

MASTRANT

ANTENNA GUYING

WHY GUY WITH SYNTHETIC ROPES?

- NO RF INTERACTION • LIGHT WEIGHT • EASY HANDLING
- COST EFFECTIVE

WHY MASTRANT?

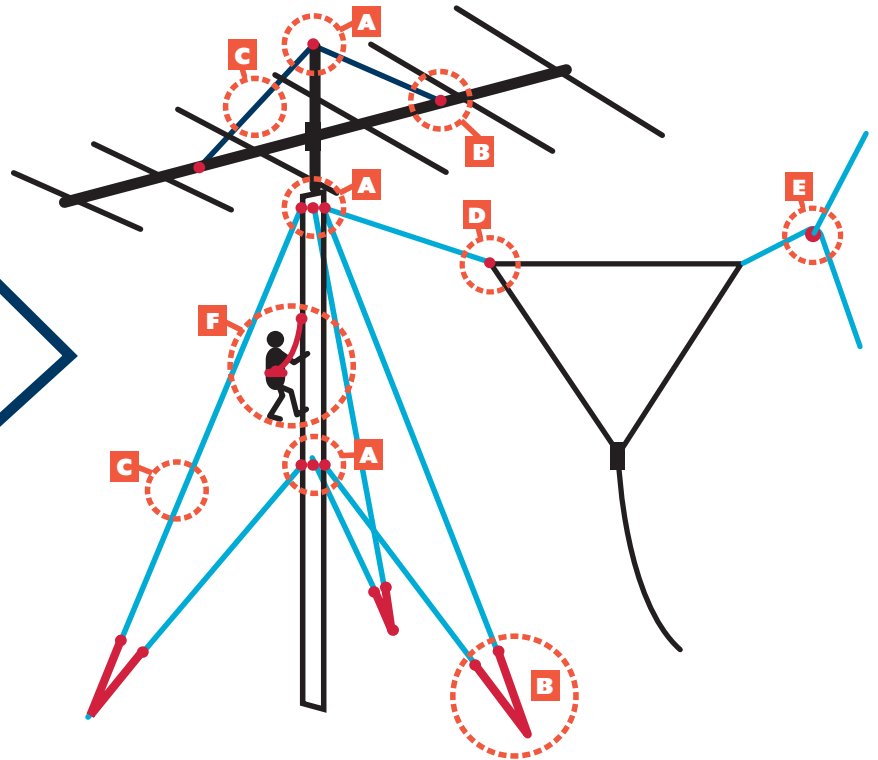
- DESIGNED FOR GUYING • UV RESISTANCE • HIGH STRENGTH
- LOW ELONGATION – NO STRETCH • WEATHER DURABILITY • WIDE RANGE OF ACCESSORIES AND “MUST HAVES” FOR ANTENNA WORK

HOW?

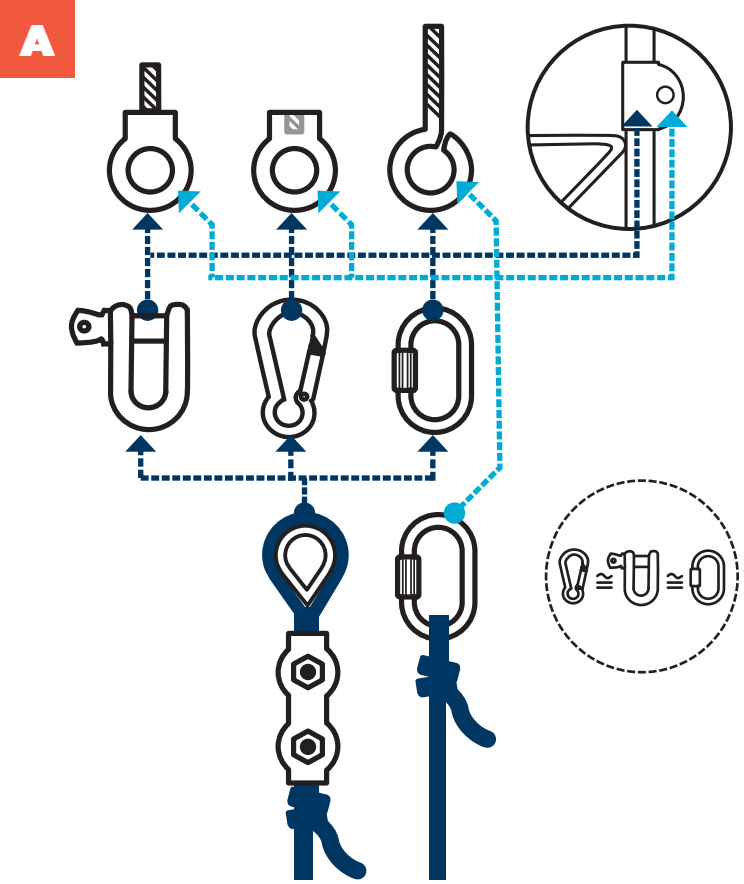
- CHOOSE APPROPRIATE GUYROPE • CALCULATE LENGTHS • THINK ABOUT IT
- DO IT • REGULARLY CHECK IT



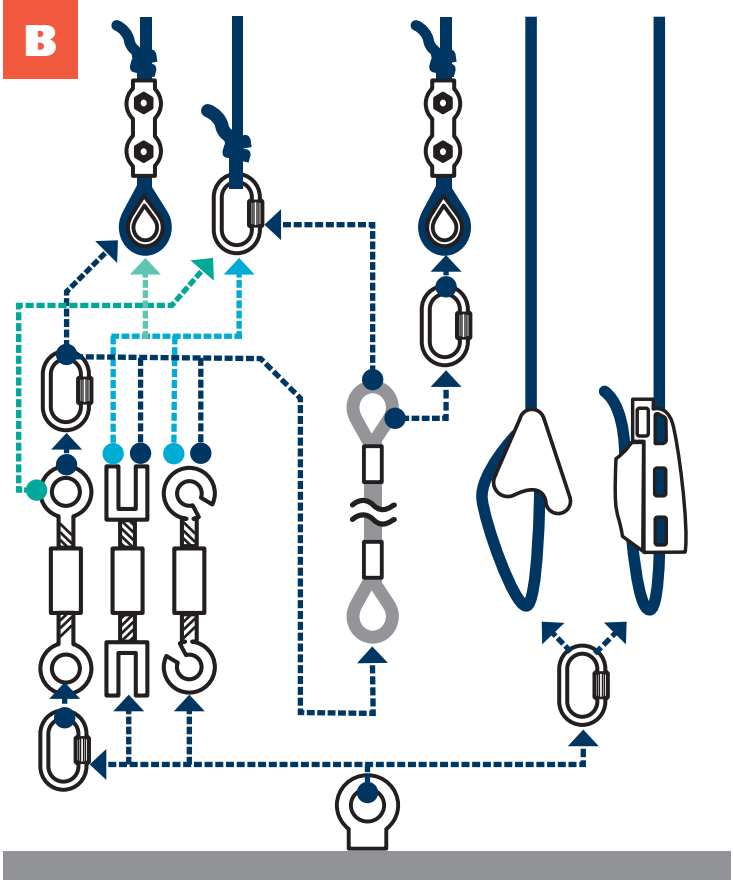
WHERE WE CAN SUPPORT YOU



TERMINATION AND COUPLING



TENSIONING & ATTACHING



TYPICAL INSTALLATIONS + RECOMMENDED GUY ROPES

C
TYPE OF USE

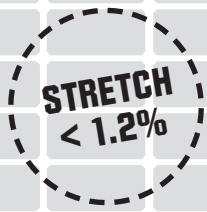
Wire antenna suspension	Vertical antenna	Mast Ø 25-100mm	Lattice tower
conventional wire antennas	Up to 20m, Ø 25-50mm	Up to 10m with 3 el. 3-8 or long VHF Yagi	Up to 20m 7 el. tribander
high tension - heavy wire, 160m	Up to 40m, Ø 50-100mm	Up to 20m, 5 el. Yagi for 20m	Up to 60m 3 stack of 5 el. Yagi 20m
LEVELS*	2-3	2-3	2-3
	3-5	3-5	3-6



breaking strength [BS] [daN, ~kg]	safe working load [SWL]	ROPE TYPE	PRICE € (incl. VAT) Longer spools available			Size of couplers		
			Meters 100 31 1			Carabiner	Shackle	Turnbuckle

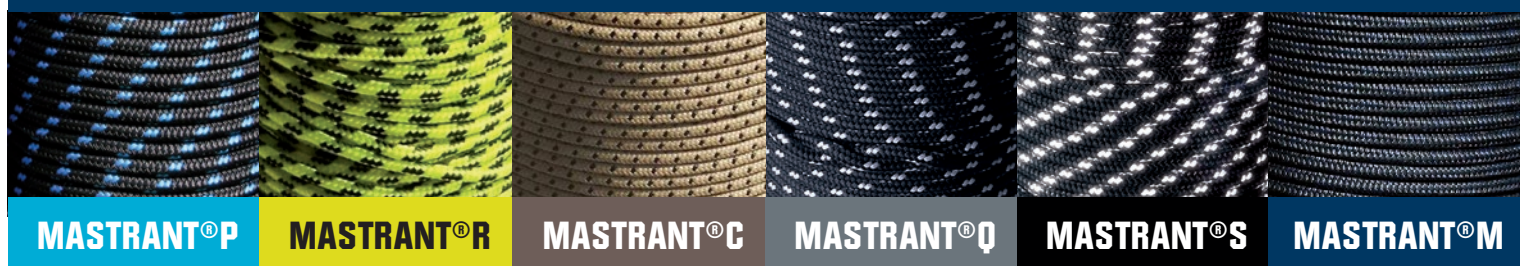
Ø SIZE	MASTRANT CLASSIC										STRETCH = ELONGATION: 2.4%, CORE = POLYESTER & POLYPROPYLENE, COVER = POLYESTER			Size of couplers						
2 1/16"												100	30	P	18	n/a	0.25	5	5	6
3 1/8"												200	60	P	26	11	0.36	5	5	6
3+ 9/64"												300	90	P	35	13	0.49	6	5	6
4 5/32"												440	130	C	45	17	0.63	6	5	6
5 3/16"												540	160	P	61	n/a	0.79	6	5	6
6 1/4"												730	220	R	75	n/a	0.98	6	5	6
8 5/16"												1700	510	Q	95	n/a	1.14	8	6	8
11 7/16"												2780	830	C	115	n/a	1.38	10	6	8
14 9/16"												3230	970	S	115	n/a	1.38	8	6	8
														Q	125	n/a	1.50	10	6	8
														Q	180	n/a	2.16	HD	7	10
														Q	245	n/a	2.94	-	10	14

Ø SIZE	MASTRANT PREMIUM										EXTRA STRONG			STRETCH = ELONGATION: <1.2%, CORE = DYNEEMA® DM 20, COVER = POLYESTER			Size of couplers			
1 3/64"												100	30	M	37	n/a	0.44	5	5	6
2 3/32"												220	70	M	43	16	0.52	5	5	6
3 1/8"												390	120	M	72	26	0.86	6	5	6
4 5/32"												900	270	M	145	n/a	1.74	7	5	6
5 3/16"												1200	360	M	225	n/a	2.70	8	6	8
6 1/4"												1850	560	M	280	n/a	3.36	10	7	10
8 5/16"												2600	780	M	399	n/a	4.79	HD	8	12
10 3/8"												3850	1160	M	690	n/a	8.28	-	10	16
12 1/2"												5500	1650	M	980	n/a	11.76	-	12	20



* LEVELS = NUMBER OF GUY ATTACHMENT POINTS. OTHER ASSUMPTIONS: WIND SPEED UP TO 160km/h, DISTANCE BETWEEN ANCHOR POINT AND BASE OF MAST > 70% OF THE HEIGHT

DETAILED INSTRUCTIONS, USEFUL TIPS, TRICKS AND ADVICE ON WEBSITE WWW.MASTRANT.COM



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MASTRANT®S

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"JEWELLERY FOR YOUR TOWER" PRICES € (INCL. VAT)

A: Terminating

Thimbles (stainless A4)

ATH02	2 mm (min.int.diam. 8 mm)	0,27
ATH03	3 mm (min.int.diam. 10 mm)	0,31
ATH04	4 mm (min.int.diam. 11 mm)	0,42
ATH05	5 mm (min.int.diam. 13 mm)	0,54
ATH06	6 mm (min.int.diam. 14 mm)	0,65
ATH08	8 mm (min.int.diam. 18 mm)	1,10
ATH10	10 mm (min.int.diam. 24 mm)	1,70
ATH12	12 mm (min.int.diam. 30 mm)	1,90
ATH14	14 mm (min.int.diam. 32 mm)	2,70



Duplex wire rope clips (stainless A4)

ADC02	2 mm (M4, wrench 7)	1,20
ADC03	3 mm (M4, wrench 7)	1,50
ADC04	4 mm (M5, wrench 8)	2,10
ADC05	5 mm (M5, wrench 8)	2,70
ADC06	6 mm (M6, wrench 10)	3,70
ADC08	8 mm (M8, wrench 13)	5,50
ADC10	10 mm (M10, wrench 17)	10,40



Fist-grips (galvanised)

APC06	6 mm (5-8 mm, M6)	2,70
APC08	8 mm (8-10 mm, M6)	3,80
APC10	10 mm (10-12, M8)	5,40
APC12	12 mm (12-14, M10)	6,90
APC16	16 mm (14-18, M12)	9,20



Bull-dog grips

	S.s.	Galv.
ASC02	2 mm (M3)	1,40
ASC03	3 mm (M3)	1,60
ASC04	4 mm (M4)	1,70
ASC05	5 mm (M5)	1,90 0,35
ASC06	6 mm (M6)	2,20 0,42
ASC08	8 mm (M6)	2,60 0,80
ASC10	10 mm (M8)	3,80 1,10
ASC12	12 mm (M10)	7,10
ASC13	13 mm (M10, galv. M12)	8,50 1,90



A, B: Coupling

Spring hooks - Carabiners (stainless A4)

AHO04	4 mm (BS: 230 kg)	1,40
AHO05	5 mm (BS: 400 kg)	1,50
AHO06	6 mm (BS: 480 kg)	1,80
AHO07	7 mm (BS: 600 kg)	2,60
AHO08	8 mm (BS: 850 kg)	3,30
AHO10	10 mm (BS: 1150 kg)	6,00
AHOS05	smooth 5 mm (BS: 170 kg)	1,90
AHOS07	smooth 7 mm (BS: 450 kg)	2,70
AHOS10	smooth 10 mm (BS: 950 kg)	6,30



Chain quick-acting couplers (stainless A4)

ACC04	4 mm, max.opn.5.5 mm (500 kg)	1,70
ACC05	5 mm, max.opn.6.5 mm (1350 kg)	2,00
ACC06	6 mm, max.opn.7.5 mm (2000 kg)	3,00
ACC07	7 mm, max.opn.8.5 mm (2500 kg)	4,20
ACC08	8 mm, max.opn.9.5 mm (3300 kg)	4,60
ACC10	10 mm, max.opn.12 mm (5500 kg)	8,10
ACC12	12 mm, max.opn.14.5 mm (7000 kg)	12,30



Shackles (stainless A4)

ASE04	4 mm, 8x14 mm hole (550 kg)	1,90
ASE05	5 mm, 10x17 mm hole (900 kg)	2,10
ASE06	6 mm, 12x21 mm hole (1300 kg)	2,50
ASE07	7 mm, 14x24 mm hole (1800 kg)	2,80
ASE08	8 mm, 16x28 mm hole (2400 kg)	3,10
ASE10	10 mm, 19x35 mm hole (3800 kg)	5,80
ASE12	12 mm, 23x41 mm hole (5550 kg)	8,30



Swivels (stainless A4)

ASW01	6 mm, 12x11 mm hole (1300 kg)	5,80
ASW02	8 mm, 16x16 mm hole (2500 kg)	10,00



B: Attaching

Fixing eyes (stainless)

AES061	eye - bolt M6 (hole 16, length 11, 800 kg)	2,20
AES081	eye - bolt M8 (hole 20, length 13, 1450 kg)	3,00
AES101	eye - bolt M10 (hole 25, leng. 17, 2300 kg)	5,70
AES121	eye - bolt M12 (hole 30, leng. 20, 3300 kg)	6,70
AEN06	eye - nut M6 (hole 16, 800 kg)	1,80
AEN08	eye - nut M8 (hole 20, 1450 kg)	2,60
AEN10	eye - nut M10 (hole 25, 2300 kg)	4,40
AEN12	eye - nut M12 (hole 30, 3300 kg)	6,20
AEN16	eye - nut M16 (hole 35, 5900 kg)	8,00
AE0540	bolt with eye M5 (5x40)	1,00
AE0640	bolt with eye M6 (6x40)	1,30
AE0860	bolt with eye M8 (8x60)	2,20
AE1070	bolt with eye M10 (10x70)	3,50
A7A836	anchoring set 10x100 mm (3000 kg)	17,00



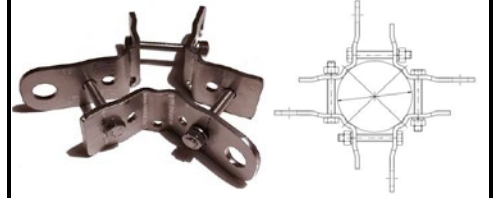
B: Attaching

Mast clamps Mastrant (stainless steel)

Parts can be used for both 3 or 4 directional setups.

Mast clamps (stainless: threads A4, plates A2)

ACM1306	universal 3 dir., masts Ø 15-53 mm	20,40
ACM1310	universal 3 dir., masts Ø 15-102 mm	21,60
ACM1406	universal 3-4 dir., masts Ø 32-85 mm	27,20
ACM1410	universal 3-4 dir., masts Ø 32-127 mm	28,80



Mast clamps (stainless: threads A4, plates A2)

ACM230x	light 3 direct., masts Ø 10-34 mm	16,20
ACM240x	light 3-4 dir., masts Ø 26-52 mm	21,60



Mast clamps (galvanised)

ACL330	3 directional, masts Ø 30-55 mm	10,00
ACL445	4 directional, masts Ø 45-75 mm	11,20



Steel cords with thimble ends (stainless A4)

			+1 m
ASR206	Ø 2 mm, 6 m (wire ant over tree)	8,50	0,46
ASR402	Ø 4 mm, 2 m (stainless 7x7, 9 kN)	9,20	1,35
ASR502	Ø 5 mm, 2 m (stainless 7x7, 15 kN)	12,30	2,12
ASR602	Ø 6 mm, 2 m (stainless 7x7, 22 kN)	16,50	2,81
ASR802	Ø 8 mm, 2 m (stainless 7x19, 33 kN)	25,00	5,38



C: Terminated guy ropes Mastrant-P & Q

Ready-made guy ropes with a thimble fitted on one end.

		Length: 20 m	30 m
NP040x0	4 mm (5/32"), BS: 220 kg (480 lb)	15,-	19,-
NP050x0	5 mm (3/16"), BS: 270 kg (590 lb)	19,-	25,-
NQ060x0	6 mm (1/4"), BS: 365 kg (800 lb)	26,-	35,-
NQ080x0	8 mm (5/16"), BS: 850 kg (1870 lb)	32,-	44,-
NQ110x0	11 mm (7/16"), BS: 1400 kg (3060 lb)	43,-	61,-
		Length: 33 m	40 m
NQ140x0	14 mm (9/16"), BS: 1800 kg (4000 lb)	92,-	109,-



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B: Tensioning

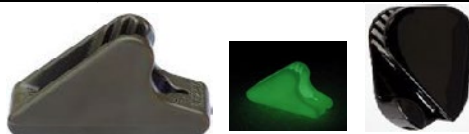
Turnbuckles		S.s.	Galv.
ASH*06*	eye-eye (hook) M6	3,90	2,00
ASH*08*	eye-eye (hook) M8	8,10	2,40
ASH*10*	eye-eye (hook) M10	11,90	3,50
ASH*12*	eye-eye (hook) M12	15,00	4,90
ASH*16*	eye-eye (hook) M16	30,40	9,70
ASH*20*	eye-eye (hook) M20	53,50	



ASHF05*	jaw-jaw M5 (560 kg)	7,30	
ASHF06*	jaw-jaw M6 (1400 kg)	8,10	
ASHF08*	jaw-jaw M8 (2200 kg)	10,00	4,90
ASHF10*	jaw-jaw M10 (3450 kg)	17,30	7,50
ASHF12*	jaw-jaw M12 (5000 kg)	25,80	9,70
ASHF14*	jaw-jaw M14 (6400 kg)	46,20	
ASHF16*	jaw-jaw M16 (8000 kg)	#####	20,30



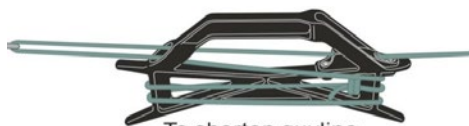
Clamcleat® tensioners (UV stabilised)		black	glow
CL266	Line-Lok tensioner 1-3 mm	0,42	0,60
CL260	Line-Lok tensioner 2-4 mm	0,70	1,00
CL276	Line-Lok tensioner 3-5 mm	1,90	2,50
CL271	Line-Lok tensioner 4-8 mm	4,60	8,10
CL223	Loop Cleat tens. 3-6 mm	3,70	
CL234	Loop Cleat tens. 6-11 mm	7,30	



Clamcleat® tensioners - adjustable (UV stabilised)		
CL828-63	Aero 3-4 mm	7,40
CL828-70AN	Aero 3-4 mm (can rig 4:1)	13,50
CL826-72	Aero 4-6 mm	9,20
CL829-11AN	Aero 4-6 mm (hard anodised)	15,40
CL827-03	Aero 4-6 mm long	10,80
CL827-11AN	Aero 4-6 mm long (hard anodised)	16,50



Clamcleat® Tensioning Reel (UV stabilised)		
CLPT771	For ropes 5-6 mm (3/16" to 1/4")	26,50



To shorten guyline wrap round reel like this.

D: Elastic ropes for tensioning

stretch 100%, e.g. for tightening of wire antennas to trees		
ER06	Elastic rope 6 mm (10 kg / 22 lb), 1m	0,60
ER08	Elastic rope 8 mm (25 kg / 55 lb), 1m	1,20

E: Pulleys

Pulleys galvanised		sing.	doub.
APUN05	nylon, 5 mm	1,50	2,40
APUN06	nylon, 6 mm	1,80	2,80
APUN08	nylon, 8 mm	3,10	5,30
APUN10	nylon, 9 mm	4,90	7,50
APUO05	anti-tangle metal, 5 mm	2,00	
APUO06	anti-tangle metal, 6 mm	2,20	
APUO07	anti-tangle metal, 7 mm	3,10	
APUO08	anti-tangle metal, 8 mm	5,30	
APUO10	anti-tangle metal, 10 mm	8,60	



Pulleys stainless		sing.
APUS10A	up to 10 mm, sheave plastic	7,20
APUX06S	up to 6 mm, sheave plastic, shackle	5,30
APUS03A	up to 3 mm, plastic	5,00
APUX09B	anti-tangle, up to 9 mm, Ø 25 mm	6,70
APUX10A	anti-tangle, up to 10 mm, Ø 32 mm	9,30
APUX14A	anti-tangle, up to 14 mm, Ø 50 mm	12,80



APUS05A	pulley up to 5 mm, sheave plastic	8,70
APUS05D	pulley up to 5 mm, sh. brass nickeled	10,60
APUS05G	double up to 5 mm, sheave plastic	12,00
APUS05J	double up to 5 mm, sh. brass nickeled	14,90



APUS06M	with metal cheek, up to 6 mm, bow	13,00
APUS08M	with metal cheek, up to 8 mm, bow	15,90
APUS10M	with metal cheek, up to 10 mm, bow	17,30



APUS08Q	HD up to 8 mm (600 kg)	14,00
APUS08X	HD up to 8 mm, needle bearing	20,20
APUS10Q	HD up to 10 mm (900 kg)	16,30
APUS12Q	HD up to 12 mm (1200 kg)	22,10



APUS08T	anti-tangle HD up to 8 mm	23,60
APUS10S	anti-tangle HD up to 10 mm	29,30
APUS12S	anti-tangle HD up to 12 mm	32,20



APUS06P	HD for wires, up to 6 mm	19,-
APU820	HD, up to 16 mm (30 kN, aluminum)	42,-



F: Personal safety

Positioning		
A7PB20	Work positioning belt	45,-



A7L10A	Lanyard LB 10 with adjuster - 1.5 m	27,-
A7T32	Positioning Lanyard PROT 3 - 2 m	75,-
A7T33	Positioning Lanyard PROT 3 - 3 m	78,-



Safety Harnesses		
A7SH2X	LX2, universal, for short-term work	89,-
A7SH5X	LX5, for professionals, quick-acting buckles	197,-



Climbing accessories		
A7AZ11	Carabiner for climbing, screw lock	10,-
A7AZ11T	Carabiner for climbing, twist lock	20,-
A7AZ23	Large Snap Hook with lock, opening 56 mm	29,-



A7EA2H	Energy absorber with 2 lan. and snap hooks	125,-
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Or design your guying yourself. Simply use our on-line calculator, which after entering the basic data, calculates the required values and provides recommendations on the choice of materials to use. This ensures that the antenna support system is designed to be safe and reliable under all conditions for many years to come. For more details visit www.mastrant.com, section Calculations or download Android application @ Google Play.

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