



Construction Program Catalogue

01
Wire
Drawing



02
Bending
Technology



Notching

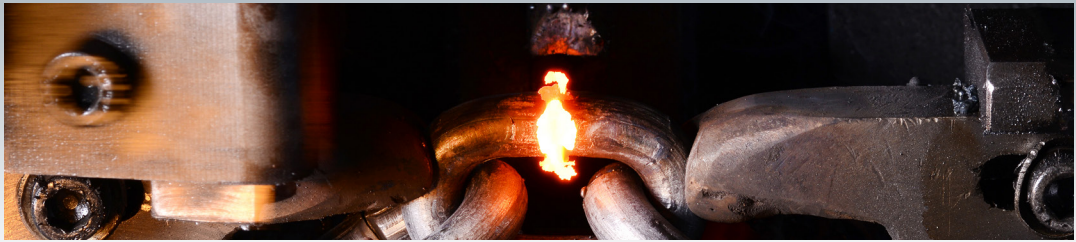


Shaping

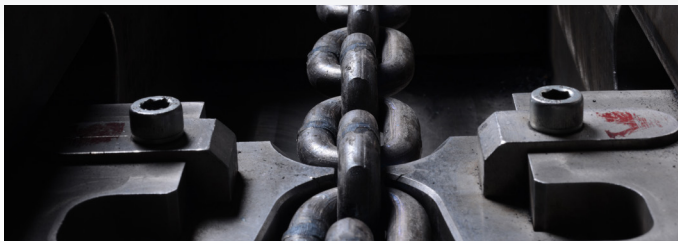
Cutting



03
Welding
Technology



04
Calibration



We do all of the processes re-quired for chain production from wire drawing to packaging in our facility. So , we serve our products to customers with superior quality management.

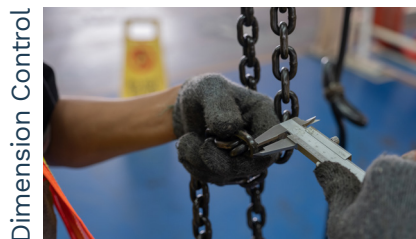
05
Stamping



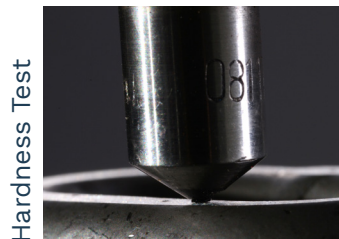
06
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Treatment



07
Testing



Dimension Control



Hardness Test



Breaking Load Limit Test

08
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Güteklasse 10 Program 10-23 Grade 100 Program

G10 Kettengehänge
G 100 Chain Lifting Slings

Pas 1061 G 10 Anschlagketten
Pas 1061 G 100 Chain

Prüfanhänger für G 10 Kettengehänge
Metal Plates for G 100 Chain Slings

DIN EN 1677-4 G 10 Aufhängerringe /-köpfe /-kopf
DIN EN 1677-4 G 100 Masterlinks

Komponenten für Anschlagketten und Zurrketten
Components for Lifting Chain and Lashing Chain

DIN EN 12195-3 G 10 Zurrkettensysteme
DIN EN 12195-3 G 100 Chain Lashing System

Prüfanhänger für G 10 Zurrkettensysteme
Metal Plates for G 100 Lashing System

Güteklasse 8 Program 26-39 Grade 80 Program

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DIN EN 818-4 G 80 Chain Lifting Slings

DIN EN 818-2 G 8 Anschlagketten
DIN EN 818-2 G 80 Lifting Chain

Prüfanhänger für G 8 Kettengehänge
Metal Plates for G 80 Chain Slings

DIN EN 1677-4 G 8 Aufhängerringe /-köpfe /-kopf
DIN EN 1677-4 G 80 Masterlinks

Komponenten für Anschlagketten und Zurrketten
Components for Lifting Chain and Lashing Chain

DIN EN 12195-3 G 8 Zurrkettensysteme
DIN EN 12195-3 G 80 Chain Lashing System

Prüfanhänger für G 8 Zurrkettensysteme
Metal Plates for G 80 Lashing System

Kettengehänge mit Schachtring-Klemme 42-45 Lifting Sling with Manhole Ring Clamps

Klemme Modell - 1.Force 63.4 / 63.5
Clamp Model - 1.Force 63.4 / 63.5

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Clamp Model - 2.Force 63.1 / 63.2

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Clamp Model - 6.Force 61.10 / 61.11

Klemme Modell - 7.Force 61.4 / 61.5
Clamp Model - 7.Force 61.4 / 61.5

Ketten für Bau Industrie 48-50 Chains for Construction Industry

Ketten für Bauschuttrutsche
Chain for Debris Pipe

G 8 Spundwandketten
G 80 Sheet-Pile Chain

Schalungsspannkette
Formwork Chain





Orçun Eğinlioğlu

Präsident des Verwaltungsrates
Chairman of the Board of Directors

Die mission der Eğinlioğlu Familie ist es, die ständig wachsenden Herausforderungen auf dem globalisierten Markt mit einem starken sozialen Bewusstsein und Verantwortungsgefühl zu leiten

Die Eğinlioğlu Gruppe möchte mit einem Vielfalt an Produkten eine anhaltende Dominanz auf dem Weltmarkt erreichen

Eğinlioğlu Family's mission is to manage company's big portfolio and increasing production in globalized world without losing its loyalty to the traditions and with hard tie to social responsibilities.

Eğinlioğlu's aim is to create permanent superiority by being different in its sector



Our Name is Symbol of Quality

Why ForceChain

Experience of production for 75 years and high quality offer a service to its costumers. With high production capacity , reponses to the demands of its costumers and with experienced stuff , costumer satisfaction is one of the main aim of Force Chain. Our stuff always focus on the new developmental researches to maintain the quality and this make us different in this sector. OUR NAME IS THE SYMBOL OF QUALITY



Quality

With 77 years manufacturing experience in welded steel link chain production from 2 mm wire diameter to 16 mm wire diameter , Force Chain is one of the leading company of this industry. The latest technology and full automatique production lines are used. It provides innovation to the sector with its heat treatment lines and 2 steps calibration system.



Sustainability

Our registered mark “Eginlioglu Group” has Research & Development department to ensure continuity on quality. Our experienced engineer stuff is doing researchs about productivity and maintainability on quality.



Technology

“Eginlioglu Zincir San. ve Tic.” is one of the members of “Eginlioglu Group” designs and produces all machines that are used fort he production. All machines used for production have the latest technology. The whole mechanical , electronic , hydrolic , pneumatic and softwares are designed and produced by Eginlioglu Group.



Speed

Having prduction capacity 1.500 Tons / Month , we provide the requirements of our costumers immediatly in 45 countries. Geopolitical position of our country , our production speed and capacity , our experienced stuff and our ability to do all process from the beginning till the end in our own make us preferable.



Service

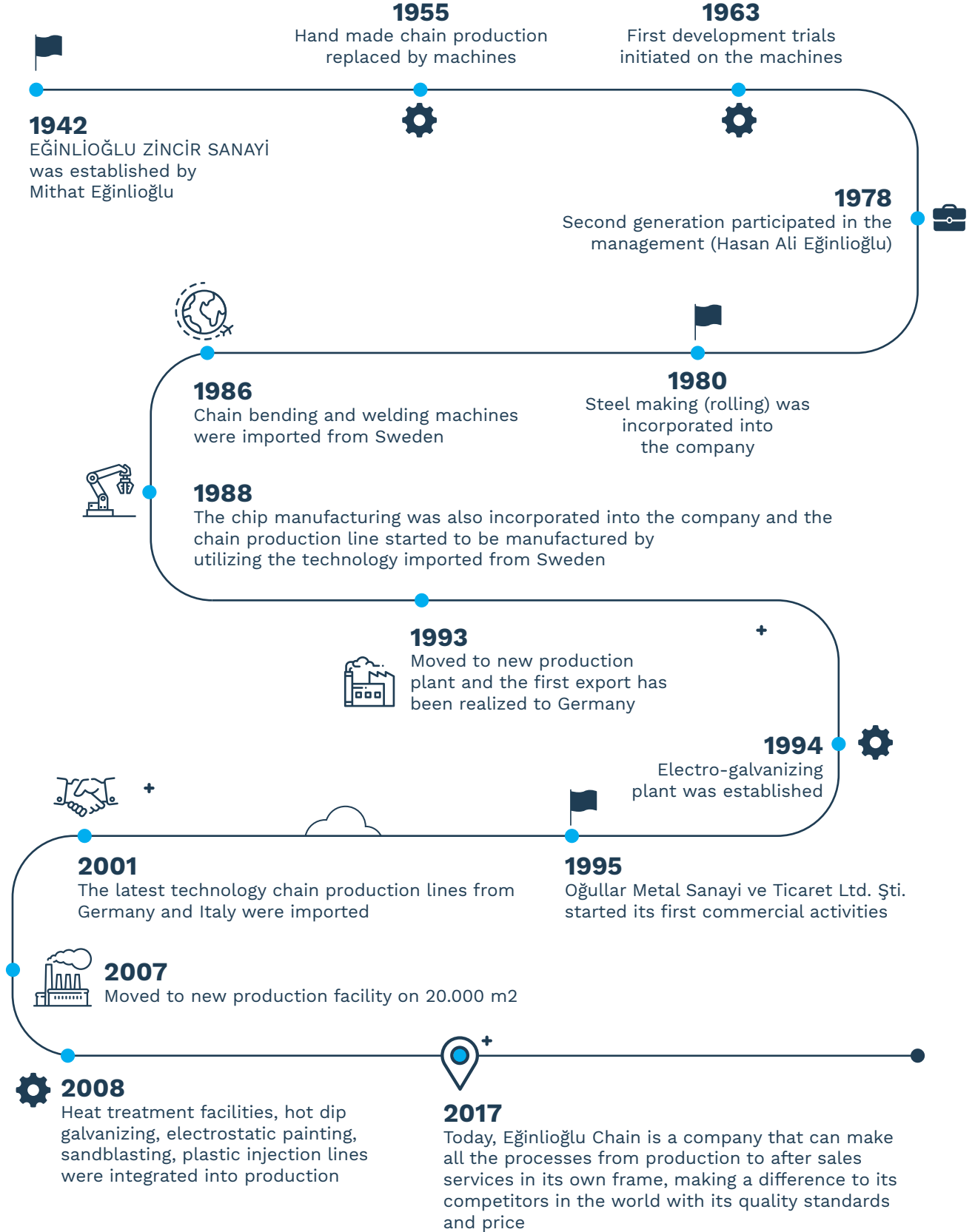
Our experienced departments , both technically and administratively , provide the best and fastest service to our costumers. Our widespread distrubition network and our speed in logistiqure make us stronger.



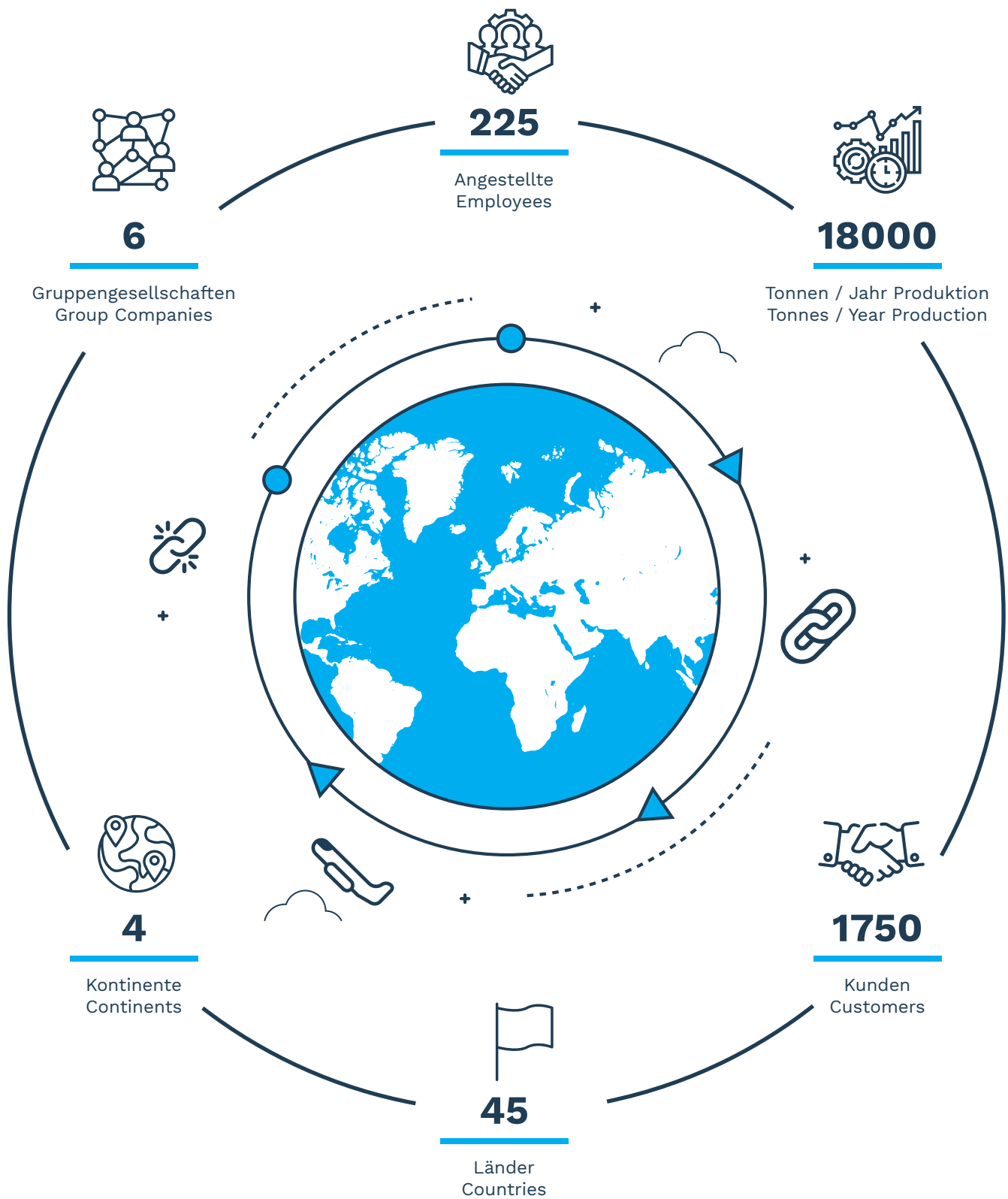
Innovation

Eğimliöğlü , one of the leading chain producer of this sector , use lots of machines that produced itself (or their patents belong to itself) in the production. To have a better quality , we continue steadily to development and improvement.0

Our Milestones



At a Glance





Güteklasse 10 Program

Grade 100 Program

10-23

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G 10 Kettengehänge

G 100 Chain Lifting Systems

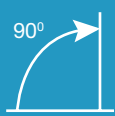
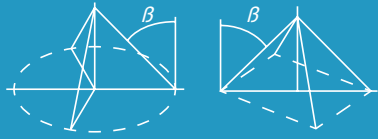
Alle Komponenten und Ketten sind blau lackiert
All components and chains blue painted

Große Auswahl an Komponenten zum Erstellen individuelle Kettengehänge
Large range of components to create your custom slings

Zwei Möglichkeiten zur Montage von Kettengehänge:
Direkt geschweißtes System oder Verbindungssystem
Two way to assembly of slings : Direct Welded System , Connecting System

Alle Komponenten hergestellt nach DIN EN 1677-1,2,3
All components produced according to DIN EN 1677-1,2,3



Diameter of Lifting Chain	 1 Leg Chain Sling	 2 Leg Chain Sling		 3 and 4 Leg Chain Sling		 Continuous Sling
mm		0 < β < 45°	0 < β < 60°	0 < β < 45°	0 < β < 60°	
		Faktor 1,4	Faktor 1,0	Faktor 2,1	Faktor 1,5	Faktor 1,6
4	0,63	0,88	0,63	1,32	0,94	1,00
5	1,00	1,40	1,00	2,10	1,50	1,60
6	1,40	1,96	1,40	2,94	2,10	2,24
7	1,90	2,66	1,90	3,99	2,85	3,04
8	2,50	3,50	2,50	5,25	3,75	4,00
10	4,00	5,60	4,00	8,40	6,00	6,40
13	6,70	9,38	6,70	14,07	10,05	10,72
16	10,00	14,00	10,00	21,00	15,00	16,00

Conditions of Use / Conditions of Use

Temperature in C°	-40° to +200°	200° to 300°	300° to 380°	Above 400°
Load Factor	1	0,90	0,75	Don't Use
Edge Load	R=Larger than 2xd 	R=Larger than d 	Smaller than d 	Don't Use
Load Factor	1	0,70	0,50	Don't Use

* d= Diameter of Chain

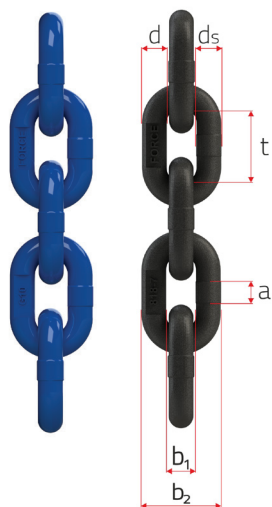


PAS 1061 G 10 Anschlagketten

PAS 1061 G 100 Chain

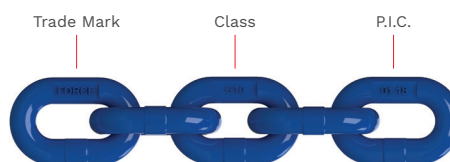
- Material : Speziell Legierten Stahl
- Standardoberfläche: Blau lackiert
- Hergestellt nach EN 818-2- Hebewerten für PAS 1061
- Die Bruchlast (BLL)- und Dehnungsgeschwindigkeit der Kette wird alle 100 Meter getestet
- Wir haben Produkt-Haftpflichtversicherung für alle Produkte im Bereich der Sicherheits Faktoren
- Zertifiziertes Qualitätsmanagement nach ISO 9001

- Material : Special Alloyed Steel
- Standard Surface : Blue Painted
- Produced according to EN 818-2 lifting values for PAS 1061
- Tested the BLL and elongation rates of the chains in every 100 meters
- We have product liability insurance for all of our products that requires security levels
- Quality approved by ISO 9001 certified company



Force Chain	Wire Diameter		Inner Length		Inside Width	Outside Width	Appr.
Article No.	Ø (dn)	Tolerance	t	Tolerance	b ₁ min.	b ₂ max.	Kg / Mtr
G100.4.BP.100.B	4	± 0,16	12	± 0,4	5,2	14,8	0,36
G100.5.BP.100.B	5	± 0,20	15	± 0,5	6,5	18,5	0,56
G100.6.BP.100.B	6	± 0,24	18	± 0,5	7,8	22,2	0,8
G100.7.BP.100.B	7	± 0,28	21	± 0,6	9,1	25,9	1,1
G100.8.BP.100.B	8	± 0,32	24	± 0,7	10,4	29,6	1,5
G100.10.BP.100.B	10	± 0,40	30	± 0,9	13	37	2,3
G100.13.BP.100.B	13	± 0,52	39	± 1,2	16,9	48,1	3,9
G100.16.BP.100.B	16	± 0,64	48	± 1,4	20,8	59,2	5,8

Stempeln / Stamping



Wire Diameter	Working Load Limit	Test Force	Breaking Load	Bending Test
Ø (dn) mm	WLL (t)	MTF (kN)	BLL (kN) min.	f (mm) min.
4,0	0,63	15,7	25,1	3,2
5,0	1,00	24,5	39,3	4,0
6,0	1,40	35,3	56,5	4,8
7,0	1,90	48,1	77,0	5,6
8,0	2,50	62,8	101,0	6,4
10,0	4,00	98,1	157,0	8,0
13,0	6,70	166,0	265,0	10,0
16,0	10,00	251,0	402,0	13,0

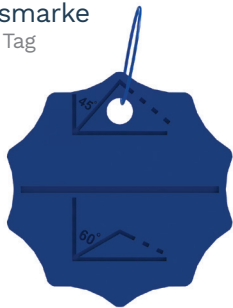
Maksimum Weld Diameter (mm)	(ds) max.	1,1 x dn
Inner Length (mm)	(tn)	3 x dn
Minimum Inner Length (mm)	(t min)	2,91 x dn
Maximum Inner Length (mm)	(t max)	3,09 x dn
Minimum Inside Width (mm)	b ₁	1,3 x dn
Maximum Outside Width (mm)	b ₂	3,7 x dn

Prüfanhänger für G 10 Kettengehänge

Metal Plates for G 100 Chain Slings

- Identifizierungskennzeichen zur leichteren erkennen von Kettengrad und der Qualität.
- Identification tag necessary for easier identification of the chain grade and quality.
- Alle erforderlichen technischen Daten sind auf dem ID-tag angebracht.
- All necessary technical data is attached on the ID tag.

Erkennungsmarke
Identification Tag



Jährliche Kontrollmarke
Annual Control Tag



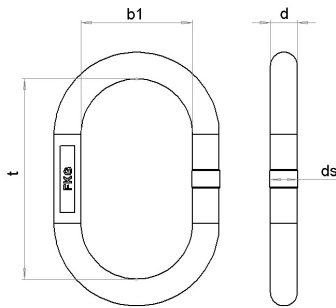
DIN EN 1677-4 G 10 Aufhängeringe /-köpfe /-kopf

DIN EN 1677-4 G 100 Masterlinks



Aufhängeringe mit und ohne Flachstelle für 1-2 Strang Anschlagketten

1-2 Leg Chain Sling Masterlink with and without Flat

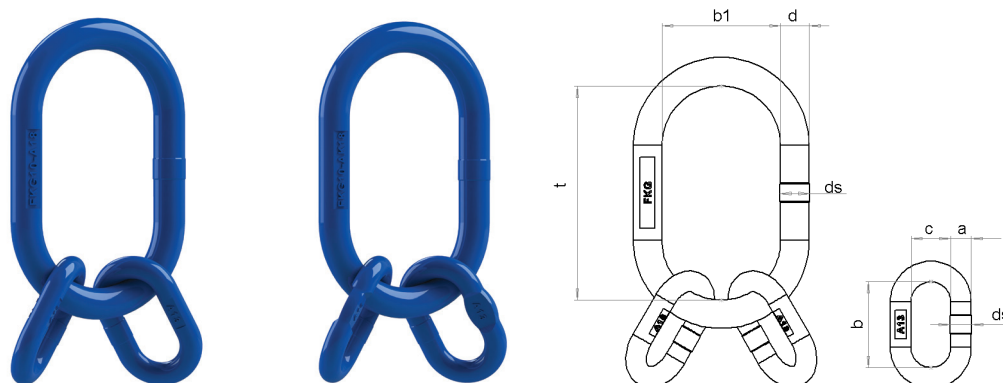


For Chain 1 Leg. 2 leg mm		Name	Dimensions			Kg/Piece	Working Load Limits (WLL)
			d	t	b ₁		
7	6	A13	13	110	60	0,34	2.000
8	7	A16	16	110	60	0,53	2.500
10	8	A18	18	135	75	0,80	4.000
13	10	A22	22	160	90	1,50	6.700
16	13	A26	26	180	100	2,30	10.000
18	16	A32	32	200	110	3,90	14.000
20	16	A36	36	260	140	6,35	17.500



Aufhängeköpfe mit und ohne Flachstelle für 3-4 Strang Anschlagketten

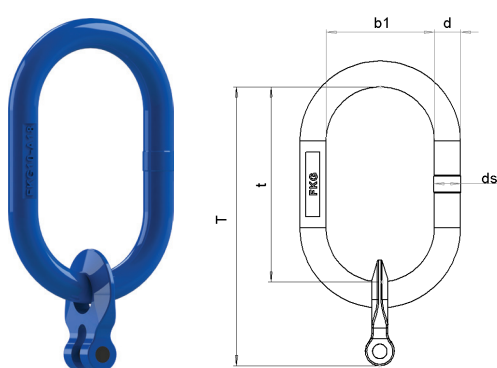
3-4 Leg Chain Sling Masterlink with and without Flat



For Chain 3/4 Leg mm	Name	Dimensions						Kg/Piece	Working Load Limits (WLL)	
		d	t	b ₁	a	b	c		0-45°	45-60°
6/7	AK18	18	135	75	13	54	25	1,16	4.000	2.850
8	AK22	22	160	90	16	70	34	2,22	5.300	3.750
10	AK26	26	180	100	18	85	40	3,36	8.000	6.000
13	AK32	32	200	110	22	115	50	6,02	14.000	10.000
16	AK36	36	260	140	26	140	65	9,94	21.200	15.000

Aufhängekopf mit Ringgabel für 1 Strang Anschlagketten

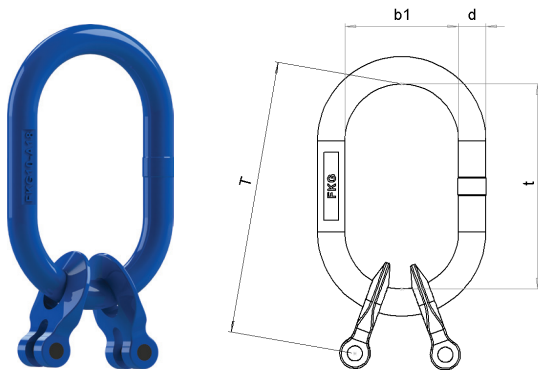
1 Leg Chain Sling Masterlink with Clevis Part



For Chain 1Leg mm	Name	Dimensions				Kg/Piece	Working Load Limits (WLL)
		d	t	b ₁	T		
6	A13RG1	13	110	60	140	0,58	1.400
8	A16RG1	16	110	60	151	0,88	2.500
10	A18RG1	18	135	75	185	1,35	4.000
13	A22RG1	22	160	90	223	2,40	6.700
16	A26RG1	26	180	100	257	4,00	10.000

Aufhängekopf mit Ringgabel für 2 Strang Anschlagketten

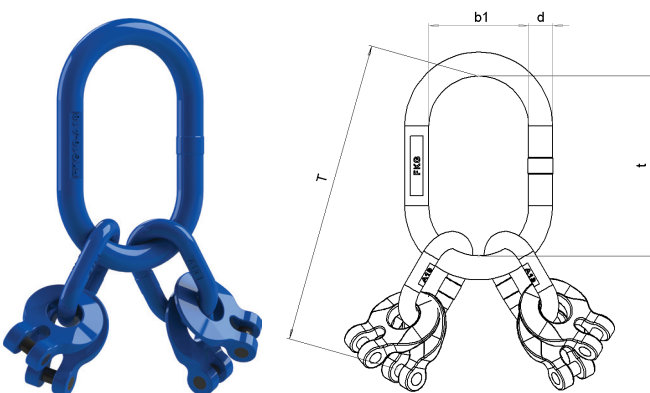
2 Leg Chain Sling Masterlink with Clevis Part



For Chain 2Leg mm	Name	Dimensions				Kg/Piece	Working Load Limits (WLL)	
		d	t	b ₁	T		0-45°	45-60°
6	A13RG2	13	110	60	140	0,70	2.000	1.400
8	A18RG2	18	135	75	176	1,40	3.550	2.500
10	A22RG2	22	160	90	210	2,45	5.600	4.000
13	A26RG2	26	180	100	243	4,20	9.500	6.700
16	A32RG2	32	200	110	277	7,05	14.000	10.000

Aufhängekopf mit Ringgabel für 3-4 Strang Anschlagketten

3-4 Leg Chain Masterlink with Clevis Part



For Chain 3/4Leg mm	Name	Dimensions				Kg/Piece	Working Load Limits (WLL)	
		d	t	b ₁	T		0-45°	45-60°
6	A18RG4	18	135	75	219	1,65	3.000	2.120
8	A22RG4	22	160	90	271	3,20	5.300	3.750
10	A26RG4	26	180	100	315	5,30	8.000	6.000
13	A32RG4	32	200	110	378	9,40	14.000	10.000
16	A36RG4	36	260	140	477	16,30	21.200	15.000

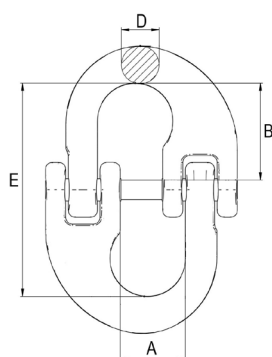
Komponenten für Anschlagketten und Zurrketten

Components for Lifting Chain and Lashing Chain



DIN EN 1677-1 G 10 Verbindungsglied

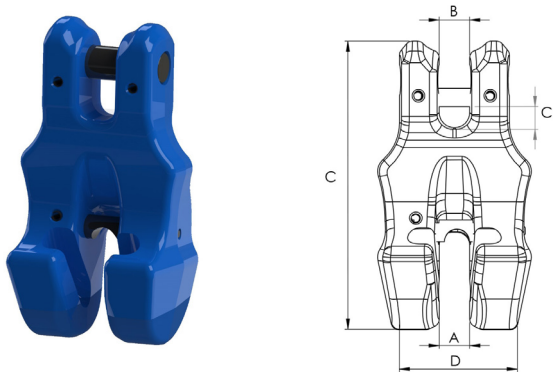
DIN EN 1677-1 G 100 Connectinglink



G100 Chain Diameter				Connecting Link Measurements							
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	A	Tolerance	B	Tolerance	D	Tolerance	E	Tolerance
6	15 / 64	1,4	5,6	14,0	$\pm 1,5$	20,8	$\pm 2,5$	5,7	$\pm 1,0$	44,5	$\pm 2,0$
8	5 / 16	2,5	10,0	18,5	$\pm 1,5$	30,8	$\pm 2,5$	10,0	$\pm 1,0$	63,1	$\pm 2,0$
10	3 / 8	4,0	16,0	23,0	$\pm 1,5$	36,0	$\pm 2,5$	12,6	$\pm 1,0$	71,6	$\pm 2,0$
13	1 / 2	6,7	26,8	27,5	$\pm 1,5$	44,5	$\pm 2,5$	16,5	$\pm 1,0$	93,4	$\pm 2,0$

DIN EN 1677-1 G 10 Ketten Verkürzungsklaue

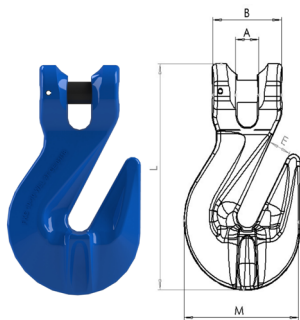
DIN EN 1677-1 G 100 Chain Clutch



G100 Chain Diameter				Hook Measurements							
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	A	Tolerance	B	Tolerance	C	Tolerance	D	Tolerance
6	15 / 64	1,40	5,60	7,5	$\pm 0,5$	7,5	$\pm 0,5$	73,0	$\pm 3,0$	38,0	$\pm 2,0$
7/8	5 / 16	2,50	10,00	9,5	$\pm 0,5$	9,5	$\pm 0,5$	92,0	$\pm 3,0$	50,0	$\pm 2,0$
10	3 / 8	4,00	16,00	11,5	$\pm 0,5$	11,5	$\pm 0,5$	115,0	$\pm 3,0$	60,0	$\pm 2,0$
13	1 / 2	6,70	26,80	15,0	$\pm 0,5$	15,0	$\pm 0,5$	149,0	$\pm 3,0$	79,0	$\pm 2,0$
16	5 / 8	10,00	40,00	19,0	$\pm 0,5$	19,0	$\pm 0,5$	184,0	$\pm 3,0$	98,0	$\pm 2,0$

DIN EN 1677-1 G 10 Verkürzungshaken mit Gabelkopf

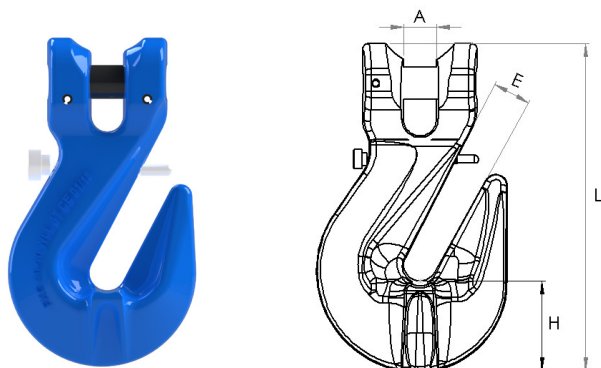
DIN EN 1677-1 G 100 Clevis Grab Hook



G100 Chain Diameter				Hook Measurements									
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	A	Tolerance	B	Tolerance	E	Tolerance	M	Tolerance	L	Tolerance
6	15 / 64	1,4	5,6	7,5	$\pm 0,5$	32,0	$\pm 1,5$	8,0	$\pm 1,0$	43,5	$\pm 2,0$	75,0	$\pm 2,0$
8	5/16	2,5	10,0	9,8	$\pm 0,5$	36,0	$\pm 1,5$	11,0	$\pm 1,0$	54,0	$\pm 2,0$	93,0	$\pm 2,0$
10	3 / 8	4,0	16,0	12,5	$\pm 0,5$	46,0	$\pm 1,5$	13,5	$\pm 1,0$	72,0	$\pm 2,0$	128,0	$\pm 2,0$
13	1 / 2	6,7	26,8	15,0	$\pm 0,5$	59,0	$\pm 1,5$	15,0	$\pm 1,0$	96,0	$\pm 2,0$	166,0	$\pm 2,0$
16	5 / 8	10,0	40,0	18,5	$\pm 0,5$	70,0	$\pm 1,5$	19,0	$\pm 1,0$	116,0	$\pm 2,0$	189,0	$\pm 2,0$

DIN EN 1677-1 G 10 Verkürzungshaken mit Gabelkopf mit Sicherung

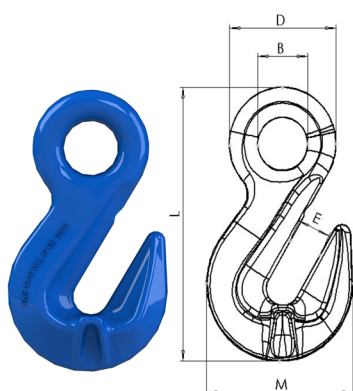
DIN EN 1677-1 G 100 Clevis Grab Hook with Safety Pin



G100 Chain Diameter				Hook Measurements						
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	A	Tolerance	E	Tolerance	H	L	Tolerance
6	15 / 64	1,4	5,6	8,0	$\pm 0,5$	8,0	$\pm 1,0$	18,5	76,5	$\pm 2,0$
8	5/16	2,5	10,0	10,0	$\pm 0,5$	10,5	$\pm 1,0$	21,0	109,0	$\pm 2,0$
10	3 / 8	4,0	16,0	12,0	$\pm 0,5$	13,0	$\pm 1,0$	29,5	134,0	$\pm 2,0$
13	1 / 2	6,7	26,8	15,0	$\pm 0,5$	15,5	$\pm 1,0$	42,0	175,5	$\pm 2,0$
16	5 / 8	10,0	40,0	19,5	$\pm 0,5$	20,0	$\pm 1,0$	44,0	182,0	$\pm 2,0$

DIN EN 1677-1 G 10 Verkürzungshaken mit Öse

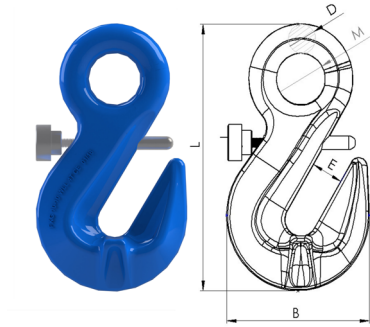
DIN EN 1677-1 G 100 Eye Grab Hook



G100 Chain Diameter				Hook Measurements									
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	D	Tolerance	B	Tolerance	E	Tolerance	M	Tolerance	L	Tolerance
6	15 / 64	1,4	5,6	30,5	$\pm 1,5$	13,5	$\pm 1,0$	8,0	$\pm 1,0$	43,5	$\pm 2,0$	73,0	$\pm 2,0$
8	5/16	2,5	10,0	37,0	$\pm 1,5$	17,5	$\pm 1,0$	11,0	$\pm 1,0$	53,0	$\pm 2,0$	93,0	$\pm 2,0$
10	3 / 8	4,0	16,0	48,5	$\pm 1,5$	22,0	$\pm 1,0$	13,5	$\pm 1,0$	74,0	$\pm 2,0$	129,0	$\pm 2,0$
13	1 / 2	6,7	26,8	59,0	$\pm 1,5$	28,0	$\pm 1,0$	16,5	$\pm 1,0$	96,0	$\pm 2,0$	166,0	$\pm 2,0$
16	5 / 8	10,0	40,0	75,0	$\pm 1,5$	36,0	$\pm 1,0$	19,0	$\pm 1,0$	116,0	$\pm 2,0$	186,0	$\pm 2,0$

DIN EN 1677-1 G 10 Verkürzungshaken mit Öse mit Sicherung

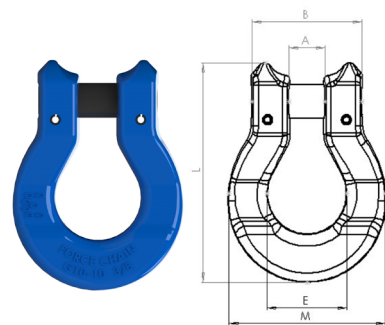
DIN EN 1677-1 G 100 Eye Grab Hook with Safety Pin



G100 Chain Diameter				Hook Measurements							
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	M	Tolerance	E	Tolerance	L	Tolerance	D	Tolerance
7/8	5/16	2,5	10,0	16,5	$\pm 0,5$	10,5	$\pm 0,5$	110,0	$\pm 2,0$	12,0	$\pm 0,5$
10	3 / 8	4,0	16,0	21,0	$\pm 0,5$	13	$\pm 0,5$	136,5	$\pm 2,0$	15,0	$\pm 0,5$
13	1 / 2	6,7	26,8	27,5	$\pm 0,5$	15,5	$\pm 0,5$	180,0	$\pm 2,0$	20,5	$\pm 0,5$

DIN EN 1677-1 Güteklasse 10 Omega Schäkel

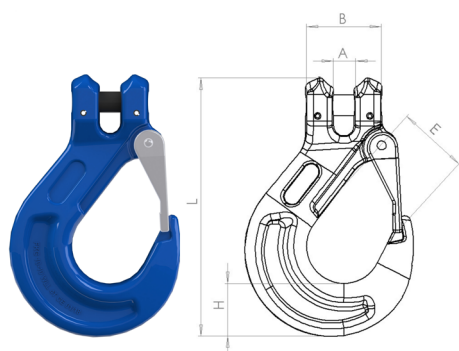
DIN EN 1677-1 Grade 100 Omega Shackle



G100 Chain Diameter				Hook Measurements									
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	A	Tolerance	B	Tolerance	E	Tolerance	M	Tolerance	L	Tolerance
6	15 / 64	1,4	5,6	8,5	$\pm 0,5$	32,5	$\pm 2,0$	20,0	$\pm 1,5$	44,0	$\pm 2,0$	55,0	$\pm 2,0$
8	5/16	2,5	10,0	10,5	$\pm 0,5$	42,0	$\pm 2,0$	24,0	$\pm 1,5$	60,0	$\pm 2,0$	73,5	$\pm 2,0$
10	3 / 8	4,0	16,0	12,5	$\pm 0,5$	48,5	$\pm 2,0$	31,0	$\pm 1,5$	70,0	$\pm 2,0$	90,0	$\pm 2,0$
13	1 / 2	6,7	26,8	16,0	$\pm 0,5$	60,0	$\pm 2,0$	38,5	$\pm 1,5$	90,0	$\pm 2,0$	109,0	$\pm 2,0$
16	5 / 8	10,0	40,0	19,0	$\pm 0,5$	75,5	$\pm 2,0$	51,0	$\pm 1,5$	112,0	$\pm 2,0$	141,5	$\pm 2,0$

DIN EN 1677-2 Güteklasse 10 Gabelkopf-Lasthaken mit Schmiedefalle

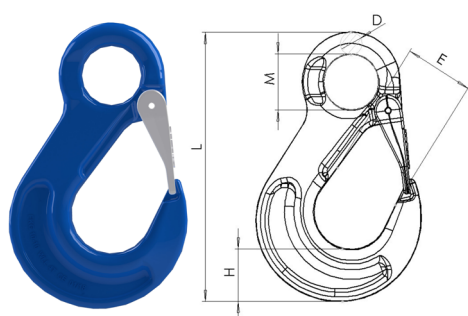
DIN EN 1677-2 Grade 10 Clevis Sling Hook



G100 Chain Diameter				Hook Measurements											
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	A	Tolerance	B	Tolerance	E	Tolerance	M	Tolerance	L	Tolerance	H	Tolerance
6	15/64	1,4	5,6	7,5	$\pm 0,5$	32,0	$\pm 1,0$	18,5	$\pm 1,5$	68,5	$\pm 2,0$	109,0	$\pm 2,5$	21,0	$\pm 1,0$
8	5/16	2,5	10,0	9,5	$\pm 0,5$	37,0	$\pm 1,0$	25,0	$\pm 1,5$	88,0	$\pm 2,0$	134,0	$\pm 2,5$	27,5	$\pm 1,0$
10	3 / 8	4,0	16,0	12,0	$\pm 0,5$	48,0	$\pm 1,0$	28,0	$\pm 1,5$	105,5	$\pm 2,0$	161,5	$\pm 2,5$	33,5	$\pm 1,0$
13	1 / 2	6,7	26,8	15,0	$\pm 0,5$	59,0	$\pm 1,0$	38,0	$\pm 1,5$	134,0	$\pm 2,0$	203,0	$\pm 2,5$	42,0	$\pm 1,0$
16	5 / 8	10,0	40,0	17,5	$\pm 0,5$	70,0	$\pm 1,0$	44,0	$\pm 1,5$	160,5	$\pm 2,0$	248,0	$\pm 2,5$	50,0	$\pm 1,0$

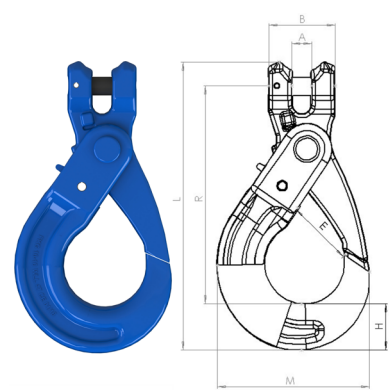
DIN EN 1677-2 G 10 Ösenlasthaken mit Schmiedefalle

DIN EN 1677-2 G 100 Eye Sling Hook



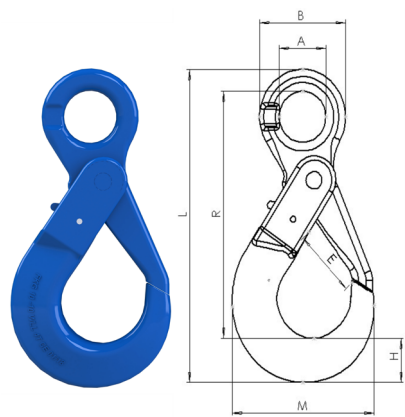
G100 Chain Diameter				Hook Measurements									
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	D	Tolerance	E	Tolerance	H	Tolerance	M	Tolerance	L	Tolerance
6	15 / 64	1,4	5,6	10,0	$\pm 1,0$	18,5	$\pm 2,0$	21,0	$\pm 1,0$	20,5	$\pm 1,0$	111,0	$\pm 2,5$
8	5/16	2,5	10,0	11,0	$\pm 1,0$	25,0	$\pm 2,0$	27,5	$\pm 1,0$	25,0	$\pm 1,0$	137,5	$\pm 2,5$
10	3 / 8	4,0	16,0	16,0	$\pm 1,0$	28,0	$\pm 2,0$	33,0	$\pm 1,0$	34,0	$\pm 1,0$	171,5	$\pm 2,5$
13	1 / 2	6,7	26,8	19,0	$\pm 1,0$	38,0	$\pm 2,0$	43,5	$\pm 1,0$	43,0	$\pm 1,0$	219,0	$\pm 2,5$
16	5 / 8	10,0	40,0	24,5	$\pm 1,0$	44,0	$\pm 2,0$	50,0	$\pm 1,0$	50,0	$\pm 1,0$	260,0	$\pm 2,5$

DIN EN 1677-3 G 10 Selflocking-Haken mit Gabelkopf
DIN EN 1677-3 G 100 Clevis Selflock Hook



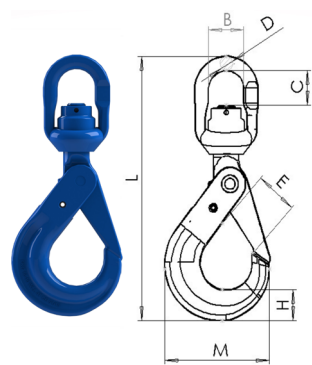
G100 Chain Diameter				Hook Measurements													
Ø (d _n) mm	Ø (d _n) Inch	WLL (t)	BLL (t)	A	Tolerance	B	Tolerance	E	Tolerance	H	Tolerance	R	Tolerance	M	Tolerance	L	Tolerance
6	15 / 64	1,4	5,6	7,5	± 0,5	32,0	± 1,5	28,0	± 1,0	20,0	± 1,0	96,0	± 2,0	70,0	± 2,0	131,0	± 3,0
8	5/16	2,5	10,0	9,5	± 0,5	36,0	± 1,5	35,5	± 1,0	26,0	± 1,0	123,0	± 2,0	90,0	± 2,0	166,0	± 3,0
10	3 / 8	4,0	16,0	12,0	± 0,5	46,0	± 1,5	45,0	± 1,0	30,0	± 1,0	144,0	± 2,0	109,0	± 2,0	196,5	± 3,0
13	1 / 2	6,7	26,8	15,0	± 0,5	59,0	± 1,5	53,5	± 1,0	40,5	± 1,0	182,0	± 2,0	138,5	± 2,0	251,0	± 3,0
16	5 / 8	10,0	40,0	17,5	± 0,5	70,0	± 1,5	62,0	± 1,0	50,5	± 1,0	217,0	± 2,0	170,5	± 2,0	303,0	± 3,0

DIN EN 1677-3 G 10 Selflocking-Haken mit Öse
DIN EN 1677-3 G 100 Eye Selflock Hook



G100 Chain Diameter				Hook Measurements													
Ø (d _n) mm	Ø (d _n) Inch	WLL (t)	BLL (t)	A	Tolerance	B	Tolerance	E	Tolerance	H	Tolerance	R	Tolerance	M	Tolerance	L	Tolerance
6	15 / 64	1,4	5,6	21,0	± 0,5	43,0	± 1,5	28,0	± 1,0	20,0	± 1,0	110,0	± 2,0	70,0	± 2,0	141,0	± 3,0
8	5/16	2,5	10,0	27,0	± 0,5	51,0	± 1,5	35,5	± 1,0	26,0	± 1,0	137,0	± 2,0	90,0	± 2,0	175,0	± 3,0
10	3 / 8	4,0	16,0	34,5	± 0,5	64,5	± 1,5	45,0	± 1,0	30,0	± 1,0	169,0	± 2,0	109,0	± 2,0	212,5	± 3,0
13	1 / 2	6,7	26,8	40,0	± 0,5	80,0	± 1,5	53,5	± 1,0	40,5	± 1,0	209,0	± 2,0	138,5	± 2,0	270,0	± 3,0
16	5 / 8	10,0	40,0	50,0	± 0,5	104,0	± 1,5	61,0	± 1,0	50,5	± 1,0	254,0	± 2,0	170,5	± 2,0	331,0	± 3,0

DIN EN 1677-3 G 10 Selflocking-Haken mit Öse mit Wirbel
DIN EN 1677-3 G 100 Swivel Eye Selflock Hook



G100 Chain Diameter				Hook Measurements													
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	B	Tolerance	C	Tolerance	D	Tolerance	E	Tolerance	H	Tolerance	M	Tolerance	L	Tolerance
6	15 / 64	1,4	5,6	32,5	$\pm 1,0$	23,0	$\pm 1,0$	11,5	$\pm 0,5$	28,0	$\pm 1,0$	20,0	$\pm 1,0$	70,0	$\pm 2,0$	184,0	$\pm 3,0$
8	5/16	2,5	10,0	36,0	$\pm 1,0$	28,0	$\pm 1,0$	13,0	$\pm 0,5$	35,5	$\pm 1,0$	26,0	$\pm 1,0$	90,0	$\pm 2,0$	229,0	$\pm 3,0$
10	3 / 8	4,0	16,0	42,0	$\pm 1,0$	35,0	$\pm 1,0$	15,5	$\pm 0,5$	45,0	$\pm 1,0$	30,0	$\pm 1,0$	108,0	$\pm 2,0$	269,0	$\pm 3,0$
13	1 / 2	6,7	26,8	50,0	$\pm 1,0$	40,0	$\pm 1,0$	17,0	$\pm 0,5$	53,5	$\pm 1,0$	43,0	$\pm 1,0$	138,5	$\pm 2,0$	330,0	$\pm 3,0$
16	5 / 8	10,0	40,0	61,0	$\pm 1,0$	56,0	$\pm 1,0$	21,5	$\pm 0,5$	62,0	$\pm 1,0$	50,5	$\pm 1,0$	170,5	$\pm 2,0$	413,0	$\pm 3,0$



DIN EN 12195-3 G 10 Zurrkettensysteme

DIN EN 12195-3 G 100 Chain Lashing Systems

- Hergestellt nach EN 818-2-Hebewerten für PAS 1061
- Alle Komponenten und Ketten sind blau lackiert
- Alle Komponenten hergestellt nach DIN EN 1677-1, 2, 3
- Zertifiziertes Qualitätsmanagement nach ISO 9001C

- Chain produced according to EN 818-2 lifting values for PAS 1061
- All components and chains blue painted
- All components produced according to DIN EN 1677-1,2,3
- Quality approved by ISO 9001 certified company



DIN EN 12195-3 Einteiliges Zurrkettensystem

DIN EN 12195-3 One Part Chain Lashing System

- Das System besteht aus;
- 1 Verbindungsglied
 - 1 Ratschenlastspanner
 - 1 Ratschenlastspanner mit Ausdrehsicherung
 - 2 Gabelkopflasthaken.

- The System consist of ;
- 1 Connecting link
 - 1 Clevis Ratchet Load Binder
 - 1 Eye Grab Hook with Safety Pin
 - 2 Clevis Sling Hook



Diameter of Chain	Lashing Capacity (LC) in daN
8 mm	5.000
10 mm	8.000
13 mm	13.400

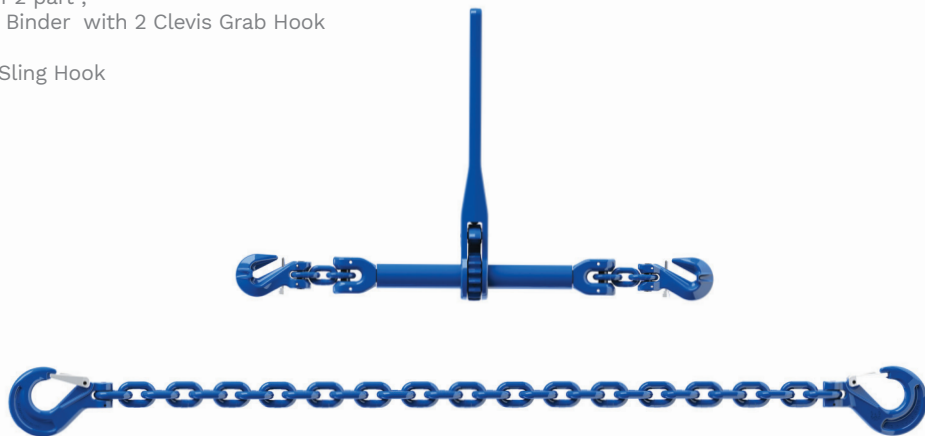


DIN EN 12195-3 Zweiteiliges Zurrkettensysteme

DIN EN 12195-3 Two Part Chain Lashing System

- Das System besteht aus 2 Teilen;
- Ratschenlastspanner mit 2 Verkürzungshaken mit Ausdrehsicherung
 - Kette mit 2 Gabelkopflasthaken.

- The System consist of 2 part ;
- Clevis Ratchet Load Binder with 2 Clevis Grab Hook with Safety Pin
 - Chain with 2 Clevis Sling Hook



Diameter of Chain	Lashing Capacity (LC) in daN
8 mm	5.000
10 mm	8.000
13 mm	13.400

Prüfanhänger für G 10 Zurrkettensysteme

Metal Plates For G 100 Lashing Systems

- Erkennungsmarke:
- Nach EN 12195-3 G10

- Identification Tag :
- According to EN 12195-3 with G10 values





Güteklasse 8 Program Grade 80 Program

26-39

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DIN EN 818-4 G 8 Kettengehänge

DIN EN 818-4 G 80 Chain Lifting System

Kettengehänge werden nach EN 818-4 produziert

Slings produce according to EN 818-4 standard

Alle Komponenten hergestellt nach DIN EN 1677-1,2,3

All components produced according to DIN EN 1677-1,2,3

Komponenten oberflächen standard ist rot lackiert

Components surface standard is red painted

Ketten oberflächen standard ist schwarz lackiert

Chain surface standard is black painted

Große Auswahl an Komponenten zum Erstellen individuelle Kettengehänge

Large range of components to create your custom slings

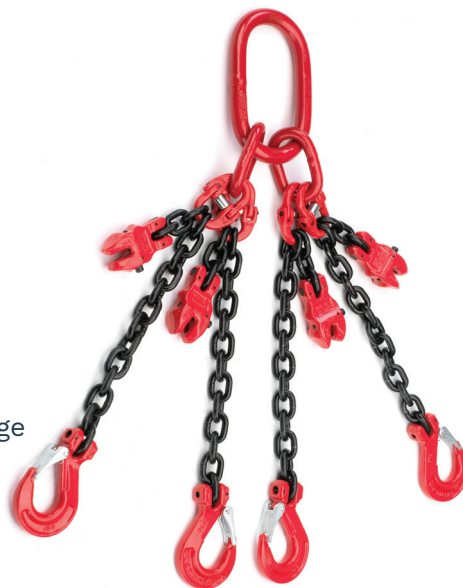
Zwei Möglichkeiten zur Montage von Kettengehänge:

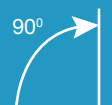
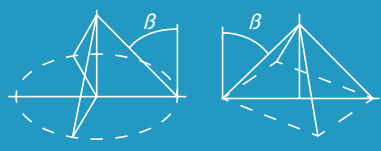
Direkt geschweißtes System oder Verbindungssystem

Two way to assembly of slings : Direct Welded System , Connecting System

Zertifiziertes Qualitätsmanagement nach ISO 9001

Quality approved by ISO 9001 certified company



Diameter of Lifting Chain						
		2 Leg Chain Sling		3 and 4 Leg Chain Sling		
mm	1 Leg Chain Sling	$0 < \beta < 45^\circ$	$0 < \beta < 60^\circ$	$0 < \beta < 45^\circ$	$0 < \beta < 60^\circ$	Continuous Sling
		Faktor 1,4	Faktor 1,0	Faktor 2,1	Faktor 1,5	
4	0,50	0,71	0,50	1,06	0,75	0,80
5	0,80	1,12	0,80	1,60	1,18	1,24
6	1,12	1,60	1,12	2,36	1,70	1,80
7	1,50	2,12	1,50	3,15	2,24	2,50
8	2,00	2,80	2,00	4,25	3,00	3,15
10	3,15	4,25	3,15	6,70	4,75	5,00
13	5,30	7,50	5,30	11,20	8,00	8,50
16	8,00	11,20	8,00	17,00	11,80	12,50

Conditions of Use / Conditions of Use

Temperature in C°	-40° to +200°	200° to 300°	300° to 380°	Above 400°
Load Factor	1	0,90	0,75	Don't Use
Edge Load	R=Larger than 2xd 	R=Larger than d 	Smaller than d 	Don't Use
Load Factor	1	0,70	0,50	Don't Use

* d= Diameter of Chain

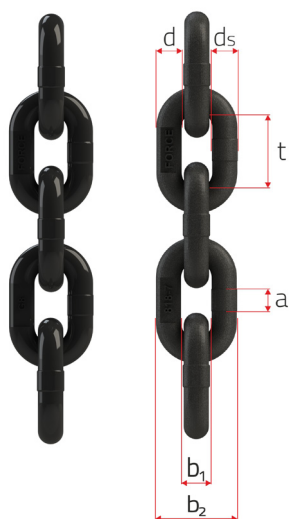


DIN EN 818-2 G 8 Anschlagkette

DIN EN 818-2 G 80 Lifting Chain

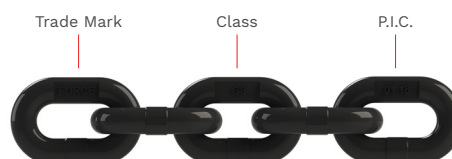
- Material : Speziell Legierten Stahl
- Standardoberfläche: Schwarz lackiert
- Hergestellt gemäß der Norm EN 818-2
- Die Bruchlast (BLL)- und Dehnungsgeschwindigkeit der Kette wird alle 100 Meter getestet
- Wir haben Produkt-Haftpflichtversicherung für alle Produkte im Bereich der Sicherheits Faktoren
- Zertifiziertes Qualitätsmanagement nach ISO 9001

- Material : Special Alloyed Steel
- Standard Surface : Black Painted
- Produced according to EN 818-2 standard
- Tested the BLL and elongation rates of the chains in every 100 meters
- We have product liability insurance for all of our products that requires security levels
- Quality approved by ISO 9001 certified company



Force Chain	Wire Diameter		Inner Length		Inside Width	Outside Width	Appr.
Article No.	Ø (dn)	Tolerance	t	Tolerance	b ₁ min.	b ₂ max.	Kg / Mtr
818-2.4.BP100.B	4	± 0,16	12	± 0,4	5,2	14,8	0,36
818-2.5.BP100.B	5	± 0,20	15	± 0,5	6,5	18,5	0,56
818-2.6.BP100.B	6	± 0,24	18	± 0,5	7,8	22,2	0,8
818-2.7.BP100.B	7	± 0,28	21	± 0,6	9,1	25,9	1,1
818-2.8.BP100.B	8	± 0,32	24	± 0,7	10,4	29,6	1,5
818-2.10.BP100.B	10	± 0,40	30	± 0,9	13	37	2,3
818-2.13.BP100.B	13	± 0,52	39	± 1,2	16,9	48,1	3,9
818-2.16.BP100.B	16	± 0,64	48	± 1,4	20,8	59,2	5,8

Stempeln / Stamping



Wire Diameter	Working Load Limit	Test Force	Breaking Load	Bending Test
Ø (dn) mm	WLL (t)	MTF (kN)	BLL (kN) min.	f (mm) min.
4	0,50	12,6	20,1	3,2
5	0,80	19,6	31,4	4,0
6	1,12	28,3	45,2	4,8
7	1,50	38,5	61,6	5,6
8	2,00	50,3	80,4	6,4
10	3,15	78,5	126,0	8,0
13	5,30	133,0	212,0	10,0
16	8,00	201,0	322,0	13,0

Maksimum Weld Diameter (mm)	(ds) max.	1.1 x dn
Inner Length (mm)	(tn)	3 x dn
Minimum Inner Length (mm)	(t min)	2,91 x dn
Maximum Inner Length (mm)	(t max)	3,09 x dn
Minimum Inside Width (mm)	b ₁	1,3 x dn
Maximum Outside Width (mm)	b ₂	3,7 x dn

Prüfanhanger für G 8 Kettengehänge

Metal Plates for G 80 Chain Slings

- Identifizierungskennzeichen zur leichteren erkennen von Kettengrad und der Qualität.
- Identification tag necessary for easier identiffcation of the chain grade and quality.
- Alle erforderlichen technischen Daten sind auf dem ID-tag angebracht.
- All necessary technical data is attached on the ID tag.

Erkennungsmarke
Identification Tag

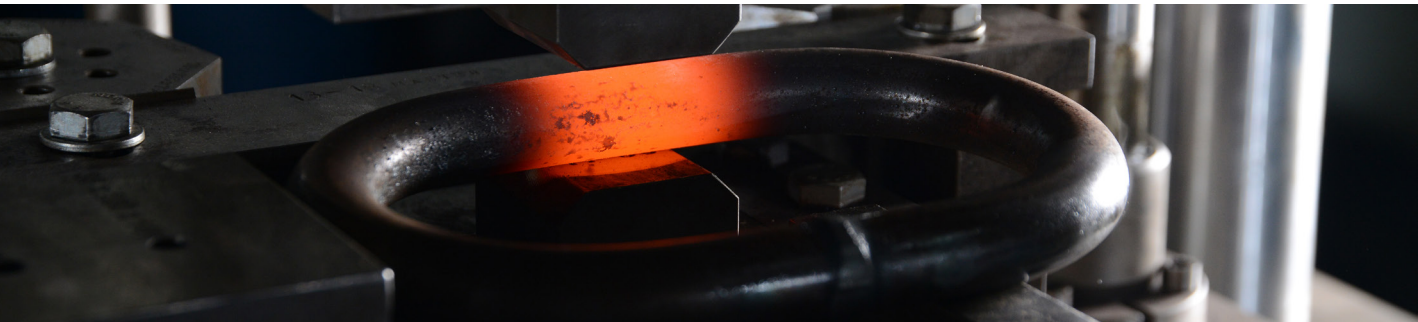


Jährliche Kontrollmarke
Annual Control Tag

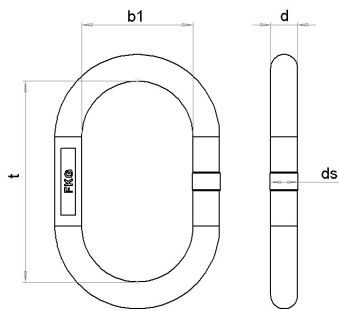


DIN EN 1677-4 G 8 Aufhängeringe / -köpfe /-kopf

DIN EN 1677-4 G 80 Masterlinks



Aufhängeringe mit und ohne Flachstelle für 1-2 Strang Anschlagkette
1-2 Leg Masterlinks with and without Flat

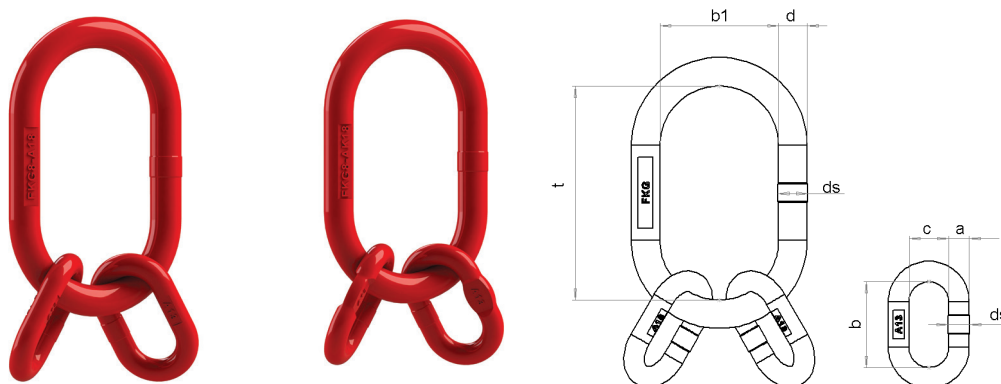


For Chain 1 Leg. 2 leg mm		Name	Dimensions			Kg/Piece	Working Load Limits (WLL)
			d	t	b ₁		
6/7	6	A13	13	110	60	0,34	1,600
8	7	A16	16	110	60	0,53	2.120
10	8	A18	18	135	75	0,80	3.150
13	10	A22	22	160	90	1,50	5.300
16	13	A26	26	180	100	2,30	8.000
18	16	A32	32	200	110	3,90	11.200
20	18	A36	36	260	140	6,35	16.000



Aufhängeköpfe mit und ohne Flachstelle für 3-4 Strang Anschlagketten

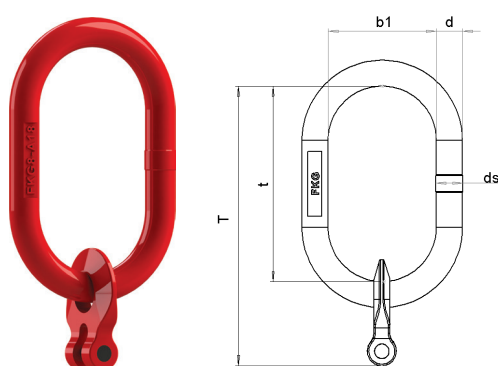
3-4 Leg Masterlinks with and without Flat



For Chain 3/4 Leg mm	Name	Dimensions						Kg/Piece	Working Load Limits (WLL)	
		d	t	b ₁	a	b	c		0-45°	45-60°
6/7	AK18	18	135	75	13	54	25	1,16	3.150	2.240
8	AK22	22	160	90	16	70	34	2,22	4.250	3.000
10	AK26	26	180	100	18	85	40	3,36	6.700	4.750
13	AK32	32	200	110	22	115	50	6,02	11.200	8.000
16	AK36	36	260	140	26	140	65	9,94	17.000	11.800

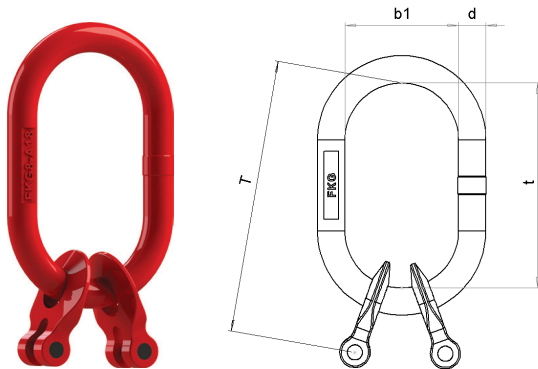
Aufhängekopf mit Ringgabel für 1 Strang Anschlagketten

1 Leg Chain Sling Masterlink with Clevis Part



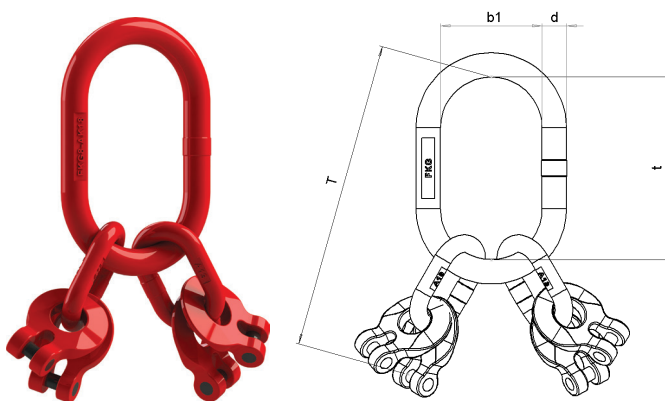
For Chain 1Leg mm	Name	Dimensions				Kg/Piece	Working Load Limits (WLL)
		d	t	b ₁	T		
6	A13RG1	13	110	60	140	0,58	1.120
8	A16RG1	16	110	60	151	0,88	2.000
10	A18RG1	18	135	75	185	1,35	3.150
13	A22RG1	22	160	90	223	2,40	5.300
16	A26RG1	26	180	100	257	4,00	8.000

Aufhängekopf mit Ringgabel für 2 Strang Anschlagketten 2 Leg Chain Sling Masterlink with Clevis Part



For Chain 2Leg mm	Name	Dimensions				Kg/Piece	Working Load Limits (WLL)	
		d	t	b ₁	T		0-45°	45-60°
6	A13RG2	13	110	60	140	0,70	1.600	1.120
8	A18RG2	18	135	75	176	1,40	2.800	2.000
10	A22RG2	22	160	90	210	2,45	4.250	3.150
13	A26RG2	26	180	100	243	4,20	7.500	5.300
16	A32RG2	32	200	110	277	7,05	11.200	8.000

Aufhängekopf mit Ringgabel für 3-4 Strang Anschlagketten 3-4 Leg Chain Sling Masterlink with Clevis Part



For Chain 3/4Leg mm	Name	Dimensions				Kg/Piece	Working Load Limits (WLL)	
		d	t	b ₁	T		0-45°	45-60°
6	A18RG4	18	135	75	219	1,65	3.150	2.240
8	A22RG4	22	160	90	271	3,20	4.250	3.000
10	A26RG4	26	180	100	315	5,30	6.700	4.750
13	A32RG4	32	200	110	378	9,40	11.200	8.000
16	A36RG4	36	260	140	477	16,30	17.000	11.800

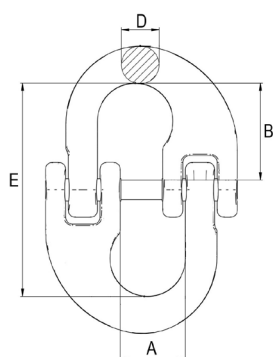
Komponenten für Anschlagketten und Zurrketten

Components for Lifting Chain and Lashing Chain



DIN EN 1677-1 G 8 Verbindungsglied

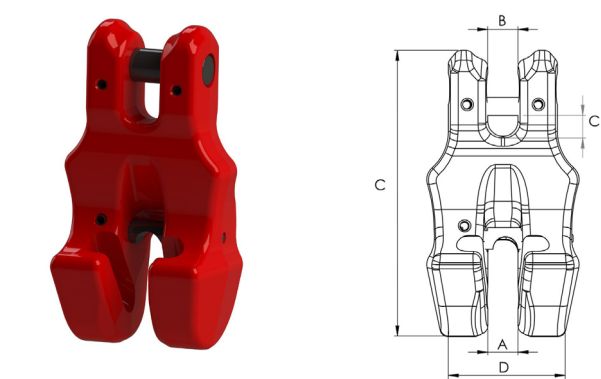
DIN EN 1677-1 G 80 Connectinglink



G80 Chain Diameter				Connecting Link Measurements							
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	A	Tolerance	B	Tolerance	D	Tolerance	E	Tolerance
6	15 / 64	1,12	4,48	15,0	$\pm 1,5$	14,5	$\pm 2,0$	7,0	$\pm 1,0$	42,0	$\pm 2,0$
8	5/16	2,00	8,00	20,5	$\pm 1,5$	24,5	$\pm 2,0$	8,5	$\pm 1,0$	60,5	$\pm 2,0$
10	3 / 8	3,15	12,60	26,0	$\pm 1,5$	28,0	$\pm 2,0$	10,5	$\pm 1,0$	68,0	$\pm 2,0$
13	1 / 2	5,30	21,20	30,0	$\pm 1,5$	36,5	$\pm 2,0$	15,0	$\pm 1,0$	87,0	$\pm 2,0$

DIN EN 1677-1 G 8 Ketten Verkürzungsklaue

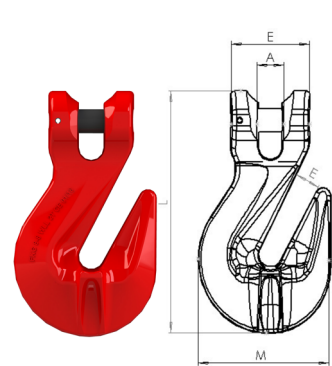
DIN EN 1677-1 G 80 Chain Clutch



G80 Chain Diameter				Hook Measurements							
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	A	Tolerance	B	Tolerance	C	Tolerance	D	Tolerance
6	15 / 64	1,12	4,48	7,5	$\pm 0,5$	7,5	$\pm 0,5$	73,0	$\pm 3,0$	38,0	$\pm 2,0$
7/8	5/16	2,00	8,00	9,5	$\pm 0,5$	9,5	$\pm 0,5$	92,0	$\pm 3,0$	50,0	$\pm 2,0$
10	3 / 8	3,15	12,60	11,5	$\pm 0,5$	11,5	$\pm 0,5$	115,0	$\pm 3,0$	60,0	$\pm 2,0$
13	1 / 2	5,30	21,20	15,0	$\pm 0,5$	15,0	$\pm 0,5$	149,0	$\pm 3,0$	79,0	$\pm 2,0$
16	5 / 8	8,00	32,00	19,0	$\pm 0,5$	19,0	$\pm 0,5$	184,0	$\pm 3,0$	98,0	$\pm 2,0$

DIN EN 1677-1 G 8 Verkürzungshaken mit Gabelkopf

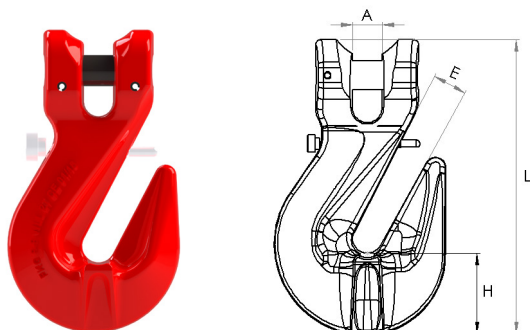
DIN EN 1677-1 G 80 Clevis Grab Hook



G80 Chain Diameter				Hook Measurements							
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	E	Tolerance	A	Tolerance	M	Tolerance	L	Tolerance
6	15 / 64	1,12	4,48	8,0	$\pm 1,0$	8,0	$\pm 0,5$	43,5	$\pm 2,0$	77,3	$\pm 2,0$
8	5/16	2,00	8,00	10,5	$\pm 1,0$	9,5	$\pm 0,5$	50,0	$\pm 2,0$	89,0	$\pm 2,0$
10	3 / 8	3,15	12,60	13,0	$\pm 1,0$	12,5	$\pm 0,5$	72,0	$\pm 2,0$	126,0	$\pm 2,0$
13	1 / 2	5,30	21,20	16,5	$\pm 1,0$	15,0	$\pm 0,5$	96,0	$\pm 2,0$	163,5	$\pm 2,0$
16	5 / 8	8,00	32,00	19,0	$\pm 1,0$	18,5	$\pm 0,5$	112,5	$\pm 2,0$	183,5	$\pm 2,0$

DIN EN 1677-1 G 8 Verkürzungshaken mit Gabelkopf mit Sicherung

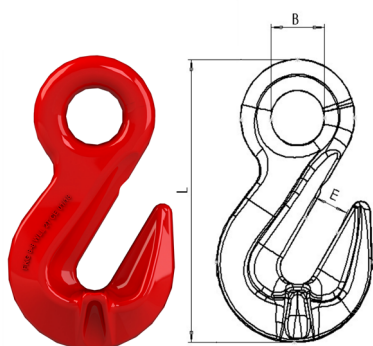
DIN EN 1677-1 G 80 Clevis Grab Hook with Safety Pin



G80 Chain Diameter				Hook Measurements							
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	E	Tolerance	A	Tolerance	H	Tolerance	L	Tolerance
6	15 / 64	1,12	4,48	8,0	$\pm 0,5$	8,0	$\pm 0,5$	17,7	$\pm 1,0$	75,0	$\pm 2,0$
7/8	5/16	2,00	8,00	11,0	$\pm 0,5$	9,5	$\pm 0,5$	18,5	$\pm 1,0$	89,0	$\pm 2,0$
10	3 / 8	3,15	12,60	13,0	$\pm 0,5$	12,5	$\pm 0,5$	29,0	$\pm 1,0$	126,5	$\pm 2,0$
13	1 / 2	5,30	21,20	16,5	$\pm 0,5$	15,0	$\pm 0,5$	42,7	$\pm 1,0$	163,5	$\pm 2,0$
16	5 / 8	8,00	32,00	19,0	$\pm 0,5$	18,5	$\pm 0,5$	45,4	$\pm 1,0$	183,5	$\pm 2,0$

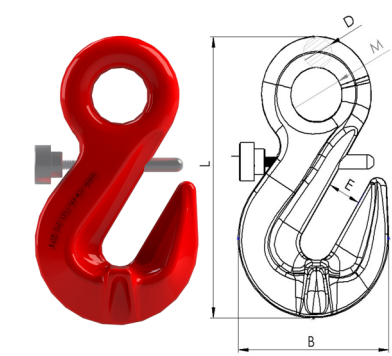
DIN EN 1677-1 G 8 Verkürzungshaken mit Öse

DIN EN 1677-1 G 80 Eye Grab Hook



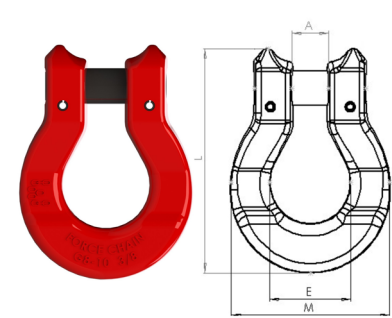
G80 Chain Diameter				Hook Measurements					
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	B	Tolerance	E	Tolerance	L	Tolerance
6	15 / 64	1,12	4,48	13,5	$\pm 1,0$	8,0	$\pm 0,5$	75,3	$\pm 2,0$
8	5/16	2,00	8,00	18,0	$\pm 1,0$	10,8	$\pm 0,5$	91,2	$\pm 2,0$
10	3 / 8	3,15	12,60	20,0	$\pm 1,0$	13,0	$\pm 0,5$	122,0	$\pm 2,0$
13	1 / 2	5,30	21,20	26,0	$\pm 1,0$	16,5	$\pm 0,5$	158,0	$\pm 2,0$
16	5 / 8	8,00	32,00	30,5	$\pm 1,0$	20,0	$\pm 0,5$	169,0	$\pm 2,0$

DIN EN 1677-1 G 8 Verkürzungshaken mit Öse mit Sicherung
DIN EN 1677-1 G 80 Eye Grab Hook with Safety Pin



G80 Chain Diameter				Hook Measurements							
$\varnothing \text{ (d_n)}$ mm	$\varnothing \text{ (d_n)}$ Inch	WLL (t)	BLL (t)	M	Tolerance	E	Tolerance	L	Tolerance	D	Tolerance
8	5/16	2,00	8,00	17,0	$\pm 1,0$	11,0	$\pm 0,5$	88,5	$\pm 2,0$	9,5	$\pm 1,0$
10	3/8	3,15	12,60	20,0	$\pm 1,0$	13,0	$\pm 0,5$	121,5	$\pm 2,0$	13,0	$\pm 1,0$
13	1 / 2	5,30	21,20	26,0	$\pm 1,0$	16,5	$\pm 0,5$	158,0	$\pm 2,0$	15,5	$\pm 1,0$
16	5/8	10,00	40,00	36,0	$\pm 1,0$	20,5	$\pm 0,5$	183,0	$\pm 2,0$	19,0	$\pm 1,0$

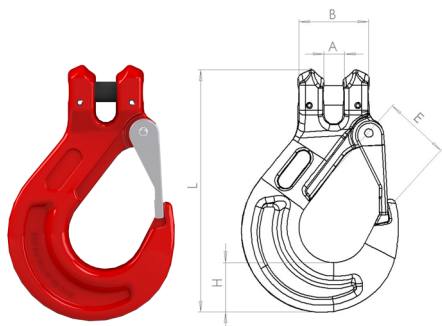
DIN EN 1677-1 G 8 Omega Schäkel
DIN EN 1677-1 G 80 Omega Shackle



G80 Chain Diameter				Hook Measurements							
$\varnothing \text{ (d_n)}$ mm	$\varnothing \text{ (d_n)}$ Inch	WLL (t)	BLL (t)	A	Tolerance	M	Tolerance	E	Tolerance	L	Tolerance
6	15 / 64	1,12	4,48	8,0	$\pm 0,5$	41,0	$\pm 2,0$	21,5	$\pm 1,0$	52,0	$\pm 2,0$
7/8	5 / 16	2,0	8,0	10,0	$\pm 0,5$	52,0	$\pm 2,0$	23,5	$\pm 1,0$	68,5	$\pm 2,0$
10	3 / 8	3,15	12,6	12,5	$\pm 0,5$	62,0	$\pm 2,0$	31,5	$\pm 1,0$	87,0	$\pm 2,0$
13	1 / 2	5,3	21,2	15,0	$\pm 0,5$	81,0	$\pm 2,0$	41,0	$\pm 1,0$	108,0	$\pm 2,0$
16	5 / 8	8,0	32,0	19,0	$\pm 0,5$	99,0	$\pm 2,0$	49,5	$\pm 1,0$	126,0	$\pm 2,0$

DIN EN 1677-2 G 8 Gabelkopf-Lasthaken mit Schmiedefalle

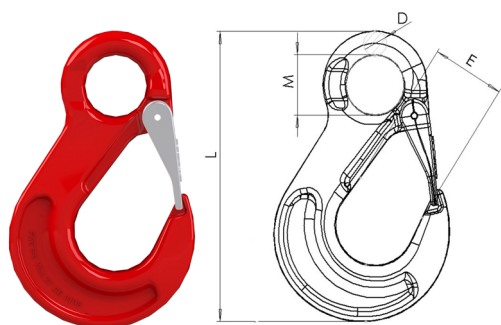
DIN EN 1677-2 G 80 Clevis Sling Hook



G80 Chain Diameter				Hook Measurements									
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	A	Tolerance	B	Tolerance	H	Tolerance	L	Tolerance	E	Tolerance
6	15 / 64	1,12	4,48	8,0	$\pm 0,5$	32,0	$\pm 1,5$	23,0	$\pm 2,0$	99,0	$\pm 1,0$	26,0	$\pm 2,0$
7/8	5 / 16	2,00	8,00	9,5	$\pm 0,5$	37,0	$\pm 1,5$	25,0	$\pm 2,0$	111,4	$\pm 1,0$	29,0	$\pm 2,0$
10	3 / 8	3,15	12,60	12,5	$\pm 0,5$	49,0	$\pm 1,5$	31,0	$\pm 2,0$	135,0	$\pm 1,0$	39,0	$\pm 2,0$
13	1 / 2	5,30	21,20	16,5	$\pm 0,5$	56,5	$\pm 1,5$	42,5	$\pm 2,0$	170,5	$\pm 1,0$	47,0	$\pm 2,0$
16	5 / 8	8,00	32,00	21,5	$\pm 0,5$	70,5	$\pm 1,5$	54,0	$\pm 2,0$	204,0	$\pm 1,0$	55,0	$\pm 2,0$

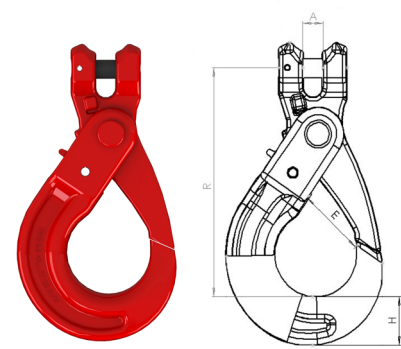
DIN EN 1677-2 G 8 Ösenlasthaken mit Schmiedefalle

DIN EN 1677-2 G 80 Eye Sling Hook



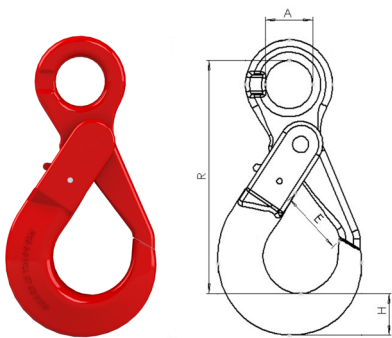
G80 Chain Diameter				Hook Measurements							
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	D	Tolerance	E	Tolerance	M	Tolerance	L	Tolerance
6	15 / 64	1,12	4,48	9,0	$\pm 1,0$	21,5	$\pm 1,0$	20,0	$\pm 1,0$	108,0	$\pm 2,0$
8	5 / 16	2,00	8,00	11,0	$\pm 1,0$	27,5	$\pm 1,0$	25,0	$\pm 1,0$	133,0	$\pm 2,0$
10	3 / 8	3,15	12,60	15,0	$\pm 1,0$	27,2	$\pm 1,0$	38,0	$\pm 1,0$	167,0	$\pm 2,0$
13	1 / 2	5,30	21,20	19,0	$\pm 1,0$	38,5	$\pm 1,0$	43,0	$\pm 1,0$	213,0	$\pm 2,0$
16	5 / 8	8,00	32,00	23,0	$\pm 1,0$	42,0	$\pm 1,0$	50,0	$\pm 1,0$	255,0	$\pm 2,0$

DIN EN 1677-3 G 8 Selflocking-Haken mit Gabelkopf
DIN EN 1677-3 G 80 Clevis Selflock Hook



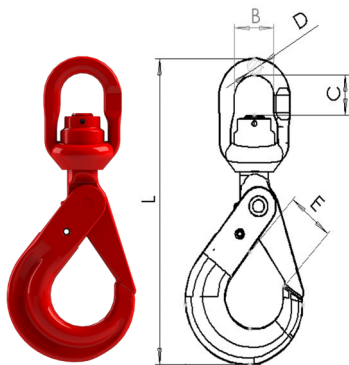
G80 Chain Diameter				Hook Measurements							
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	A	Tolerance	R	Tolerance	E	Tolerance	H	Tolerance
6	15 / 64	1,12	4,48	7,5	$\pm 0,5$	96,0	$\pm 2,0$	28,0	$\pm 1,0$	20,0	$\pm 1,0$
7/8	5/16	2,00	8,00	9,5	$\pm 0,5$	123,0	$\pm 2,0$	35,5	$\pm 1,0$	26,0	$\pm 1,0$
10	3 / 8	3,15	12,60	12,0	$\pm 0,5$	144,0	$\pm 2,0$	45,0	$\pm 1,0$	30,0	$\pm 1,0$
13	1 / 2	5,30	21,20	15,0	$\pm 0,5$	182,0	$\pm 2,0$	53,5	$\pm 1,0$	40,5	$\pm 1,0$
16	5 / 8	8,00	32,00	17,5	$\pm 0,5$	217,0	$\pm 2,0$	62,0	$\pm 1,0$	50,5	$\pm 1,0$

DIN EN 1677-3 G 8 Selflocking-Haken mit Öse
DIN EN 1677-3 G 80 Eye Selflock Hook



G80 Chain Diameter				Hook Measurements						
$\varnothing (d_n)$ mm	$\varnothing (d_n)$ Inch	WLL (t)	BLL (t)	A	R	Tolerance	E	Tolerance	H	Tolerance
6	15 / 64	1,12	4,48	21,0	110,0	$\pm 2,0$	29,0	$\pm 1,0$	20,0	$\pm 1,0$
7/8	5/16	2,00	8,00	27,0	137,0	$\pm 2,0$	35,5	$\pm 1,0$	26,0	$\pm 1,0$
10	3 / 8	3,15	12,60	34,5	169,0	$\pm 2,0$	45,0	$\pm 1,0$	30,0	$\pm 1,0$
13	1 / 2	5,30	21,20	40,0	209,0	$\pm 2,0$	53,5	$\pm 1,0$	40,5	$\pm 1,0$
16	5 / 8	8,00	32,00	50,0	254,0	$\pm 2,0$	62,0	$\pm 1,0$	50,5	$\pm 1,0$

DIN EN 1677-3 G 8 Selflocking-Haken mit Öse mit Wirbel
DIN EN 1677-3 G 80 Swivel Eye Selflock Hook



G80 Chain Diameter				Hook Measurements									
$\varnothing$ (d _n) mm	$\varnothing$ (d _n) Inch	WLL (t)	BLL (t)	B	Tolerance	C	Tolerance	D	Tolerance	E	Tolerance	L	Tolerance
6	15 / 64	1,12	4,48	32,5	± 2,0	23,0	± 2,0	11,5	± 1,0	28,0	± 1,5	184,0	± 3,5
8	5 / 16	2,00	8,00	36,0	± 2,0	28,5	± 2,0	13,0	± 1,0	36,0	± 1,5	226,0	± 3,5
10	3 / 8	3,15	12,60	42,0	± 2,0	35,0	± 2,0	15,5	± 1,0	45,0	± 1,5	269,0	± 3,5
13	1 / 2	5,30	21,20	50,0	± 2,0	41,0	± 2,0	17,0	± 1,0	53,5	± 1,5	327,0	± 3,5
16	5 / 8	8,00	32,00	71,0	± 2,0	58,0	± 2,0	21,5	± 1,0	61,0	± 1,5	413,0	± 3,5



DIN EN 12195-3 G 8 Zurrkettensysteme

DIN EN 12195-3 G 80 Chain Lashing Systems

- Hergestellt gemäß der Norm EN 818-2
- Alle Komponenten hergestellt nach DIN EN 1677-1,2,3
- Komponenten oberflächen standard ist rot lackiert
- Ketten oberflächen standard ist schwarz lackiert oder galvanisch verzinkt
- Zertifiziertes Qualitätsmanagement nach ISO 9001

- Chain produced according to EN 818-2 standard
- All components produced according to DIN EN 1677-1,2,3
- Component surface is red painted
- Chain surface standard is black painted or elektro galvanized
- Quality approved by ISO 9001 certified company



DIN EN 12195-3 Einteiliges Zurrkettensysteme

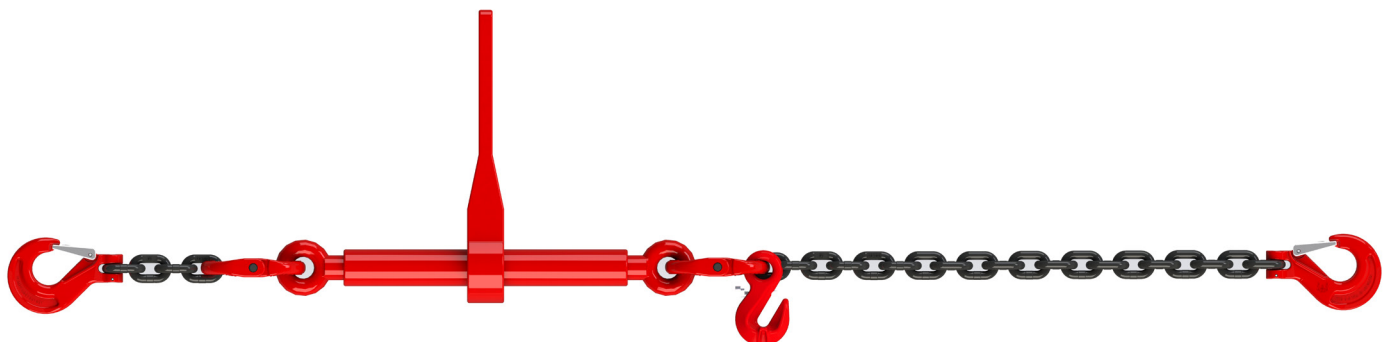
DIN EN 12195-3 One Part Chain Lashing System

Das System besteht aus;

- 2 Verbindungsglied
- 1 Ratschenlastspanner
- 1 Verkürzungshaken mit öse mit sicherung
- 2 Gabelkopflasthaken.

The System consist of ;

- 2 Connecting link
- 1 Eye Ratchet Load Binder
- 1 Eye Grab Hook with Safety Pin
- 2 Clevis Sling Hook



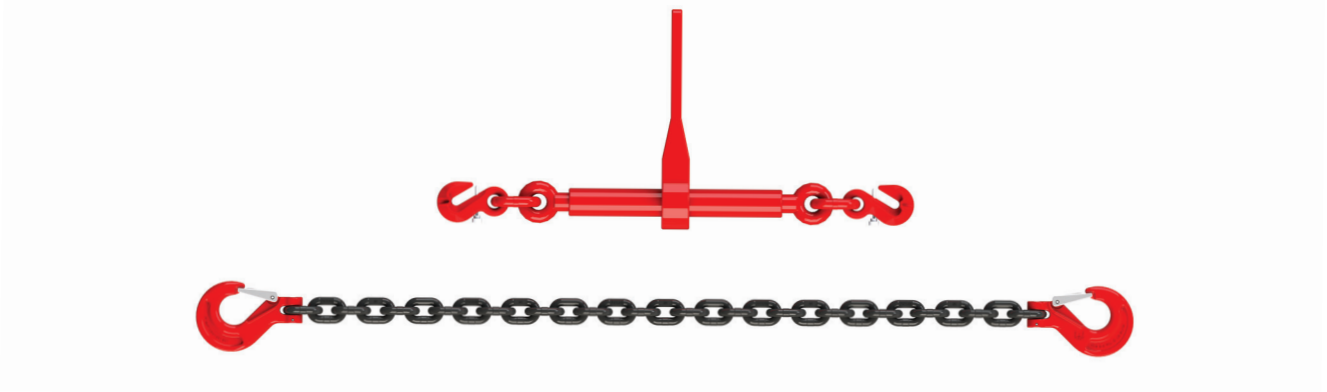
Diameter of Chain	Lashing Capacity (LC) in daN
6 mm	2.200
8 mm	4.000
10 mm	6.300
13 mm	10.000
16 mm	16.000

DIN EN 12195-3 Zweiteiliges Zurrkettensysteme

DIN EN 12195-3 Two Part Chain Lashing System

- Das System besteht aus 2 Teilen;
- Ratschenlastspanner mit 2 Verkürzungshaken mit öse mit sicherung
 - Kette mit 2 Gabelkopflasthaken.

- The System consist of 2 part ;
- Eye Ratchet Load Binder with 2 Clevis Grab Hook with Safety Pin
 - Chain with 2 Clevis Sling Hook



Diameter of Chain	Lashing Capacity (LC) in daN
6 mm	2.200
8 mm	4.000
10 mm	6.300
13 mm	10.000
16 mm	16.000

Prüfanhänger für G 8 Zurrkettensysteme

Metal Plates for G 80 Lashing Systems

- Erkennungsmarke:
- Nach EN 12195-3 G8

- Identification Tag :
- According to EN 12195-3 with G8 values





Kettengehänge mit Schachtring-Klemme

Lifting Sling with Manhole Ring Clamps

42-45

Klemme Modell - 1.Force 63.4 / 63.5
Clamp Model - 1.Force 63.4 / 63.5

42

Klemme Modell - 2.Force 63.1 / 63.2
Clamp Model - 2.Force 63.1 / 63.2

43

Klemme Modell - 3.Force 61.1 / 61.2
Clamp Model - 3.Force 61.1 / 61.2

43

Klemme Modell - 4.Force 62.4 / 62.5
Clamp Model - 4.Force 62.4 / 62.5

44

Klemme Modell - 5.Force 62.1 / 62.2
Clamp Model - 5.Force 62.1 / 62.2

44

Klemme Modell - 6.Force 61.10 / 61.11
Clamp Model - 6.Force 61.10 / 61.11

45

Klemme Modell - 7.Force 61.4 / 61.5
Clamp Model - 7.Force 61.4 / 61.5

45

Kettengehänge mit Schachtring-Klemme

Kettengehänge mit Schachtring-Klemme

Lifting Sling with Manhole Ring Clamps

- Das System besteht aus 3 Teilige Kettengehänge mit Schachtring-Klemme.
- 3 Teilige Kettengehänge sind für alle Klemme Modellen geeignet.
- Hergestellt gemäß der Norm DIN EN 818-4
Aufhängeköpfe : 18 x 135 x 75 – 13 x 54 x 25 / Galv. Verz.
Kette : DIN EN 818-2 / 7x21 / Galv. Verz.
- Qualität bestätigt durch TUV NORD.
- Wir haben 3 verschiedene Modelle und 7 verschiedene Arten, für unterschiedliche Formen und Gewichte von Schachtring-Klemme.
- The system consist of 3 leg lifting sling and 3 manhole ring clamps.
- 3 leg lifting sling is standard for all clamp models.
- Lifting sling produce according to DIN EN 818-4 standard
AK Model Masterlink : 18 x 135 x 75 13 x 54 x 25 /E.Galv.
Chain : DIN En 818-2 / 7x21 /E.Galv.
- Quality of clamps approved by TUV NORD.
- We have 3 different model and 7 different type of clamps for different shape and weight of manhole rings.



Klemme Modell – 1.Force 63.4 / 63.5

Clamp Model – 1.Force 63.4 / 63.5



Model No	Load Capacity (Kg)	Kg / Clamp	Number of Clamp	Chain Length	Lifting Sling Dimensions								Surface	Lifiting Sling (Kg)
					Number of Leg	Chain	Masterlink							
							d	t	b1	a	b	c		
1.Force 63.4	3.000	14,3	3	1,8	3	7 x 21	18	135	75	13	54	25	Electro Galv.	6,0
1.Force 63.5	3.000	14,3	3	2,5	3	7 x 21	18	135	75	13	54	25	Electro Galv.	8,2



Klemme Modell - 2.Force 63.1 / 63.2

Clamp Model - 2.Force 63.1 / 63.2



Model No	Load Capacity (Kg)	Kg / Clamp	Number of Clamp	Chain Length	Lifting Sling Dimensions								Surface	Lifiting Sling (Kg)
					Number of Leg	Chain	Masterlink							
							d	t	b1	a	b	c		
2.Force 63.1	1.500	8,3	3	1,8	3	7 x 21	18	135	75	13	54	25	Electro Galv.	6,0
2.Force 63.2	1.500	8,3	3	2,5	3	7 x 21	18	135	75	13	54	25	Electro Galv.	8,2

Klemme Modell - 3.Force 61.1 / 61.2

Clamp Model - 3.Force 61.1 / 61.2



Model No	Load Capacity (Kg)	Kg / Clamp	Number of Clamp	Chain Length	Lifting Sling Dimensions								Surface	Lifiting Sling (Kg)
					Number of Leg	Chain	Masterlink							
							d	t	b1	a	b	c		
3.Force 61.1	1.500	8,6	3	1,8	3	7 x 21	18	135	75	13	54	25	Electro Galv.	6,0
3.Force 61.2	1.500	8,6	3	2,5	3	7 x 21	18	135	75	13	54	25	Electro Galv.	8,2

Kettengehänge mit Schachtring-Klemme

Klemme Modell - 4.Force 62.4 / 62.5

Clamp Model - 4.Force 62.4 / 62.5



Model No	Load Capacity (Kg)	Kg / Clamp	Number of Clamp	Chain Length	Lifting Sling Dimensions								Surface	Lifiting Sling (Kg)
					Number of Leg	Chain	Masterlink							
							d	t	b1	a	b	c		
4.Force 62.4	3.000	19,2	3	1,8	3	7 x 21	18	135	75	13	54	25	Electro Galv.	6,0
4.Force 62.5	3.000	19,2	3	2,5	3	7 x 21	18	135	75	13	54	25	Electro Galv.	8,2

Klemme Modell - 5.Force 62.1 / 62.2

Clamp Model - 5.Force 62.1 / 62.2



Model No	Load Capacity (Kg)	Kg / Clamp	Number of Clamp	Chain Length	Lifting Sling Dimensions								Surface	Lifiting Sling (Kg)
					Number of Leg	Chain	Masterlink							
							d	t	b1	a	b	c		
5.Force 62.1	1.500	14,1	3	1,8	3	7 x 21	18	135	75	13	54	25	Electro Galv.	6,0
5.Force 62.2	1.500	14,1	3	2,5	3	7 x 21	18	135	75	13	54	25	Electro Galv.	8,2

Klemme Modell - 6.Force 61.10 / 61.11

Clamp Model - 6.Force 61.10 / 61.11



Model No	Load Capacity (Kg)	Kg / Clamp	Number of Clamp	Chain Length	Lifting Sling Dimensions								Surface	Lifiting Sling (Kg)
					Number of Leg	Chain	Masterlink							
							d	t	b1	a	b	c		
6.Force 61.10	3.000	18,4	3	1,8	3	7 x 21	18	135	75	13	54	25	Electro Galv.	6,0
6.Force 61.11	3.000	18,4	3	2,5	3	7 x 21	18	135	75	13	54	25	Electro Galv.	8,2

Klemme Modell - 7.Force 61.4 / 61.5

Clamp Model - 7.Force 61.4 / 61.5



Model No	Load Capacity (Kg)	Kg / Clamp	Number of Clamp	Chain Length	Lifting Sling Dimensions								Surface	Lifiting Sling (Kg)
					Number of Leg	Chain	Masterlink							
							d	t	b1	a	b	c		
7.Force 61.4	3.000	14,2	3	1,8	3	7 x 21	18	135	75	13	54	25	Electro Galv.	6,0
7.Force 61.5	3.000	14,2	3	2,5	3	7 x 21	18	135	75	13	54	25	Electro Galv.	8,2



Ketten für Bau Industrie

Chains for Construction Industry

48-50

Ketten für Bauschuttrutsche
Chain for Debris Pipe

48

G 8 Spundwandketten
G 80 Sheet-Pile Chain

49

Schalungsspannkette
Formwork Chain

50

Ketten für Schuttrutsche

Chain for Debris Pipe

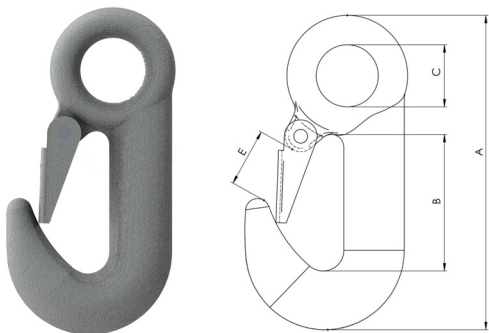


Chain Dimesions			Hook Mesaruments			WLL max. (kg)	Surface Options
d	t	b1	d	l	m		
7	49	12	18	92	11	220	Hot Dip Galv. or E. Galv.

Abschlepphaken

Tow Hook

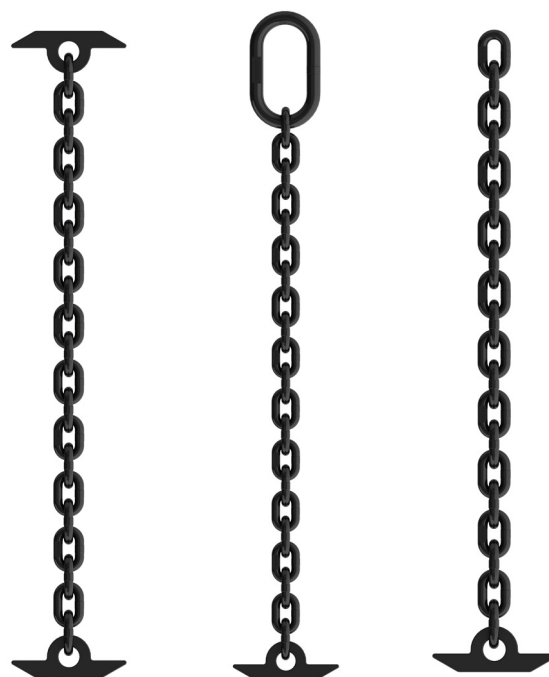
Technical drawing of a tow hook showing dimensions A, B, C, and E.



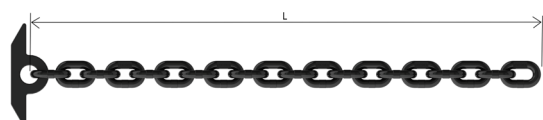
Hook Mesaruments			
A	B	C	E
91.0	39.5	18.0	17.0

G 8 Spundwandketten

G 80 Sheet-Pile Chain

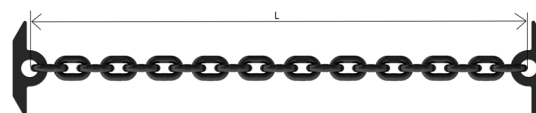


Ausführung mit einem knebel
System with one toggle



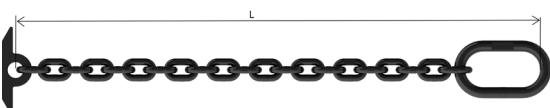
DIN EN 818-2 Chain (mm)	10 x 30
Lange (mtr)	0,65
WLL (kg)	1.600
Taggle (mm)	95

Ausführung mit zwei knebel
System with two toggle



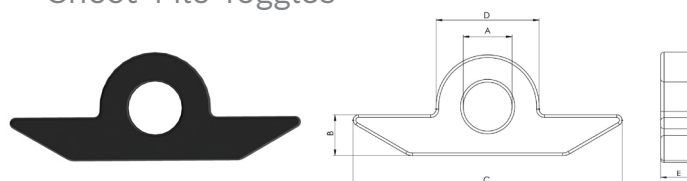
DIN EN 818-2 Chain (mm)	10 x 30
Lange (mtr)	1
WLL (kg)	1.600
Taggle (mm)	95

Ausführung mit einem knebel
und A-Glied
System with one toggle and Masterlink



DIN EN 818-2 Chain (mm)	10 x 30
Grade 80 Masterlink (mm)	13 x 85
Lange (mtr)	0,65 und 1
WLL (kg)	1.600
Taggle (mm)	95

Spundwandknebel
Sheet-Pile Toggles



Sheet-Pile Toggle				
A	B	C	D	E
14	13	95	35	10

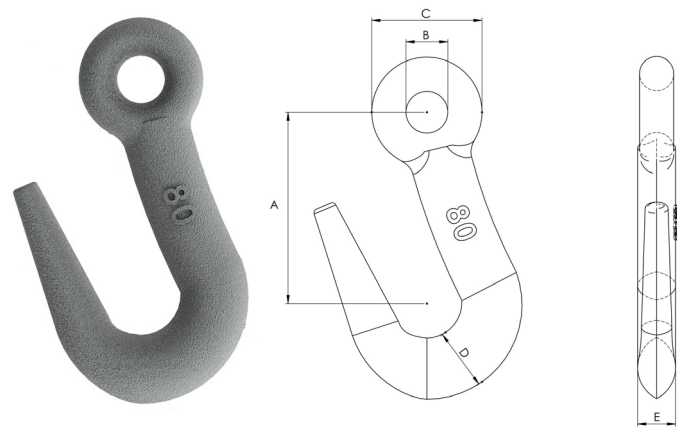
Schalungsspannkette
Formwork Chain

Ketten oberflächen standard ist feuerverzinkt oder galvanisch verzinkt
Chain surface standard is hot dip galvanized or elektro galvanized



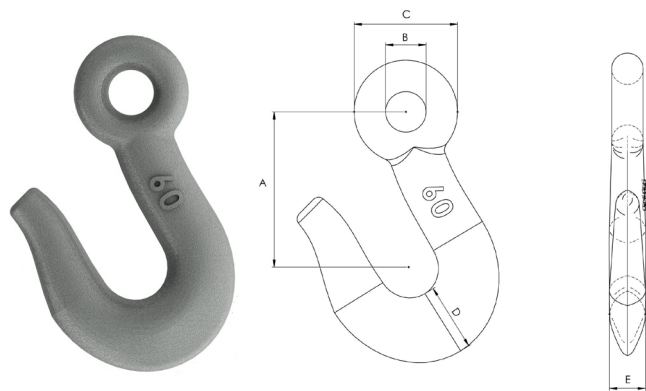
Chain Dimensions			Hook No	Length (mtr)	Weight (kg)	WLL max. (kg)
d	t	b1				
5	35	9	60	2,5	1,05	125
6	42	11	60	2,5	1,53	160
8	52	14	80	2,5	2,75	320

Zugkettenhaken No 80
Eye Hook No 80



Hook Mesaruments			
A	B	C	E
50.5	11	29	9

Zugkettenhaken No 60
Eye Hook No 60



Hook Mesaruments			
A	B	C	E
35.5	9	23	8



Notes



Force Ketten Germany GmbH
Franz Kissing Straße 11 – 58706
Menden / Deutschland
Tel: +49 2373 91 92 121
Fax: +49 2373 91 92 123
Mail: info@forceketten.de

www.forceketten.de

Headquarter
Eginlioğlu Zincir Sanayi ve Ticaret
Organize Sanayi Bölgesi
8.Cd. No:10 Altıeylül / Balıkesir / TURKEY
Tel: +90 266 281 14 20
Fax: +90 266 281 14 26
Mail: info@forcechain.com

www.forcechain.com