



Qingdao Powerful Machinery Co., Ltd. is located in Qingdao, one of the largest port cities in China, As China's leading manufacturer of rigging, lifting, and material handling applications, Powerful Machinery delivers a diverse portfolio of products engineered to exceed the toughest demands of any industry, construction, cargo handling, towing, marine, and transportation.

Our products include welded chains, G80 and G100 lifting chains & accessories, hooks, shackles, hoist rings, master links, chain slings, turnbuckles, snatch blocks, wire rope & fittings and a host of other customengineered solutions: the most comprehensive portfolio in the industry.

Powerful Machinery has 20 years of export experience, with customers in dozens of countries around the world. Our products are exported to Europe, America, Southeast Asia, the Middle East, Australia, and many other regions.

At Powerful Machinery, We have a team of professionals working together to provide our customers with the best products and services. When you choose Powerful Machinery, you are guaranteed more than superior products—you are guaranteed the quality assurance that comes with a customer service team committed to exceeding end-user expectations.

At Powerful Machinery, it's not just about lifting products; it's about working with a trusted partner who is invested in your success.



Webbing sling is made of high tenacity polyester by advanced international weaving technology, equipment and various sewing methods.

According to customer's requirement, the safety factor of sling could reach 4:1, 5:1, 6:1,7:1, 8:1, its load range is from 0.5t to 100t, which is produced according to International standard, for color and load capacity.









Use Instructions as per EN1492 Part 1

Use and Maintenance Instruction for Flat Webbing

Lifting correctly

- Before the load is lifted, the weight of the load must be determined by checking the delivery note, marking on the load or packing weight labels (eg. Steel profiles) or by the crane weigher. The load must be within the carrying capacity shown on the sling label for the given angle of inclination.
- The larger the angle of inclination on multi-fall slings, the greater the tension force between individual slings that has to be taken up in addition to the load. The reductions in carrying capacity for inclinations 45° and from 45° to 60° are shown on the sling label. Inclination angels larger than 60° are not permitted.
- Lifting the load without twisting or turning it as per the following instructions. On single-fall slings and chains, round slings and endless flat slings, the point of attachment should be above the load center, double-fall slings should be attached at both sides and above the load centre; 3 and 4-fall slings should be attached at one level around the load centre. Preferably they should be attached with equal spacing and above the load center.
- In multi-fall cases where the slings are attached at different angles of inclination, the greatest strain is borne by the single sling with the smallest inclination angle. In extreme cases, a single vertical sling will bear the weight of the complete load. When multi-fall slings are attached asymmetrically, only half of the carrying capacity shown on the sling label may be carried.









Safety factor 7:1 Flat Polyester Slings type (Double Ply)

	1140		WLL in kg at different modes						
WLL (KG)	WIDTH (MM)	COLOR	Straight lift	Basket lift	7°-45°	Choker hitch	45°-60°		
1000	30	Violet	1000	2000	1400	800	1000		
2000	60	Green	2000	4000	2800	1600	2000		
3000	90	Yellow	3000	6000	4200	2400	3000		
4000	120	Grey	4000	8000	5600	3200	4000		
5000	150	Red	5000	10000	7000	4000	5000		
6000	180	Brown	6000	12000	8400	4800	6000		
8000	240	Blue	8000	16000	11200	6400	8000		
10000	300	Orange	10000	20000	14000	8000	10000		
12000	300	Orange	12000	24000	16800	9600	12000		



Use Instructions for Flat Webbing

Before using it, select the correct flat webbing or round sling regard to its application, capacity and the surface conditions of the load (see designation on the labels).

Examine the condition of the webbing sling (improperly maintained or repaired slings, including unreadable labels, must be excluded from further use).

The permitted capacity of the slings must not be exceeded (WLL in accordance with the applied lifting method).

Never shorten a sling by knotting it.

Flat webbing sling and round sling must not be placed around sharp edges or over rough surfaces, Use wear sleeves and edge protectors where necessary.

Flat webbing sling should be applied in a way that they carry the load by the full sling width.

Loads may only be placed on slings if damage is precluded.

Do not drag slings from under loads, position the sling correctly to ensure easy removal after use.

Position slings in a way that they hold the load securely (displacement of the centre of gravity must be avoided)

In "choker" lifts, only use flat webbing slings with reinforced eyes.

Using flat webbing slings with Becket eyes, the opening angle of the eyes shouldn't exceed 20 at the connecting point.

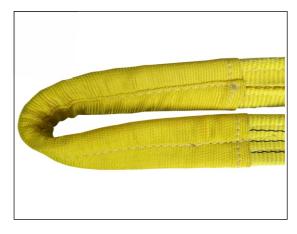
In cases that flat webbing slings or round slings are used in connection with chemical or in extreme temperatures. Contact the manufacturer for instructions.

In "choker" or direct lifts, the round sling should be positioned so that it can form its "natural" inclination angle of 60 and that heat due to friction is avoided.

Avoid sharp jerks and jolts.

Don't drag the load across the floor with the sling or drag the sling across rough surfaces







Webbing slings

flat webbing slings are made of high tensile polyester (PES)with the following advantages:

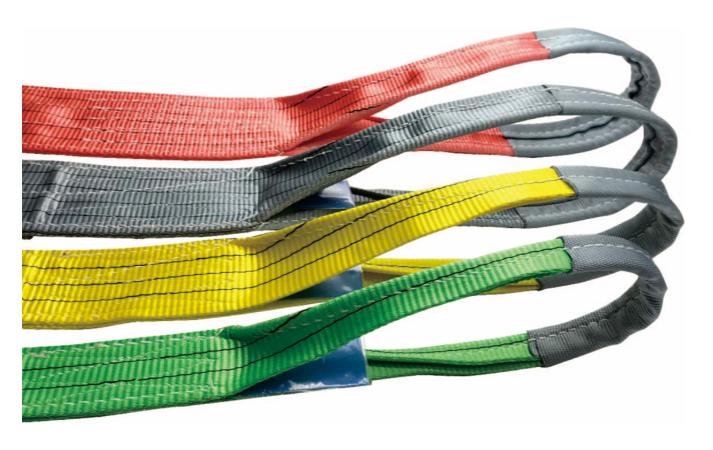
- Low weight, thus easy to handle
- Protection against hand injury
- Protection against damage on the surface of cargo
- Highly flexible and adaptable to given shapes
- Equal pressure distribution over tension and pressure sensitive loads
- Heat resistant up to +100 °C
 Moisture-resistant fabric, thus preventing frost damage (up to approx, -40 °C)
- Low-strain, wear-resistant, long-life material (100%PES)





Safety factor 5:1 & 6:1 Flat Polyester Slings type (Single Ply)

			WLL in kg at different modes						
WLL(KG)	WIDTH (MM)	COLOR	Straight lift	Basket lift	7°-45°	Choker hitch	45°-60°		
500	25	Violet	500	1000	700	400	500		
1000	50	Green	1000	2000	1400	800	1000		
1500	75	Yellow	1500	3000	2100	1200	1500		
2000	100	Grey	2000	4000	2800	1600	2000		
2500	125	Red	2500	5000	3500	2000	2500		
3000	150	Brown	3000	6000	4200	2400	3000		
4000	200	Blue	4000	8000	5600	3200	4000		
5000	250	Orange	5000	10000	7000	4000	5000		
6000	300	Orange	6000	12000	8400	4800	6000		





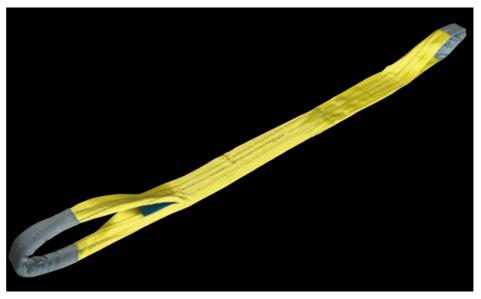
Safety factor 5:1 & 6:1 Flat Polyester Slings type (Double Ply)

			WLL in kg at different modes						
WLL(KG)	WIDTH (MM)	COLOR	Straight lift	Basket lift	7°-45°	Choker hitch	45° -60°		
1000	25	Violet	1000	2000	1400	800	1000		
2000	50	Green	2000	4000	2800	1600	2000		
3000	75	Yellow	3000	6000	4200	2400	3000		
4000	100	Grey	4000	8000	5600	3200	4000		
5000	125	Red	5000	10000	7000	4000	5000		
6000	150	Brown	6000	12000	8400	4800	6000		
8000	200	Blue	8000	16000	11200	6400	8000		
10000	250	Orange	10000	20000	14000	8000	10000		
12000	300	Orange	12000	24000	16800	9600	12000		

Supervision for Flat Webbing

- Before using it, flat webbing slings and round slings should be examined for obvious defects and in cases there is damage, they should be taken out of service.
- Annual inspection must be guaranteed. They should be carried out by a competent person in accordance with the regulations specified below:

Instruction for inspection of Flat Webbing



- Flat webbing slings must be taken out of service when:
- Yarn fracture or cutting exceeds 10% of the sling cross-section.
- Damage occurs at the supporting seams.
- Deformation is caused by heat absorption (friction, radiation)
- Damage is caused by aggressive materials
- Chafing on the surface
- Yarn is threadbare or looped
- When fittings are deformed or damaged





Safety factor 5:1 & 6:1 & 7:1 Flat Polyester Slings type (Four Ply)

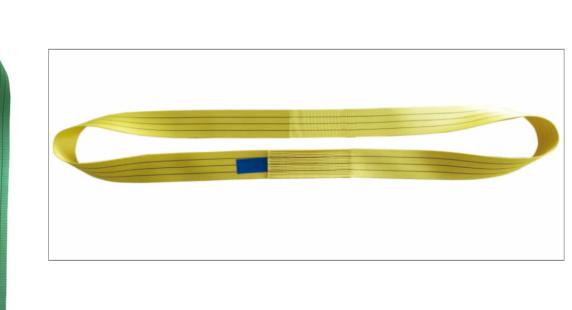
,											
				WLL in kg at different modes							
WLL(KG)	SF 5:1 SF 6:1 WIDTH (MM)	SF 7:1 WIDTH (MM)	COLOR	Straight lift	Basket lift	7"-45"	Choker hitch	45°-60°			
2000	25	30	Violet	2000	4000	2800	1600	2000			
4000	50	60	Green	4000	8000	5600	3200	4000			
6000	75	90	Yellow	6000	12000	8400	4800	6000			
8000	100	120	Grey	8000	16000	11200	6400	8000			
10000	125	150	Red	10000	20000	14000	8000	10000			
12000	150	180	Brown	12000	24000	16800	9600	12000			
16000	200	240	Blue	16000	32000	22400	12800	16000			
20000	250	300	Orange	20000	40000	28000	16000	20000			
24000	300	300	Orange	24000	48000	33600	19200	24000			





Safety factor 5:1 & 6:1 & 7:1 Endless Webbing Sling

					WLL in kç	g at differe	ent modes	;
W 1 (KO)	SF 5:1 SF 6:1	SF 7:1		Straight lift	Basket lift		Choker hitch	
WLL(KG)	WLL(KG) WIDTH (MM)	WIDTH (MM)	COLOR			7° -45°		45° -60°
1000	25	30	Violet	1000	2000	1400	800	1000
2000	50	60	Green	2000	4000	2800	1600	2000
3000	75	90	Yellow	3000	6000	4200	2400	3000
4000	100	120	Grey	4000	8000	5600	3200	4000
5000	125	150	Red	5000	10000	7000	4000	5000
6000	150	180	Brown	6000	12000	8400	4800	6000
8000	200	240	Blue	8000	16000	11200	6400	8000
10000	250	300	Orange	10000	20000	14000	8000	10000
12000	300	300	Orange	12000	24000	16800	9600	12000



Maintenance and repair of Flat Webbing and Round Slings

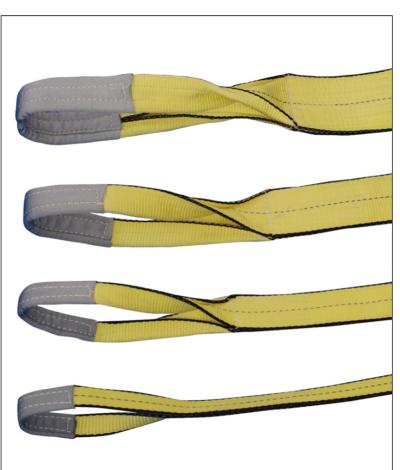
- Slings must be stored cool and dry in a preferably ventilated place and be protected against adverse weather conditions and chemically active environments.
- Slings should not be dried near open fire or other hot places (over 100°C).
- Repairs may only be conducted by the manufacturer.

Reference:

EN 1492-1+A1:2008
Textile slings-Safety-part 1:
Flat woven webbing slings, made of man-made fibres, for general purpose use
German version DIN EN 1492-1







Safety factor 5:1 Flat Polyester Slings type (Double Ply)

Salety factor 3.1 Flat Folyester Sinigs type (Double Fig)										
			WLL in lbs at different modes							
WORK LOAD LIMIT (Ibs)	SF 5:1 WIDTH (inch)	COLOR	Straight lift	Basket lift	7°-45°	Choker hitch	45°-60°			
3100	1	Yellow	3100	6200	4340	2480	3100			
6200	2	Yellow	6200	12400	8680	4960	6200			
8800	3	Yellow	8800	17600	12320	7040	8800			
11000	4	Yellow	11000	22000	15400	8800	11000			
13700	5	Yellow	13700	27400	19180	10960	13700			
16500	6	Yellow	16500	33000	23100	13200	16500			
22700	8	Yellow	22700	45400	31780	18160	22700			
28400	10	Yellow	28400	56800	39760	22720	28400			

2" x 20' TOW STRAP



Working Load Limit: 3,333 Lbs

Breaking 10,000 Lbs

- U.V. & weather resistant
- Reinforced construction for maximum strength and versatility
- Eye loop on both ends provides quick & easy attachment to tow hooks or hitch balls

3" x 30' RECOVERY STRAP







Failure to comply with warnings below may result in serious personal injuries and cargo damage.

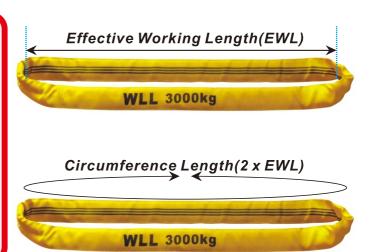
- Do not exceed maximum capacity.
- Do not use if there is any visible damage to strap webbing or stitching.
- Attach strap directly to vehicle frame, towing eye, or hitch, never attach to ball hitch or bumper.
- Keep strap away from sharp edges, heat, and corrosive chemicals.
- Do not use for lifting.
- Not for highway use.



Round Slings are manufactured to EN 1492-2 and have a safety factor of 7:1. The load bearing fibers are wound together to form an endless hank. The working load limit is determined by number of turns in the hank

Advantages over Round Slings

- Round Slings have a high strength to weight ratio.
- Wears evenly along the length.
- Load bearing fiber protected from the load, giving greater resistance to wear.
- Remove slings from service when the outer cover is damaged and/or the yarn is exposed.



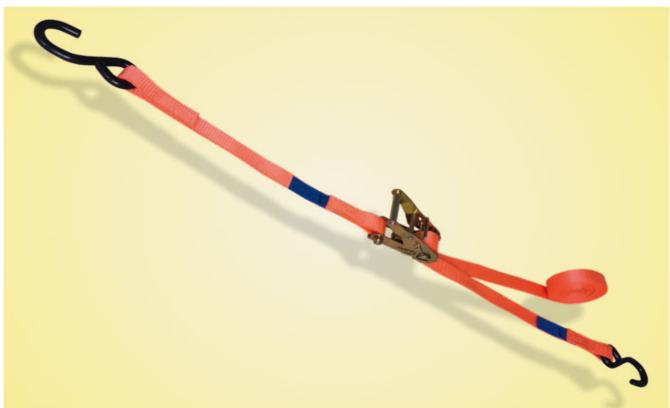
Safety factor 7:1 According to EN 1492-2

			WLL in kg at different modes					
W 1 ((6))			Straight lift	Basket lift		Choker hitch		
WLL(KG)	WIDTH (MM)	COLOR			7°-45°	8	45°-60°	
1000	45	Violet	1000	2000	1400	800	1000	
2000	47	Green	2000	4000	2800	1600	2000	
3000	58	Yellow	3000	6000	4200	2400	3000	
4000	72	Grey	4000	8000	5600	3200	4000	
5000	83	Red	5000	10000	7000	4000	5000	
6000	90	Brown	6000	12000	8400	4800	6000	
8000	102	Blue	8000	16000	11200	6400	8000	
10000	116	Orange	10000	20000	14000	8000	10000	
12000	116	Orange	12000	24000	16800	9600	12000	
15000	130	Orange	15000	30000	21000	12000	15000	
20000	130	Orange	20000	40000	28000	16000	20000	
25000	175	Orange	25000	50000	35000	20000	25000	
30000	175	Orange	30000	60000	42000	24000	30000	
40000	220	Orange	40000	80000	56000	32000	40000	
50000	220	Orange	50000	100000	70000	40000	50000	

1"(25mm) Ratchet Tie Down

- Capacity is ranging from 250kg to 1500kg.
- Variety of colors can be customized by requirements

EN12195-2









Lashing capacity	Webbing width	Min.B.S	Fixed length	←		Certificate
400daN	25mm	800daN	0.25~0.5m	400daN	800daN	~
500daN	25mm	1000daN	0.25~0.5m	500daN	1000daN	/
750daN	25mm	1500daN	0.25~0.5m	750daN	1500daN	/
200daN	25mm	400daN	/	/	200daN	✓

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2"(50mm) 3000daN Ratchet Tie Down











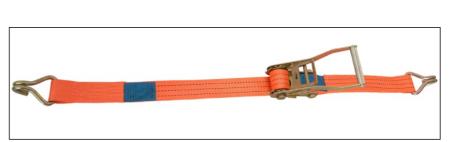














Lashing Capacity:1500KG(1500daN)

Breaking Strength: 3000KG (3000daN)

Material:100% Polyester

Width:2"(50mm)

Breaking Strength for webbing: 3750daN

Color:Blue/Orange/Yellow/Red/etc.

Length:4M/6M/8M/10M/12M/etc.



MUST READ BEFORE USE

- Failure to comply with warning may result in tie down failure, serious personal Injury or Death. Use of this product demonstrates an understanding of this warning and the risks involved.
- Never exceed working load limit. Inspect before each use.
- Webbing should not be used if abrasions, cuts, tears, burns, knots, damaged sew patterns or alterations are present.
- Always protect webbing from sharp or abrasive surfaces.
- Hardware must be pulled in a straight line or strength will be reduced, Do not use if any signs
 of damage, deformation, or alterations are present.
- This tie down assembly is not to be used for lifting or towing.
- Refer to Federal, State, Provincial, Industry or local regulations for proper tie down methods.



2"(50mm) 4000daN Ratchet Tie Down EN12195-2













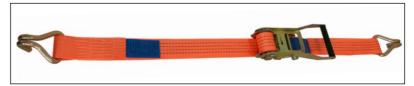














Size:2"(50mm)X4T

Lashing Capacity: 2000KG (2000daN)

Breaking Strength: 4000KG (4000daN)

Material:100% Polyester

Width:2"(50mm)

Breaking Strength for webbing:5000daN(For Normal)

Breaking Strength for webbing:6000daN(For GS)

Color:Blue/Orange/Yellow/Red/etc.

Length:4M/6M/8M/10M/12M/etc.



MUST READ BEFORE USE

- Failure to comply with warning may result in tie down failure, serious personal Injury or Death. Use of this product demonstrates an understanding of this warning and the risks involved.
- Never exceed working load limit. Inspect before each use.
- Webbing should not be used if abrasions, cuts, tears, burns, knots, damaged sew patterns or alterations are present.
- Always protect webbing from sharp or abrasive surfaces.
- Hardware must be pulled in a straight line or strength will be reduced, Do not use if any signs of damage, deformation, or alterations are present.
- This tie down assembly is not to be used for lifting or towing.
- Refer to Federal, State, Provincial, Industry or local regulations for proper tie down methods.











2"(50mm) 5000daN Ratchet Tie Down EN12195-2























Size:2"(50mm)X5T

Lashing Capacity:2500KG(2500daN)

Breaking Strength: 5000KG (5000daN)

Material:100% Polyester

Width:2"(50mm)

Breaking Strength for webbing:6250daN(For Normal)

Breaking Strength for webbing: 7500daN (For GS)

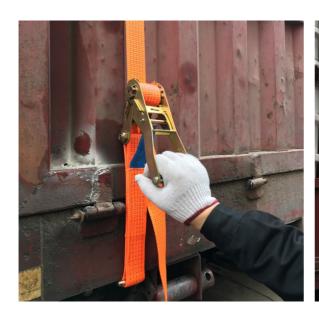
Color:Blue/Orange/Yellow/Red/etc.

Length: 4M/6M/8M/10M/12M/etc.



MUST READ BEFORE USE

- Failure to comply with warning may result in tie down failure, serious personal Injury or Death. Use of this product demonstrates an understanding of this warning and the risks involved.
- Never exceed working load limit. Inspect before each use.
- Webbing should not be used if abrasions, cuts, tears, burns, knots, damaged sew patterns or alterations are present.
- Always protect webbing from sharp or abrasive surfaces.
- Hardware must be pulled in a straight line or strength will be reduced, Do not use if any signs
 of damage, deformation, or alterations are present.
- This tie down assembly is not to be used for lifting or towing.
- Refer to Federal, State, Provincial, Industry or local regulations for proper tie down methods.







2"(50mm) 4000daN **Ergo Ratchet Tie Down** EN12195-2

















Lashing Capacity:2000KG(2000daN)

Breaking Strength: 4000KG(4000daN)

Material:100% Polyester

Width:2"(50mm)

Breaking Strength for webbing:5000daN(For Normal)

Breaking Strength for webbing: 6000daN (For GS)

Color:Blue/Orange/Yellow/Red/etc.

Length:4M/6M/8M/10M/12M/etc.



2"(50mm) 5000daN Ratchet Tie Down



Size:2"(50mm)X5T

Load Capacity:2500KG(2500daN)

Breaking Strength: 5000KG (5000daN)

Material: 100% Polyester

Width:2"(50mm)

Breaking Strength for webbing:6250daN(For Normal)

Breaking Strength for webbing:7500daN(For GS)

Color:Blue/Orange/Yellow/Red/etc.

Length:4M/6M/8M/10M/12M/etc.

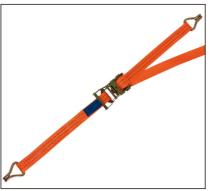


1.5"(35mm) Ratchet Tie Down

Capacity is ranging from 2000kg to 3000kg.

 Variety of colors can be customized by requirements EN12195-2

Lashing capacity	Webbing width	Min.B.S	Fixed length	←		Certificate
1000daN	35mm	2000	0.3~0.5m	1000daN	2000daN	✓
1500daN	35mm	3000	0.3~0.5m	1500daN	3000daN	/
2000daN	35mm	4000	/	/	2000daN	✓











Instruction for inspection of Round Slings

- Round slings must be taken out of service when:
- Damage is caused by aggressive materials.
- The outer casting or its sewing is damaged and the core is visible.
- In that case, the sling must be taken out of service and inspected by a competent person. The sling may only be reused by a component person or a competent person confirms its safety after it has been repaired.
- Deformation is caused by heat absorption (friction, radiation).
- When fittings are deformed or damaged.
- Damage caused by heat and a glossy surface produced by frictions, in extreme cases the surface fibres can fuse together.

Reference:

EN 1492-2+A1:2008

Textile slings-Safety-part 2:

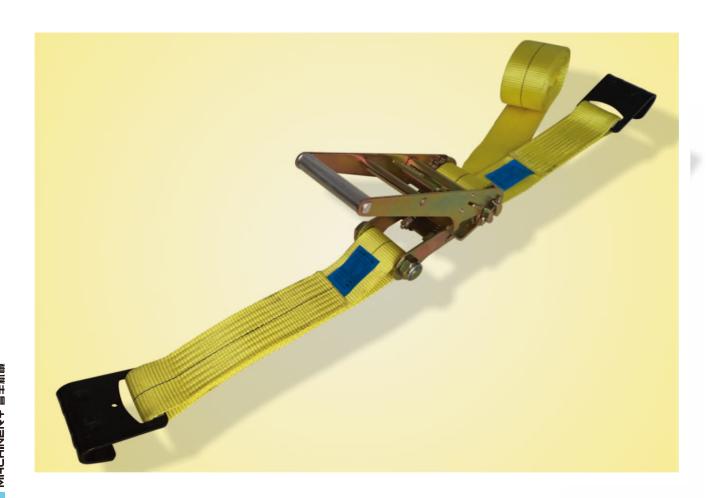
Round slings, made of man-made fibres, for general purpose use

German version DIN EN 1492-2





3"(75mm) 10000daN Ratchet Tie Down



Size:3"(75mm)X10T

Lashing Capacity:5000KG(5000daN)

Breaking Strength: 10000KG(10000daN)

Material:100% Polyester

Width: 3" (75mm)

Breaking Strength for webbing:

12500daN(For Normal)

Breaking Strength for webbing:

15000daN(For GS)

Color:Blue/Orange/Yellow/Red/etc.

Length: 4M/6M/8M/10M/12M/etc.





Size:4"(100mm)X10T

Lashing Capacity:5000KG(5000daN)

Breaking Strength: 10000KG (10000daN)

Material:100% Polyester

Width:4"(100mm)

Breaking Strength for webbing:

12500daN(For Normal)

Breaking Strength for webbing:

15000daN(For GS)

Color:Blue/Orange/Yellow/Red/etc.

Length:4M/6M/8M/10M/12M/etc.



2"(50mm) 5000daN Ratchet Tie Down

Size:2"(50mm)X5T

Lashing Capacity: 2500KG

Breaking Strength: 5000KG

Material: 100% Polyester

Color:Blue/Orange/Yellow/Red/etc.

Fixed length: 1M

Length: 4M/6M/8M/10M/12M/etc.

2"(50mm) 3000daN Ratchet Tie Down

Size:2"(50mm)X3T

Lashing Capacity: 1500KG

Breaking Strength: 3000KG

Material: 100% Polyester

Color:Blue/Orange/Yellow/Red/etc.

Fixed length: 1M

Length: 4M/6M/8M/10M/12M/etc.

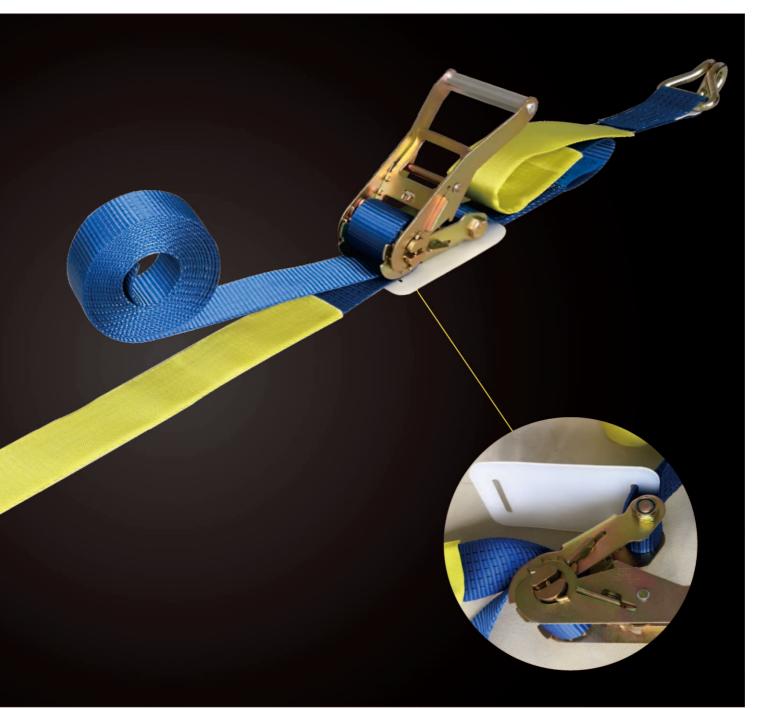
MUST READ BEFORE USE

- Failure to comply with warning may result in tie down failure, serious personal Injury or Death. Use of this product demonstrates an understanding of this warning and the risks involved.
- Never exceed working load limit. Inspect before each use.
- Webbing should not be used if abrasions, cuts,tears,burns,knots,damaged sew patterns or alterations are present.
- Always protect webbing from sharp or abrasive surfaces.
- Hardware must be pulled in a straight line or strength will be reduced, Do not use if any signs of damage, deformation, or alterations are present.
- This tie down assembly is not to be used for lifting or towing.
- Refer to Federal, State, Provincial, Industry or local regulations for proper tie down methods.

















2"(50mm) 5000daN Ratchet Tie Down AS/NZS 4380:2001



Size:2"(50mm)X5T

Lashing Capacity:2500KG Breaking Strength:5000KG Material:100% Polyester

Width:2"(50mm)

Color:Blue/Orange/Yellow/Red/etc. Length:4M/6M/8M/10M/12M/etc.

WARNING

TIE DOWN MUST BE INSPECTED PRIOR TO USE
PROTECT WEBBING FROM SHARP EDGES HOT SURFACES & ACIDS
DO NOR USE STRAP IF WEB IS CUT OR HARDWARE DAMAGED
HOOKS AND BUCKLES MUST BE IN LINE WITH DIRECTION OF PULL
STICKING CAMS OR LEVERS SHOULD BE LUBED ON PIVOT PINS
STORE OUT OF SUN WHEN NOT IN USE





1.5"(35mm) 3000daN Ratchet Tie Down AS/NZS 4380:2001



Size:1.5"(35mm)X3T
Lashing Capacity:1500KG
Breaking Strength:3000KG
Material:100% Polyester

Width:1.5"(35mm)
Color:Blue/Orange/Yellow/Red/etc.
Length:4M/6M/8M/10M/12M/etc.

3"(75mm) 10000daN Ratchet Tie Down AS/NZS 4380:2001

Size:3"(75mm)X10T

Lashing Capacity: 5000KG

Breaking Strength: 10000KG

Material:100% Polyester

Width: 3" (75mm)

Color:Blue/Orange/Yellow/Red/etc. Length:4M/6M/8M/10M/12M/etc.



Working Load Limit: 3,333 Lbs
Breaking Load Limit: 10,000 Lbs

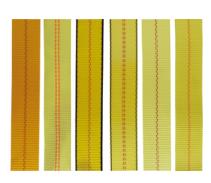










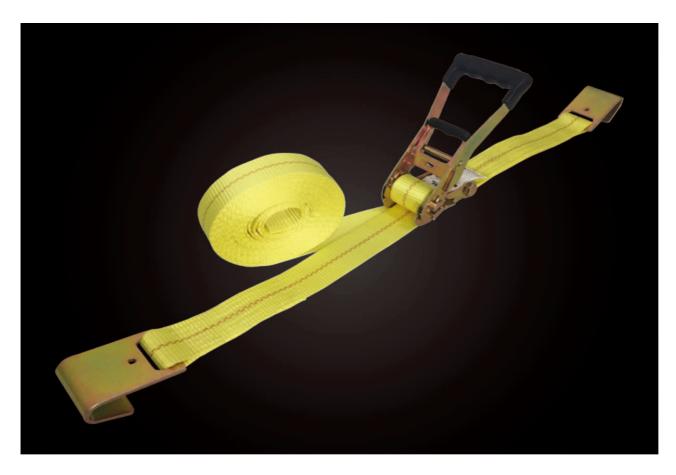


Size:2"(50mm)X10000LBS
Working load limit:3333LBS
Breaking Strength:10000LBS
Material:100% Polyester

Width:2"(50mm)

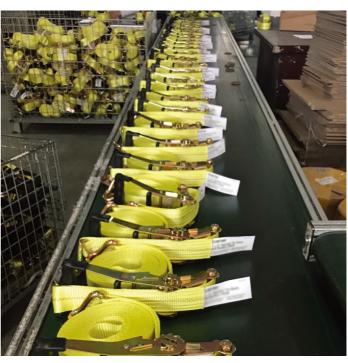
Color:Blue/Orange/Yellow/Red/etc.
Length:15ft/20ft/27ft/30ft/etc.





AWARNING

- FAILURE TO COMPLY MAY RESULT IN INJURY OR DEATH.
- NEVER EXCEED WORKING LOAD LIMIT(WLL) RATING.
- + DO NOT USE IF STRAP IS CUT OR DAMAGED.
- ALWAYS PROTECT STRAP FROM SHARP EDGES ABRASIVE OR HOT SURFACES.
- HARDWARE MUST BE PULLED IN A STRAIGHT LINE.
- DO NOT USE FOR LIFTING OR TOWING.
- * STORE OUT OF DIRECT SUN WHEN NOT IN USE.
- REFER TO FEDERAL, STATE OR PROVINCIAL REGULATIONS FOR PROPER TIE-DOWN METHODS.





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