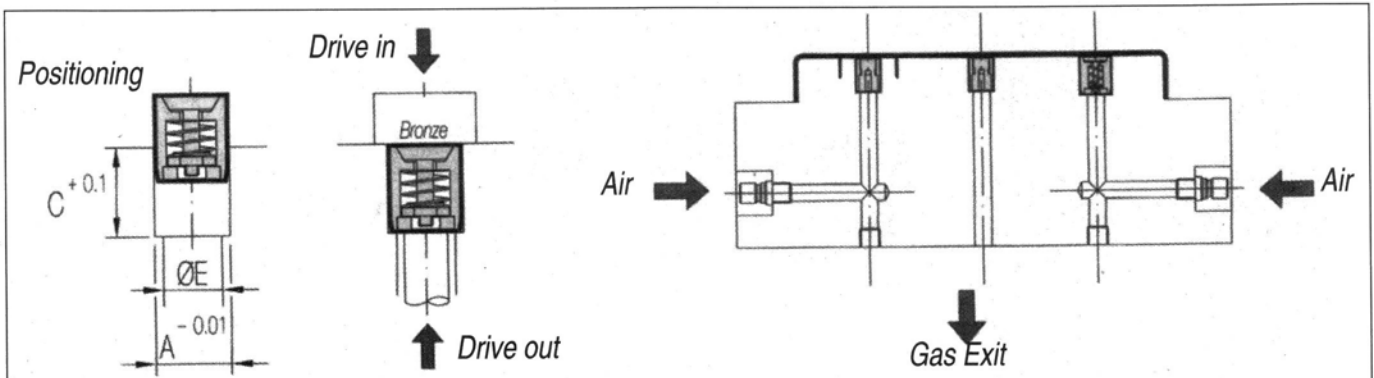
## DOUBLE VALVE

**Material: INOX. 1.4034 - 50 - 55 HRc.**

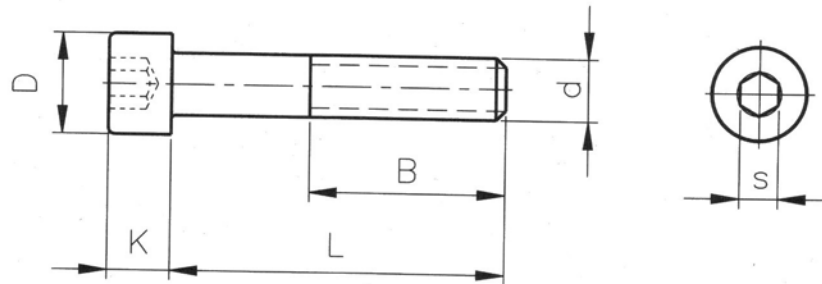
**Double Valve:** An effective method of semi pneumatic ejection, for tools with ribs or areas forming gas traps or vacuum conditions.



Ref	A	B	C	E	H
VD.080512	8	5	12	6	7
VD.100612	10	6	12	8	7
VD.120812	12	8	12	10	7



Norma: DIn 912



d	M6	M8	M10	M12	M16
B	18	22	26	30	38
D	10	13	16	18	24
K	6	8	10	12	16
s	5	6	8	10	14

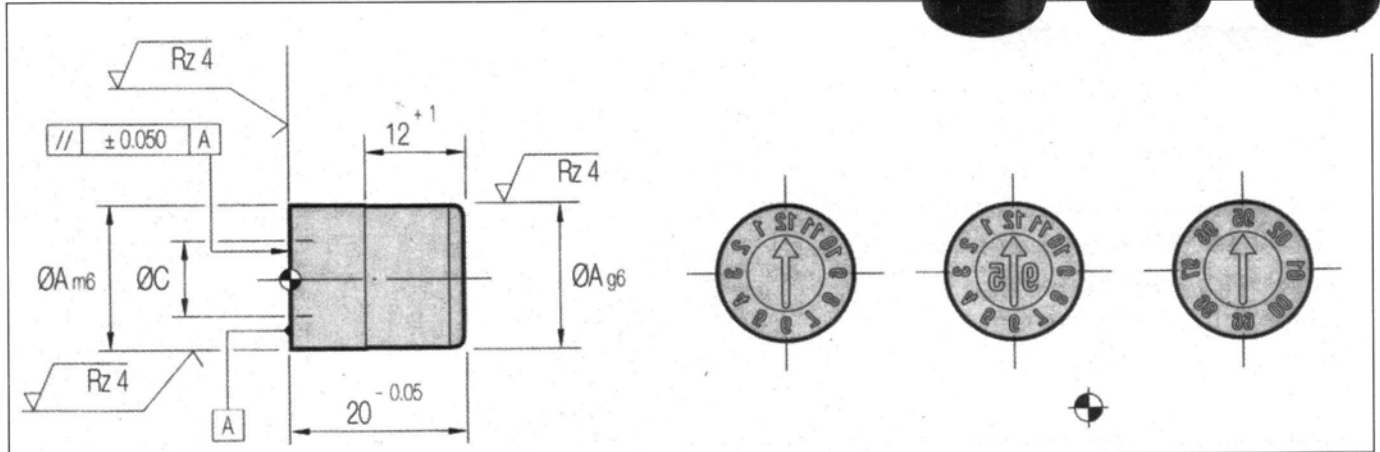
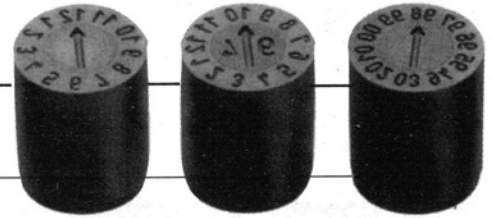
Length L					
	M6	M8	M10	M12	M16
10		•		•	
12			•		
16		•	•	•	
20	•	•	•		
25		•	•	•	•
30		•	•	•	•
35		•		•	•
40	•	•	•	•	•
45	•	•	•		
50		•	•	•	•
55		•	•	•	•
60		•	•	•	•
70		•	•	•	•
80		•	•	•	•
90		•	•	•	•
100		•	•	•	•
110		•	•	•	•
120		•	•	•	•
130		•	•	•	•
140			•	•	•
150			•	•	
160			•	•	
180				•	

Order: Socket Cap Screws CAP / d x L - Example: CAP / M10 x 25.

# VAP

## DATE STAMP

Material: INOX. 1.4034 - 45 - 50 HRc.  
Patented system



**Date Stamp:** This is a permanent date stamp where only the central year insert is changed. The month is changed by using a screwdriver. Completely stainless.

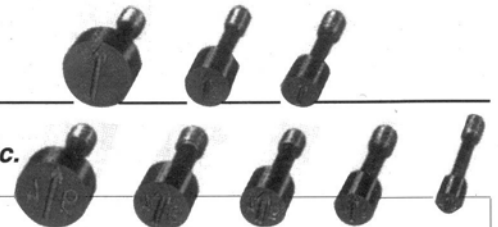
Reference			A	C	E
12 Months	Annual	Years			
FA.0632SF	FA.063212	FA.063205	6	3.2	4
FA.0847SF	FA.084712	FA.084705	8	4.7	6
FA.1057SF	FA.105712	FA.105706	10	5.7	8
FA.1267SF	FA.126712	FA.126708	12	6.7	10
FA.1687SF	FA.168712	FA.168710	16	8.7	12

The last two numbers of model "YEARS", indicate how many years are engraved in each date stamp. For the reference "ANNUAL" indicate the required year.

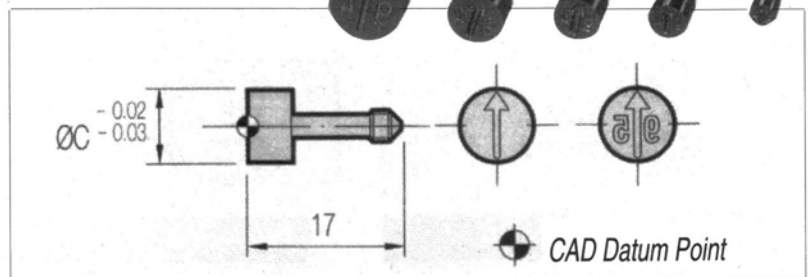
# VAP

## DATE INSERT

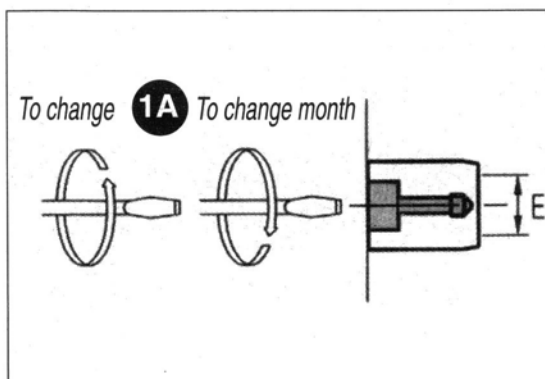
Material: 1.4034 - 50 - 50 HRc.



**Date Insert:** Due to fact that the insert is adjustable / removable from the front of the mould, there is no need to remove the tool from the machine or disassemble the mould.

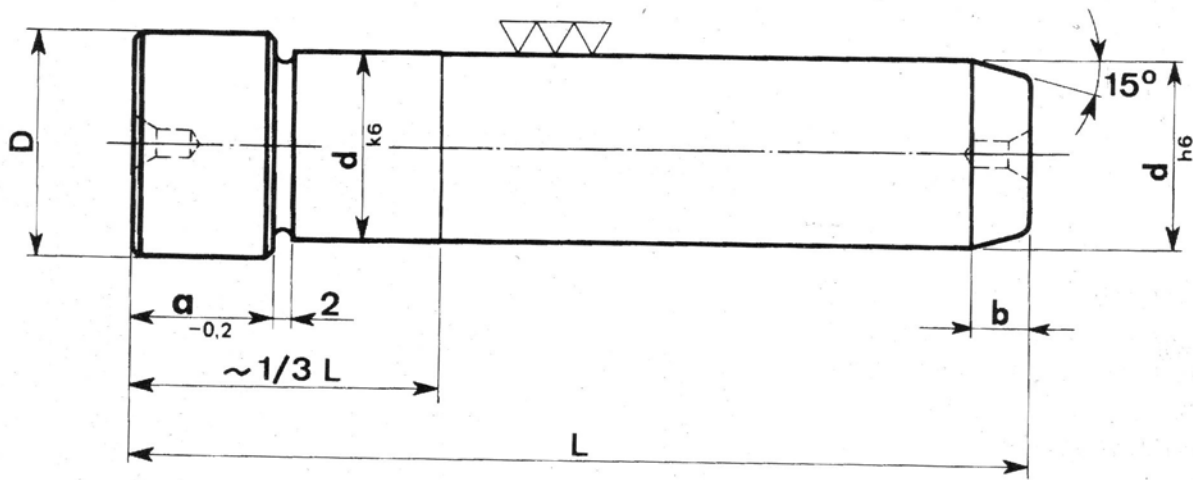


**IMPORTANT:** To change the year just turn the annual insert to the left.



Reference		C
Arrow Only	Arrow + Year	
IA.3217SF	IA.3217..	3.2
IA.4717SF	IA.4717..	4.7
IA.5717SF	IA.5717..	5.7
IA.6717SF	IA.6717..	6.7
IA.8717SF	IA.8717..	8.7

After the reference, indicate the desired year.



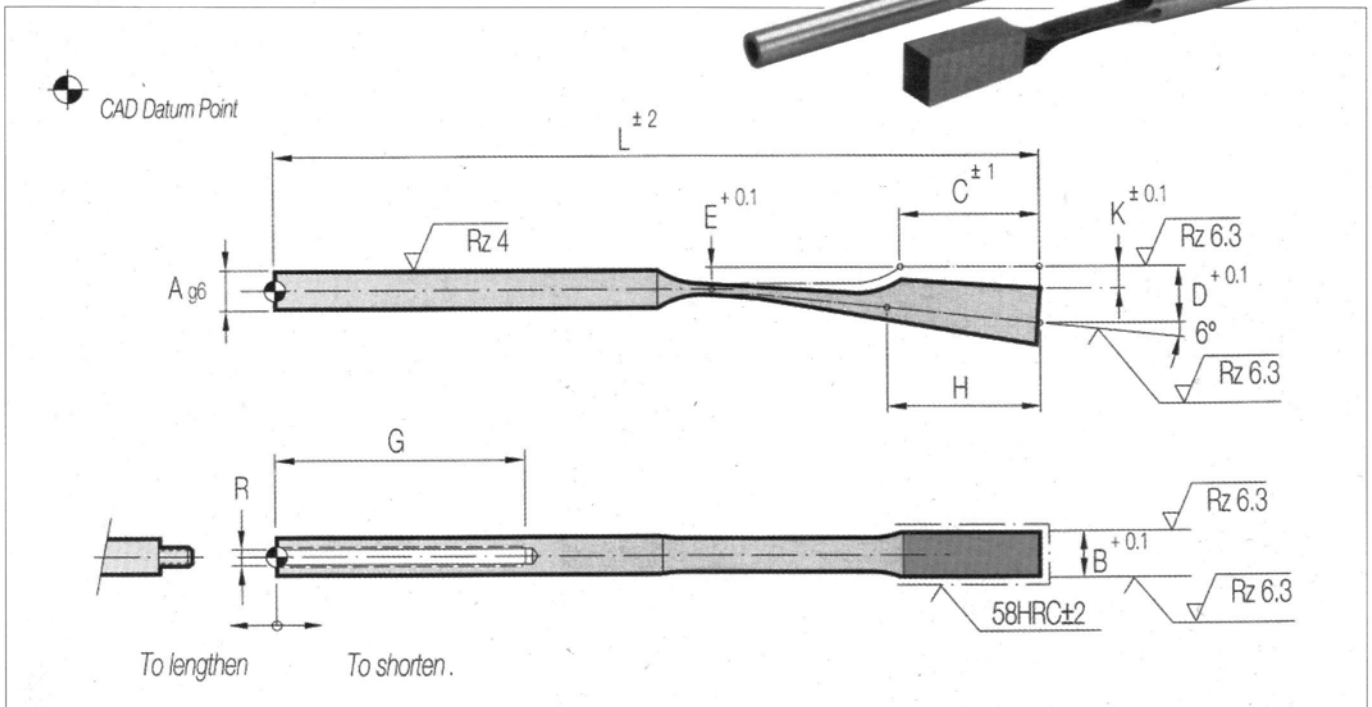
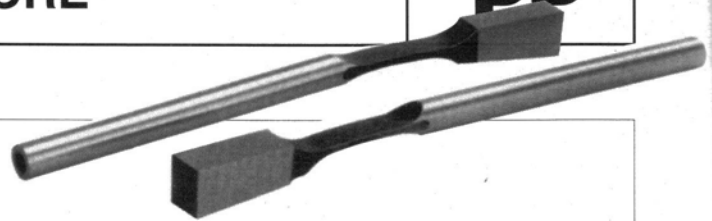
**MATERIAL:** 1.7264  
**TREATMENT:** Carbonitrided prof. 0,6  
**HARDNESS:** 60-62 HRc.

d	D	a	b	L												
				44	52	65	75	85	95	105	115	125	140	170	200	250
10	12	8	3		•	•	•	•	•	•						
12	15	8	4			•	•	•	•	•	•					
14	17	10	4	•	•	•	•	•	•	•	•	•				
16	19	12	5						•	•	•	•	•	•		
18	22	14	6					•		•		•	•	•		
20	24	15	6					•		•		•	•	•	•	
25	30	18	7											•	•	•

**Order:** Angle pin G2 / d x L – **Example:** G2 / 12 x 52.

*VAP*

Mat. 1.2106 Hardened  $45 \pm 3$  HRC. Patented System.



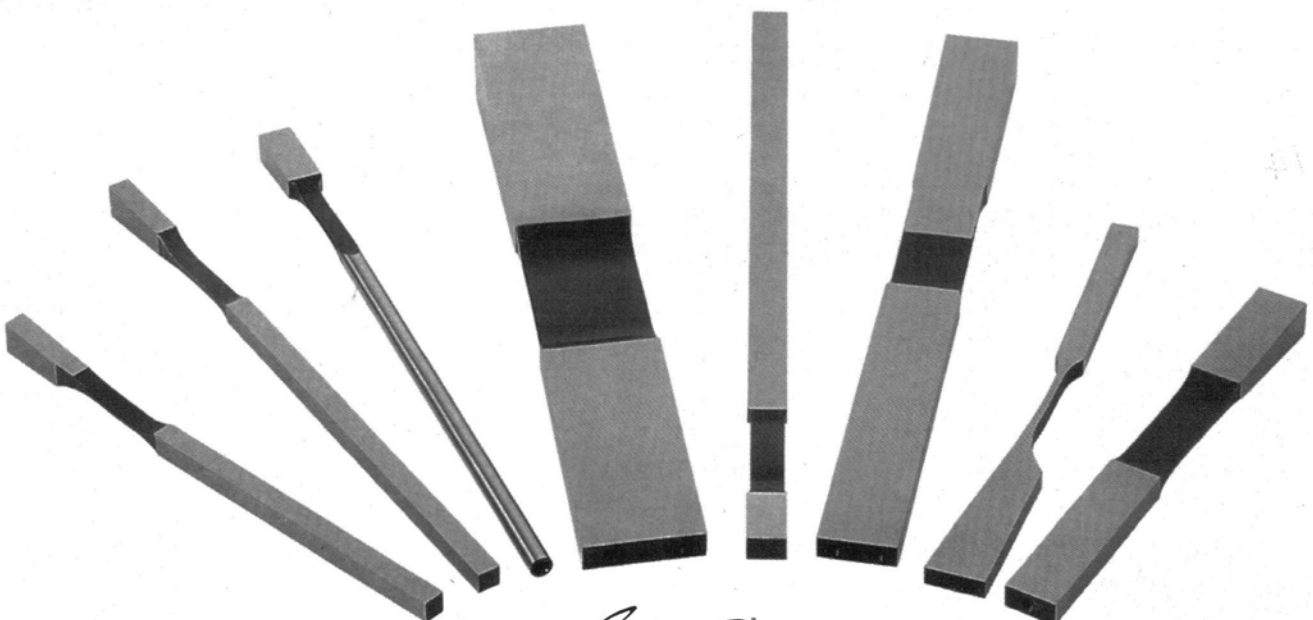
**Sprung Core.** Manufactured from spring steel this unit allows the release of small undercuts. It is activated by the ejector plates as a standard ejector.

Ref.	A	B	C	D	E	G	H	K	L	R
PP.060622	6	6.2	22	9	3.5	40	25	3.5	125	M.4
PP.060822	6	8.2	22	9	3.5	40	25	3.5	125	M.4
PP.080825	8	8.2	25	11.5	4.5	50	30	4.5	140	M.5
PP.081025	8	10.2	25	11.5	4.5	50	30	4.5	140	M.5
PP.081225	8	12.2	25	11.5	4.5	50	30	4.5	140	M.5
PP.101430	10	14.2	30	15	5.5	60	38	5.5	175	M.6
PP.101630	10	16.2	30	15	5.5	60	38	5.5	175	M.6
PP.101830	10	18.2	30	15	5.5	60	38	5.5	175	M.6

### PARTS IN INCHES

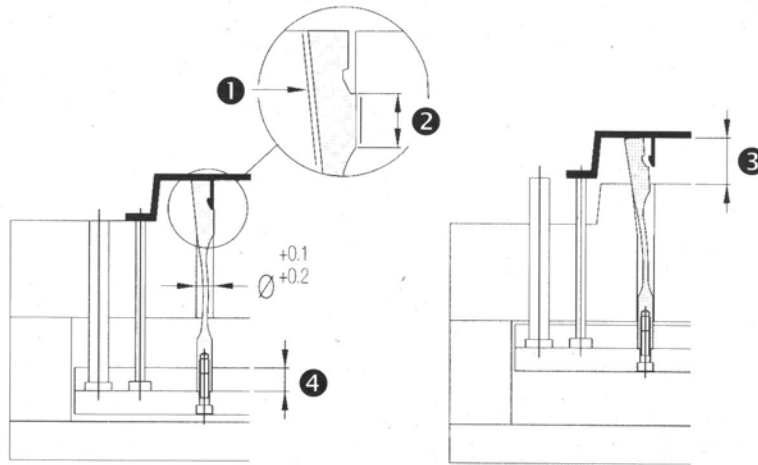
PP.156406	25/64	0.244	0.866	0.354	0.137	1.575	0.984	0.137	6	#8-32
PP.014008	1/4	0.322	0.866	0.354	0.145	1.575	0.984	0.137	6	#8-32
PP.516010	5/16	0.401	0.984	0.453	0.177	1.965	1.190	0.177	7	#10-24
PP.516012	5/16	0.480	0.984	0.453	0.177	1.965	1.190	0.177	7	#10-24

Special sizes on request



VAP

## SIMPLE INJECTION



### Fitting instructions for Sprung Cores:

- ① This area of support must be the same length as dimension *H* on the sprung core
- ② The adjustment area must be at least 1/3 of the dimension *C*
- ③ The stroke of the sprung core must be the same or smaller than the dimension *C*
- ④ The plate that houses the shaft of the core must be minimum 15mm in all cases
- ⑦ General tolerance of adjustment *H7/g6*.
- ⑧ After the cores are adjusted, remove 0,1 to ensure smooth ejection

## WITH DOUBLE PLATE

