



















**DANGER:** Overhead lifting presents a very real danger of severe injury or loss of life if lifting equipment is not used properly.Please read and understand all of these instructions prior to using any lifting sling or sling assembly. Sling should only be used by qualified persons who are responsible for the sling selection, inspection and use.

Grade 100 Chain Sling Components										
WORKING LOAD LIMITS IN TONNES Acc. to PAS 1061										
	90° -	α	ß	B 3 le	Choke endless sling					
Load Factor	1	1.4	1	2.1	1.5	1.6				
For Chain Size mm	tonnes	β 0 - 45° α 0 - 90°	45° - 60° 90° - 120°	β 0 - 45° a 0 - 90°	45° - 60° 90° - 120°					
6	1.4	2.0	1.4	2.9	2.1	2.2				
7	1.9	2.7	1.9	4.0	2.9	3.0				
8	2.5	3.5	2.5	5.3	3.8	4.0				
10	4.0	5.6	4.0	8.4	6.0	6.4				
13	6.7	9.4	6.7	14.1	10.1	10.7				
16	10.0	14.0	10.0	21.0	15.0	16.0				
20	16.0	22.4	16.0	33.6	24.0	25.6				
22	19.0	26.5	19.0	39.9	28.5	30.4				
26	26.5	37.1	26.5	55.7	39.8	42.4				
32	40.0	56.0	40.0	84.0	60.0	64.0				

WORKING LOAD LIMITS IN LBS Acc. to PAS 1061										
		90°			B 3 legs 4 legs		Choke endless sling			
Load	Factor	1	1.4	1	2.1 1.5		1.6			
For C	Chain Size	lbs	β0-45°	45° - 60°	β0-45°	45° - 60°				
mm	inch	103	a 0 - 90°	90° - 120°	a 0 - 90°	90° - 120°				
6	7/32	3,200	4,500	3,200	6,800	4,800	5,100			
7	1/4 (9/32)	4,300	6,100	4,300	9,100	6,400	6,900			
8	5/16	5,700	8,100	5,700	12,100	8,500	9,100			
10	3/8	8,800	12,400	8,800	18,700	13,200	14,100			
13	1/2	15,000	21,200	15,000	31,800	22,500	24,000			
16	5/8	22,600	32,000	22,600	47,900	33,900	36,200			
20	3/4	35,300	49,900	35,300	74,900	52,950	56,500			
22	7/8	42,700	60,400	42,700	90,600	64,000	68,300			
26	1	59,700	84,400	59,700	12,600	89,550	95,500			
32	1 1/4	90,400	127,800	90,400	191,700	135,600	144,600			

\*\* Safety factor 4:1 above limits are valid for standard use and equally loaded slings. Proper use and maintaince of your YOKE chain slings will give long life and enable you to carry out your lifting operations efficiently and safely.

The Alpha( $\alpha$ ) angle should never exceed 120°; the Beta( $\beta$ ) angle should never exceed 60°







### **Extreme-100 Grab Chain Sling Features**

YOKE offers best solutions which can adjust the length of Chain Sling serving for unsymmetric lengths with convenience and functionality, also with following features.

- Light weight but heavy duty system, extreme wear resistance and longer life than traditional components.
- Cost effective compared to conventional slings using multiple components.
- Product designed according to EN818, EN1677 and PAS1061, tested according to GS-OA-15-05.
- Each component is Proof Load tested at 2.5 times the WLL with certification for each sling.
- Each component is Fatigue Rated to 20,000 cycles at 1.5 times the WLL.
- Each component is marked with batch number that links to the test certificate with full traceability to raw material.
- Fully integrated shortening clutch and master link.
- No reduction in WLL when shortening chain.
- Replacement parts available worldwide.

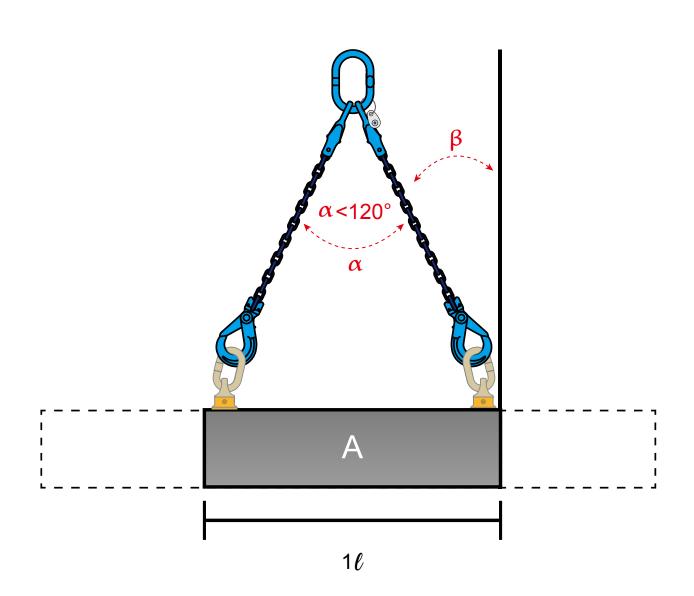




### Caution

#### **Application Scenario A:**

When a standard size load is symetrical or asymetrical, we need a 2-leg Grab Chain Sling for lifting.



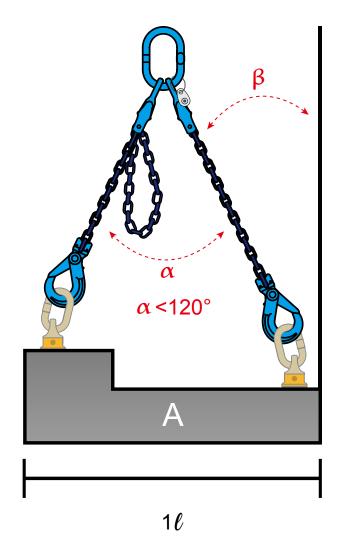
Lifting Condition : A standard load where the lifting angle is below 120°

Application : XTB\*1

Lifting Solution : This lifting system allows riggers to perform the lift safely.







Lifting Condition : An asymetrical load lift where the lifting angle is below 120° included angle

### Application : XTB\*1

Lifting Solution : Adjusting the length to balance the asymetrical load.

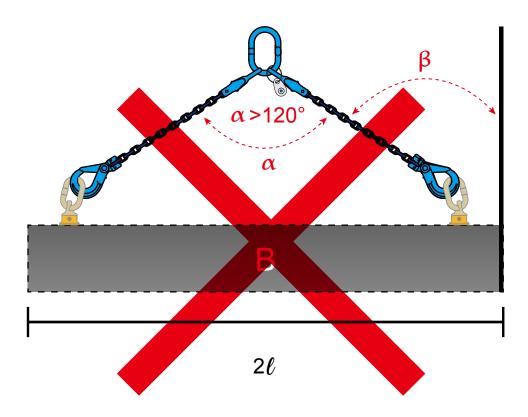




### Caution

#### **Application Scenario B:**

When there's a 2-times-wide load, we should lengthen Grab Chain Slings to avoid incident angle effect.



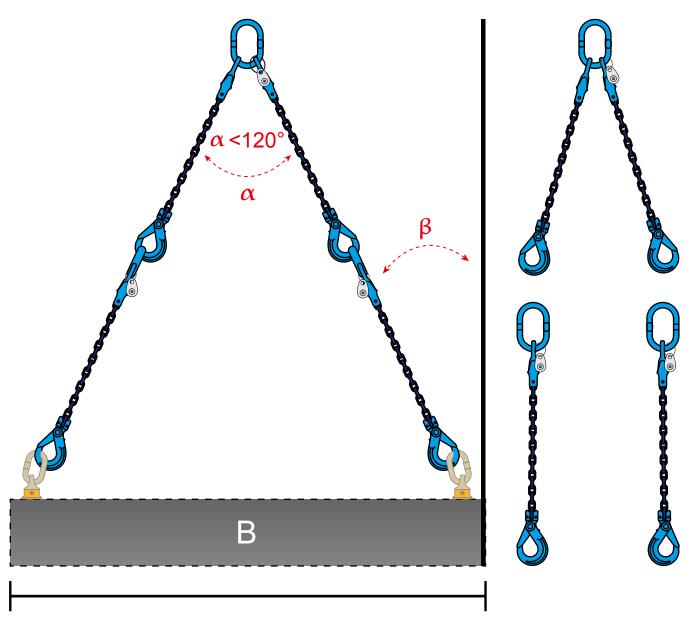
Lifting Condition : A 2-times-wide load lift which results in the severe angle over 120°

Application : XTB\*1

Lifting Solution : To connect 2 additional single slings for lengthening the original chain sling in order to reduce the lifting angle.







 $2\ell$ 

Lifting Condition : A 2-times-wide load with lengthened chain slings can perform lifting safely below 120° lifting angle.

#### Application : XTB\*1+ XSB\*2

Lifting Solution : This lifting system allows riggers to perform the lift safely.



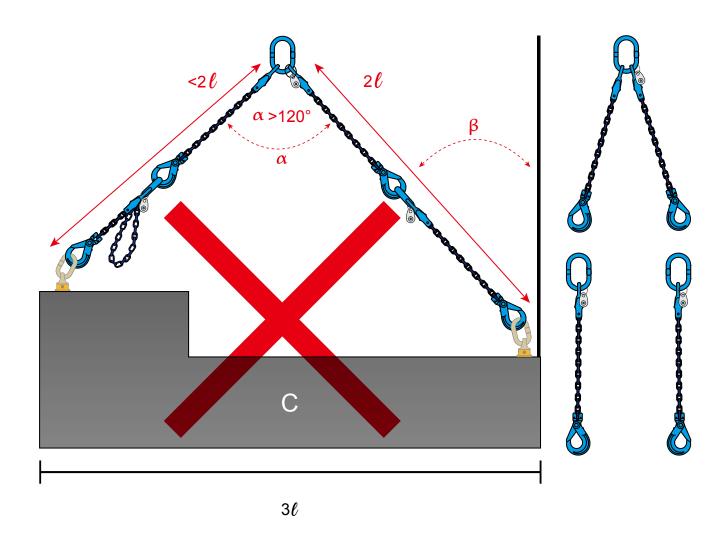
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### Caution

#### Application Scenario C:

When there's a 3-times-wide asymetrical load, we should lengthen Grab Chain Slings to avoid incident angle effect.



Lifting Condition : A 3-times-wide load lift with lengthened chain slings, however, the length of Chain Slings are not extended enough to reduce the lifting angle, it creates a high risk and is forbidden to work above 120 degree included angle.

#### Application : XTB\*1+ XSB\*2

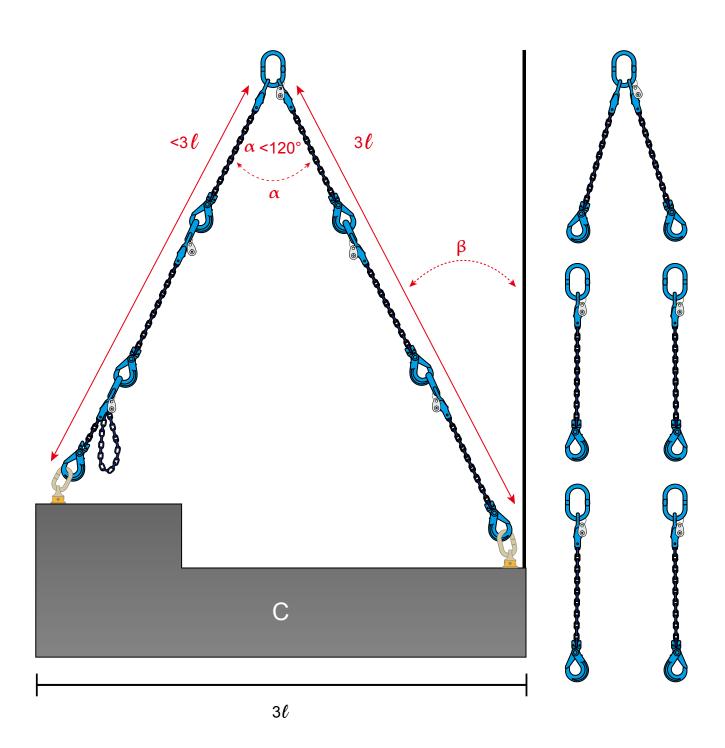
Lifting Solution : To connect 2 additional single slings for lengthening the original chain sling in order to reduce the lifting angle.





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### Grab Chain Sling



Lifting Condition : A 3-times-wide load lift with lengthened chain slings can perform lifting safely below 120° lifting angle.

#### Application : XTB\*1+ XSB\*4

Lifting Solution : This lifting system allows riggers to perform the lift safely.











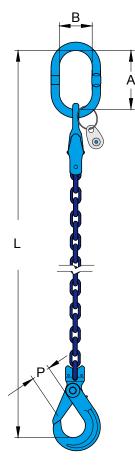
#### **RFID SupraTag**

- Product Traceability
- Declaration of Conformity
- Safe Use Instruction
- Manufacturer Authentication











- Quenched and Tempered Alloy Steel.
- At least 25% greater WLL than G80 products.
- Manufactured in accordance with EN1677, ASME B30.9 and EN 818-4.
- Proof Load tested at 2.5 times the WLL with certification for each batch manufactured.
- Each link is marked with batch number that links to test certificate with full traceability to raw materials.
- Fully integrated shortening clutch and master link.
- No reduction in WLL when shortening chain.
- Speedy assembly.
- Light weight system.
- Cost effective compared to slings which use multiple components.
- RFID equipped.



**Extreme-100 Grab Chain Sling** 

with X-026 Self Locking Hook

Item No.	WLL	For Grade 100 Chain	Used to Single Hook Acc. to DIN15401	k Acc. to Dimensions				N.W.
	tonnes	mm		А	В	Р	m	kg
XSB-06	1.4	6	4	120	70	28	2	2.5
XSB-08	2.5	8	5	140	80	34	3	5.8
XSB-10	4.0	10	6	160	95	44	3	9.5
XSB-13	6.7	13	10	170	105	51	3	16.5

\* Design factor 4:1

Item No.	For Used to Single Grade 100 Hook Acc. to em No. WLL Chain DIN15401				Dimensions (inch)	Total Component Length (L)	N.W.	
	tonnes	inch		А	В	Р	inch	lbs
XSB-06	1.4	7/32	4	4.7	2.8	1.1	78.7	5.4
XSB-08	2.5	5/16	5	5.5	3.1	1.3	118.1	12.8
XSB-10	4.0	3/8	6	6.3	3.7	1.7	118.1	20.9
XSB-13	6.7	1/2	10	6.7	4.1	2.0	118.1	36.3

\* Design factor 4:1

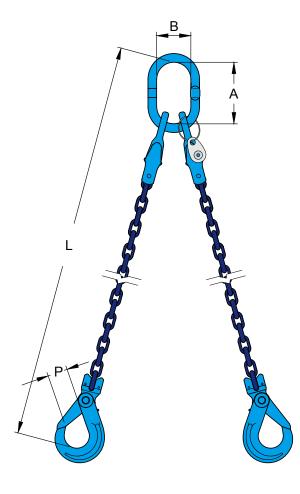












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- Speedy assembly.
- Light weight system.
- Cost effective compared to slings which use multiple components.
- RFID equipped.



### Extreme-100 Grab Chain Sling

with X-026 Self Locking Hook

Item No.	β 0-45° α 0-90°	β 45-60° α 90-120°	For Grade 100 Chain	Used to Single Hook Acc. to DIN15401	o Dimensions			Total Component Length (L)	N.W.
	tor	nnes	mm		А	В	Р		kg
XTB-06	2.0	1.4	6	4	120	70	28	2	4.4
XTB-08	3.5	2.5	8	6	160	95	34	3	11.4
XTB-10	5.6	4.0	10	10	170	105	44	3	18.6
XTB-13	9.4	6.7	13	10	190	110	51	3	32.2

\* Design factor 4:1

Item No.	β 0-45° α 0-90°	β 45-60° α 90-120°	For Grade 100 Chain	Used to Single Hook Acc. to DIN15401	Dimensions (inch)			Total Component Length (L)	N.W.
	to	nnes	inch		А	В	Р	inch	lbs
XTB-06	2.0	1.4	7/32	4	4.7	2.8	1.1	78.7	9.7
XTB-08	3.5	2.5	5/16	6	6.3	3.7	1.3	118.1	25.2
XTB-10	5.6	4.0	3/8	10	6.7	4.1	1.7	118.1	40.9
XTB-13	9.4	6.7	1/2	10	7.5	4.3	2.0	118.1	70.9

\* Design factor 4:1













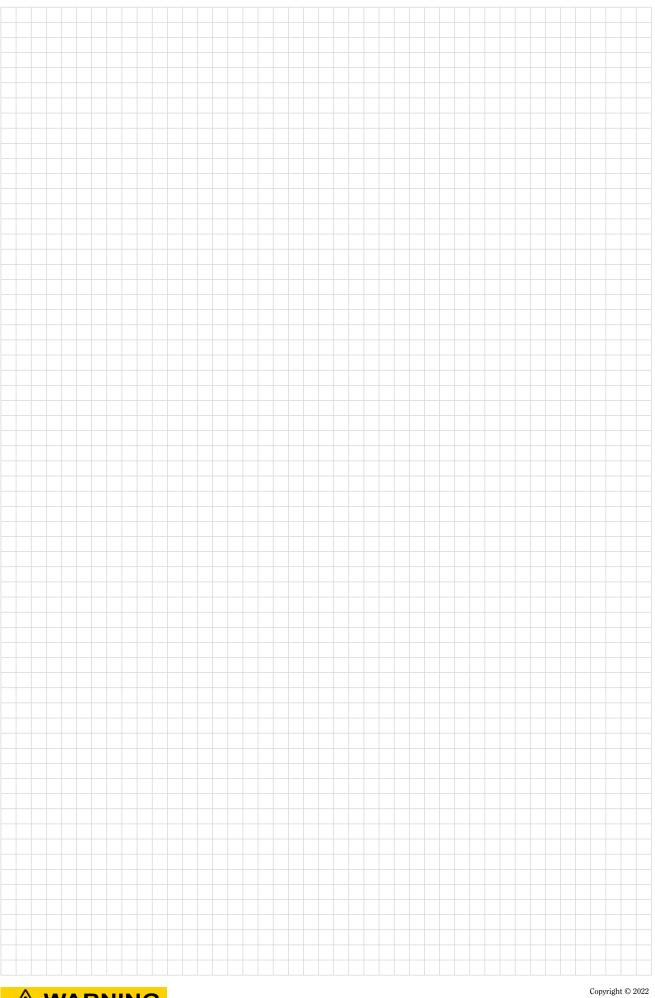


# **Grab Chain Sling**



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