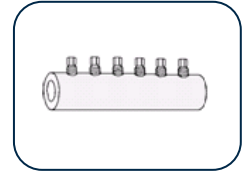


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PLAKA - MBT

Reinforcing bar couplers

REF 01.02.04 - Version V02 – 19/01/2021



Description

The MBT range of couplers provides a method of joining reinforcing bars. The bar ends are supported within the coupler by two serrated saddles, and as the lockshear bolts are tightened, the conical ends embed themselves into the bar. As this happens the serrated saddles bite into both the bar and the shell of the coupler. Neither bar end preparation to form threads, nor bar rotation are required. The MBT achieve failure loads higher than 110% of the characteristic yield strength of grade 500 reinforcing bar

Application fields

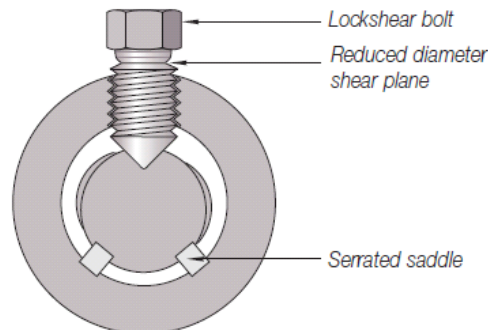
The MBT are used:

- to connect unthreaded bars
- to connect bars of precast structures
- to connect bent bars
- to connect easily long and heavy bars
- to connect bars with different diameters

Properties

Mechanical properties	
Steel quality of the coupler sleeve	Tensile strength $\geq 600 \text{ N/mm}^2$
Steel quality of the lockshear bolts	Tensile strength $\geq 525 \text{ N/mm}^2$
Steel quality of the serrated saddles	Tensile strength $\geq 700 \text{ N/mm}^2$
Technical agreements	BBA - No 98/R102 Zulassung Z-1.5-10 for type ET10 à ET28 AFCAB certification M20/023

Dimensions



Section showing the embedment of the lockshear bolts and saddles into the bar and the shell of the coupler.

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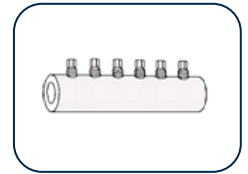
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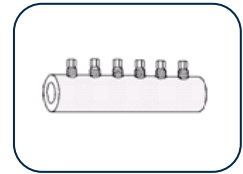
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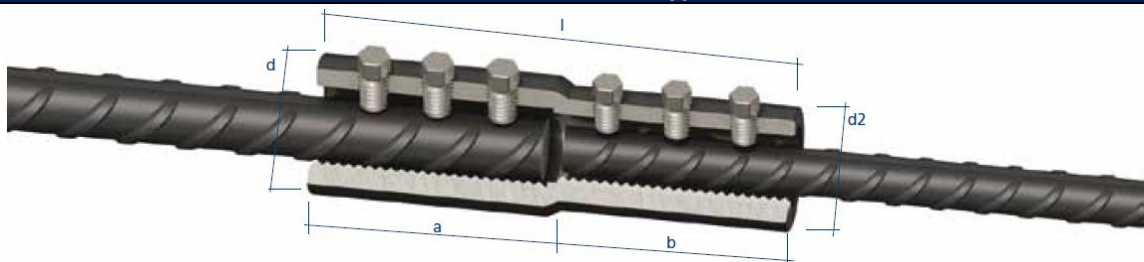


MBT ET Series



Bar diameter [mm]	External diameter 'd' [mm]	Total length 'l' [mm]	Socket size A/F [ins]	No. of bolts []	Approx weight [kg]	Product code []
10	33,4	100	1/2	4	0,52	BRMBT10
12	33,4	140	1/2	6	0,72	BRMBT12
14	42,2	160	1/2	6	1,25	BRMBT14
16	42,2	160	1/2	6	1,25	BRMBT16
20	48,3	204	1/2	8	1,96	BRMBT20
25	54,0	258	5/8	8	3,00	BRMBT25
28	66,7	312	5/8	10	5,80	BRMBT28
32	71,0	312	5/8	10	6,50	BRMBT32
40	81,0	484	3/4	14	11,30	BRMBT40

MBT Transition Series type MR



Bar diameter [mm/mm]	External diameter 'd' [mm]	External diameter 'd2' [mm]	Total length 'l' [mm]	Individual length a-b [mm]	Socket size A/F a:b [ins]	No. of bolts a:b []	Approx weight [kg]	Product code []
16/12	42,2	26,4	160	80-80	1/2:1/2	3:3	1,30	BRMR1612
16/14	42,2	42,2	160	80-80	1/2:1/2	3:3	1,25	BRMR1614
20/16	48,3	48,3	160	80-80	1/2:1/2	3:3	1,56	BRMR2016
25/20	54,0	54,0	180	90-90	5/8:1/2	3:3	2,23	BRMR2520
28/25	66,7	54,0	258	129-129	5/8:5/8	4:4	3,98	BRMR2825
32/25	71,0	54,0	231	102-129	5/8:5/8	3:4	3,70	BRMR3225
32/28	71,0	66,7	286	130-156	5/8:5/8	4:5	5,71	BRMR3228
40/32	81,0	71,0	335	178-157	3/4:5/8	5:5	7,47	BRMR4032

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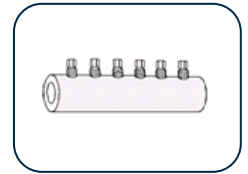
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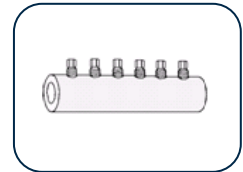
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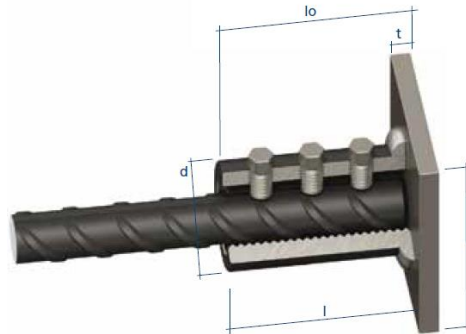
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MBT headed anchors



Bar diameter	External diameter 'd'	Coupler sleeve length 'l'	Length plate included 'l ₀ '	Plate thickness 't'	Plate size 'p'	Size lockshear bolts	Qty lockshear bolts	Weigh t	Ref. product code
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[inch]	[]	[kg]	[]
12	33,4	75	85	10	70	1/2	3	0,74	BRHA12
14	42,2	82	92	10	70	1/2	3	1,01	BRHA14
16	42,2	82	92	10	80	1/2	3	1,07	BRHA16
20	48,3	104	114	10	90	1/2	4	1,58	BRHA20
25	54,0	129	139	10	100	5/8	4	2,29	BRHA25
28	66,7	156	168	12	110	5/8	5	4,14	BRHA28
32	71,0	156	171	15	130	5/8	5	4,72	BRHA32
40	81,0	247	262	15	150	3/4	7	8,30	BRHA40

Accessories MBT

Accessories	Description	Picture	Diameters [mm]	Reference code	Weight [Kg]
	Socket head		φ10-20	BRD1620	0,29
			φ25-32	BRD2532	0,69
			φ40	BRD40	0,71
	Ratchet wrench (Length 56cm)		φ10-40	BRRAC	1,51

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