



E0-Flare Fitting **24° to 37°**

A Methodical Approach To Forming

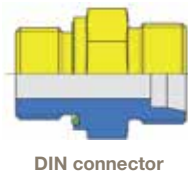


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Flare fittings – a tube connection system for hydraulic applications

This fitting system from Parker sets the new standard:

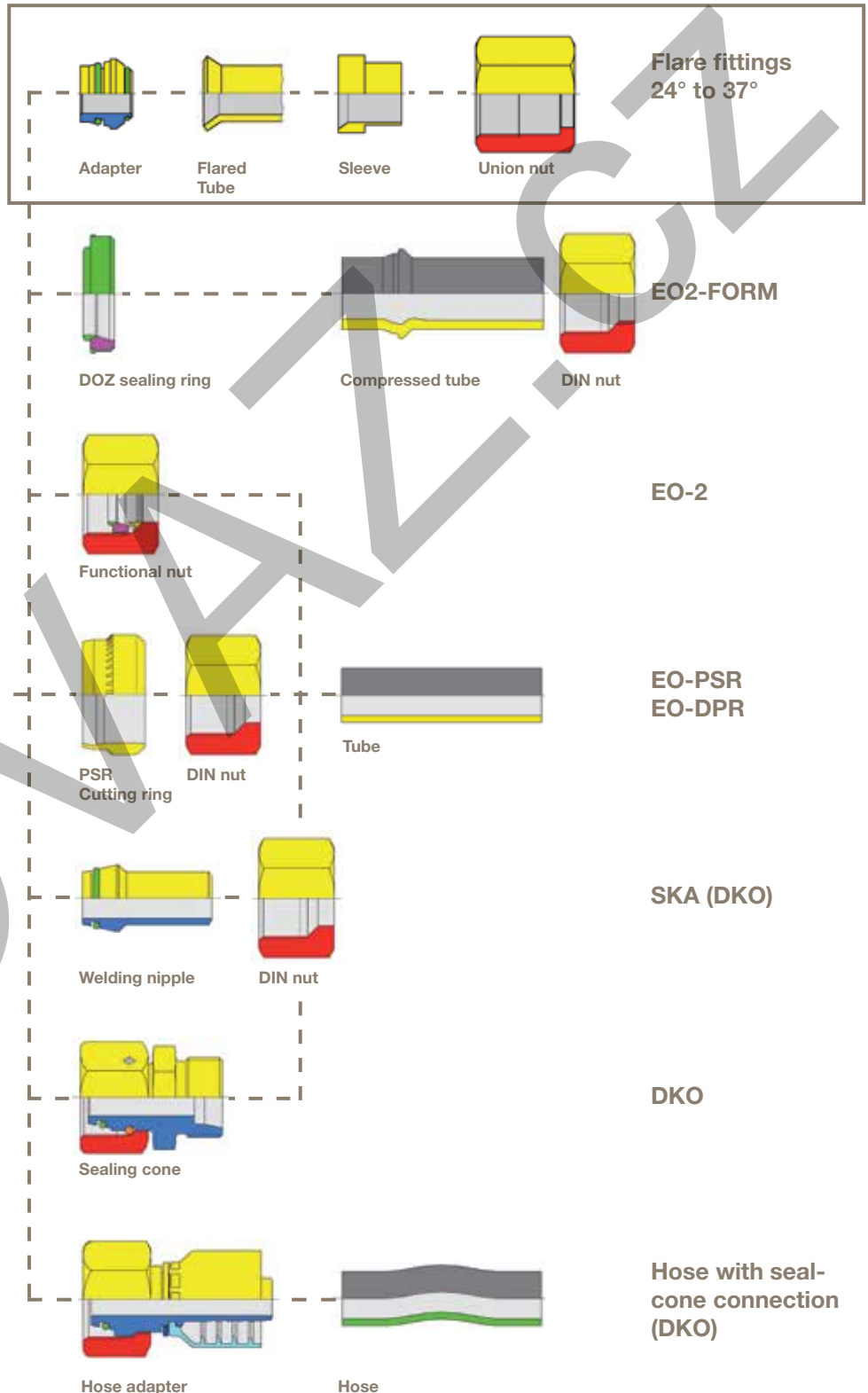
Parker's flare fitting system closes a gap in the construction of hydraulic applications. Parker now offers the best solution for customers who have been using laborious welded connections or for those applications where welded connections are not permitted. Now you can quickly join 37 degree flared tubes with standard 24 degree couplings for a connection that cannot be pulled apart. This system-based solution targets unique application requirements and delivers excellent reliability during assembly and operation.



It ensures flawless functionality for applications with strict requirements (with pressure surges, for example) and relatively high load limits of up to 630 bar nominal pressure (S series steel and stainless steel).

The sleeve centers the tube. Also, as the union nut is being tightened, the sleeve prevents any distortion or twisting of the connecting system.

The primary component is the adapter in accordance to DIN 3949 which joins the 24° cone (ISO 8434-1) of the fitting to the 37° flare connection similar to ISO 8434-2.



A closer look at the advantages for you

- Available in steel and stainless steel
- In the stainless steel version, the union nut threads are silver plated from 12S/15L
- Compatible with all conventional and standardised systems and assembly machines
- Ozone-resistant O-rings for steel and stainless steel
- Easy to assemble
- Reduces the torque
- Excellent resistance to corrosion
- Cr(VI)-free surface
- Up to 630 bar nominal pressure
- Cannot be pulled out
- Form-lock connection system provides excellent reliability during assembly and operation



These flare fittings can be used:

- For the manufacture of presses
- For mobile hydraulics (in all-terrain vehicles)
- For military applications (army, navy)
- For ship building

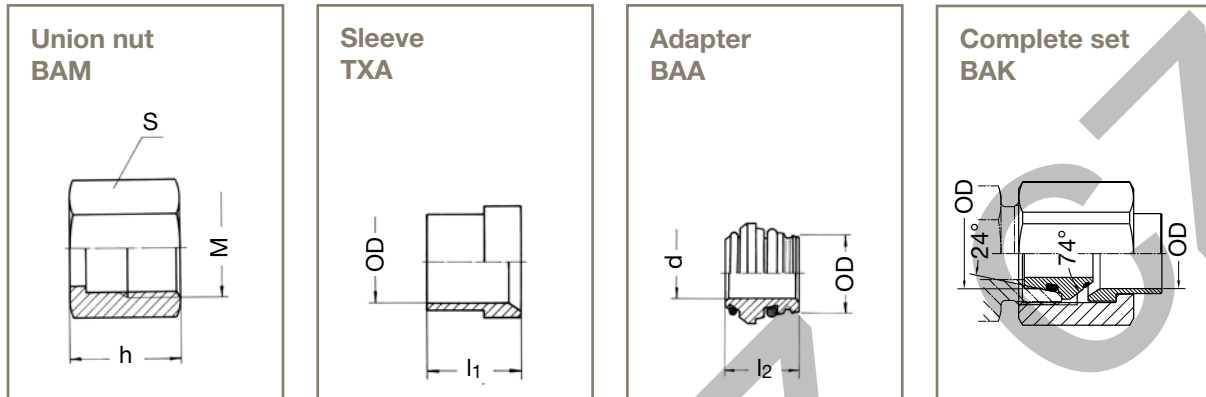


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Ordering information

Flare fittings

Individual parts and complete set



Series	OD	M	h	l ₁	l ₂	d	S	kg for 100 pcs.	Union nut	Sleeve	Adapter	Complete set	PN (bar) ¹⁾ Steel	PN (bar) ¹⁾ Stainless steel 71
L	06	M12x1.5	17.0	10.5	11.5	3.0	14	1.6	BAM06L	TXA06LS	BAA06LSOR	BAK06L	PN 500	PN 315
	08	M14x1.5	18.0	11.0	12.0	5.0	17	2.4	BAM08L	TXA08LS	BAA08LSOR	BAK08L		
	10	M16x1.5	19.5	12.5	12.5	6.0	19	3.1	BAM10L	TXA10LS	BAA10LSOR	BAK10L		
	12	M18x1.5	20.5	13.0	12.5	8.0	22	4.4	BAM12L	TXA12LS	BAA12LSOR	BAK12L		
	15	M22x1.5	23.0	14.0	12.5	11.0	27	7.6	BAM15L/14S	TXA15L	BAA15LOR	BAK15L	PN 400	
	18	M26x1.5	23.0	14.5	13.0	14.0	32	10.2	BAM18L	TXA18L	BAA18LOR	BAK18L	PN 250	
	22	M30x2.0	27.5	18.0	14.2	17.0	36	14.0	BAM22L/20S	TXA22L	BAA22LOR	BAK22L		
	28	M36x2.0	27.5	17.0	14.7	23.0	41	15.8	BAM28L	TXA28L	BAA28LOR	BAK28L		
	35	M45x2.0	30.0	19.0	18.5	28.0	50	25.5	BAM35L	TXA35L	BAA35LOR	BAK35L		
	42	M52x2.0	34.0	21.0	20.5	35.0	60	42.2	BAM42L	TXA42L	BAA42LOR	BAK42L		
S	06	M14x1.5	18.0	10.5	11.5	3.0	17	2.4	BAM06S	TXA06LS	BAA06LSOR	BAK06S	PN 630	PN 400
	08	M16x1.5	19.0	11.0	12.0	5.0	19	3.1	BAM08S	TXA08LS	BAA08LSOR	BAK08S		
	10	M18x1.5	20.5	12.5	12.5	6.0	22	4.4	BAM10S	TXA10LS	BAA10LSOR	BAK10S		
	12	M20x1.5	21.0	13.0	12.5	8.0	24	5.4	BAM12S	TXA12LS	BAA12LSOR	BAK12S		
	16	M24x1.5	26.5	17.0	15.0	11.0	30	10.4	BAM16S	TXA16S	BAA16SOR	BAK16S	PN 400	
	20	M30x2.0	27.5	17.5	18.5	14.0	36	15.3	BAM22L/20S	TXA20S	BAA20SOR	BAK20S		
	25	M36x2.0	30.5	20.0	20.0	19.0	46	25.8	BAM25S	TXA25S	BAA25SOR	BAK25S		
	30	M42x2.0	32.0	21.5	22.0	23.0	50	31.9	BAM30S	TXA30S	BAA30SOR	BAK30S		
38	M52x2.0	40.0	26.5	26.0	30.0	60	48.8	BAM38S	TXA38S	BAA38SOR	BAK38S			

Standard O-ring for steel and stainless steel material, made from elastomer NBR. FKM on request. Replacement O-rings for adapters on request.

¹⁾ The allowable nominal pressures depend on the thickness of the tube wall.

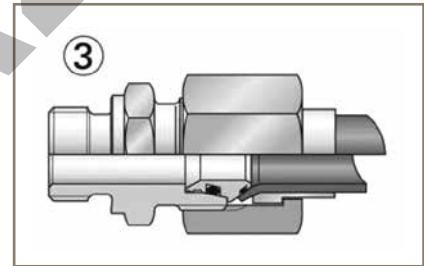
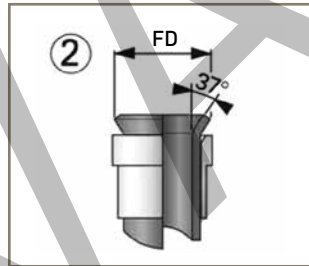
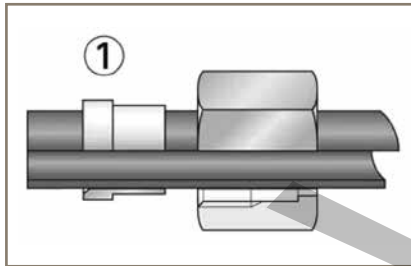
Sample order

Component	ID code Steel	ID code Stainless steel	Example Steel	Example Stainless steel
Union nut	CFX	NBR71X	BAM16SCFX	BAM16SNBR71X
Sleeve	CFX	NBR71X	TXA16SCFX	TXA16SNBR71X
Adapter	CF	NBR71	BAA16SORCF	BAA16SORNBR71
Complete set	CF	NBR71	BAK16SCF	BAK16SNBR71

Assembly information

Assembling the 24 degree to 37 degree conversion adaptor

1. Push the union nut and sleeve onto the tube as shown in the illustration.
2. Flare the tube using a flaring tool or machine. The flare diameter (**FD**) may not be below or above the limits specified in the table. The flared cone must be perpendicular to the tube axis and centred on the sleeve. The inner cone must be clean and free of grooves.
3. Place the conversion adaptor into the 24 degree cone. Align the flared tube with the coupling and tighten the tube nut with a wrench until the adaptor is held secure between the two cones. Tighten to the point where all slack is removed from the connection and resistance starts to be felt. From this point a further 1/4 turn is required for a secure connection. When re-tightening a previously tightened connection there is no need for the extra 1/4 turn from the point of resistance.



Tube OD	6	8	10	12	15	16	18	20	22	25	28	30	35	38	38x6	42
FD min.	9.1	11.3	13.1	15.3	19.1	20.6	23.2	25.6	26.5	31.1	32.7	37.0	41.8	46.0	46.6	48.8
FD max.	10.0	12.0	14.0	16.0	20.0	22.0	24.0	26.8	27.5	33.0	33.3	38.7	42.7	47.2	48.0	49.8



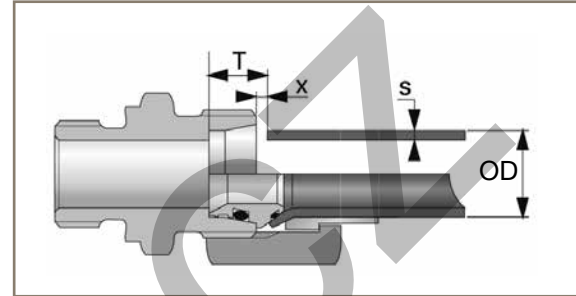
Assembly information

Available dimensions

Determining the tube length – installation length

The tube is fitted between the faces of the two couplings in order to determine the correct installation length. The length required for the unflared tube can be calculated by subtracting the dimension x for each tube end. When using the size

specifications in the size tables, you will need the size T in order to calculate the tube length. T is equal to the difference in tube length between the flare fitting and the cutting ring fitting.



Series	Tube size			Order code	Calculated pressure, bar		
	OD x s	T	x		Cr(VI)-free	DIN 2413 I static	DIN 2413 III fluctuating
	Seamless steel EO tubes, material E235N (St. 37.4)						
L	06x1.0	8.0	1.0	R06x1CF	444	372	
	06x1.5	9.0	2.0	R06x1.5CF	666	526	
	08x1.0	8.0	1.0	R08x1CF	333	288	
	08x1.5	9.0	2.0	R08x1.5CF	499	412	
	08x2.0	9.5	2.5	R08x2CF	666	526	
	10x1.0	8.0	1.0	R10x1CF	282	248	
	10x1.5	9.0	2.0	R10x1.5CF	423	357	
	10x2.0	10.0	3.0	R10x2CF	564	458	
	12x1.0	8.0	1.0	R12x1CF	235	209	
	12x1.5	9.0	2.0	R12x1.5CF	353	303	
	12x2.0	10.0	3.0	R12x2CF	470	391	
	15x1.5	8.0	1.0	R15x1.5CF	282	248	
	15x2.0	9.0	2.0	R15x2CF	376	321	
	18x1.5	7.5	0.0	R18x1.5CF	235	209	
	18x2.0	8.5	1.0	R18x2CF	313	273	
	18x2.5	9.0	1.5	R18x2.5CF	392	33	
	22x1.5	8.5	1.0	R22x1.5CF	192	173	
	22x2.0	9.5	2.0	R22x2CF	256	227	
	22x2.5	10.5	3.0	R22x2.5CF	320	278	
	22x3.0	11.0	3.5	R22x3CF	385	328	
	28x2.0	9.0	1.5	R28x2CF	201	181	
	28x2.5	10.0	2.5	R28x2.5CF	252	223	
	28x3.0	10.5	3.0	R28x3CF	302	264	
	35x2.0	12.0	1.5	R35x2CF	161	147	
	35x2.5	12.5	2.0	R35x2.5CF	201	181	
	35x3.0	13.5	3.0	R35x3CF	242	215	
	35x4.0	15.0	4.5	R35x4CF	322	280	
	42x2.0	12.5	1.5	R42x2CF	134	123	
	42x3.0	14.0	3.0	R42x3CF	204	181	
	42x4.0	15.5	4.5	R42x4CF	269	237	

Series	Tube size			Order code	Calculated pressure, bar		
	OD x s	T	x		Cr(VI)-Free	DIN 2413 I static	DIN 2413 III fluctuating
	Seamless steel EO tubes, material E235N (St. 37.4)						
S	06x1.0	8.0	1.0	R06x1CF	444	372	
	06x1.5	9.0	2.0	R06x1.5CF	666	526	
	08x1.0	8.0	1.0	R08x1CF	333	288	
	08x1.5	9.0	2.0	R08x1.5CF	499	412	
	08x2.0	9.5	2.5	R08x2CF	666	526	
	10x1.0	8.5	1.0	R10x1CF	282	248	
	10x1.5	9.5	2.0	R10x1.5CF	423	357	
	10x2.0	10.5	3.0	R10x2CF	564	458	
	12x1.0	8.5	1.0	R12x1CF	235	209	
	12x1.5	9.5	2.0	R12x1.5CF	353	303	
	12x2.0	10.5	3.0	R12x2CF	470	391	
	16x1.5	8.5	0.0	R16x1.5CF	264	233	
	16x2.0	9.5	1.0	R16x2CF	353	303	
	16x2.5	10.0	1.5	R16x2.5CF	441	370	
	16x3.0	11.0	2.5	R16x3CF	529	433	
	20x2.0	11.5	1.0	R20x2CF	282	248	
	20x2.5	12.5	2.0	R20x2.5CF	353	303	
	20x3.0	13.5	3.0	R20x3CF	423	357	
	20x3.5	14.5	4.0	R20x3.5CF	494	408	
	25x2.0	13.0	1.0	R25x2CF	226	201	
	25x2.5	13.5	1.5	R25x2.5CF	282	248	
	25x3.0	14.5	2.5	R25x3CF	338	292	
	25x4.0	16.0	4.0	R25x4CF	451	378	
	30x2.0	13.0	- 0.5	R30x2CF	188	170	
	30x2.5	14.0	0.5	R30x2.5CF	235	209	
	30x3.0	14.5	1.0	R30x3CF	282	248	
	30x4.0	16.5	3.0	R30x4CF	376	321	
	30x5.0	18.0	4.5	R30x5CF	470	391	
	38x2.5	16.0	0.0	R38x2.5CF	186	168	
	38x3.0	16.5	0.5	R38x3CF	223	199	
	38x4.0	18.0	2.0	R38x4CF	297	260	
	38x5.0	20.0	4.0	R38x5CF	371	318	
38x6.0	18.5	2.5	R38x6CF	445	373		

Machines and tools

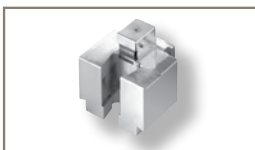
Flaring die set, for metric-sized tubes

Tube OD, mm	Order code
6	M157406BA
8	M157408BA
10	M157410BA
12	M157412BA
14	M157414
15	M157415
16	M157416BA
18	M157418
20	M157420BA
22	M157422
25	M157425BA
28	M157428BA
30	M157430
35	M157435BA
38	M157438BA
38x6	M157438X6BA
42	M157442BA

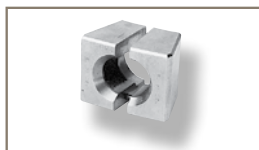
Tube OD [mm]	Thickness of wall [mm]	Flare Ø Min [mm]	Flare Ø Max [mm]	Set pressure EOMAT/UNI [bar]
06	1.0 – 1.5	9.1	10.0	45
08	1.0 – 1.5	11.3	12.0	40
	2.0			60
10	1.0 – 2.0	13.1	14.0	55
	2.0			60
12	1.0 – 1.5	15.3	16.0	40
	2.0			60
14	1.5 – 2.5	18.6	19.6	80
	3.0			110
15	1.5 – 2.0	19.1	20.0	60
	2.0			70
16	1.0 – 2.5	20.6	22.0	100
	3.0			100
18	1.5 – 2.0	23.2	24.0	75
	2.5			100
20	2.0 – 3.5	25.6	26.8	95
	3.5			95
22	1.5 – 2.5	26.5	27.5	110
	3.0			110
25	2.0 – 4.0	31.1	33.0	120
	4.0			120
28	2.0 – 3.0	32.7	33.3	110
	3.0			110
30	2.0 – 4.0	37.0	38.7	150
	4.0			180
35	2.0 – 4.0	41.8	42.7	150
	4.0			140
38	2.5 – 4.0	46.0	47.2	185
	4.0			210
42	2.0 – 4.0	48.8	49.8	185
	4.0			185

Pressure table (sticker format) for the flaring adapter can be ordered separately for the EOMAT UNI.

Order code **EOMATUNI/CHARTBA**



Order code for flaring device: **EOMATBOERDELBX**



Flaring die set: **(EOMAT UNI & KarryFlare)**

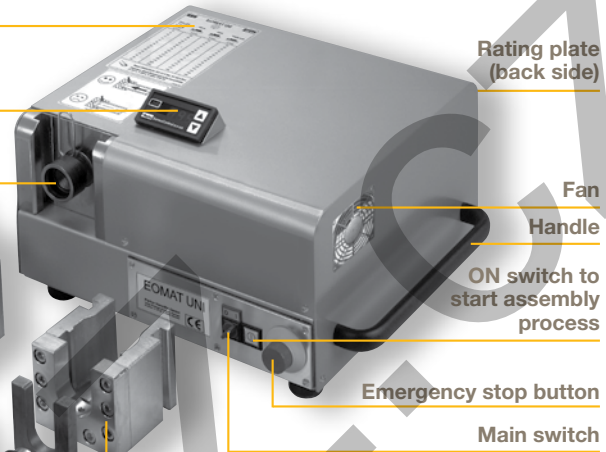
EOMAT UNI Order code: EOMATUNI230V

Pressure settings table

LED display continuously variable pressure setting

Cylinder piston with tool holder

Device for 37° tube flare



Rating plate (back side)

Fan

Handle

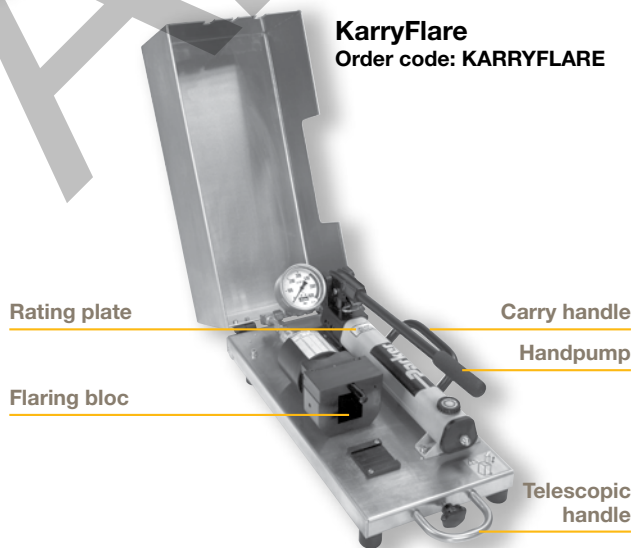
ON switch to start assembly process

Emergency stop button

Main switch

Device for assembling progressive ring or cutting ring (holding the backing plate)

KarryFlare Order code: KARRYFLARE



Rating plate

Carry handle

Handpump

Flaring bloc

Telescopic handle

Parflare ECO Order code: PARFLAREECO230V



Rating plate

Pressure table

Carry handle

Flaring bloc

Telescopic handle

Other machines available on request!

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