DME®

DOUBLE RACK UNDERCUT SOLUTIONS

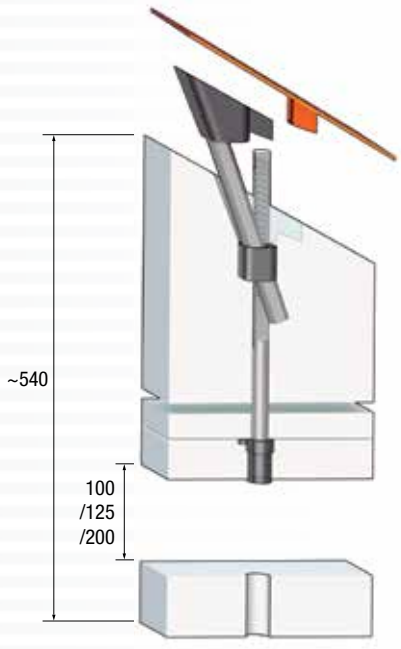
CUMSA
INNOVATIVE SOLUTIONS FOR YOUR MOLDS

DOUBLE RACK SYSTEM
DR-SERIES (SOLID ROD)

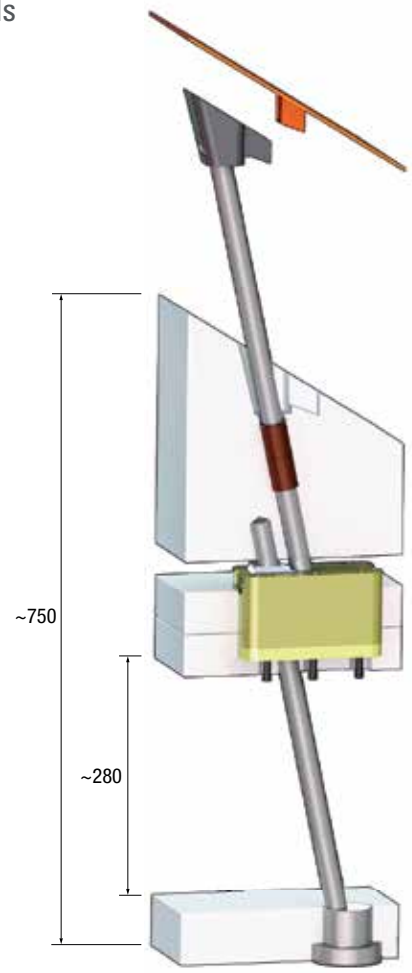
The DR-Series lifter systems simplifies designs when molding under-cuts. The use of this system eliminates the need for high-precision angled housings in the core plates.

BENEFITS

- De-molding strokes from 14mm to 60mm.
- Customized drafts
- Big savings in time & cost for machining and adjustments
- Significant reduction to the ejection stroke
- “Mirror” parts available for 1+1 cavities molds
- Vertical function maximizing strength

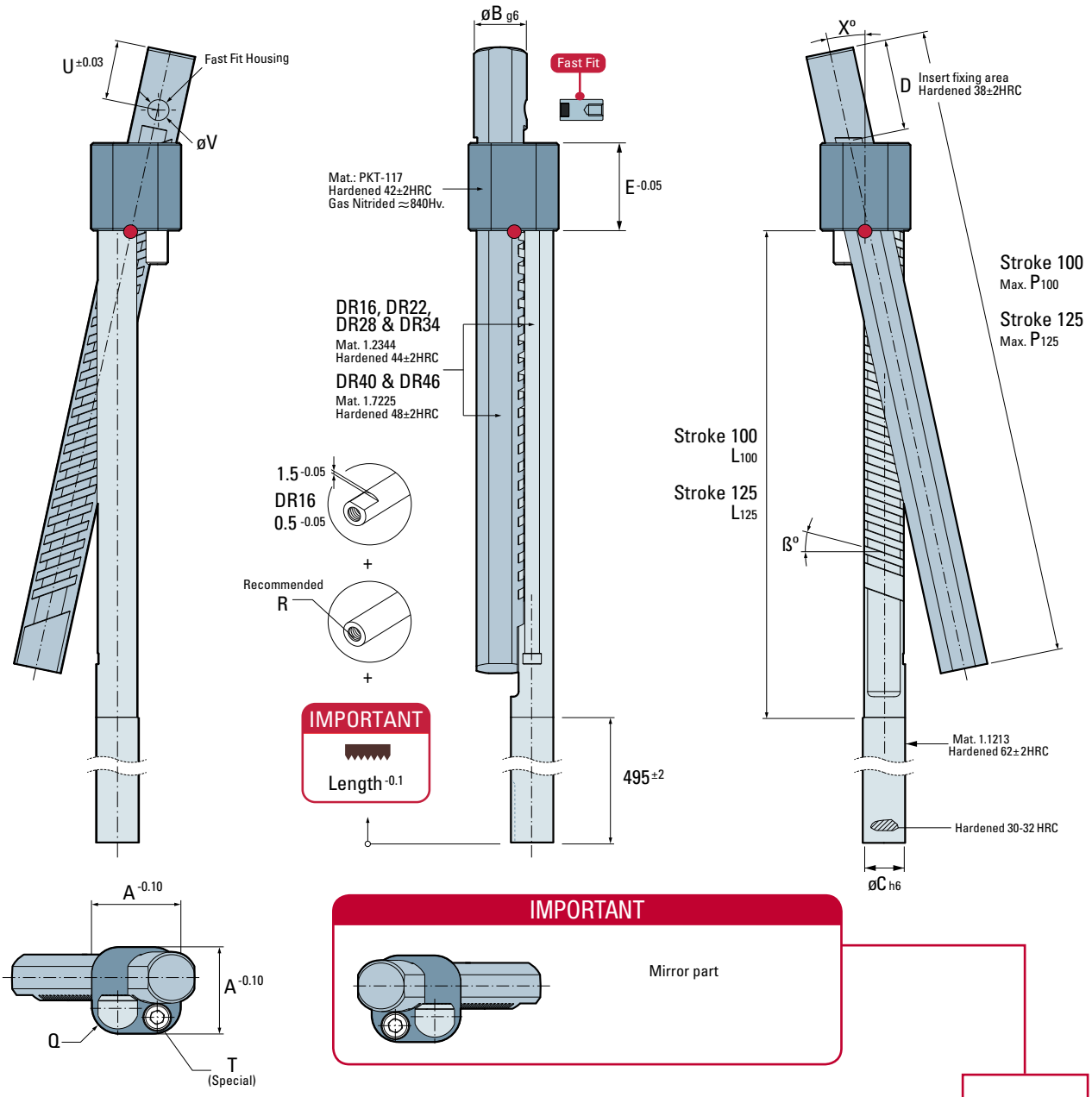


DOUBLE RACK SYSTEM



CONVENTIONAL SYSTEM

DOUBLE RACK SYSTEM
DR-SERIES



IMPORTANT

Mirror part

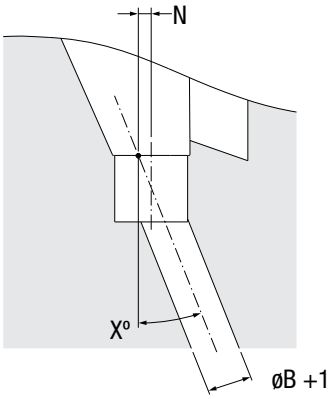
Stroke 100	Stroke 125	X°				A	B	C	D	E	L100	P100	L125	P125	Q	R	T	U	V	Stroke 100 - S	Stroke 125 - S
DR16100Lx	–	08	12	16	–	16	9	8	20	20	142	178	–	–	4	M5	M5	10	6	DR16100LxS	–
DR22100Lx	DR22125Lx	08	12	16	20	22	12	12	30	22	148	202	202	261	6.5	M6	M6	17	8	DR22100LxS	DR22125LxS
DR28100Lx	DR28125Lx	08	12	16	20	28	16	14	36	28	152.5	214	194.5	266	8.5	M8	M8	23	8	DR28100LxS	DR28125LxS
DR34100Lx	DR34125Lx	08	12	16	20	34	20	16	36	34	160.5	227	188.5	264	10.5	M8	M8	23	8	DR34100LxS	DR34125LxS
DR40100Lx	DR40125Lx	08	12	16	20	40	22	20	36	40	170	244	204	284	10.5	M10	M10	20	10	DR40100LxS	DR40125LxS
DR46100Lx	DR46125Lx	08	12	16	20	46	24	24	42	46	175	258	201	289	10.5	M10	M12	26	10	DR46100LxS	DR46125LxS

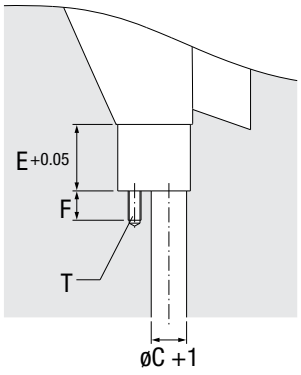
IMPORTANT

When ordering, replace the x in the reference with the required Xº dimension (8º, 12º, 16º or 20º) and indicate the required ßº.

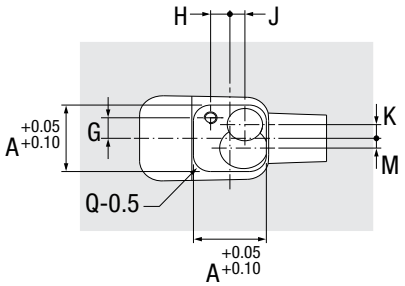
DOUBLE RACK SYSTEM
DR-SERIES

Core Housing

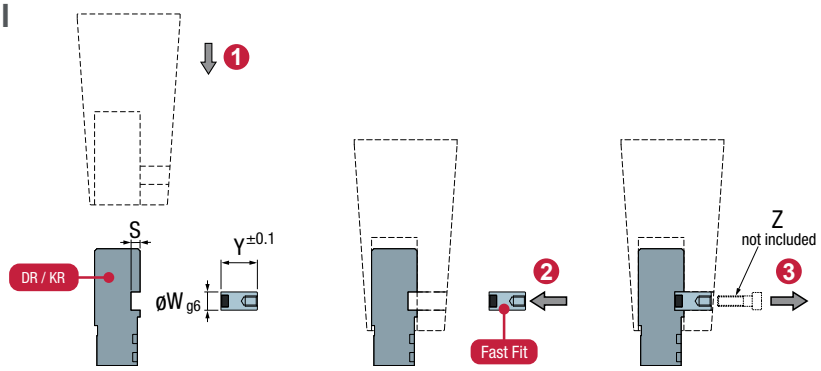




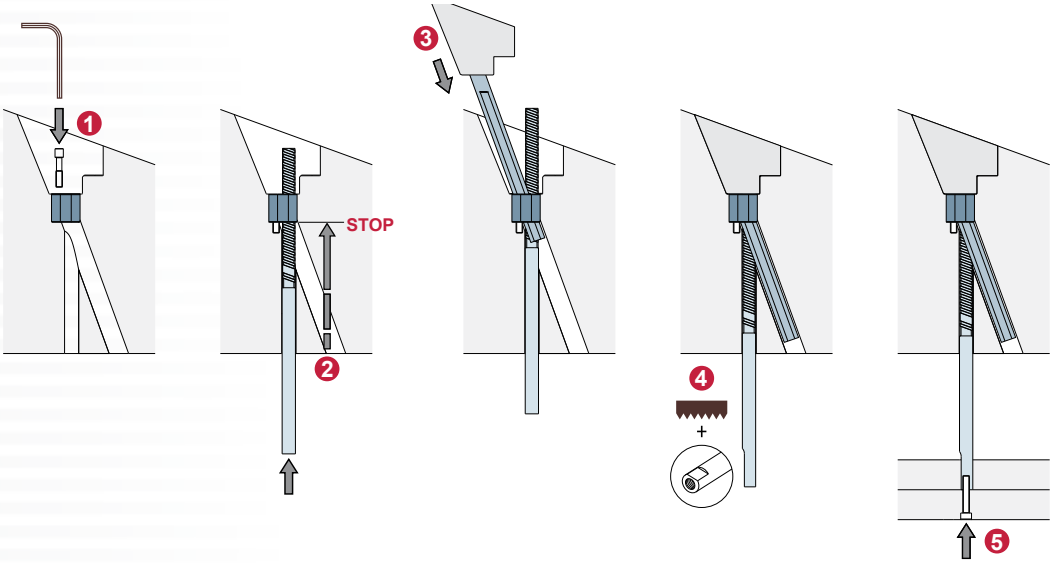
Stroke 100	Stroke 125	F	G	H	J	K	M	N	S	T	W	Y	Z
DR16100L	-	10	4.6	4.6	3	2.35	3	2.8	2.5	M5	6	9	M4
DR22100L	DR22125L	13	5.6	5.6	4.2	3.7	4.2	3.5	2.5	M6	8	12	M4
DR28100L	DR28125L	16	7.5	7.5	5	5.4	4.8	4.8	2.5	M8	8	13.5	M4
DR34100L	DR34125L	16	10.5	8	7	7	5	6	4	M8	8	16	M4
DR40100L	DR40125L	20	11	11	7	8	7	7	4	M10	10	20	M6
DR46100L	DR46125L	25	13	13	8	8	9	9	5	M12	10	24	M6



FAST FIT: Installation and removal



Installation

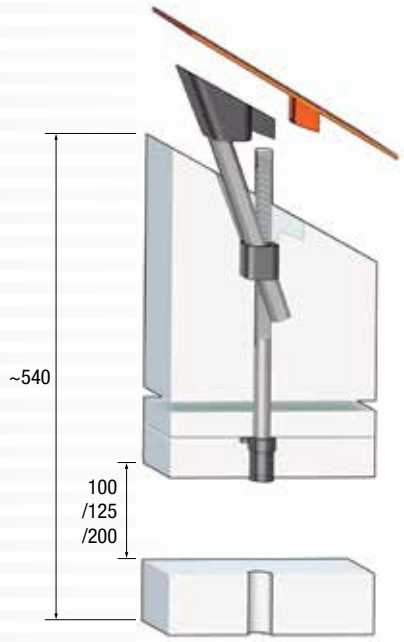


DOUBLE RACK SYSTEM
KR-SERIES (COOLED ROD)

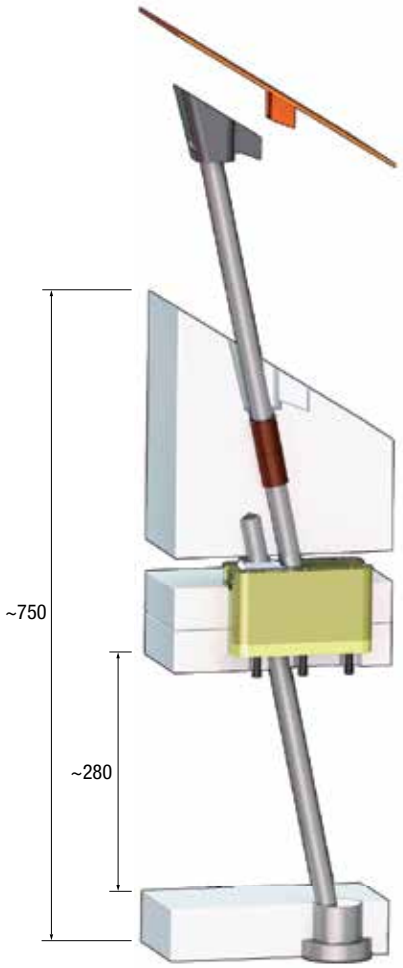
The KR Cooled Double Rack System incorporates all the features of the DR lifter with the addition of a drilled interior, making it possible to deliver coolant to the lifter head.

BENEFITS

- Considerably reduces the size of the lifter head
- Faster Cycle times
- Two Cooling Connection Options
- Higher Quality Parts with less scrap

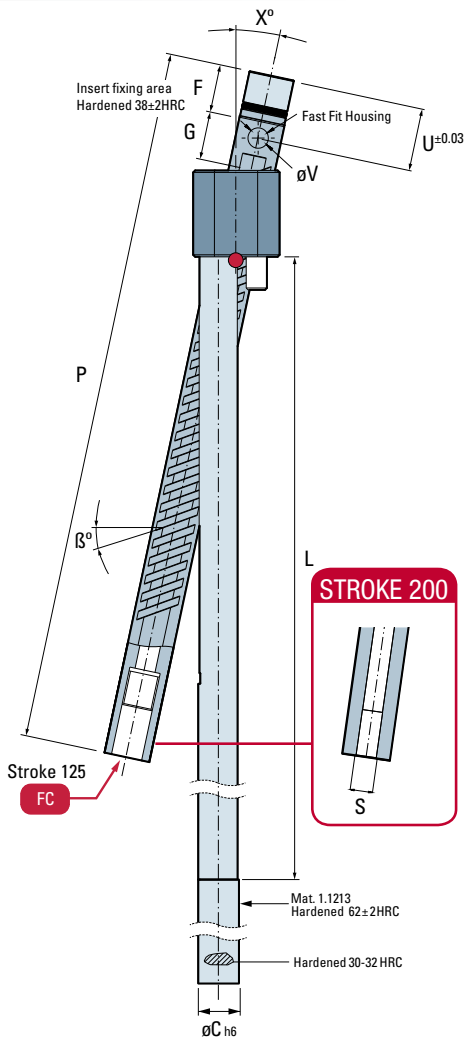


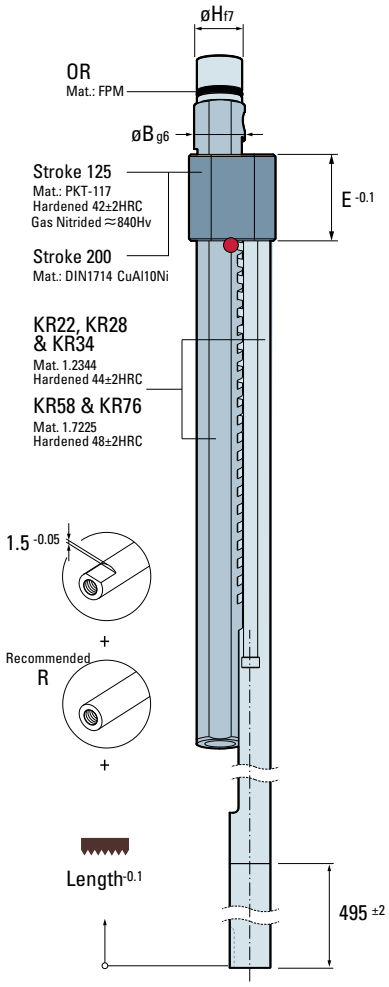
DOUBLE RACK SYSTEM

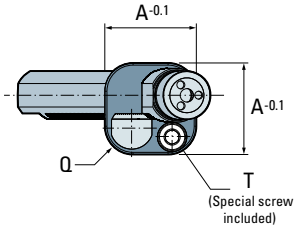


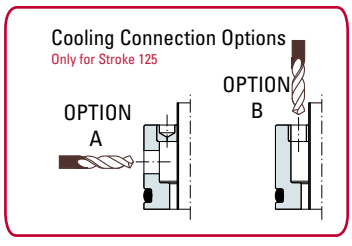
CONVENTIONAL SYSTEM

DOUBLE RACK SYSTEM
KR-SERIES









IMPORTANT
Mirror part

	Item No.	X°				A	B	C	E	F	G	H	L	P	Q	R	S	T	U	V	OR	Mirror Item No. (S)
Stroke 125	KR22125Lx	08	12	16	20	22	12	12	22	16	20	10.8	282	260	6.5	M6	-	M6	23	8	8x1.25	KR22125LxS
	KR28125Lx	08	12	16	20	28	16	14	28	16	20	13.8	294.5	272	8.5	M8	-	M8	23	8	11x1.3	KR28125LxS
	KR34125Lx	08	12	16	20	34	20	16	34	18	20	17.8	311.5	275	10.5	M8	-	M8	25	8	14x1.78	KR34125LxS
Stroke 200	KR58200Lx	08	12	16	-	58	30	30	66	25	55	26	362	430	13.5	M20	1/4" Gas	M14	60	12	21x2.5	KR58200LxS
	KR76200Lx	08	12	16	-	76	40	40	80	30	60	34	392	470	17	M24	3/8" Gas	M18	70	12	28x3	KR76200LxS

IMPORTANT
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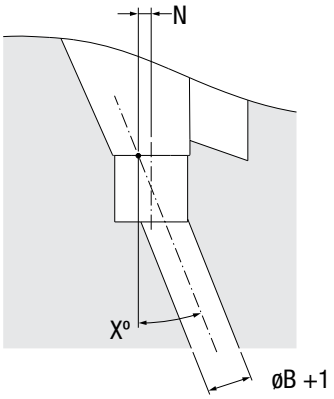
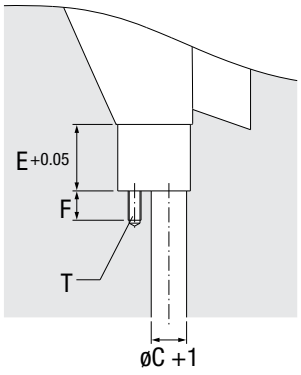
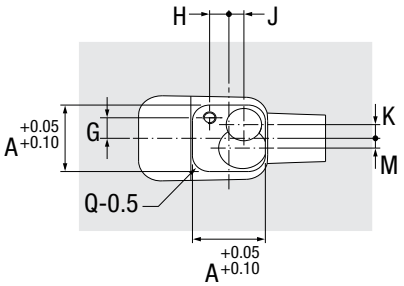
DOUBLE RACK SYSTEM
KR-SERIES

Core Housing

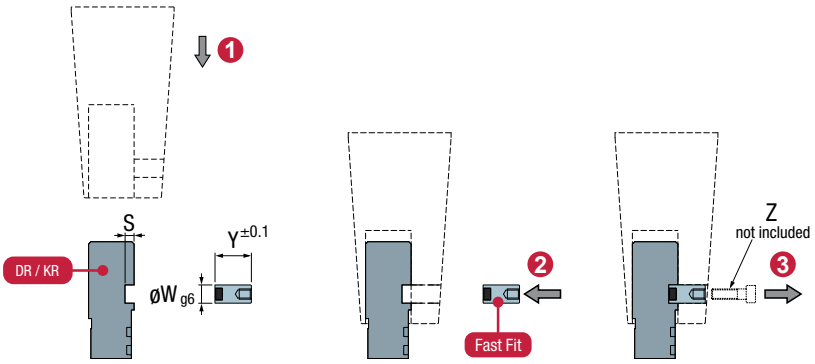




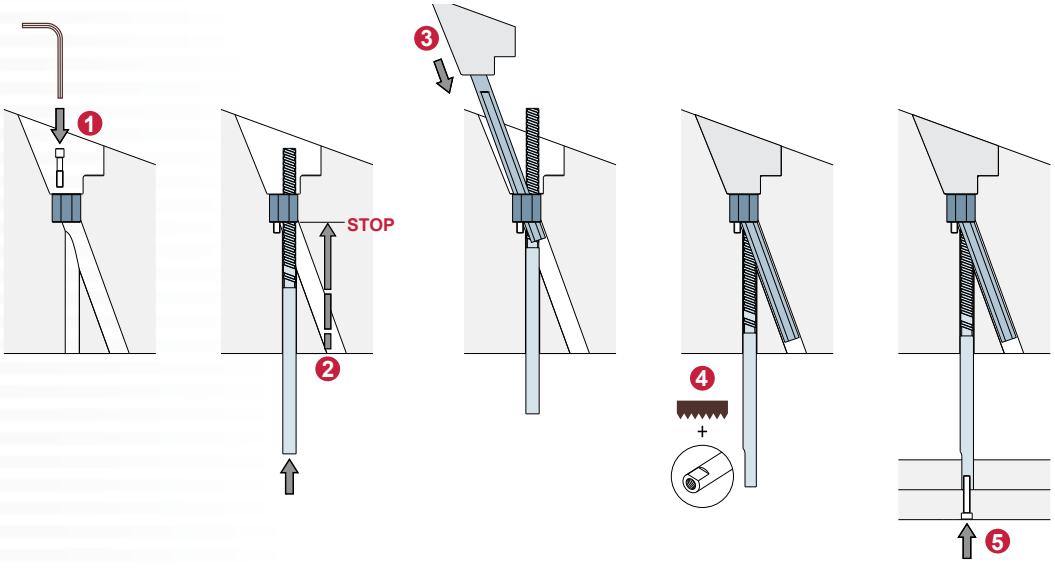
Stroke 125	Stroke 200	F	G	H	J	K	M	N	S	T	W	Y	Z
-	-	10	4.6	4.6	3	2.35	3	2.8	2.5	M5	6	9	M4
KR22125L	-	13	5.6	5.6	4.2	3.7	4.2	3.5	2.5	M6	8	12	M4
KR28125L	-	16	7.5	7.5	5	5.4	4.8	4.8	2.5	M8	8	13.5	M4
KR34125L	-	16	10.5	8	7	7	5	6	4	M8	8	16	M4
-	-	20	11	11	7	8	7	7	4	M10	10	20	M6
-	-	25	13	13	8	8	9	9	5	M12	10	24	M6
-	KR58200L	28	15.5	15.5	10	12.2	11.2	10	5	M14	12	30	M6
-	KR76200L	36	21	21	13	15.2	15.2	12	6	M18	12	36	M6



FAST FIT: Installation and removal



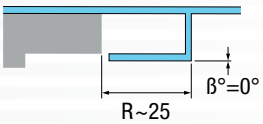
Installation



DOUBLE RACK SYSTEM

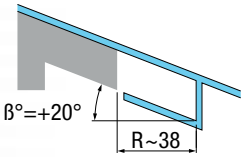
DR- & KR-SERIES

Neutral angles (ß=0°)



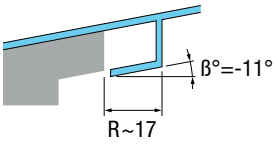
DRxx100L16 or DRxx125L12
or KRxx125L12

Positive angles (ß>0°)

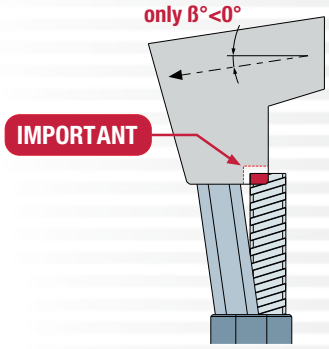


DRxx100L20 or DRxx125L16
or KRxx125L16

Negative angles (ß<0°)



DRxx100L12 or DRxx125L8
or KRxx125L8



Stroke 100
Stroke 200 (Multiply S value x2)

ß°	DRxx100L8 / KRxx200L8		DRxx100L12 / KRxx200L12		DRxx100L16 / KRxx200L16		DRxx100L20	
	S (-ß°)	S (+ß°)	S (-ß°)	S (+ß°)	S (-ß°)	S (+ß°)	S (-ß°)	S (+ß°)
0	14.0		21.2		28.6		36.4	
1	14.0	14.0	21.1	21.3	28.5	28.8	36.1	36.6
2	13.9	14.1	21.1	21.4	28.3	28.9	35.9	36.8
3	13.9	14.1	21.0	21.5	28.2	29.1	35.7	37.1
4	13.9	14.1	20.9	21.5	28.1	29.2	35.4	37.3
5	13.8	14.2	20.8	21.6	27.9	29.4	35.2	37.5
6	13.8	14.2	20.7	21.7	27.8	29.5	35.0	37.8
7	13.8	14.3	20.7	21.8	27.7	29.7	34.8	38.1
8	13.7	14.3	20.6	21.9	27.5	29.8	34.6	38.3
9	13.7	14.3	20.5	22.0	27.4	30.0	34.4	38.6
10	13.7	14.4	20.4	22.0	27.2	30.2	34.2	38.8
11	13.6	14.4	20.4	22.1	27.1	30.3	33.9	39.1
12	13.6	14.4	20.3	22.2	27.0	30.5	33.7	39.4
13	13.6	14.5	20.2	22.3	26.8	30.7	33.5	39.7
14	13.5	14.5	20.1	22.4	26.7	30.8	33.3	40.0
15	13.5	14.6	20.1	22.5	26.6	31.0	33.1	40.3
16	13.5	14.6	20.0	22.6	26.5	31.2	32.9	40.6
17	13.4	14.6	19.9	22.7	26.3	31.4	32.7	40.9
18	13.4	14.7	19.8	22.8	26.2	31.6	32.5	41.2
19	13.4	14.7	19.8	22.9	26.1	31.8	32.3	41.6
20	13.3	14.8	19.7	23.0	25.9	32.0	32.1	41.9
21	13.3	14.8	19.6	23.1	25.8	32.2	31.9	
22	13.2	14.9	19.5	23.2	25.6	32.4	31.7	
23	13.2	14.9	19.4	23.3	25.5	32.6	31.5	
24	13.2	14.9	19.4	23.4	25.4	32.8	31.3	
25	13.1	15.0	19.3	23.5	25.2	33.1	31.1	
26	13.1	15.0	19.2	23.7	25.1		30.9	
27	13.1	15.1	19.1	23.8	25.0		30.7	
28	13.0	15.1	19.0	23.9	24.8		30.4	
29	13.0	15.2	19.0	24.0	24.7		30.2	
30	12.9	15.2	18.9	24.2	24.6		30.0	
31	12.9	15.3	18.8		24.4		29.8	
32	12.9	15.4	18.7		24.3		29.6	
33	12.8	15.4	18.6		24.1		29.4	
34	12.8	15.5	18.5		24.0		29.2	
35	12.7	15.5	18.5		23.8		29.0	
36	12.7		18.4		23.7		28.7	
37	12.7		18.3		23.5		28.5	
38	12.6		18.2		23.4		28.3	
39	12.6		18.1		23.2		28.1	
40	12.5		18.0		23.1		27.8	
41	12.5		17.9		22.9		27.6	
42	12.4		17.8		22.7		27.4	
43	12.4		17.7		22.6		27.1	
44	12.3		17.6		22.4		26.9	
45	12.3		17.5		22.2		26.6	

S ≥ R

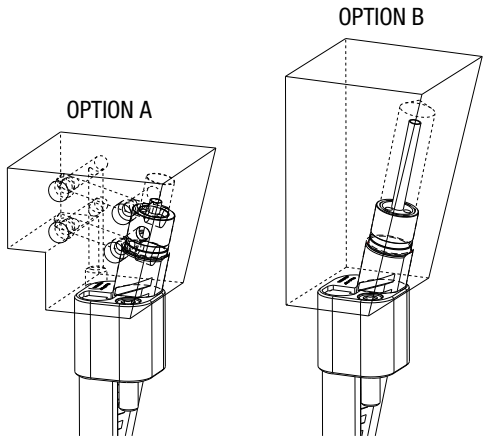
Stroke 125

ß°	DRxx125L8 / KRxx125L8		DRxx125L12 / KRxx125L12		DRxx125L16 / KRxx125L16		DRxx125L20 / KRxx125L20	
	S (-ß°)	S (+ß°)	S (-ß°)	S (+ß°)	S (-ß°)	S (+ß°)	S (-ß°)	S (+ß°)
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	
41	15.6		22.4		28.6		34.5	
42	15.5		22.3		28.4		34.2	
43	15.5		22.1		28.2		33.9	
44	15.4		22.0		28.0		33.6	
45	15.4		21.9		27.8		33.3	

APPLICATION EXAMPLE

IMPORTANT

Cooling Connection Options



1 **KR** Cooled Lifter Rack

2 **FC** KR Water Fountain

3 **MK** Connection Hose

4 **RD** Cooling Distributor

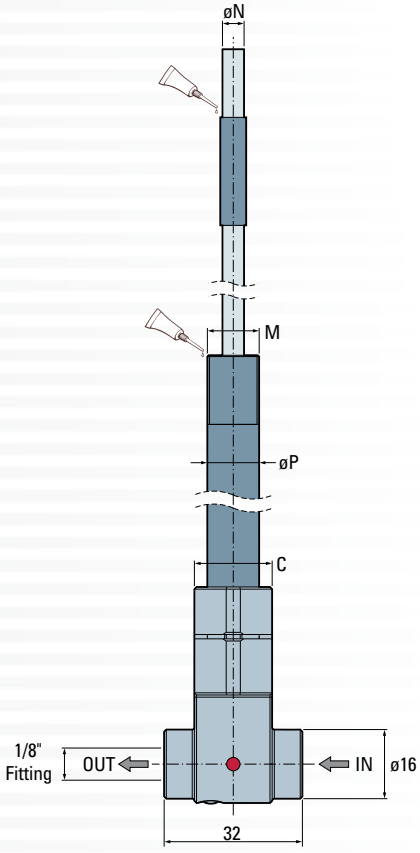
5 **CK** 90° Plate Connector

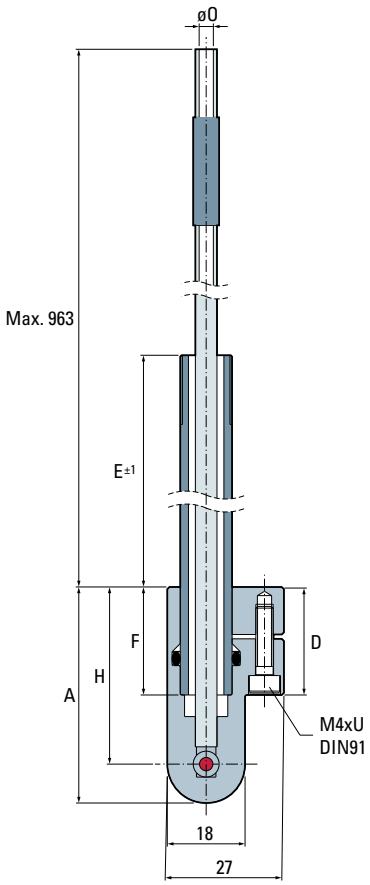
DOUBLE RACK SYSTEM
KR-SERIES ACCESSORIES

FC WATER FOUNTAIN

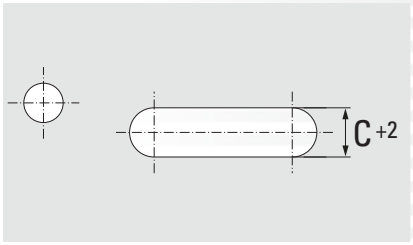
Compact solution for a water fountain.
Water goes up from the centre tube of the fountain and is collected by the external tube. Both the water inlet and outlet are on the same level, saving space in the mold.
Unique fixing system allowing the external tube to be hermetically sealed, preventing water leakages.

Item Number	A	C	D	E	F	H	M	N	O	P	U	Compatible with
FC220300	40	15	18	283.5	16.5	31	M8x1	3.5	3	8	10	KR22125L
FC220500	40	15	18	483.5	16.5	31	M8x1	3.5	3	8	10	KR22125L
FC280300	50	18	25	275	25	41	M10x1	4.5	4	10	16	KR28125L
FC280500	50	18	25	475	25	41	M10x1	4.5	4	10	16	KR28125L
FC340300	50	18	25	275	25	41	M12x1	5	4.5	12	16	KR34125L
FC340500	50	18	25	475	25	41	M12x1	5	4.5	12	16	KR34125L

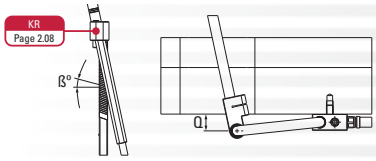




Pocket Detail



IMPORTANT

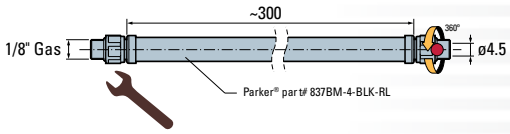


RIten No.	Q					
	ß≤0°	0°<ß≤10°	10°<ß≤20°	20°<ß≤25°	25°<ß≤30°	30°<ß≤35°
KRxx125L8	10	15	18	20	23	25
KRxx125L12	10	16	22	25	29	-
KRxx125L16	10	18	26	31	-	-
KRxx125L20	10	20	31	-	-	-

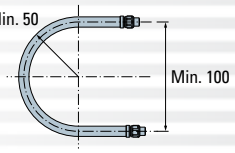
DOUBLE RACK SYSTEM
KR-SERIES ACCESSORIES

MK - Connection Hose with Fittings
Strong and robust hoses to avoid leakages. Incorporates rotary connections to avoid twisted hoses which can restirct water passages.

Item Number
MK120300



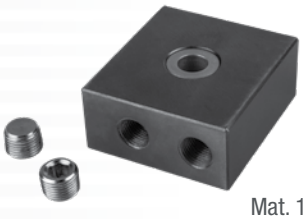
IMPORTANT

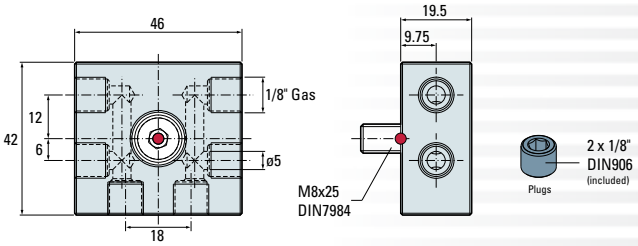


Mat. 1.0308 Zn.
Maximum working temperature 80ºC

RD - Cooling Distributor
Connects the inlets and outlets of the water coming to and from the lifter.

Item Number
RD182012

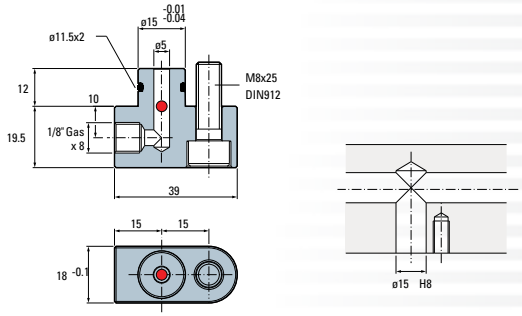




Mat. 1.1730
Maximum working temperature 80ºC.

CK - Elbow
Connects the water coming from the external circuit.

Item Number
CK181839



Mat. 1.1730
Maximum working temperature 80ºC.

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