



PULL STUDS
TIRANTES

15

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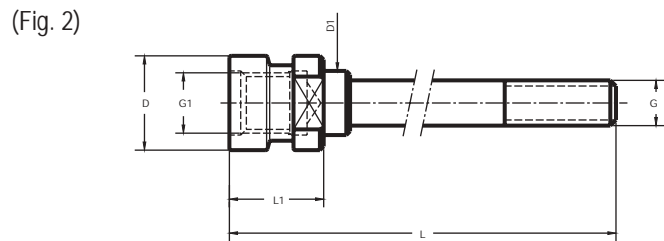
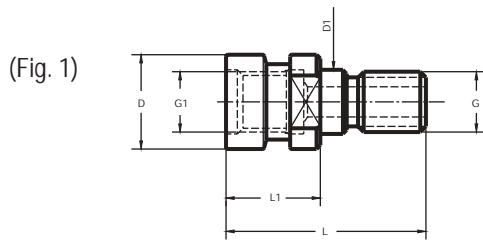
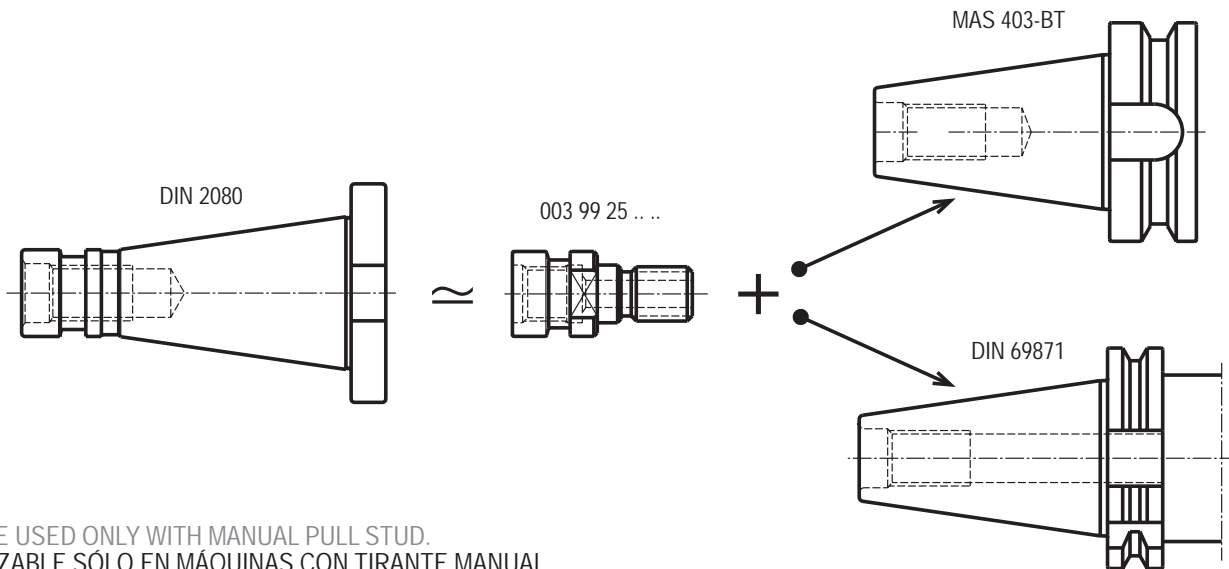
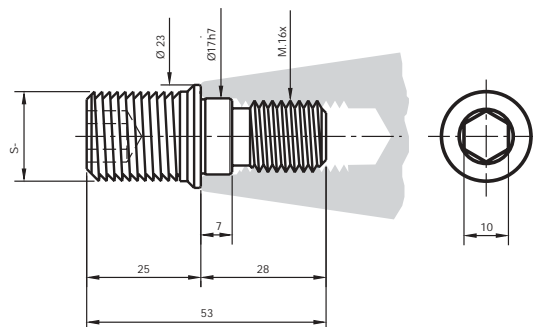


FIG.	G	G ₁	L	L ₁	D	D ₁	COD.
1	M-16	M-16	52	25,15	25	17	003 99 25 02 00
1	M-24	M-24	65	25,20	39,3	25	003 99 25 04 00
2	M-12	M-16	111	25,15	25	17	003 99 25 02 40
2	M-16	M-16	117	25,15	25	17	003 99 25 02 50



TO BE USED ONLY WITH MANUAL PULL STUD.
UTILIZABLE SÓLO EN MÁQUINAS CON TIRANTE MANUAL.



PULL STUDS NECESSARY TO USE DIN 69871 OR MAS-403 BT SHANKS IN MACHINES WITH DEKEL SYSTEM.
SU EMPLEO HACE POSIBLE LA UTILIZACION DE HERRAMIENTAS CON CONO SEGUN DIN 69871 ó MAS-403 BT EN MAQUINAS DEKEL

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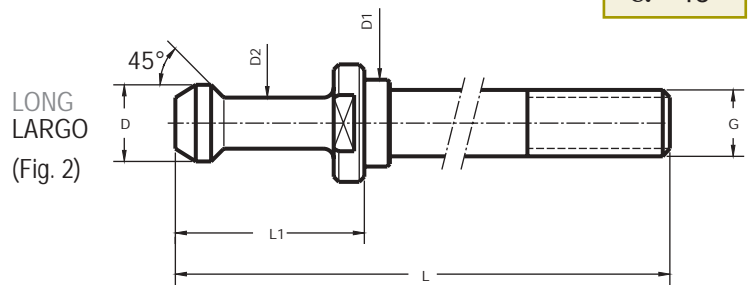
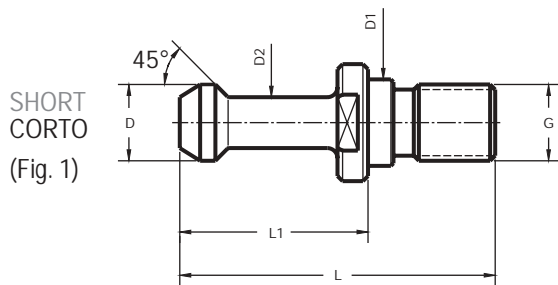


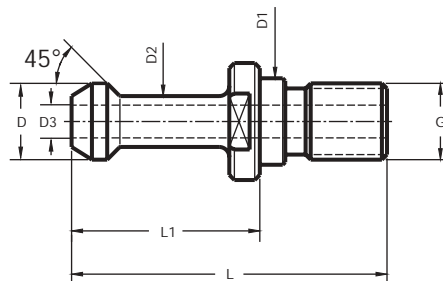
FIG.	D	G	L	L ₁	D ₁	D ₂	COD.
1	11	M-12	43	23	12,5	7	003 99 14 01 00
1	15	M-16	60	35	17	10	003 99 14 02 00
1	23	M-24	85	45	25	17	003 99 14 04 00
(*) 1	15	M-16	57	32,15	17	10	003 99 94 02 00
2	11	M-10	90	23	12,5	7	003 99 14 01 30
2	11	M-12	94	23	12,5	7	003 99 14 01 40
2	15	M-12	100	35	17	10	003 99 14 02 01
2	15	M-12	118	35	17	10	003 99 14 02 40
2	15	M-12	178	35	17	10	003 99 14 02 41
2	15	M-16	100	35	17	10	003 99 14 02 02
2	15	M-16	124	35	17	10	003 99 14 02 50
2	19	M-16	110	40	21	14	003 99 14 03 02
2	23	M-20	165	45	25	17	003 99 14 04 60

(*) This pull stud is not according to MAS 403-BT.

(*) Este tirante no cumple la norma MAS 403-BT.

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With coolant through channel
Con orificio central para paso de refrigerante



D	G	L	L ₁	D ₁	D ₂	D ₃	COD.
15	M-16	60	35	17	10	4	003 99 34 02 00
23	M-24	85	45	25	17	8	003 99 34 04 00

$\alpha = 60^\circ$

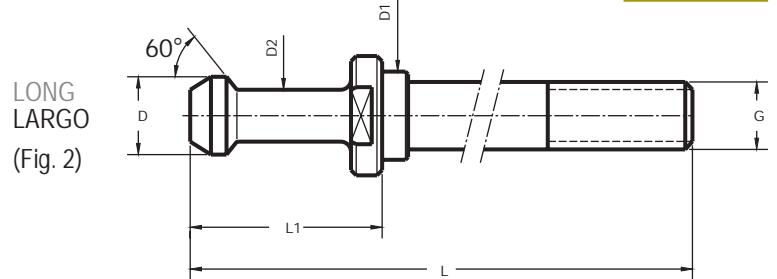
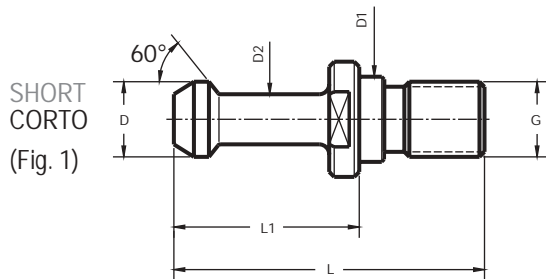


FIG.	D	G	L	L ₁	D ₁	D ₂	COD.
1	11	M-12	43	23	12,5	7	003 99 15 01 00
1	15	M-16	60	35	17	10	003 99 15 02 00
1	19	M-20	70	40	21	14	003 99 15 03 00
1	23	M-24	85	45	25	17	003 99 15 04 00
(*) 1	15	M-16	57	32,15	17	10	003 99 95 02 00
2	11	M-10	90	23	12,5	7	003 99 15 01 30
2	11	M-10	145	23	12,5	7	003 99 15 01 31
2	11	M-12	94	23	12,5	7	003 99 15 01 40
2	11	M-12	143	23	12,5	7	003 99 15 01 41
2	13	M-10	108	28	12,5	8,5	003 99 15 11 30
2	13	M-12	112	28	12,5	8,5	003 99 15 11 40
2	15	M-12	100	35	17	10	003 99 15 02 01
2	15	M-12	118	35	17	10	003 99 15 02 40
2	15	M-12	178	35	17	10	003 99 15 02 41
2	15	M-16	100	35	17	10	003 99 15 02 02
2	15	M-16	124	35	17	10	003 99 15 02 50
2	15	M-16	194	35	17	10	003 99 15 02 51
2	23	M-16	160	45	25	17	003 99 15 04 50
2	23	M-20	165	45	25	17	003 99 15 04 60
2	23	M-20	270	45	25	17	003 99 15 04 61

(*) This pull studs is not according to MAS 403-BT.

(*) Este tirante no cumple la norma MAS 403-BT.

$\alpha = 90^\circ$

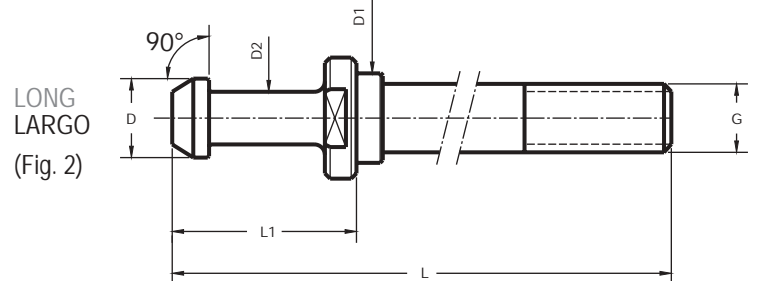
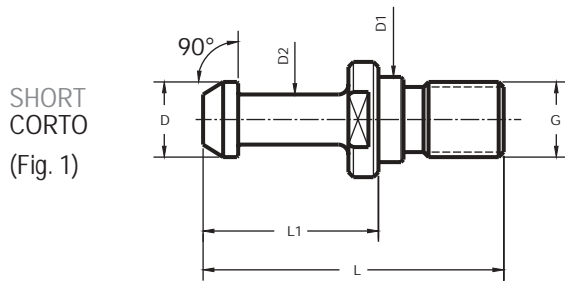


FIG.	D	G	L	L ₁	D ₁	D ₂	COD.
1	15	M-16	50	25	17	10	003 99 18 02 00
*1	24	M-24	71	31	25	18	003 99 18 04 00
1	15	M-16	60	35	17	10	003 99 23 02 00
1	23	M-24	85	45	25	17	003 99 23 04 00
2	15	M-12	110	26,75	17	10	003 99 11 02 40
2	15	M-16	116	26,75	17	10	003 99 11 02 50
2	23	M-20	165	45,2	25	17	003 99 11 04 60
2	15	M-12	108	25	17	10	003 99 18 02 40
2	15	M-16	114	25	17	10	003 99 18 02 50
2	15	M-12	118	35	17	10	003 99 23 02 40
2	15	M-12	178	35	17	10	003 99 23 02 41
2	15	M-16	124	35	17	10	003 99 23 02 50
2	23	M-20	165	45	25	17	003 99 23 04 60

(*) Pull studs with coolant though channel.

(*) Tirante provisto de agujero central pasante

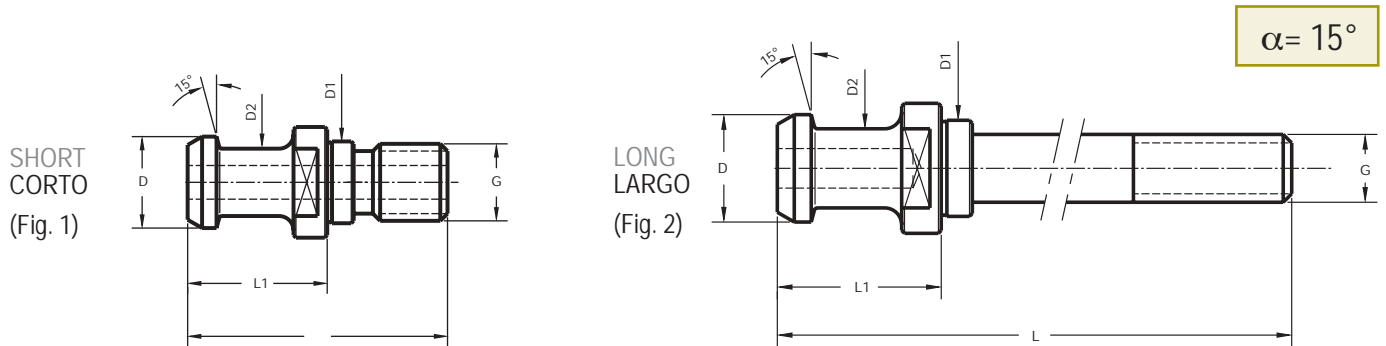
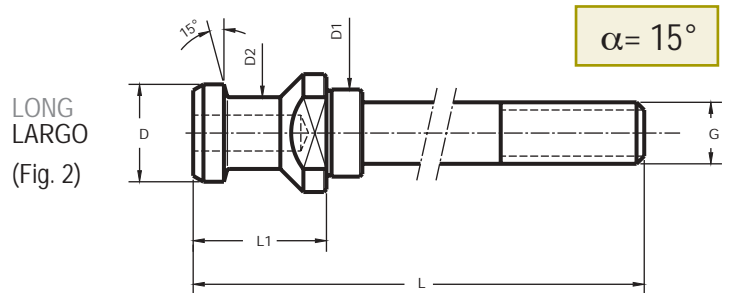
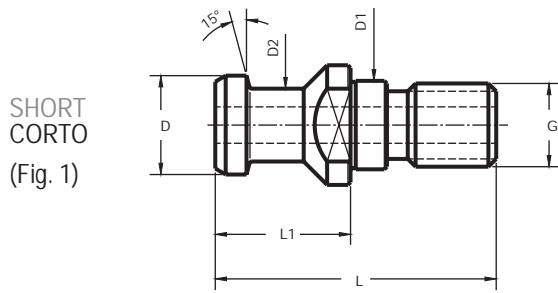


FIG.	D	G	L	L ₁	D ₁	D ₂	COD.
1	12	M-12	43	23,4	12,5	8	003 99 31 01 00
1	19	M-16	54	29	17	14	003 99 31 02 00
1	23	M-20	60	30	21	17	003 99 31 03 00
1	28	M-24	74	34	25	21	003 99 31 04 00
2	12	M-10	90	23,4	12,5	8	003 99 31 01 30
2	12	M-10	145	23,4	12,5	8	003 99 31 01 31
2	12	M-12	94	23,4	12,5	8	003 99 31 01 40
2	12	M-12	143	23,4	12,5	8	003 99 31 01 41
2	19	M-12	94	29	17	14	003 99 31 02 01
2	19	M-12	112	29	17	14	003 99 31 02 40
2	19	M-12	172	29	17	14	003 99 31 02 41
2	19	M-16	94	29	17	14	003 99 31 02 02
2	19	M-16	118	29	17	14	003 99 31 02 50
2	19	M-16	188	29	17	14	003 99 31 02 51
2	28	M-20	154	34	25	21	003 99 31 04 60
2	28	M-20	260	34	25	21	003 99 31 04 61



DIN 69872 Form A - ISO 7388/2 Form A
DIN 69872 Forma A - ISO 7388/2 Forma A

DIN 69872 Form A - ISO 7388/2 Form A
DIN 69872 Forma A - ISO 7388/2 Forma A

FIG.	D	G	L	L ₁	D ₁	D ₂	COD.
*1	13	M-12	44	24	13	9	003 99 16 01 00
1	19	M-16	54	26	17	14	003 99 16 02 00
1	28	M-24	74	34	25	21	003 99 16 04 00
2	13	M-12	94	24	13	9	003 99 16 01 40
2	19	M-12	92	26	17	14	003 99 16 02 01
2	19	M-12	112	26	17	14	003 99 16 02 40
2	19	M-12	171	26	17	14	003 99 16 02 41
2	19	M-16	93	26	17	14	003 99 16 02 02
2	19	M-16	118	26	17	14	003 99 16 02 50
2	19	M-16	183	26	17	14	003 99 16 02 51
2	23	M-16	100	30	21	17	003 99 16 03 02
2	23	M-16	135	30	21	17	003 99 16 03 50
2	23	M-16	125	30	21	17	003 99 16 03 52
2	28	M-20	154	34	25	21	003 99 16 04 60

* Without coolant through channel.

* Sin orificio central pasante.

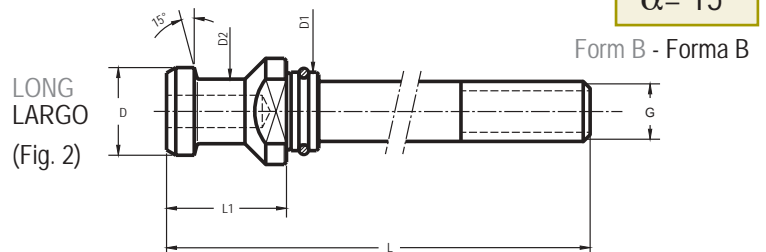
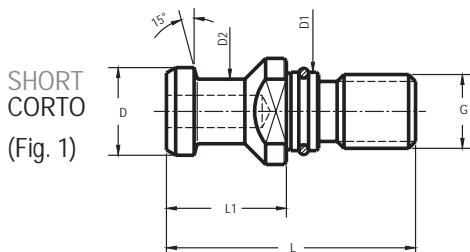

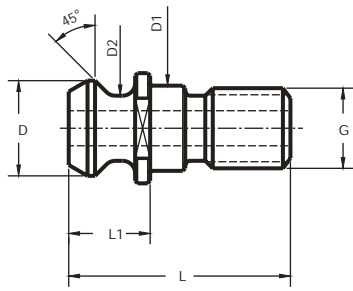


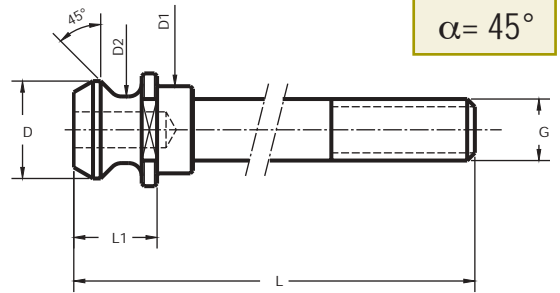
FIG.	D	G	L	L ₁	D ₁	D ₂	COD.	
1	13	M-12	44	24	13	9	003 99 26 01 00	305 04 01 11 00
1	19	M-16	54	26	17	14	003 99 26 02 00	305 04 01 41 50
1	23	M-20	65	30	21	17	003 99 26 03 00	305 04 01 72 00
1	28	M-24	74	34	25	21	003 99 26 04 00	305 04 02 02 50
2	19	M-12	112	26	17	14	003 99 26 02 40	305 04 01 41 50
2	19	M-16	118	26	17	14	003 99 26 02 50	305 04 01 41 50

SHORT
CORTO
(Fig. 1)



ISO 7388/2 Form B
ISO 7388/2 Forma B

LONG
LARGO
(Fig. 1)



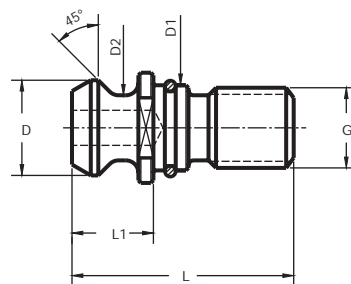
ISO 7388/2 Form B
ISO 7388/2 Forma B

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FIG.	D	G	L	L ₁	D ₁	D ₂	COD.
1	13,20	M-12	34	11,65	13	9,15	003 99 17 01 00
1	18,80	M-16	44,5	16,25	17	12,80	003 99 17 02 00
*1	18,80	M-16	44,5	19,10	17	12,80	003 99 32 02 00
1	23,90	M-20	56	20,80	21	16,15	003 99 17 03 00
1	29	M-24	65,5	25,40	25	19,45	003 99 17 04 00
*1	29	M-24	65,5	25,20	25	19,45	003 99 32 04 00
2	13,20	M-10	80	11,65	13	9,15	003 99 17 01 30
2	18,80	M-12	82	16,25	17	12,80	003 99 17 02 01
2	18,80	M-12	161	16,25	17	12,80	003 99 17 02 41
2	18,80	M-16	83	16,25	17	12,80	003 99 17 02 02
2	18,80	M-16	108	16,25	17	12,80	003 99 17 02 50
2	18,80	M-16	178	19,10	17	12,80	003 99 32 02 51
2	23,90	M-16	90	20,80	21	16,15	003 99 17 03 02
2	23,90	M-16	125	20,80	21	16,15	003 99 17 03 50


* These pull studs are not according to ISO 7388/2 Form B.

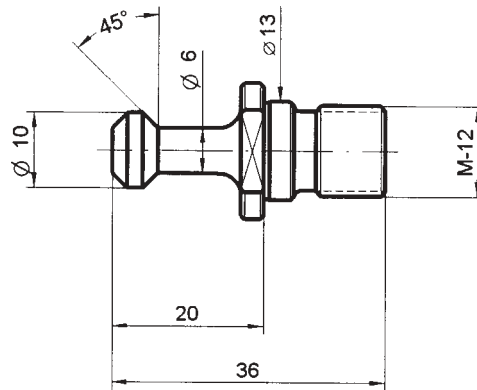
* Estos tirantes no cumplen la norma ISO 7388/2 Forma B.



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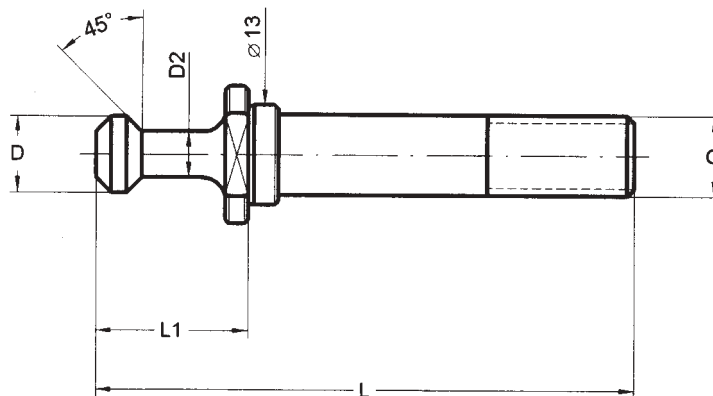
Without coolant through channel
Sin paso de refrigerante

D	G	L	L ₁	D ₁	D ₂	COD.	
18,8	M-16	44,5	16,25	17	12,80	003 99 27 02 00	
29	M-24	65,5	25,4	25	19,45	003 99 27 04 00	



$\alpha = 45^\circ$

D	G	L	L ₁	D ₁	D ₂	COD.
10	M-12	36	20	13	6	003 99 30 01 00



$\alpha = 45^\circ$

D	G	L	L ₁	D ₁	D ₂	COD.
10	M-6	74	20	13	6	003 99 30 01 20
10	M-10	84	20	13	6	003 99 30 01 30
10	M-12	89	20	13	6	003 99 30 01 40