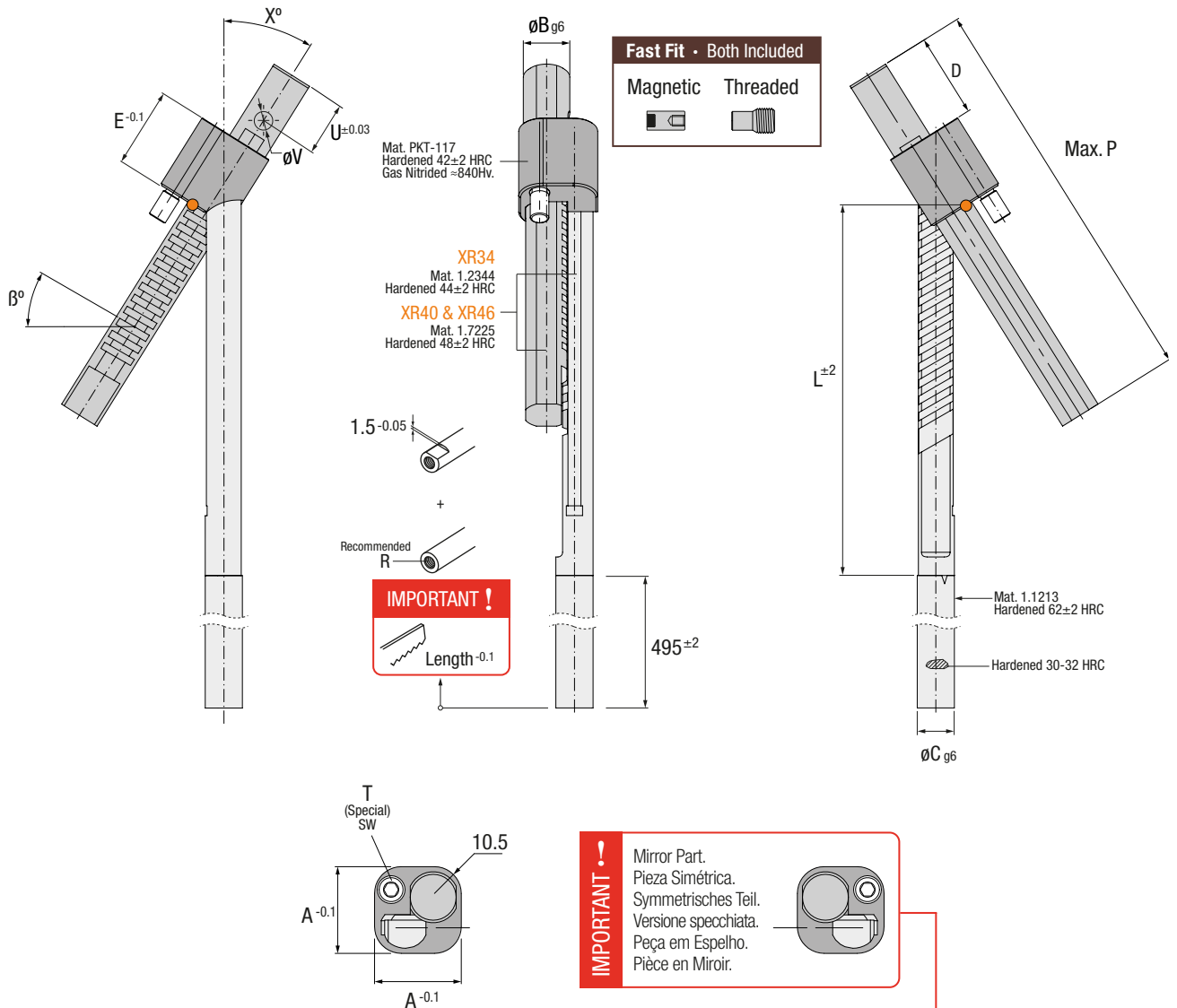


XR

UNDERCUTS



Patented



Stroke 100	X°				A	B	C	D	E	L	P	R	T	U	V	Stroke 100-S	SWa
XR34100L-x	24	28	32	36	34	20	16	36	34	159	225	M8	M8	23	8	XR34100L-x-S	5
XR40100L-x	24	28	32	36	40	22	20	36	40	170	240	M10	M10	20	10	XR40100L-x-S	6
XR46100L-x	24	28	32	36	46	24	24	42	46	174	255	M10	M12	26	10	XR46100L-x-S	8



PLAY

HOW TO ORDER

Check page 48-49 for Min / Max β values

$\beta^\circ < 0$ & $\beta^\circ = 0$

$\beta^\circ > 0$

XR $\begin{matrix} A \\ 34 \end{matrix}$ $\begin{matrix} \text{Stroke} \\ 100L \end{matrix}$ - $\begin{matrix} X^\circ \\ 28 \end{matrix}$ $\begin{matrix} \beta \\ -10 \end{matrix}$ — Standard — XR $\begin{matrix} A \\ 34 \end{matrix}$ $\begin{matrix} \text{Stroke} \\ 100L \end{matrix}$ - $\begin{matrix} X^\circ \\ 28 \end{matrix}$ $\begin{matrix} \beta \\ +10 \end{matrix}$

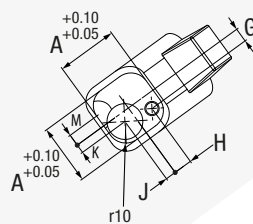
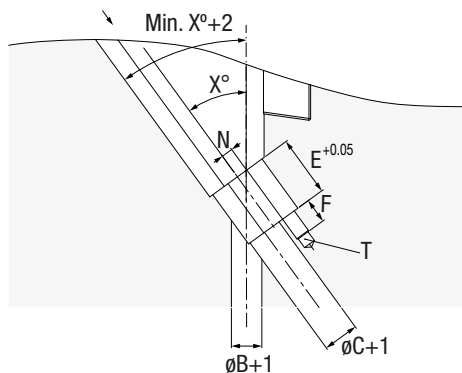
XR $\begin{matrix} A \\ 34 \end{matrix}$ $\begin{matrix} \text{Stroke} \\ 100L \end{matrix}$ - $\begin{matrix} X^\circ \\ 28 \end{matrix}$ -S $\begin{matrix} \beta \\ -10 \end{matrix}$ — Symmetrical — XR $\begin{matrix} A \\ 34 \end{matrix}$ $\begin{matrix} \text{Stroke} \\ 100L \end{matrix}$ - $\begin{matrix} X^\circ \\ 28 \end{matrix}$ -S $\begin{matrix} \beta \\ +10 \end{matrix}$

INSTALLATION GUIDELINES

ES Consejos de Instalación DE Richtlinien zur Installation
IT Consigli di Installazione PT Instruções de Instalação FR Mode d'Installation

Core Housing

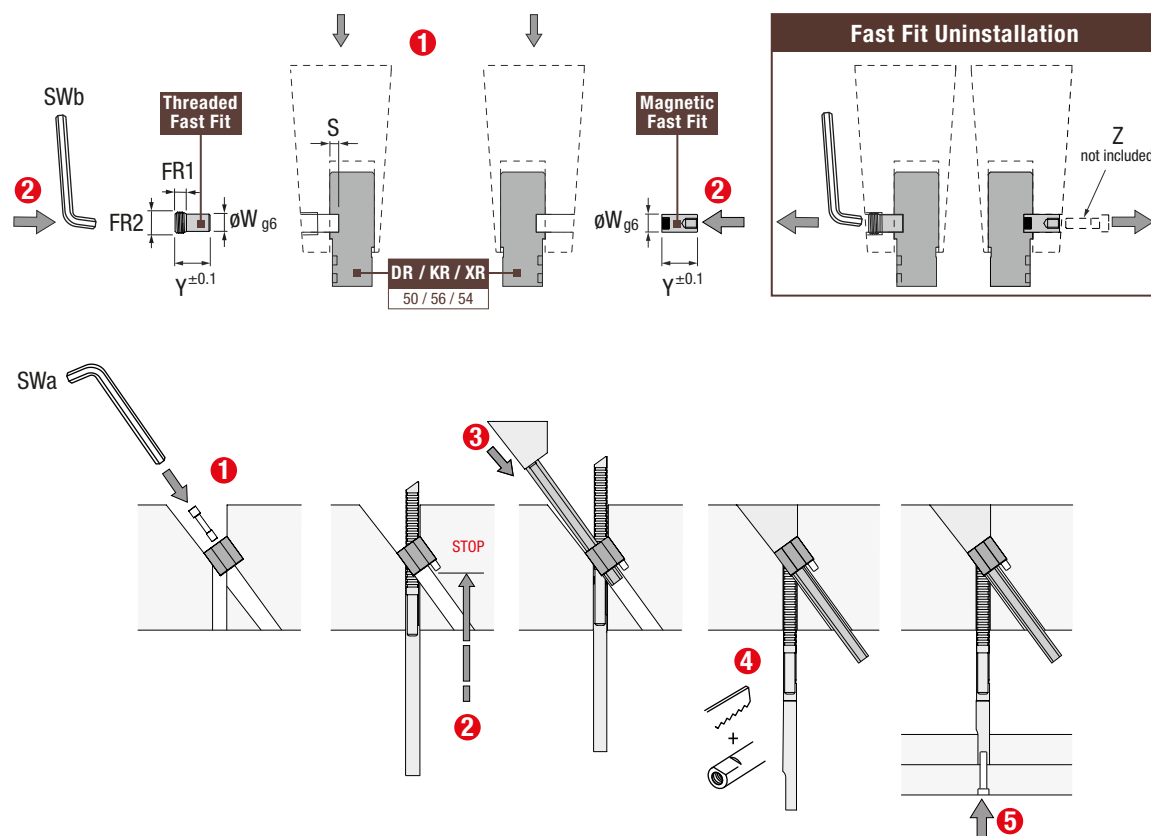
Alojamiento Placa Punzón
Einbaumaße DR Führung
Sede nel Punzone
Alojamento Bucha
Logement dans l'empreinte



Stroke 100	F	FR1	FR2	G	H	J	K	M	N	S	T	W	Y	Z	SWb
XR34100L..	16	5.3	M10x1	8	10.5	6	5	7	6	4	M8	8	16	M4	5
XR40100L..	20	8.5	M12x1	11	11	7	7	8	7	4	M10	10	20	M6	6
XR46100L..	25	8.5	M12x1	13	13	9	9	8	8	5	M12	10	24	M6	8

Installation

Instalación · Montage · Montaggio · Instalação · Montage



XR

UNDERCUTS



Patented

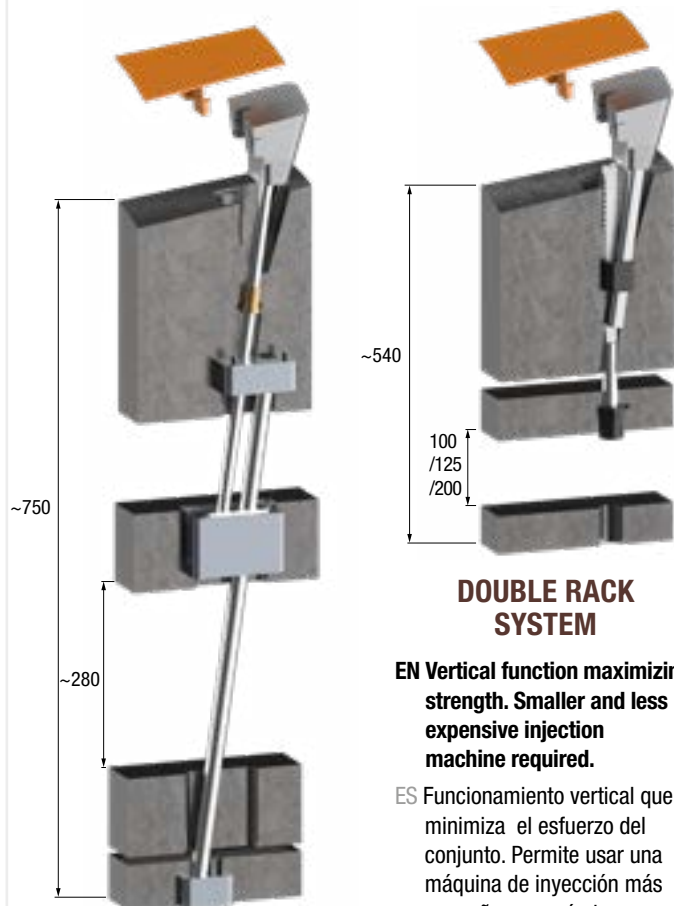


DOUBLE RACK SYSTEM

by CUMSA

COMPARE

Comparativa · Vergleich · Confronto · Comparativo · Comparatif



DOUBLE RACK SYSTEM

EN Vertical function maximizing strength. Smaller and less expensive injection machine required.

ES Funcionamiento vertical que minimiza el esfuerzo del conjunto. Permite usar una máquina de inyección más pequeña y económica.

DE Vertikale Funktion mit maximaler Kraft. Ein kleineres Werkzeug kann eventuell eine kleinere und günstiger Spritzgießmaschine benötigen.

IT Funzionamento verticale che minimizza lo sforzo. Permette di usare una macchina d'iniezione più piccola ed economica.

PT Funcionamento na vertical minimizando o esforço. Permite o uso de máquinas de injeção de menores dimensões e mais económicas.

FR Fonctionnement vertical réduisant les efforts. Permet de réduire la dimension de la presse d'injection et ainsi de réaliser des économies.

CONVENTIONAL SYSTEM

EN Eliminates the need for high-precision angled housings in the core plates.

ES Elimina los complicados taladros inclinados de alta precisión.

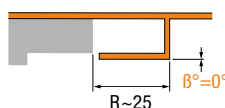
DE Es wird keine hochpräzise Schrägbohrung in der Formplatte benötigt.

IT Elimina le complicate lavorazioni inclinate ad alta precisione.

PT Elimina a necessidade de furos inclinados com precisão.

FR Termine les logements inclinés de haute précision.

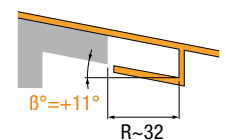
Neutral angles ($\beta^\circ = 0^\circ$)



$S \geq R$

DR.xx100L-16
KR.xx200L-16
DR.xx125L-12
KR.xx125L-12
XR.xx100L-24

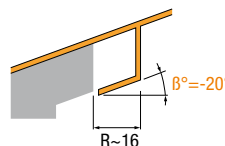
Positive Angles ($\beta^\circ > 0^\circ$)



$S \geq R$

DR.xx100L-20
DR.xx125L-16
KR.xx125L-16
XR.xx100L-24

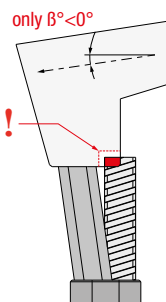
Negative Angles ($\beta^\circ < 0^\circ$)



$S \geq R$

DR.xx100L-12
KR.xx200 L-12
DR.xx125L-8
KR.xx125L-8
XR.xx100L-24

IMPORTANT !



**Stroke 100 (DR)
Stroke 200 (KR)
(Multiply S value x2)**

β°	DR.xx100L-8	DR.xx100L-12		
	KR.xx200L-8	KR.xx200L-12		
	S (- β°)	S (+ β°)	S (- β°)	S (+ β°)
0	14.0	21.2		
1	14.0	14.0	21.1	21.3
2	13.9	14.1	21.1	21.4
3	13.9	14.1	21.0	21.5
4	13.9	14.1	20.9	21.5
5	13.8	14.2	20.8	21.6
6	13.8	14.2	20.7	21.7
7	13.8	14.3	20.7	21.8
8	13.7	14.3	20.6	21.9
9	13.7	14.3	20.5	22.0
10	13.7	14.4	20.4	22.0
11	13.6	14.4	20.4	22.1
12	13.6	14.4	20.3	22.2
13	13.6	14.5	20.2	22.3
14	13.5	14.5	20.1	22.4
15	13.5	14.6	20.1	22.5
16	13.5	14.6	20.0	22.6
17	13.4	14.6	19.9	22.7
18	13.4	14.7	19.8	22.8
19	13.4	14.7	19.8	22.9
20	13.3	14.8	19.7	23.0
21	13.3	14.8	19.6	23.1
22	13.2	14.9	19.5	23.2
23	13.2	14.9	19.4	23.3
24	13.2	14.9	19.4	23.4
25	13.1	15.0	19.3	23.5
26	13.1	15.0	19.2	23.7
27	13.1	15.1	19.1	23.8
28	13.0	15.1	19.0	23.9
29	13.0	15.2	19.0	24.0
30	12.9	15.2	18.9	24.2
31	12.9	15.3	18.8	
32	12.9	15.4	18.7	
33	12.8	15.4	18.6	
34	12.8	15.5	18.5	
35	12.7	15.5	18.5	
36	12.7		18.4	
37	12.7		18.3	
38	12.6		18.2	
39	12.6		18.1	
40	12.5		18.0	
45	12.3		17.5	
50	12.0		16.9	
55	11.7		16.3	
60	11.3		15.5	

SELECTION TABLE: WHICH DR / KR DO I NEED?

ES TABLA DE SELECCIÓN: Qué DR / KR / XR necesito?

DE AUSWAHLTABELLE: Welcher DR / KR / XR ist am besten geeignet?

IT TABELLA PER SCELTA: Di quale DR / KR / XR ho bisogno?

PT TABELA DE SELECÇÃO: Qual é o DR / KR / XR que preciso?

FR TABLEAU DE CORRESPONDANCE: Quel est le DR / KR que j'ai besoin?



Stroke 100 (DR) Stroke 200 (KR) (Multiply S value x2)

	DR.xx100L-16		DR.xx100L-20	
	KR.xx200L-16			
	S (-B°)	S (+B°)	S (-B°)	S (+B°)
	28.6		36.4	
28.5	28.8		36.1	36.6
28.3	28.9		35.9	36.8
28.2	29.1		35.7	37.1
28.1	29.2		35.4	37.3
27.9	29.4		35.2	37.5
27.8	29.5		35.0	37.8
27.7	29.7		34.8	38.1
27.5	29.8		34.6	38.3
27.4	30.0		34.4	38.6
27.2	30.2		34.2	38.8
27.1	30.3	33.9	39.1	
27.0	30.5		33.7	39.4
26.8	30.7		33.5	39.7
26.7	30.8		33.3	40.0
26.6	31.0		33.1	40.3
26.5	31.2		32.9	40.6
26.3	31.4		32.7	40.9
26.2	31.6		32.5	41.2
26.1	31.8		32.3	41.6
25.9	32.0	32.1	41.9	
25.8	32.2		31.9	
25.6	32.4		31.7	
25.5	32.6		31.5	
25.4	32.8		31.3	
25.2	33.1		31.1	
25.1			30.9	
25.0			30.7	
24.8			30.4	
24.7			30.2	
24.6			30.0	
24.4			29.8	
24.3			29.6	
24.1			29.4	
24.0			29.2	
23.8			29.0	
23.7			28.7	
23.5			28.5	
23.4			28.3	
23.2			28.1	
23.1			27.8	
22.2			26.6	
21.3			25.1	
20.3			23.9	
19.1			22.3	

Stroke 125 (DR / KR)

β°	DR.xx125L-8		DR.xx125L-12		DR.xx125L-16		DR.xx125L-20	
	KR.xx125L-8		KR.xx125L-12		KR.xx125L-16		KR.xx125L-20	
	S (-B°)	S (+B°)	S (-B°)	S (+B°)	S (-B°)	S (+B°)	S (-B°)	S (+B°)
0	17.5		26.5		35.8		45.4	
1	17.5	17.6	26.4	26.6	35.6	36.0	45.2	45.7
2	17.4	17.6	26.3	26.7	35.4	36.2	44.9	46.0
3	17.4	17.6	26.2	26.8	35.3	36.3	44.6	46.3
4	17.3	17.7	26.1	26.9	35.1	36.5	44.3	46.6
5	17.3	17.7	26.0	27.0	34.9	36.7	44.0	46.9
6	17.3	17.8	25.9	27.1	34.7	36.9	43.8	47.3
7	17.2	17.8	25.8	27.2	34.6	37.1	43.5	47.6
8	17.2	17.9	25.7	27.3	34.4	37.3	43.2	47.9
9	17.1	17.9	25.7	27.4	34.2	37.5	43.0	48.2
10	17.1	18.0	25.6	27.6	34.1	37.7	42.7	48.6
11	17.1	18.0	25.5	27.7	33.9	37.9	42.4	48.9
12	17.0	18.1	25.4	27.8	33.7	38.1	42.2	49.3
13	17.0	18.1	25.3	27.9	33.6	38.3	41.9	49.6
14	16.9	18.2	25.2	28.0	33.4	38.6	41.7	50.0
15	16.9	18.2	25.1	28.1	33.2	38.8	41.4	50.4
16	16.8	18.3	25.0	28.2	33.1	39.0	41.1	50.7
17	16.8	18.3	24.9	28.4	32.9	39.2	40.9	51.1
18	16.8	18.4	24.8	28.5	32.7	39.5	40.6	51.5
19	16.7	18.4	24.7	28.6	32.6	39.7	40.4	52.0
20	16.7	18.5	24.6	28.7	32.4	40.0	40.1	52.4
21	16.6	18.5	24.5	28.9	32.2	40.2	39.9	
22	16.6	18.6	24.4	29.0	32.1	40.5	39.6	
23	16.5	18.6	24.3	29.2	31.9	40.8	39.4	
24	16.5	18.7	24.2	29.3	31.7	41.0	39.1	
25	16.4	18.7	24.1	29.4	31.6	41.3	38.8	
26	16.4	18.8	24.0	29.6	31.4		38.6	
27	16.3	18.9	23.9	29.7	31.2		38.3	
28	16.3	18.9	23.8	29.9	31.1		38.1	
29	16.2	19.0	23.7	30.1	30.9		37.8	
30	16.2	19.1	23.6	30.2	30.7		37.5	
31	16.1	19.1	23.5		30.5		37.3	
32	16.1	19.2	23.4		30.3		37.0	
33	16.0	19.3	23.3		30.2		36.7	
34	16.0	19.4	23.2		30.0		36.5	
35	15.9	19.4	23.1		29.8		36.2	
36	15.9		23.0		29.6		35.9	
37	15.8		22.9		29.4		35.7	
38	15.8		22.7		29.2		35.4	
39	15.7		22.6		29.0		35.1	
40	15.7		22.5		28.8		34.8	
45	15.4		21.9		27.8		33.3	
50	15.0		21.1		26.7		31.7	
55	14.6		20.3		25.4		29.9	
60	14.1		19.4		23.9		27.9	

Stroke 100 (XR)

β°	XRxx100L-24		XRxx100L-28		XRxx100L-32		XRxx100L-36	
	S (-B°)	S (+B°)	S (-B°)	S (+B°)	S (-B°)	S (+B°)	S (-B°)	S (+B°)
0	44.5		53.2		62.5		72.7	
1	44.2	44.9	52.7	53.7	61.8	63.2	71.7	73.6
2	43.8	45.2	52.2	54.2	61.2	63.9	70.9	74.5
3	43.5	45.6	51.7	54.7	60.5	64.6	70.0	75.5
4	43.2	46.0	51.3	55.2	59.9	65.3	69.1	76.5
5	42.9	46.3	50.8	55.8	59.2	66.1	68.3	77.6
6	42.5	46.7	50.4	56.3	58.6	66.9	67.5	78.7
7	42.2	47.1	49.9	56.9	58.0	67.7	66.7	79.8
8	41.9	47.5	49.5	57.5	57.4	68.5	65.9	
9	41.6	47.9	49.0	58.1	56.9	69.4	65.2	
10	41.3	48.3	48.6	58.7	56.3	70.2	64.4	
11	41.0	48.7	48.2	59.3	55.7	71.1	63.7	
12	40.7	49.2	47.8	59.9	55.2		62.9	
13	40.4	49.6	47.4	60.6	54.6		62.2	
14	40.1	50.1	46.9	61.3	54.1		61.5	
15	39.8	50.6	46.5	62.0	53.5		60.8	
16	39.5	51.0	46.1		53.0		60.1	
17	39.2	51.5	45.7		52.5		59.4	
18	38.9	52.1	45.3		51.9		58.8	
19	38.6	52.6	44.9		51.4		58.1	
20	38.3		44.5		50.9		57.5	
21	38.0		44.2		50.4		56.8	
22	37.7		43.8		49.9		56.2	
23	37.4		43.4		49.4		55.5	
24	37.2		43.0		48.9		54.9	
25	36.9		42.6		48.4		54.3	
26	36.6		42.2		47.9		53.6	
27	36.3		41.8		47.4		53.0	
28	36.0		41.5		46.9		52.4	
29	35.7		41.1		46.4		51.8	
30	35.4		40.7		45.9		51.2	
31	35.1		40.3		45.4		50.6	
32	34.8		39.9		44.9		50.0	
33	34.5		39.5		44.4		49.4	
34	34.2		39.1		44.0		48.8	
35	33.9		38.7		43.5		48.2	
36	33.6		38.4		43.0		47.6	
37	33.3		38.0		42.5		46.9	
38	33.0		37.6		42.0		46.3	
39	32.7		37.2		41.5		45.7	
40	32.4		36.8		41.0		45.1	
45	30.8		34.7		38.4		42.0	
50								
55								
60								

Special β° angles possible under request

ES Posibilidad de ángulos β° especiales DE Sonderwinkel auf Anfrage möglich (β°) IT E' possibile avere angolazioni β° speciali su richiesta PT Possibilidade de ângulos β° especiais FR Possibilité de réaliser des angles β° spéciaux.