WLL table

WORKING LOAD LIMIT (WLL) POLYESTER

Wll capacity table for webbing and roundsling

Colourco-deaccor-ding to EN 1492-1/2	Working Load Limits with 1 webbing sling or roundsling							Working Load Limits with 2 webbing slings or roundslings			
	straight lift	choked lift	*β	*β		*β		*β		*β	
			0° - 7°	7° - 45°	45° - 60°	7° - 45°	45° - 60°	7° - 45°	45° - 60°	7° - 45°	45° - 60°
											
Factor	1	0,8	2	1,4	1	0,7	0,5	1,4	1	1,12	0,8
WLL in t											
WLL 1 t	1,00	0,80	2,00	1,40	1,00	0,70	0,50	1,40	1,00	1,12	0,80
WLL 2 t	2,00	1,60	4,00	2,80	2,00	1,40	1,00	2,80	2,00	2,24	1,60
WLL 3 t	3,00	2,40	6,00	4,20	3,00	2,10	1,50	4,20	3,00	3,36	2,40
WLL 4 t	4,00	3,20	8,00	5,60	4,00	2,80	2,00	5,60	4,00	4,48	3,20
WLL 5 t	5,00	4,00	10,00	7,00	5,00	3,50	2,50	7,00	5,00	5,60	4,00
WLL 6 t	6,00	4,80	12,00	8,40	6,00	4,20	3,00	8,40	6,00	6,72	4,80
WLL 8 t	8,00	6,40	16,00	11,20	8,00	5,60	4,00	11,20	8,00	8,96	6,40
WLL 10 t	10,00	8,00	20,00	14,00	10,00	7,00	5,00	14,00	10,00	11,20	8,00
WLL 12 t	12,00	9,60	24,00	16,80	12,00	8,40	6,00	16,80	12,00	13,44	9,60
WLL 15 t	15,00	12,00	30,00	21,00	15,00	10,50	7,50	21,00	15,00	16,80	12,00
WLL 20 t	20,00	16,00	40,00	28,00	20,00	14,00	10,00	28,00	20,00	22,40	16,00
WLL 25 t	25,00	20,00	50,00	35,00	25,00	17,50	12,50	35,00	25,00	28,00	20,00
WLL 30 t	30,00	24,00	60,00	42,00	30,00	21,00	15,00	42,00	30,00	33,60	24,00
WLL 40 t	40,00	32,00	80,00	56,00	40,00	28,00	20,00	56,00	40,00	44,80	32,00
WLL 50 t	50,00	40,00	100,00	70,00	50,00	35,00	25,00	70,00	50,00	56,00	40,00
WLL 60 t	60,00	48,00	120,00	84,00	60,00	42,00	30,00	84,00	60,00	67,20	48,00
WLL 70 t	70,00	56,00	140,00	98,00	70,00	49,00	35,00	98,00	70,00	78,40	56,00
WLL 80 t	80,00	64,00	160,00	112,00	80,00	56,00	40,00	112,00	80,00	89,60	64,00
WLL 90 t	90,00	72,00	180,00	126,00	90,00	63,00	45,00	126,00	90,00	100,80	72,00
WLL 100 t	100,00	80,00	200,00	140,00	100,00	70,00	50,00	140,00	100,00	112,00	80,00
WLL 110 t	110,00	88,00	220,00	154,00	110,00	77,00	55,00	154,00	110,00	123,20	88,00
WLL 115 t	115,00	92,00	230,00	161,00	115,00	80,50	57,50	161,00	115,00	128,80	92,00

Web slings Roundslings
Information

1) EN-Standards and Machinery Directives
For all European manufacturers are the technical demands and the references how to produce textile lifting equipment like roundslings and webslings summarized in the EN 1492-1 (Webslings) end the EN 1492-2 (Roundslings). Additionally the textile lifting equipment is encoded with the CE mark according the Machinery Directory 2006/42/EG

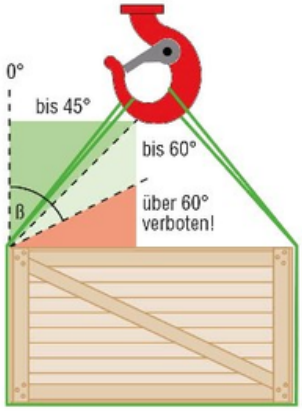
2) Testing and Maintenance
To guarantee a safe way of using the textile lifting equipment they must be tested at least one time per year or according the latest publications of the standard or local guidlines.
The operator of the equipment has to arrange independently of predetermining operation conditions several test intervals. These tests may only be done by competent persons. Possible damaged Roundslings/Webslings may only be repaired by the manufacturer or by people who have become the power of attorney to repair from the manufacturer.

3) Lifting of loads (WLL Capacity table and lifting angle)
If a load with a certain weight has to be lifted, the person who has to coordinate this job has to make sure the correct lifting materials are chosen. Also the number of slings, the capacity and the length has to be defined. It is also to plan the lifting procedure and to make sure that the angle of inclination is not more than 60 degrees (an angle of more than 60 degrees is forbidden!)

The bigger the angle of inclination, the smaller the practical capacity of the lifting equipment.
As a simple rule you can say:

By an angle of inclination up to 45 degrees the chosen lifting equipment can be calculated with only 70% of the original capacity. For example:
70% of 2T = 0,7 x 2T = 1,4T

By an angle of inclination up to 60 degrees the chosen lifting equipment can be calculated with only 50% of the original capacity. For example:
50% of 2T = 0,5 x 2T = 1,0T



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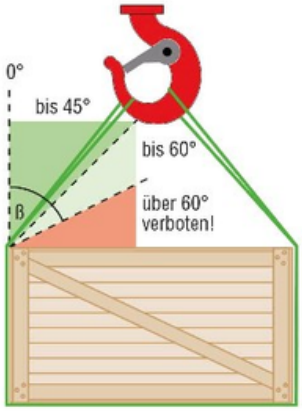

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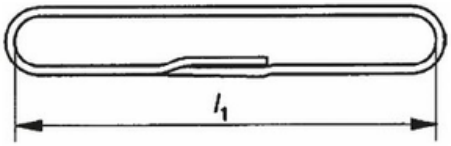
MCEE / MCED endless web slings

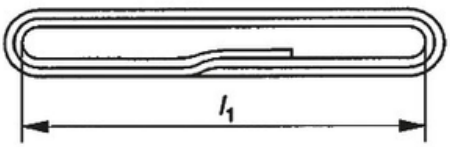
MCEE ENDLESS WEB SLINGS SINGLE LAYER

	Type	WLL	Webbing width in mm	Thickness in mm	Weight 0,5 meter in kg (L_1)	Weight 1 meter in kg (L_1)	Weight 0,5 meter extra in KG
	MCEE30	WLL 1 t	30	3,5	0,12	0,21	0,09
	MCEE60	WLL 2 t	60	3	0,21	0,38	0,17
	MCEE90	WLL 3 t	90	4	0,34	0,60	0,26
	MCEE120	WLL 4 t	120	4		0,82	0,35
	MCEE150	WLL 5 t	150	3,5		1,06	0,45
	MCEE180	WLL 6 t	180	3,5		1,45	0,58
	MCEE240	WLL 8 t	240	4		1,84	0,72
	MCEE300	WLL 10 t	300	3,5		2,47	0,95
	MCEE300	WLL 12 t	300	4		3,14	1,14



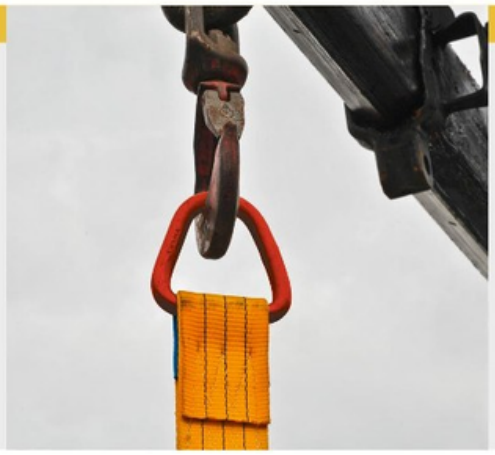
MCED ENDLESS WEB SLINGS 2-LAYER

	Type	WLL	Webbing width in mm	Thickness in mm	Weight 0,5 meter in kg (L_1)	Weight 1 meter in kg (L_1)	Weight 0,5 meter extra in KG
	MCED30	WLL 2 t	30	7	0,22	0,41	0,19
	MCED60	WLL 4 t	60	6	0,39	0,73	0,34
	MCED90	WLL 6 t	90	7,5	0,62	1,16	0,54
	MCED120	WLL 8 t	120	8		1,57	0,72
	MCED150	WLL 10 t	150	7		2,02	0,93
	MCED180	WLL 12 t	180	7		2,69	1,19
	MCED240	WLL 16 t	240	8		3,37	1,48
	MCED300	WLL 20 t	300	7		4,5	1,96
	MCED300	WLL 24 t	300	8		5,58	2,35



MCDD / MCDDS
web slings with triangles

MCDD 2-LAYER WEB SLINGS WITH TRIANGLES (MALE/MALE)



Type	WLL	Webbing width in mm	Thick-ness in mm	Weight 1 meter in kg (L_1)	Weight 2 meter in kg (L_2)	Weight 3 meter in kg (L_3)	Weight 1 meter extra in KG
MCDD30	WLL 1 t	30	7	0,62	0,82	1,02	0,20
MCDD60	WLL 2 t	60	6	1,39	1,74	2,09	0,35
MCDD90	WLL 3 t	90	7,5	2,78	3,33	3,88	0,55
MCDD120	WLL 4 t	120	8		4,68	5,41	0,73
MCDD150	WLL 5 t	150	7		6,19	7,13	0,94
MCDD180	WLL 6 t	180	7		8,51	9,71	1,20
MCDD240	WLL 8 t	240	8			16,24	1,50
MCDD300	WLL 10 t	300	7			21,68	1,97
MCDD300	WLL 12 t	300	8			22,97	2,36

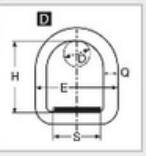
MCDDS 2-LAYER WEB SLINGS WITH TRIANGLES (MALE/FEMALE)

Type	WLL	Webbing width in mm	Thick-ness in mm	Weight 1 meter in kg (L_1)	Weight 2 me-ter in kg (L_2)	Weight 3 meter in kg (L_3)	Weight 1 meter extra in KG
MCDDS30	WLL 1 t	30	7	0,82	1,02	1,22	0,20
MCDDS60	WLL 2 t	60	6	1,86	2,21	2,56	0,35
MCDDS90	WLL 3 t	90	7,5	3,63	4,21	4,76	0,55
MCDDS120	WLL 4 t	120	8		6,11	6,84	0,73
MCDDS150	WLL 5 t	150	7		8,90	9,84	0,94
MCDDS180	WLL 6 t	180	7		10,79	11,99	1,20
MCDDS240	WLL 8 t	240	8			20,45	1,50
MCDDS300	WLL 10 t	300	7			27,31	1,97

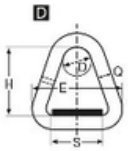
MCDD/ MCDDS
Triangle specifications

TECHNICAL INFORMATION FOR MCDD MALE TRIANGLES

Type	WLL	Width in mm	Q in mm	D in mm	H in mm	E in mm	Weight per piece in kg
DTR/010	WLL 1 t	30	12	45	60	70	0,2

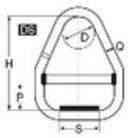


Type	WLL	Width in mm	Q in mm	D in mm	H in mm	E in mm	Weight per Piece in kg
DTR/020	WLL 2 t	60	16	30	80	100	0,5
DTR/030	WLL 3 t	90-100	20	60	120	146	1,1
DTR/040	WLL 4 t	120	23	60	130	179	1,6
DTR/050	WLL 5 t	150	26	90	180	222	2,2
DTR/060	WLL 6 t	180	28	90	180	262	3
DTR/080	WLL 8 t	240	32	100	200	344	5,8
DTR/100	WLL 10 t	300	35	100	250	400	7,9



TECHNICAL INFORMATION FOR MCDDS FEMALE TRIANGLES

Typ	WLL	Width in mm	Q in mm	D in mm	H in mm	P in mm	Weight per Piece in kg
DSTR/010	WLL 1 t	30	12	50	100	25	0,4
DSTR/020	WLL 2 t	60	16	40	146	40	1
DSTR/030	WLL 3 t	90-100	20	70	205	55	2
DSTR/040	WLL 4 t	120	23	80	218	55	3,1
DSTR/050	WLL 5 t	150	26	90	300	80	5
DSTR/060	WLL 6 t	180	28	90	284	80	5,4
DSTR/080	WLL 8 t	240	32	120	332	90	10,2
DSTR/100	WLL 10 t	300	35	120	385	100	13,8



TDQ 4-layer web slings

TDQ

TDQ: 4- LAYER WEB SLINGS

Weight of a 4-layer TDQ web sling.

	Type	TDQ150	TDQ180/200	TDQ240	TDQ300	TDQ300	TDQ500	TDQ600
	WLL	10 t	12 t	15 t	20 t	25 t	30 t	40 t
	Eye width	80 mm	95/105	125 mm	160 mm	160 mm	260 mm	310 mm
	Eye length	650 mm	700 mm	850 mm	1100 mm	1200 mm	1500 mm	1500 mm
	Webbing width	150 mm	180/200	240 mm	300 mm	300 mm	500 mm	600 mm
EWL in mtr		kg	kg	kg	kg	kg	kg	kg
4	TDQ	7,7	10,1	12,4	16,3	19,6	26,5	41,0
5	TDQ	9,6	12,5	15,4	20,3	24,3	32,9	50,8
6	TDQ	11,4	14,9	18,3	24,2	29,0	39,2	60,6
7	TDQ	13,3	17,3	21,3	28,1	33,7	45,6	70,4
8	TDQ	15,1	19,7	24,3	32,0	38,4	52,0	80,2
9	TDQ	17,0	22,1	27,2	35,9	43,1	58,4	90,1
10	TDQ	18,8	24,5	30,2	39,8	47,8	64,7	99,9
11	TDQ	20,7	26,9	33,2	43,7	52,5	71,1	109,7
12	TDQ	22,5	29,3	36,1	47,6	57,2	77,5	119,5
13	TDQ	24,4	31,7	39,1	51,5	61,9	83,8	129,3
14	TDQ	26,2	34,1	42,1	55,4	66,6	90,2	139,2
15	TDQ	28,1	36,5	45,1	59,4	71,3	96,6	149,0
16	TDQ	29,9	38,9	48,0	63,3	76,0	102,9	158,8
17	TDQ	31,8	41,3	51,0	67,2	80,7	109,3	168,6
18	TDQ	33,6	43,7	54,0	71,1	85,4	115,7	178,4
19	TDQ	35,5	46,1	56,9	75,0	90,1	122,1	188,3
20	TDQ	37,3	48,5	59,9	78,9	94,8	128,4	198,1
	Extra per mtr. working length*	1,9	2,4	3,0	3,9	4,7	6,4	9,8

* length above 24 meter please consult the manufacturer.

TDQDD 4-layer triangle web slings

TDQDD

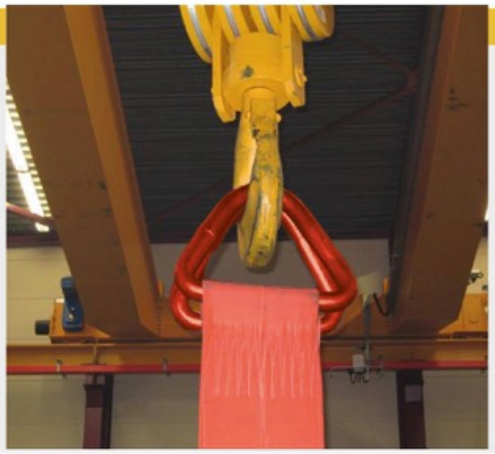
TDQDD 4-LAYER WEB SLING WITH TRIANGLES (MALE)

Weigth of a 4-layer TDQDD web sling with triangles (Male)

	Type	TDQDD150	TDQDD180/200	TDQDD180/200	TDQDD240	TDQDD300	TDQDD300
	WLL	10 t	12 t	12 t	15 t	20 t	25 t
	Webbing width	150 mm	180/200	180/200	240 mm	300 mm	300 mm
	Weight Triangle	12,6	15,6	15	28,8	47,8	47,8
EWL in mtr		kg	kg	kg	kg	kg	kg
4	TDQDD	20,3	25,7	10,1	41,2	64,1	67,4
5	TDQDD	22,2	28,1	12,5	44,2	68,1	72,1
6	TDQDD	24,0	30,5	14,9	47,1	72,0	76,8
7	TDQDD	25,9	32,9	17,3	50,1	75,9	81,5
8	TDQDD	27,7	35,3	19,7	53,1	79,8	86,2
9	TDQDD	29,6	37,7	22,1	56,0	83,7	90,9
10	TDQDD	31,4	40,1	24,5	59,0	87,6	95,6
11	TDQDD	33,3	42,5	26,9	62,0	91,5	100,3
12	TDQDD	35,1	44,9	29,3	64,9	95,4	105,0
13	TDQDD	37,0	47,3	31,7	67,9	99,3	109,7
14	TDQDD	38,8	49,7	34,1	70,9	103,2	114,4
15	TDQDD	40,7	52,1	36,5	73,9	107,2	119,1
16	TDQDD	42,5	54,5	38,9	76,8	111,1	123,8
17	TDQDD	44,4	56,9	41,3	79,8	115,0	128,5
18	TDQDD	46,2	59,3	43,7	82,8	118,9	133,2
19	TDQDD	48,1	61,7	46,1	85,7	122,8	137,9
20	TDQDD	49,9	64,1	48,5	88,7	126,7	142,6
	Extra per mtr. working length*	1,8	2,4	2,4	2,9	3,9	4,7

* length above 24 meter please consult the manufacturer.

TDQDD Triangle specifications

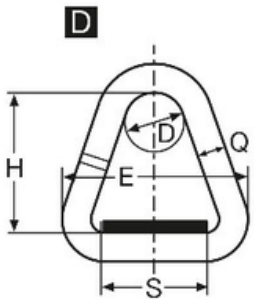


TDQDD

TDQDD TRIANGLE SPECIFICATIONS

Triangle Type 2 - male

Type	W.L.L.	S in mm	Q in mm	D in mm	H in mm	E in mm	weigth in kg
DTR/10	10	180	35	100	200	320	6,3
DTR/12	12	170	40	90	200	290	7,8
DTR/15	15	300	45	150	250	440	14,4
DTR/20	20	300	50	180	300	460	19
DTR/25	25	300	55	180	300	492	23,9
DTR/30	30	300	55	180	300	492	23,9



TDQDDS 4-layer triangle web slings

TDQDDS

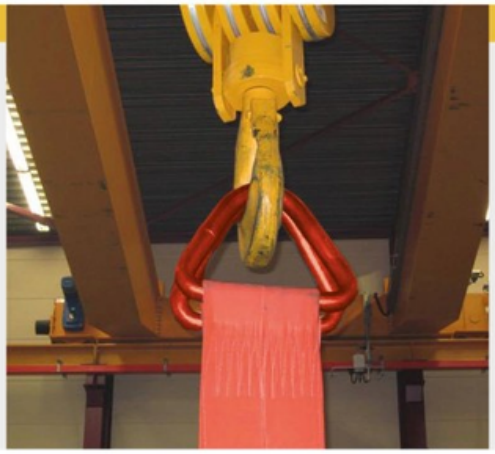
TDQDDS 4-LAYER WEB SLING WITH TRIANGLES (MALE/FEMALE)

Weigth of a 4-layer TDQDDS web sling with triangles (Male/Female)

	Type	TDQDDS150	TDQDDS180/200	TDQDD180/200	TDQDDS240	TDQDDS300	TDQDDS300
	WLL	10 t	12 t	12 t	15 t	20 t	25 t
	Webbing width	150 mm	180/200	180/200	240 mm	300 mm	300 mm
	Weight Triangle	19,3	23,3	30	41,6	71,4	71,4
EWL in mtr		kg	kg	kg	kg	kg	kg
4	TDQDDS	27,0	33,4	10,1	54,0	87,7	91,0
5	TDQDDS	28,9	35,8	12,5	57,0	91,7	95,7
6	TDQDDS	30,7	38,2	14,9	59,9	95,6	100,4
7	TDQDDS	32,6	40,6	17,3	62,9	99,5	105,1
8	TDQDDS	34,4	43,0	19,7	65,9	103,4	109,8
9	TDQDDS	36,3	45,4	22,1	68,8	107,3	114,5
10	TDQDDS	38,1	47,8	24,5	71,8	111,2	119,2
11	TDQDDS	40,0	50,2	26,9	74,8	115,1	123,9
12	TDQDDS	41,8	52,6	29,3	77,7	119,0	128,6
13	TDQDDS	43,7	55,0	31,7	80,7	122,9	133,3
14	TDQDDS	45,5	57,4	34,1	83,7	126,8	138,0
15	TDQDDS	47,4	59,8	36,5	86,7	130,8	142,7
16	TDQDDS	49,2	62,2	38,9	89,6	134,7	147,4
17	TDQDDS	51,1	64,6	41,3	92,6	138,6	152,1
18	TDQDDS	52,9	67,0	43,7	95,6	142,5	156,8
19	TDQDDS	54,8	69,4	46,1	98,5	146,4	161,5
20	TDQDDS	56,6	71,8	48,5	101,5	150,3	166,2
	Extra per mtr. working length*	1,8	2,4	2,4	2,9	3,9	4,7

* length above 24 meter please consult the manufacturer.

TDQDDS Triangle specifications



TDQDDS TRIANGLE SPECIFICATIONS

Triangle type 2 - male

Type	W.L.L.	S in mm	Q in mm	D in mm	H in mm	E in mm	Weight kg
DTR/10	10	180	35	100	200	320	6,3
DTR/12	12	170	40	90	200	290	7,8
DTR/15	15	300	45	150	250	440	14,4
DTR/20	20	300	50	180	300	460	19
DTR/25	25	300	55	180	300	492	23,9
DTR/30	30	300	55	180	300	492	23,9

Triangle type 2 - female

Type	W.L.L.	S in mm	Q in mm	D in mm	H in mm	P in mm	Weight kg
DSTR/10	10	180	35	100	340	100	13
DSTR/12	12	180	40	100	340	100	15,5
DSTR/15	15	250	45	150	466	120	27,2
DSTR/20	20	300	50	180	540	150	36
DSTR/25	25	300	55	180	540	150	47,5
DSTR/30	30	300	55	180	540	150	47,5