



THIELE®

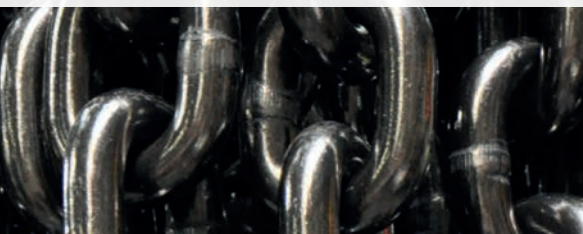


TA8



THIELE  
LIFTING PRODUCTS

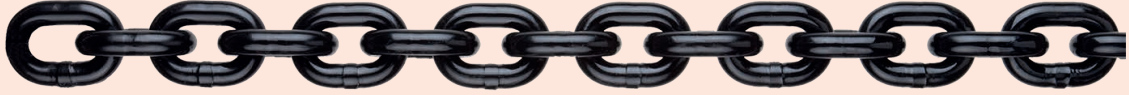
Grade 80



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## Round Steel Chains

TWN 0805



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## Product Overview - Lifting Products Grade 80

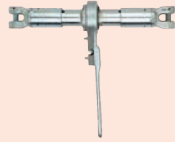
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### Lashing Chains




TWN 1400






TWN 1401



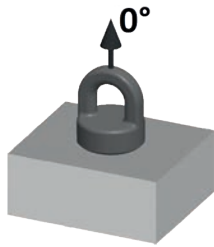
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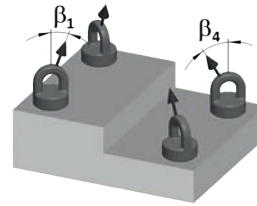
Page 92	Endless Chains				
<p>Type K11</p> 	<p>Type K12</p> 	<p>Type K22</p> 			



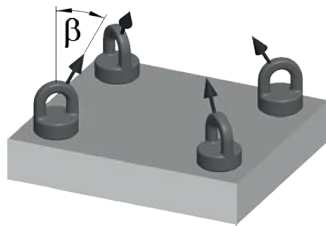
1. Determine the weight of the load to be lifted.



5. Consider that asymmetry may influence the load factor (see table 4 on page 63).



2. Check number of chain strands required (depending on the number of available lifting points).

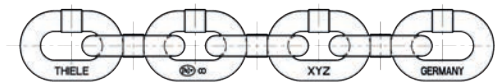
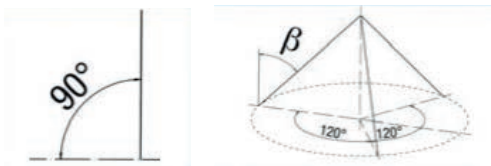


6. Specify the sling using components for the selected chain trade size.



3. Determine the trade size by taking the inclination angle into consideration (see table 1 on page 60 and table 2 on page 61 and table 3 on page 62).

7. Determine the chain length for each strand by considering the required effective reaches.



4. Consider possible temperature impacts (see load reductions on page 63).

8. Control selected lifting components and/ or chain slings to ensure that they meet applicable safety-laws and regulations (e.g. DGUV)



### Special Advices:

Please also consider special conditions of use, such as e.g. intermittent impacts on loads when selecting the grade 80 chain slings. If the chain slings were used above the maximum admissible temperature, they have to be immediately rejected. The THIELE-assembly systems must not be used with chemical influences such as acids and/or lyes.


Lifting products according to DIN EN 818-4 fulfill the requirements of the EC-directive for machines, especially for safety relevant components. The working load limit and the test requirements meet or exceed the European standards.

## Identification Tags

The use of chain slings without identification tag is not permitted. The data on the identification tag must be in accordance with the standard DIN EN 818-4 for chain slings.

THIELE Grade 80 identification tags have an octagonal shape for easy identification.

### Legal Marking of Grade 80 Chains according to the German DGUV

The number "4" below the  is the registration number of the German Statutory Accident Insurance (DGUV) and identifies the manufacturer of the sling. The marking is recognized by all international certification societies and work authorities.



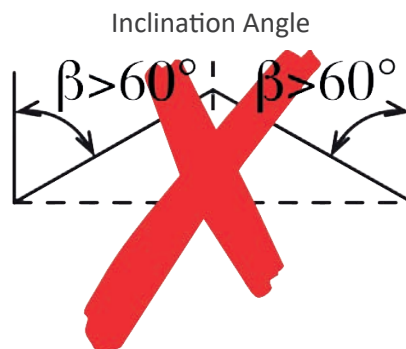
## Working Load Limit – Type: Direct (Chain Slings)

		1-leg	2-leg		3-/ 4-leg	
Inclination Angle		$\beta = 0^\circ$	$0^\circ < \beta \leq 45^\circ$	$45^\circ < \beta \leq 60^\circ$	$0^\circ < \beta \leq 45^\circ$	$45^\circ < \beta \leq 60^\circ$
Load Factor		1	1,4	1	2,1	1,5
Trade Size	Nominal Size [mm]	[t]	[t]	[t]	[t]	[t]
6-8	6	1,12	1,60	1,12	2,36	1,70
7-8	7	1,50	2,12	1,50	3,15	2,24
8-8	8	2,00	2,80	2,00	4,25	3,00
10-8	10	3,15	4,25	3,15	6,70	4,75
13-8	13	5,30	7,50	5,30	11,20	8,00
16-8	16	8,00	11,20	8,00	17,00	11,80
18-8	18	10,00	14,00	10,00	21,20	15,00
20-8	20	12,50	17,00	12,50	26,50	19,00
22-8	22	15,00	21,20	15,00	31,50	22,40
26-8	26	21,20	30,00	21,20	45,00	31,50
28-8*	28	25,00	33,50	25,00	50,00	37,50
32-8	32	31,50	45,00	31,50	67,00	47,50
36-8	36	40,00	56,00	40,00	85,00	60,00
40-8	40	50,00	71,00	50,00	106,00	75,00
45-8*	45	63,00	90,00	63,00	132,00	95,00
50-8*	50	80,00	112,00	80,00	160,00	118,00
56-8*	56	100,00	140,00	100,00	200,00	150,00
63-8*	63	125,00	170,00	125,00	265,00	190,00
71-8*	71	160,00	224,00	160,00	335,00	236,00

THIELE chain slings are available in mounted and welded execution.

Table 1

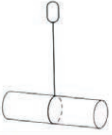
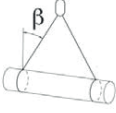
\*These trade sizes are available in welded execution only.





# Working Load Limit Tables

## Working Load Limit – Type: Choke Hitch (Chain Slings)

		1-leg	2-leg	
				
Inclination Angle		$\beta = 0^\circ$	$0^\circ < \beta \leq 45^\circ$	$45^\circ < \beta \leq 60^\circ$
Load Factor		0,8	1,12	0,8
Trade Size	Nominal Size [mm]	[t]	[t]	[t]
6-8	6	0,90	1,25	0,90
7-8	7	1,25	1,70	1,25
8-8	8	1,60	2,24	1,60
10-8	10	2,50	3,55	2,50
13-8	13	4,25	6,00	4,25
16-8	16	6,30	9,00	6,30
18-8	18	8,00	11,20	8,00
20-8	20	10,00	14,00	10,00
22-8	22	11,80	17,00	11,80
26-8	26	17,00	23,60	17,00
28-8*	28	20,00	28,00	20,00
32-8	32	25,00	35,50	25,00
36-8	36	31,50	45,00	31,50
40-8	40	40,00	56,00	40,00
45-8*	45	50,00	71,00	50,00
50-8*	50	63,00	90,00	63,00
56-8*	56	80,00	112,00	80,00
63-8*	63	100,00	140,00	100,00
71-8*	71	125,00	180,00	125,00

THIELE chain slings are available in mounted and welded execution.

\*These trade sizes are available in welded execution only.

Table 2



## Working Load Limit – Type: Choke Hitch (Endless Chains)

		K11		K12/K13		K22/K23	
Inclination Angle		$\beta = 0^\circ$	$0^\circ < \beta \leq 25^\circ$	$0^\circ < \beta \leq 45^\circ$	$45^\circ < \beta \leq 60^\circ$	$0^\circ < \beta \leq 45^\circ$	$45^\circ < \beta < 60^\circ$
Load Factor		1,6	1,45	1,12	0,8	1,7	1,2
Trade Size	Nominal Size [mm]	[t]	[t]	[t]	[t]	[t]	[t]
6-8	6	1,80	1,60	1,25	0,90	1,90	1,32
7-8	7	2,50	2,24	1,70	1,25	2,65	1,80
8-8	8	3,15	2,80	2,24	1,60	3,35	2,36
10-8	10	5,00	4,50	3,55	2,50	5,30	3,75
13-8	13	8,50	7,50	6,00	4,25	9,00	6,30
16-8	16	12,50	11,80	9,00	6,30	13,20	9,50
18-8	18	16,00	15,00	11,20	8,00	17,00	11,80
20-8	20	20,00	18,00	14,00	10,00	21,20	15,00
22-8	22	23,60	22,40	17,00	11,80	25,00	18,00
26-8	26	33,50	30,00	23,60	17,00	35,50	25,00
28-8*	28	40,00	35,50	28,00	20,00	42,50	30,00
32-8	32	50,00	47,50	35,50	25,00	53,00	37,50
36-8	36	63,00	60,00	45,00	31,50	67,00	47,50
40-8	40	80,00	71,00	56,00	40,00	85,00	60,00
45-8*	45	100,00	90,00	71,00	50,00	106,00	75,00
50-8*	50	125,00	112,00	90,00	63,00	132,00	95,00
56-8*	56	160,00	140,00	112,00	80,00	170,00	118,00
63-8*	63	200,00	180,00	140,00	100,00	212,00	150,00
71-8*	71	250,00	224,00	180,00	125,00	265,00	190,00

THIELE chain slings are available in mounted and welded execution.  
 \*These trade sizes are available in welded execution only.

Table 3



Type K11



Type K12



Type K22

## Load Reductions/ Lifting Chains

### Temperature Application Range of Grade 80 Lifting Chains acc. to the DIN EN 818-2

Temperature Application Range	Working Load Limit
-40°C to 200°C	100 %
over 200°C to 300°C	90 %
over 300°C to 400°C	75 %

If Grade 80 lifting chains are used at temperatures exceeding 200°C, then the working load limit has to be reduced. The manufacturer has to be consulted if lifting chains are used outside of the allowed temperature application range.

Table 4

### Load Factors at Asymmetry

Number of strands	1		2		3		4			
	Inclination Angle $\beta$	Load Factor	Inclination Angle $\beta$	Load Factor	Inclination Angle $\beta$	Load Factor	Inclination Angle $\beta$	Load Factor		
	-	1	0° - 45°	1,4	46° - 60°	1	0° - 45°	2,1	46° - 60°	1,5

Table 5

### Lifting Chains

The grade 80 lifting chains TWN 0805 are made from CrNiMo alloy steel and are used to assemble chain slings and lashing chains. The max. application temperature is 400°C. The manufacturing and testing requirements of these high-quality round steel chains are based on the DIN EN 818-2 and on the German Statutory Accident Insurance test principle GS-HM 37.

### TWN 0805

Trade Size	Article-No.				Working Load Limit [t]	Nominal Size $d_n$ [mm]	Pitch $p_n$ [mm]	Inside Width $w_3$ [mm] min.	Outside Width $w_2$ [mm] max.	Weight app. [kgs/m]
	Self-Coloured	RAL 9005	Corrothiel	Electro-galvanized						
6-8	F01452	F01453	F01454	F01448	1,12	6	18	7,80	22,20	0,82
7-8	F01458	F01459	F01457	F014601	1,50	7	21	9,50	25,90	1,10
8-8	F01464	F01465	F01429	F01433	2,00	8	24	10,90	29,60	1,46
10-8	F01469	F01470	F01450	F01445	3,15	10	30	13,00	37,00	2,26
13-8	F01474	F01475	F01476	F014781	5,30	13	39	17,40	48,10	3,76
16-8	F01479	F01480	F01487	F014821	8,00	16	48	20,80	59,20	5,70
18-8	F01484	F01485	F04580	F01484G	10,00	18	54	23,40	66,60	7,10
20-8	F01494	F01495	F04606	F014944	12,50	20	60	26,00	74,00	9,00
22-8	F01499	F01500	F04629	F015111	15,00	22	66	28,60	81,40	10,90
26-8	F01514	F01515	F04695	*	21,20	26	78	33,80	96,20	15,20
28-8	F01519	F01520	F01521	-	25,00	28	84	36,40	104,00	17,60
32-8	F01524	F01525	F01526	F01527	31,50	32	96	41,60	118,00	23,00
36-8	F01529	F01530	F04814	-	40,00	36	108	46,80	133,00	29,00
40-8	F01534	F01535	F04838	-	50,00	40	120	52,00	148,00	36,00
45-8	F01539	F01540	F04889	-	63,00	45	135	58,50	167,00	45,50
50-8	F01545	F01546	F04900	-	80,00	50	150	65,00	185,00	56,00
56-8	F01555	F01556	F04908	-	100,00	56	168	72,80	207,00	72,50
63-8	-	F01566	-	-	125,00	63	190	81,90	233,00	89,00
71-8	-	F01598	-	-	160,00	71	210	92,30	263,00	113,00

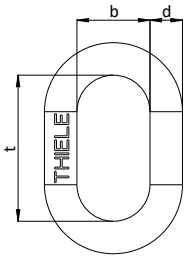
\* On request



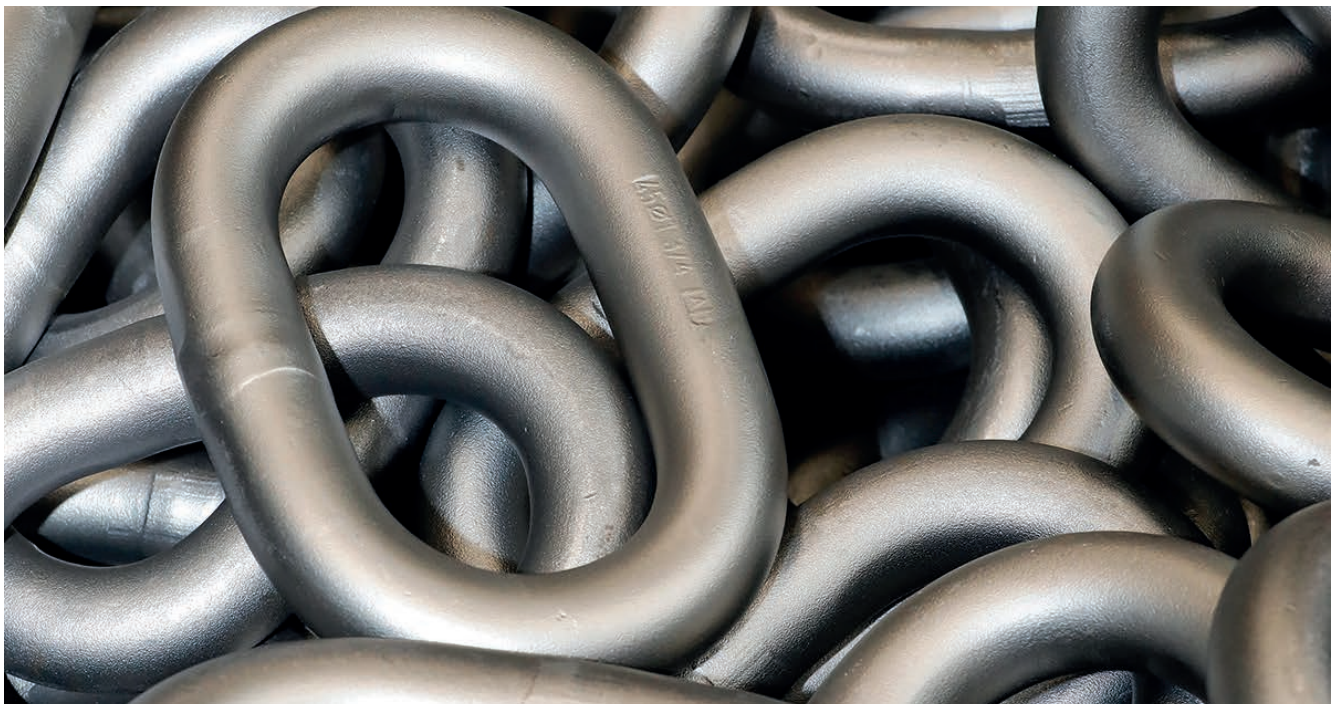
## TWN 0795

### Intermediate Links Type B

The grade 80 intermediate links TWN 0795 are used to assemble chain slings. The dimensions comply with the DIN 5688-3 and enable the use of connecting links, e.g. a THI-LOK® TWN 1320. The manufacturing and testing requirements comply with the DIN EN 1677 parts 1 and 4.



Trade Size	Article-No.	Working Load Limit 0° <math>\beta \leq 45^\circ</math> [t]	Dimensions [mm]			Weight app. [kgs]
			d	t	b	
B8	F122880	1,12	8	36	18	0,05
B10	F122890	2,00	10	46	23	0,09
B13	F122930	3,15	13	60	30	0,20
B16	F122970	5,30	16	70	35	0,36
B18	F123010	6,70	18	85	40	0,54
B20	F123030	8,00	20	90	45	0,73
B22	F123070	10,00	22	100	50	0,97
B26	F123090	12,50	26	120	60	1,60
B28	F123190	15,00	28	130	65	1,90
B32	F123110	21,20	32	140	70	2,90
B36	F123130	25,00	36	160	80	4,20
B40	F123150	31,50	40	180	90	5,80
B45	F123170	40,00	45	200	100	8,20
B50	F123210	50,00	50	220	110	11,00
B56	F123230	63,00	56	260	130	16,00
B63	F123270	80,00	63	280	140	22,00
B70	F123290	100,00	70	320	160	31,00
B80	F123300	125,00	80	360	180	46,50
B90	F123320	160,00	90	400	200	65,50



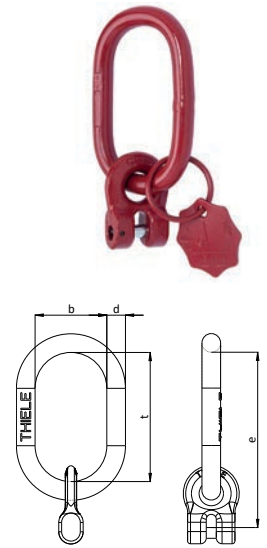
# Suspension Components

## Fixed-Size Master Links TAA1 for 1-leg Chain Slings

The grade 80 fixed size master links TWN 0810/1 are used to assemble 1-leg chain slings. The fixed installed ring shackles only allow the assembly of lifting chains of the appropriate nominal size. The dimensions of the fixed size master links type A comply with the DIN 5688-3. The manufacturing and testing requirements are based on the DIN EN 1677 parts 1 and 4.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	d	t	b	
6-8	F08101068	1,12	121	13	90	50	0,40
8-8	F08101088	2,00	147	16	110	60	1,00
10-8	F08101108	3,15	176	18	130	70	1,20
13-8	F08101138	5,30	219	22	160	90	2,30
16-8	F08101168	8,00	255	26	180	100	4,00
22-8	F08101228	15,00	350	36	250	140	10,00

### TWN 0810/1

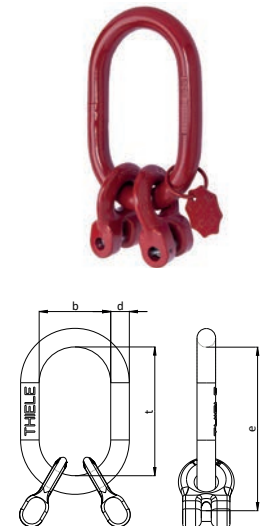


## Fixed-Size Master Links TAA2 for 2-leg Chain Slings

The grade 80 fixed size master links TWN 0810/2 are used to assemble 2-leg chain slings. The fixed installed ring shackles only allow the assembly of lifting chains of the appropriate nominal size. The dimensions of the fixed size master links type A comply with the DIN 5688-3. The manufacturing and testing requirements are based on the DIN EN 1677 part 1 and part 4.

Trade Size	Article-No.	Working Load Limit $0^\circ < \beta \leq 45^\circ$ [t]	Dimensions [mm]				Weight app. [kgs]
			e	d	t	b	
6-8	F08102068	1,60	121	13	90	50	0,50
8-8	F08102088	2,80	167	18	130	70	1,20
10-8	F08102108	4,25	186	20	140	80	1,90
13-8	F08102138	7,50	239	26	180	100	4,00
16-8	F08102168	11,20	305	32	230	125	7,60
22-8	F08102228	21,20	420	45	320	175	19,60

### TWN 0810/2

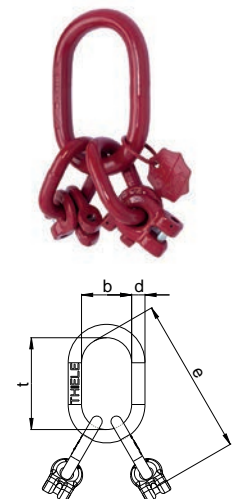


## Fixed-Size Master Links TAA4 for 3- and 4-leg Chain Slings

The grade 80 fixed size master links TWN 0810/4 are used to assemble 3- and 4-leg chain slings. The fixed installed ring shackles only allow the assembly of lifting chains of the appropriate nominal size. The dimensions of the fixed size master links type A comply with the DIN 5688-3. The manufacturing and testing requirements are based on the DIN EN 1677 part 1 and part 4.

Trade Size	Article-No.	Working Load Limit $0^\circ < \beta \leq 45^\circ$ [t]	Dimensions [mm]				Weight app. [kgs]
			e	d	t	b	
6-8	F08104068	2,36	201	16	110	60	1,40
8-8	F08104088	4,25	267	22	160	90	3,10
10-8	F08104108	6,70	316	26	180	100	5,40
13-8	F08104138	11,20	409	32	230	125	11,10
16-8	F08104168	17,00	495	40	290	160	19,00
22-8	F08104228	31,50	620	50	340	190	42,80

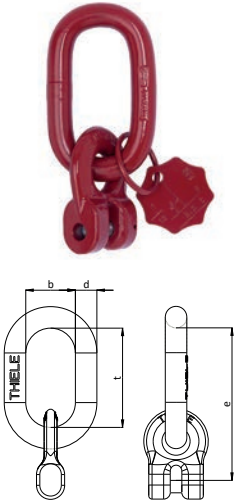
### TWN 0810/4



## TWN 0811/1

### Fixed-Size Master Links TAB1 for 1-leg Chain Slings

The grade 80 fixed size master links TWN 0811/1 are used to assemble 1-leg chain slings. The fixed installed ring shackles only allow the assembly of lifting chains of the appropriate nominal size. The dimensions of the fixed size master links type B comply with the DIN 5688-3. The manufacturing and testing requirements are based on the DIN EN 1677 parts 1 and 4.

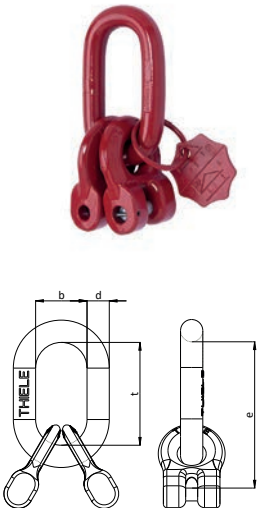


Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	d	t	b	
6-8	F08111068	1,12	91	13	60	30	0,31
8-8	F08111088	2,00	107	16	70	35	0,57
10-8	F08111108	3,15	136	20	90	45	1,14
13-8	F08111138	5,30	159	22	100	50	1,84
16-8	F08111168	8,00	195	26	120	60	3,20
18-8	F08111188	10,00	219	32	140	70	5,40
22-8	F08111228	15,00	260	36	160	80	8,00

## TWN 0811/2

### Fixed-Size Master Links TAB2 for 2-leg Chain Slings

The grade 80 fixed size master links TWN 0811/2 are used to assemble 2-leg chain slings. The fixed installed ring shackles only allow the assembly of lifting chains of the appropriate nominal size. The dimensions of the fixed size master links type B comply with the DIN 5688-3. The manufacturing and testing requirements are based on the DIN EN 1677 parts 1 and 4.

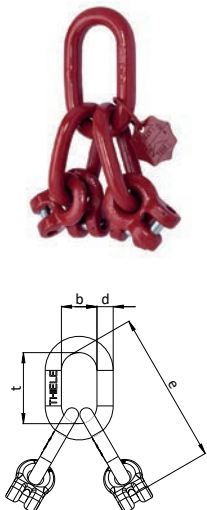


Trade Size	Article-No.	Working Load Limit $0^\circ < \beta \leq 45^\circ$ [t]	Dimensions [mm]				Weight app. [kgs]
			e	d	t	b	
6-8	F08112068	1,60	91	13	60	30	0,42
8-8	F08112088	2,80	107	16	70	35	0,78
10-8	F08112108	4,25	136	20	90	45	1,40
13-8	F08112138	7,50	179	26	120	60	2,71
16-8	F08112168	11,20	205	28	130	65	5,10
18-8	F08112188	14,00	219	32	140	70	7,90
22-8	F08112228	21,20	280	40	180	90	11,80

## TWN 0811/4

### Fixed-Size Master Links TAB4 for 3- and 4-leg Chain Slings

The grade 80 fixed size master links TWN 0811/4 are used to assemble 3- and 4-leg chain slings. The fixed installed ring shackles only allow the assembly of lifting chains of the appropriate nominal size. The dimensions of the fixed size master links type B comply with the DIN 5688-3. The manufacturing and testing requirements are based on the DIN EN 1677 parts 1 and 4.

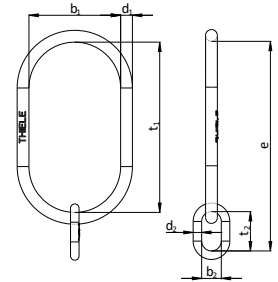


Trade Size	Article-No.	Working Load Limit $0^\circ < \beta \leq 45^\circ$ [t]	Dimensions [mm]				Weight app. [kgs]
			e	d	t	b	
6-8	F08114068	2,36	161	16	70	35	1,20
8-8	F08114088	4,25	197	20	90	45	2,29
10-8	F08114108	6,70	236	22	100	50	4,07
13-8	F08114138	11,20	299	26	120	60	8,28
16-8	F08114168	17,00	345	32	140	70	12,50
18-8	F08114188	21,20	379	36	160	80	20,00
22-8	F08114228	31,50	460	40	180	90	29,40

# Suspension Components

## Oversized Master Link Assemblies for 1-leg Chain Slings for Single Crane Hooks DIN 15401 (16 t, 25 t, 40 t)

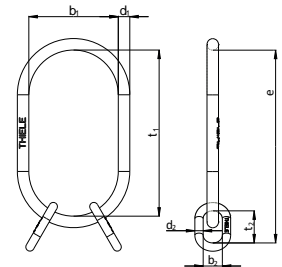
The grade 80 oversized master link assemblies TWN 0815 are used to assemble 1-leg chain slings and are used with big crane hooks according to the DIN 15401. The manufacturing and testing requirements are based on the DIN EN 1677 parts 1 and 4. The dimensions comply with the DIN 5688-3. The intermediate links enable the use of connecting links, e.g. THI-LOK® TWN 1320.

**TWN 0815**


Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]							Crane Hooks acc. DIN 15401	Weight app. [kgs]
			e	d <sub>1</sub>	t <sub>1</sub>	b <sub>1</sub>	d <sub>2</sub>	t <sub>2</sub>	b <sub>2</sub>		
6-8	F08150616	1,12	320	18	260	140	13	60	30	16	1,67
8-8	F08150816	2,00	330	22	260	140	16	70	35	16	2,60
10-8	F08151016	3,15	330	22	260	140	16	70	35	16	2,60
13-8	F08151316	5,30	260	26	260	140				16	3,17
16-8	F08151616	8,00	260	30	260	140				16	4,30
18-8	F08151816	10,00	370	36	250	140	26	120	60	16	7,80
6-8	F08150625	1,12	400	20	340	180	13	60	30	25	2,54
8-8	F08150825	2,00	400	20	340	180	13	60	30	25	2,54
10-8	F08151025	3,15	410	24	340	180	16	70	35	25	3,78
13-8	F08151325	5,30	410	28	340	180	16	70	35	25	5,07
16-8	F08151625	8,00	430	32	340	180	20	90	45	25	6,95
18-8	F08151825	10,00	440	40	340	180	22	100	50	25	10,90
20-8	F08152025	12,50	340	40	340	180				25	10,00
22-8	F08152225	15,00	340	40	340	180				25	10,00
6-8	F08150640	1,12	490	22	430	220	13	60	30	40	3,73
8-8	F08150840	2,00	490	22	430	220	13	60	30	40	3,73
10-8	F08151040	3,15	500	26	430	220	16	70	35	40	5,33
13-8	F08151340	5,30	500	30	430	220	16	70	35	40	7,05
16-8	F08151640	8,00	520	34	430	220	20	90	45	40	9,41
18-8	F08151840	10,00	530	42	430	220	22	100	50	40	14,50
20-8	F08152040	12,50	430	42	430	220				40	13,50
22-8	F08152240	15,00	430	42	430	220				40	13,52

## Oversized Master Link Assemblies for 2-leg Chain Slings for Single Crane Hooks DIN 15401 (16 t, 25 t, 40 t)

The grade 80 oversized master link assemblies TWN 0816 are used to assemble 2-leg chain slings and are used with big crane hooks according to the DIN 15401. The manufacturing and testing requirements are based on the DIN EN 1677 parts 1 and 4. The dimensions comply with the DIN 5688-3. The intermediate links enable the use of connecting links, e.g. THI-LOK® TWN 1320.

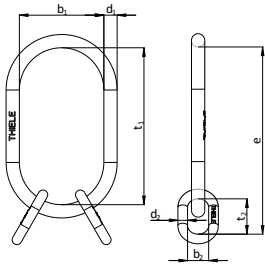
**TWN 0816**


Trade Size	Article-No.	Working Load Limit 0° <math>\beta \le 45^\circ</math> [t]	Dimensions [mm]							Crane Hooks acc. DIN 15401	Weight app. [kgs]
			e	d <sub>1</sub>	t <sub>1</sub>	b <sub>1</sub>	d <sub>2</sub>	t <sub>2</sub>	b <sub>2</sub>		
6-8	F08160616	1,60	320	18	260	140	13	60	30	16	1,88
8-8	F08160816	2,80	330	22	260	140	16	70	35	16	2,96
10-8	F08161016	4,25	330	26	260	140	16	70	35	16	3,90
13-8	F08161316	7,50	350	30	260	140	20	90	45	16	5,75
16-8	F08161616	11,20	370	36	250	140	26	120	60	16	9,43
6-8	F08160625	1,60	400	22	340	180	13	60	30	25	2,70
8-8	F08160825	2,80	410	24	340	180	16	70	35	25	4,14
10-8	F08161025	4,25	410	28	340	180	16	70	35	25	5,43
13-8	F08161325	7,50	430	32	340	180	20	90	45	25	7,68
16-8	F08161625	11,20	440	40	340	180	22	100	50	25	11,90
18-8	F08161825	14,00	440	40	340	180	22	100	50	25	11,90
20-8	F08162025	17,00	480	45	340	180	32	140	70	25	18,60
6-8	F08160640	1,60	490	26	430	220	16	70	35	40	5,70
8-8	F08160840	2,80	500	26	430	220	13	60	30	40	5,70
10-8	F08161040	4,25	500	30	430	220	16	70	35	40	7,42
13-8	F08161340	7,50	520	34	430	220	20	90	45	40	9,88
16-8	F08161640	11,20	530	42	430	220	22	100	50	40	15,50
18-8	F08161840	14,00	530	42	430	220	22	100	50	40	15,50
22-8	F08162240	21,20	570	48	430	220	32	140	70	40	23,70

## TWN 0817

### Oversized Master Link Assemblies for 3- and 4-leg Chain Slings for Single Crane Hooks DIN 15401 (16 t, 25 t, 40 t)

The grade 80 oversized master link assemblies TWN 0817 are used to assemble 3- and 4-leg chain slings and are used with big crane hooks according to the DIN 15401. The manufacturing and testing requirements are based on the DIN EN 1677 parts 1 and 4. The dimensions comply with the DIN 5688-3. The intermediate links enable the use of connecting links, e.g. THI-LOK®s TWN 1320.

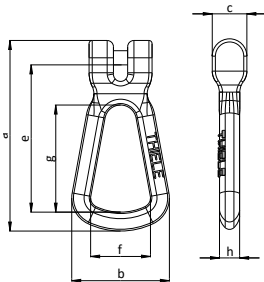


Trade Size	Article-No.	Working Load Limit $0^\circ \leq \beta \leq 45^\circ$ [t]	Dimensions [mm]							Crane Hooks acc. DIN 15401	Weight app. [kgs]
			e	d <sub>1</sub>	t <sub>1</sub>	b <sub>1</sub>	d <sub>2</sub>	t <sub>2</sub>	b <sub>2</sub>		
6-8	F08170616	2,36	320	22	260	140	13	60	30	16	2,96
8-8	F08170816	4,25	330	26	260	140	16	70	35	16	3,90
10-8	F08171016	6,70	350	30	260	140	20	90	45	16	5,75
13-8	F08171316	11,20	370	36	250	140	26	120	60	16	9,43
16-8	F08171616	17,00	370	36	250	140	26	120	60	16	9,43
6-8	F08170625	2,36	400	24	340	180	13	60	30	25	4,14
8-8	F08170825	4,25	410	28	340	180	16	70	35	25	5,43
10-8	F08171025	6,70	430	32	340	180	20	90	45	25	7,68
13-8	F08171325	11,20	440	40	340	180	22	100	50	25	11,90
16-8	F08171625	17,00	460	40	340	180	26	120	60	25	13,20
20-8	F08172025	26,50	590	55	430	220	36	160	80	25	32,30
6-8	F08170640	2,36	490	26	430	220	13	60	30	40	5,70
8-8	F08170840	4,25	500	30	430	220	16	70	35	40	7,42
10-8	F08171040	6,70	520	34	430	220	20	90	45	40	10,10
13-8	F08171340	11,20	530	42	430	220	22	100	50	40	15,50
16-8	F08171640	17,00	550	42	430	220	26	120	60	40	16,80
18-8	F08171840	21,20	570	48	430	220	32	140	70	40	23,70
22-8	F08172240	31,50	590	55	430	220	36	160	80	40	32,30

## TWN 0820

### Clevis Suspension Links

The grade 80 clevis suspension links TWN 0820 are predominantly used to assemble 1-leg basket slings for bundling of loads. The manufacturing and testing requirements are based on the DIN EN 1677-1.



Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]							Weight app. [kgs]
			e	f	g	a	c	h	b	
8-8	F31000	2,00	93,5	38	68	121	22	13	62	0,36
10-8	F31010	3,15	126	49	95	165,5	28	19	88	0,86
13-8	F31020	5,30	158,5	60	120	207	37	22	104	1,60
16-8	F31030	8,00	187	80	140	246	43	28	136	3,00



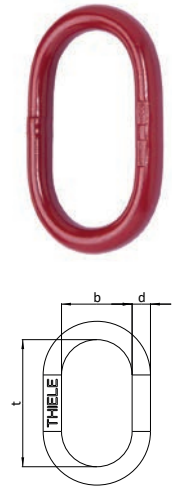
# Suspension Components

## Master Links Type A for 1- and 2-leg Chain Slings

The grade 80 master links TWN 1313 are used to assemble 1- and 2-leg chain slings. The dimensions comply with the DIN 5688-3 and enable the use of connecting links, e.g. THI-LOK®'s TWN 1320. The possibility of using the links for single- and double-leg chain slings offers a high flexibility and economical warehousing. The master links can be used e.g. to assemble wire rope slings according to the DIN EN 13414-1. The manufacturing and testing requirements are based on the DIN EN 1677 parts 1 and 4.

Article-No.	Working Load Limit $0^\circ < \beta \leq 45^\circ$ [t]	Dimensions [mm]			Weight app. [kgs]	Trade Size for use in Chain Slings		Crane Hooks acc. DIN 15401
		d	t	b		1-leg	2-leg	
F1313013	2,00	13	90	50	0,29	6/7-8	6-8	1,6
F1313016	3,15	16	110	60	0,53	8-8	7-8	2,5
F1313018	4,00	18	130	70	0,79	10-8	8-8	4
F1313020	4,75	20	140	80	1,10		10-8	5
F1313022	5,60	22	160	90	1,50	13-8		6
F1313026	8,00	26	180	100	2,30	16-8	13-8	8
F1313032	12,50	32	230	125	4,40	18/20-8	16-8	12
F1313036	16,00	36	250	140	6,20	22-8	18-8	16
F1313040	19,00	40	290	160	8,80		20-8	20
F1313045	25,00	45	320	175	12,00	26/28-8	22-8	25
F1313050	31,50	50	340	190	16,00	32-8	26-8	25
F1313056	40,00	56	380	210	23,00	36-8	28-8	32
F1313063	50,00	63	430	240	33,00	40-8	32-8	40
F1313070	63,00	70	470	260	44,00	45-8	36-8	50
F1313080	80,00	80	520	290	64,00	50-8	40-8	63
F1313085	100,00	85	520	290	73,00	56-8	45-8	63
F1313095	125,00	95	580	320	100,00	63-8	50-8	80
F1313110	160,00	110	680	380	160,00	71-8	56-8	100

### TWN 1313

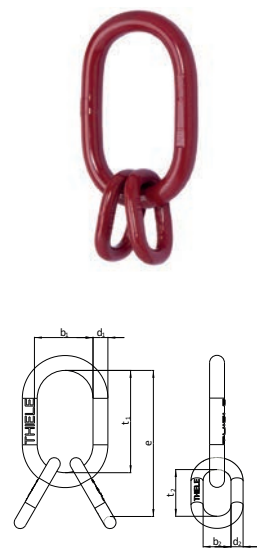


## Master Link Assemblies for 3- and 4-leg Chain Slings

The grade 80 master link assemblies TWN 1314 are used to assemble 3- and 4-leg chain slings. The manufacturing and testing requirements are based on the DIN EN 1677, parts 1 and 4. The dimensions comply with the DIN 5688-3 and enable the use of connecting links, e.g. THI-LOK®'s TWN 1320. Furthermore, the master link assemblies can be used e.g. to assemble wire rope slings according to the DIN EN 13414-1.

Article-No.	Working Load Limit $0^\circ < \beta \leq 45^\circ$ [t]	Dimensions [mm]							Weight app. [kgs]	Trade Size for use in Chain Slings
		e	d <sub>1</sub>	t <sub>1</sub>	b <sub>1</sub>	d <sub>2</sub>	t <sub>2</sub>	b <sub>2</sub>		
F1314016	3,15	170	16	110	60	13	60	30	1,40	6-8
F1314020	4,75	210	20	140	80	16	70	35	1,80	8-8
F1314026	8,00	270	26	180	100	20	90	45	3,80	10-8
F1314032	12,50	350	32	230	125	26	120	60	7,70	13-8
F1314040	19,00	420	40	290	160	28	130	65	13,00	16-8
F1314045	25,00	460	45	320	175	32	140	70	18,00	18-8
F1314050	31,50	500	50	340	190	36	160	80	25,00	20-8
F1314050A	31,50	520	50	340	190	40	180	90	28,00	22-8
F1314063	50,00	630	63	430	240	45	200	100	49,00	26-8
F1314063A	50,00	630	63	430	240	45	200	100	49,00	28-8
F1314080	71,00	740	80	520	290	50	220	110	86,00	32-8
F1314085	85,00	780	85	520	290	56	260	130	106,00	36-8
F1314095	112,00	860	95	580	320	63	280	140	146,00	40-8
F1314110	132,00	1000	110	680	380	70	320	160	223,00	45-8
F1314110A	160,00	1040	110	680	380	80	360	180	252,00	50-8

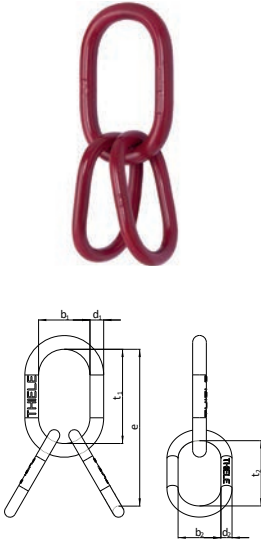
### TWN 1314



## TWN 1315

### Master Link Assemblies for 3- and 4-leg Rope Slings

The grade 80 master link assemblies TWN 1315 are used to assemble 3- and 4-leg wire rope slings. The extra large intermediate links enable easy assembly of wire rope slings. The manufacturing and testing requirements are based on the DIN EN 1677 parts 1 and 4. The dimensions comply with the DIN 5688-3.



Article-No.	Working Load Limit $0^\circ < \beta \leq 45^\circ$ SF = 1:4 [t]	Dimensions [mm]							Weight app. [kgs]	Classification of the Wire Rope Diameter*	
		$d_1$	$t_1$	$b_1$	e	$d_2$	$t_2$	$b_2$		Fiber [mm]	Steel [mm]
F1315016	2,80	16	110	60	200	13	90	50	1,11	11	10
F1315018	4,00	18	130	70	240	16	110	60	1,85	13	12
F1315022	5,30	22	160	90	290	18	130	70	3,08	14	14
F1315026	7,50	26	180	100	340	22	160	90	5,40	18	16
F1315032	11,10	32	230	125	410	26	180	100	9,10	22	20
F1315036	16,00	36	250	140	480	32	230	125	15,00	26	24
F1315045	21,00	45	320	175	570	36	250	140	24,40	28	28
F1315050	31,60	50	340	190	660	45	320	175	40,40	36	36
F1315056	40,20	56	380	210	720	50	340	190	55,40	40	40
F1315063	50,10	63	430	240	810	56	380	210	78,40	44	44
F1315085	101,80	85	520	290	1.040	80	520	290	201,00	60	60

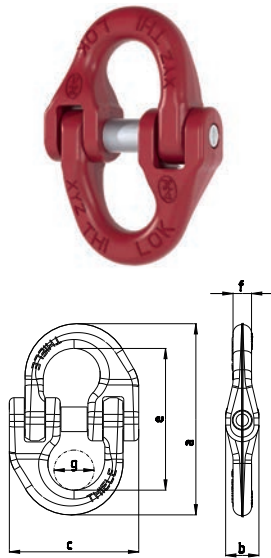
\*Acc. to the DIN EN 13414-1 for 3- and 4-leg slings.

## Connectors

## TWN 1320

### THI-LOK® Connecting Links

The grade 80 THI-LOK® connecting links TWN 1320 are used to connect lifting chains with lifting components to assemble chain slings. The manufacturing and testing requirements are based on the DIN EN 1677-1.



Trade Size	Article-No.	Working Load Limit $0^\circ < \beta \leq 45^\circ$ [t]	Dimensions [mm]						Weight app. [kgs]
			e	g	a	c	b	f	
6-8	F308061	1,12	39	13	53	38	11	7	0,08
7-8	<b>NEW</b> F308151	1,50	47	16	65	48	13	8	0,12
8-8	F308161	2,00	54	18	74	53	14	9	0,17
10-8	F308261	3,15	64	22	88	62	18	12	0,29
13-8	F308361	5,30	86	26	118	77	23	15	0,62
16-8	F308461	8,00	102	36	141	100	29	19	1,16
18-8	F308561	10,00	115	36	157	111	32	21	1,63
20-8	F308661	12,50	128	45	175	130	36	23	2,30
22-8	F308761	15,00	141	45	193	139	39	25	2,99
26-8	F308861	21,20	166	56	228	165	46	29	4,90
32-8	F308961	31,50	204	70	282	209	57	38	9,65
36-8	<b>NEW</b> F309061	40,00	230	80	321	244	66	44	15,00
40-8	<b>NEW</b> F309161	50,00	230	80	321	244	66	44	15,00

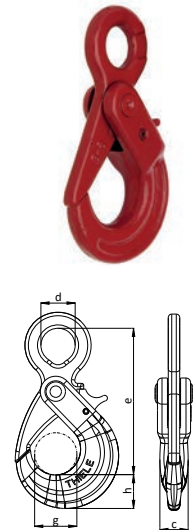
# Hooks

## Eye Self-Locking Hooks

The grade 80 self-locking hooks with eye TWN 0798 are used to assemble chain slings and are often used in the construction industry. The associated lifting chains are assembled by using connecting links, e.g. THI-LOK®s TWN 1320. The hooks lock automatically when under load and may only be reopened manually if not under load anymore. The self-locking hooks comply with the DIN EN 1677-3.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]					Weight app. [kgs]
			e	d	g	h	c	
6-8	Z07274	1,12	106	22,5	28	22	15	0,48
7/8-8	Z07275	2,00	133	24	35	25	20	0,82
10-8	Z07276	3,15	167	32	45	35	27	1,65
13-8	Z07277	5,30	208	39	54	41	33	3,12
16-8	Z07278	8,00	250	49	67	54	39	5,88
18/20-8	F092255	12,50	257	60	74	57	43	7,33
22-8	F092275	15,00	290	71	88	62	52	9,91

TWN 0798



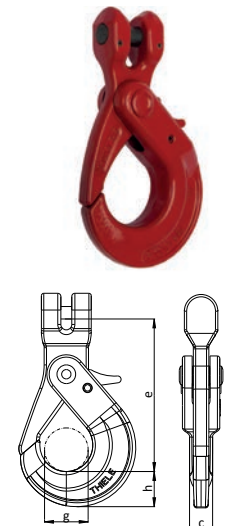
TA8

## Clevis Self-Locking Hooks

The grade 80 clevis self-locking hooks TWN 0799 are used to assemble chain slings and are often used in the construction industry. The clevis design enables the direct attachment to the lifting chain. The hooks lock automatically when under load and may only be reopened manually if not under load anymore. The self-locking hooks comply with the DIN EN 1677-3.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	g	h	c	
6-8	Z07279	1,12	98	28	22	15	0,57
8-8	Z07280	2,00	122	33	25	20	0,93
10-8	Z07281	3,15	150	45	35	27	1,75
13-8	Z07282	5,30	186	54	41	33	3,25
16-8	Z07296	8,00	215	67	54	39	6,20
18/20-8	F0922055	12,50	215	74	57	43	7,28

TWN 0799

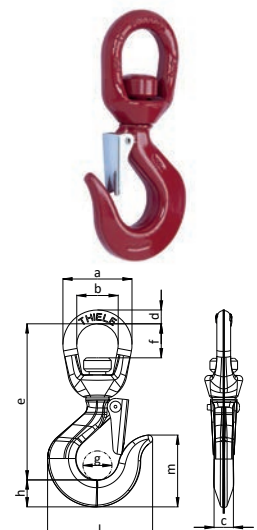


## Swivel Hooks

The grade 80 swivel hooks TWN 0854 are used to assemble chain slings. The swivels enable the chain strands to be aligned without twisting. The lifting chains are assembled by using connecting links, e.g. THI-LOK®s TWN 1320. The manufacturing and testing requirements comply with the DIN EN 1677-2.

Trade Size	Article-No.	Working Load Limit $0^\circ < \beta \leq 45^\circ$ [t]	Dimensions [mm]										Weight app. [kgs]
			d	f	b	e	g	a	c	h	l	m	
0,75 t	F32103	0,75	10	25	30	113,5	19	50	13	14	62,5	42,5	0,37
6-8	F32100	1,12	10	25	30	113	21	50	14	19	73	52	0,38
8-8	F32110	2,00	16	42	44	155	25	76	19	24,5	88	68	1,00
10-8	F32120	3,15	16	42	44	162	28	76	20,5	28,5	104	72	1,20
13-8	F32130	5,30	19	43	51	190	34	89	28	33	120	87	2,08
16-8	F32140	8,00	25	60	64	247	42	114	35	43	156	110	4,45

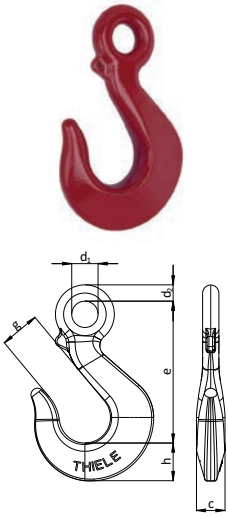
TWN 0854



## TWN 0855

### Eye Sling Hooks

The grade 80 eye sling hooks TWN 0855 are used to assemble chain slings. The lifting chains are assembled by using connecting links, e.g. THI-LOK®s TWN 1320. The manufacturing and testing requirements comply with the DIN EN 1677-2.

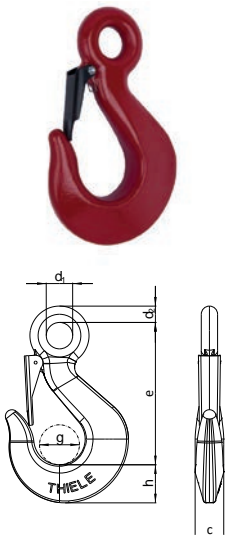


Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]						Weight app. [kgs]
			e	d <sub>1</sub>	g	h	c	d <sub>2</sub>	
36-8	Z04079	40,00	388	72	109	103	78	44,5	31,50
40-8	Z04083	50,00	442	84	124	116	89	50,5	46,00
45-8	Z04080	63,00	494	90	138	130	99	56	63,00
50-8	Z04081	80,00	610	102	155	145	110	63	80,00

## TWN 0855/1

### Eye Sling Hook with Safety Latch

The grade 80 eye sling hooks TWN 0855/1 are used to assemble chain slings. The lifting chains are assembled by using connecting links, e.g. THI-LOK®s TWN 1320. The safety latch prevents unintentional detachment from the load. The sling hooks comply with the DIN EN 1677-2.

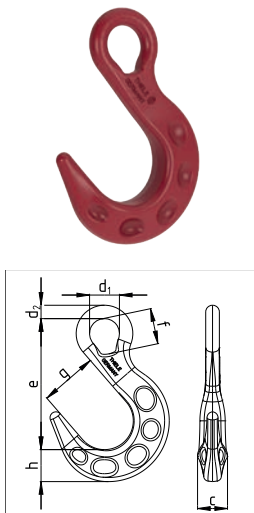


Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]						Weight app. [kgs]
			e	d <sub>1</sub>	g	h	c	d <sub>2</sub>	
36-8	Z06159	40,00	388	72	90	103	78	44,5	32,30
40-8	Z06160	50,00	442	84	103	116	89	50,5	47,00
45-8	Z06161	63,00	494	90	114	130	99	56	64,40
50-8	Z06162	80,00	610	102	131	145	110	63	81,90

## TWN 0856

### Eye Foundry Hooks

The grade 80 eye foundry hooks TWN 0856 are used to assemble chain slings, primarily for foundries. The associated lifting chains are assembled by using connecting links, e.g. THI-LOK®s TWN 1320. The manufacturing and testing requirements comply with the DIN EN 1677-1.



Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]							Weight app. [kgs]
			e	d <sub>1</sub>	g	h	c	d <sub>2</sub>	f	
6-8	<b>NEW</b> F32354	1,12	108	21 <sup>1)</sup>	50	24	20	12	-	0,44
7/8-8	<b>NEW</b> F32364	2,00	135	28 <sup>1)</sup>	66	33	26	14	-	0,97
10-8	<b>NEW</b> F32374	3,15	161	32 <sup>1)</sup>	76	35	32	18	-	1,56
13-8	<b>NEW</b> F32384	5,30	196	42 <sup>1)</sup>	89	42	38	21	-	2,96
16-8	<b>NEW</b> F32394	8,00	229	54 <sup>1)</sup>	102	48	45	23	-	4,71
18/20-8	<b>NEW</b> F32404	12,50	259	59	114	63	59	27,0	70	7,95
22-8	<b>NEW</b> F32414	15,00	288	65	127	70	65	30	78	10,88
26-8	<b>NEW</b> F32424	21,20	329	76	136	81	75	35	89	16,49
32-8	<b>NEW</b> F32444	31,50	358	85	152	97	83	42	100	26,20

<sup>1)</sup> With circular eyelet

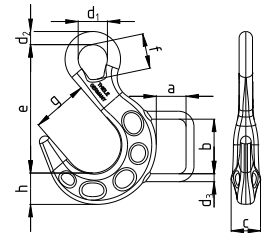
## Eye Foundry Hooks with Handle NEW

The grade 80 eye foundry hooks with handle TWN 0856/1 are used to assemble chain slings, primarily for foundries. The associated lifting chains are assembled by using connecting links, e.g. THI-LOK®s TWN 1320. The handle ensures an safe and easy handling. The manufacturing and testing requirements comply with the DIN EN 1677-1.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]										Weight app. [kgs]
			e	d <sub>1</sub>	g	h	c	d <sub>2</sub>	a	b	d <sub>3</sub>	f	
16-8	F32396	8,00	229	54 <sup>1)</sup>	102	48	45	23	60	110	16	-	5,20
18/20-8	F32406	12,50	259	59	114	63	59	27,0	60	110	16	70	8,40

<sup>1)</sup> With circular eyelet

TWN 0856/1



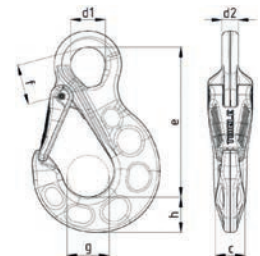
## SOLIDO® Eye Sling Hooks with forged Safety Latch

The grade 80 eye sling hooks TWN 0858/1 are used to assemble standard chain slings. The lifting chains are assembled by using connecting links, e.g. THI-LOK®s TWN 1320. The forged safety latch prevents an unintentional detachment from the load. The sling hooks comply with the DIN EN 1677-2.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]							Weight app. [kgs]
			e	d <sub>1</sub>	d <sub>2</sub>	g	h	c	f	
6-8	F329010	1,12	92	21 <sup>1)</sup>	11	24	20	17	-	0,36
7/8-8	F329110	2,00	118	28 <sup>1)</sup>	14	30	25	20	-	0,76
10-8	F329210	3,15	146	36 <sup>1)</sup>	18	37	32	29	-	1,50
13-8	F329310	5,30	168	42 <sup>1)</sup>	21	42	41	35	-	2,55
16-8	F329410	8,00	210	54 <sup>1)</sup>	25	51	50	41	-	4,65
18/20-8	F32951	12,50	270	62 <sup>1)</sup>	30	65	58	55	-	8,70
22-8	F329710	15,00	271	65 <sup>1)</sup>	30	70	62	55	-	10,20
26-8	F329810	21,20	302	70	33	75	71	60	81	15,00
32-8	F329910	31,50	350	80	38	90	84	70	99	24,30

<sup>1)</sup> With circular eyelet

TWN 0858/1

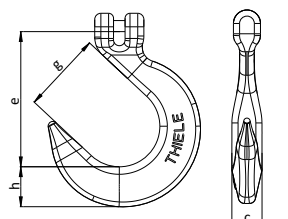


## Clevis Foundry Hooks

The grade 80 clevis foundry hooks TWN 0859 are used to assemble chain slings, primarily for foundries. The manufacturing and testing requirements comply with the DIN EN 1677-1.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	g	h	c	
8-8	F33310	2,00	110	66	33	27	1,12
10-8	F33320	3,15	133	76	35	32	1,61
13-8	F33330	5,30	159	89	41	38	3,40
16-8	F33340	8,00	189	102	48	45	5,50
20-8	F33355	12,50	217	114	54	51	9,00
22-8	F33360	15,00	244	124	60	56	12,00

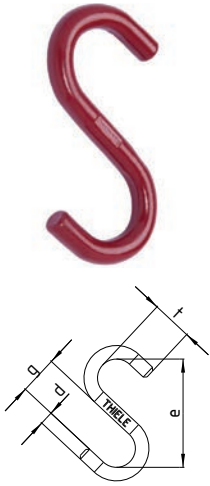
TWN 0859



## TWN 0860

### S-Hooks

The grade 80 S-hooks TWN 0860 can be used universally for lifting of loads, also in combination with chain slings. The manufacturing and testing requirements are based on the DIN EN 1677-1.

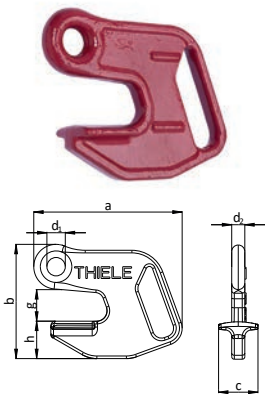


Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	g	t	d	
	F18130	0,15	80	28	30	10	0,12
	F18160	0,25	100	36	38	12	0,21
	F18180	0,40	130	46	48	16	0,48
	F18200	0,80	160	56	58	20	0,91
6-8	F18220	1,12	180	64	64	22	1,20
7-8	F18230	1,50	200	70	70	26	1,90
8-8	F18250	2,00	230	80	80	32	3,40
10-8	F18260	3,15	260	90	90	36	4,80
	F18280	4,00	300	104	104	40	6,80
	F18290	4,50	350	122	121	45	10,00
13-8	F18300	5,30	400	140	138	51	14,60
	F18310	6,00	450	158	154	57	20,50
16-8	F18320	8,00	500	160	160	63	27,40
18-8	F18330	10,00	550	166	168	72	39,00

## TWN 0868

### Pipe Transport Hooks

The grade 80 pipe transport hooks TWN 0868 are used as forged end fittings in 2-leg chain slings to lift pipes. The lifting chains are assembled by using connecting links, e.g. THI-LOK®s TWN 1320. The manufacturing and testing requirements are based on the DIN EN 1677-1.

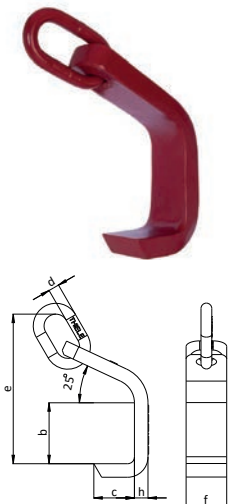


Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]							Weight app. [kgs]
			b	a	d <sub>1</sub>	d <sub>2</sub>	g	h	c	
13-8	F32608	5,30	174	226	28	20	49	57	60	3,10
22-8	F32641	15,00	274	345	44	30	80	90	95	14,62

## TWN 0872

### Plate Hooks for Basket Chains

The grade 80 plate hooks with intermediate link TWN 0872 are used as end fittings of chain slings for the horizontal transportation of thick-walled sheet metals in steel constructions. The intermediate links enable the connection of additional slings. The hooks are used in 2-leg basket chain slings, the max. inclination angle is  $\beta = 30^\circ$ . The manufacturing and testing requirements are based on the DIN EN 1677-1.



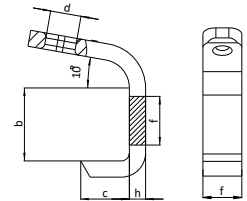
Trade Size	Article-No.	Working Load Limit $15^\circ < \beta \leq 30^\circ$ [t]	Dimensions [mm]						Weight app. [kgs]
			e	b	c	d	f	h	
6-8	F35500	1,60	221	90	60	16	60	20	2,50
8-8	F35501	2,80	244	90	90	16	70	25	4,00
10-8	F35502	4,25	332	140	95	18	80	30	10,08
13-8	F35503	7,50	360	145	105	22	90	35	11,00
16-8	F35504	11,20	404	155	120	26	110	45	16,80
20-8	F35505	17,00	445	175	130	32	120	55	30,00
22-8	F35506	21,20	510	205	135	36	140	60	40,30
26-8	F35507	30,00	560	230	145	45	160	70	61,50
32-8	F35508	45,00	621	255	160	50	180	85	85,50

## Plate Hooks for Spreader Chains

The grade 80 plate hooks with eyelet TWN 0873 are used as end fittings in chain slings for the horizontal transport of thick-walled sheet metals in steel constructions. The eyelet allows the chain to be passed through. The max. inclination angle is  $\beta = 30^\circ$ . The manufacturing and testing requirements are based on the DIN EN 1677-1.

Trade Size	Article-No.	Working Load Limit $15^\circ < \beta \leq 30^\circ$ [t]	Dimensions [mm]					Weight app. [kgs]
			b	c	d	f	h	
6-8	F35600	1,60	90	60	38	60	20	2,40
8-8	F35601	2,80	90	90	42	70	25	3,50
10-8	F35602	4,25	140	95	50	80	30	8,00
13-8	F35603	7,50	145	100	65	90	35	12,52
16-8	F35604	11,20	155	120	78	110	45	22,00
20-8	F35605	17,00	175	130	92	130	55	25,00
22-8	F35606	21,20	205	135	100	140	60	34,00
26-8	F35607	30,00	230	145	118	160	70	50,00
32-8	F35608	45,00	255	160	142	190	85	69,00

TWN 0873



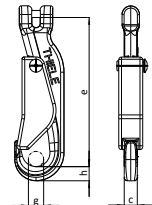
## Engine-Transport Clevis Hooks

The grade 80 engine-transport hooks TWN 0889 are used in chain slings as end fittings, predominantly for the transportation of engine blocks. The tip shape enables the attachment to small eyelets. The manufacturing and testing requirements are based on the DIN EN 1677-1.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	g	h	c	
6-8*	F33439	0,50	137	19	13	12	0,55

\*Compatible with trade size 6-8, but WLL limited to max 0,5 t.

TWN 0889



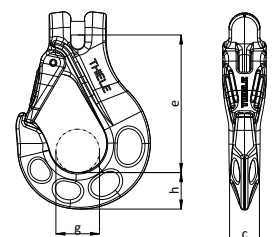
## Clevis Sling Hooks with Forged Safety Latch

The grade 80 clevis sling hooks TWN 1340/1 are used to assemble universal chain slings and lashing chains. The clevis design enables the direct attachment to the lifting chain. The forged safety latch prevents an unintentional detachment from the load. The sling hooks comply with the DIN EN 1677-2.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	g	h	c	
6-8	F336010	1,12	76	24	20	17	0,36
8-8	F336110	2,00	95	30	25	22	0,76
10-8	F336210	3,15	114	37	32	28	1,41
13-8	F336310	5,30	134	42	41	35	2,48
16-8	F336410	8,00	162,5	51	50	41	6,00
20-8	F336510	12,50	201	54	61	62	8,15
20-8 <sup>1)</sup>	F33656	12,50	220	65	58	55	9,68
22-8	F336610	15,00	224	70	62	55	11,46
22-8 <sup>1)</sup>	F33661	15,00	244	75	64	61	10,62

<sup>1)</sup>TWN 0835/1

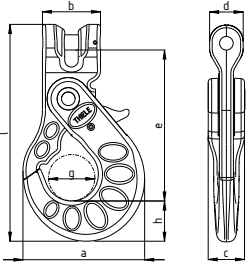
TWN 1340/1



## TWN 1399

### Clevis Skip Suspension Hooks NEW

The grade 80 skip suspension hooks TWN 1399 connect chain slings with the pivot of containers, e.g. containers according to DIN 30720. The shape of the hooks is designed to fit container lifting pivots. The clevis design enables the direct attachment to the lifting chain. The hooks lock automatically when under load and may only be reopened manually if not under load anymore. The skip suspension hooks comply with the DIN EN 1677-3.

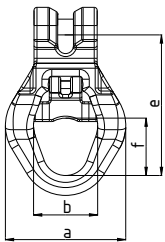


Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]								Weight app. [kgs]
			e	c	g	h	d	b	a	l	
13-8	F335000	5,30	167	40	51	42	37	64	135	239	3,34
16-8	F335300	8,00	165	40	51	42	37	64	135	239	3,34

## TWN 0869

### Clevis Skip Suspension Links for One-Hand Operation and Forged Safety Latch

The grade 80 skip suspension links TWN 0869 connect chain slings with the pivot of containers, e.g. containers according to DIN 30720. The shape of the eyelet is designed to fit container suspension pivots. The clevis design enables the direct attachment to the lifting chain. The forged safety latch allows a safe one-hand operation. The manufacturing and testing requirements are based on DIN EN 1677 parts 1 and 4.

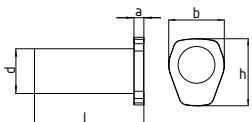


Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	f	b	a	
13-8	F313800	5,30	142	57,5	65	122	1,92
16-8	F313850	8,00	141	57,5	65	122	1,92

## TWN 0869/1

### Container Pivots

The container pivots TWN 0869/1 are welded to containers and serve as lifting points for attaching skip suspension hooks and links.



Article-No.	Dimensions [mm]					Weight app. [kgs]
	a	d	b	l	h	
F31410	10	45	68	110	82	1,60



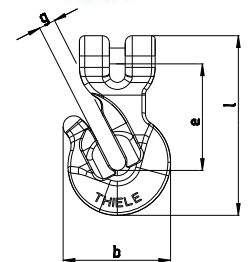
# Shortening Components

## Clevis Shortening Hooks

The grade 80 clevis shortening hooks TWN 0827 are used to adjust the strand lengths of chain slings. The clevis design enables the direct attachment to the lifting chain. The manufacturing and testing requirements comply with the DIN EN 1677-1.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	g	l	b	
8-8	F33200	2,00	61	9,5	102	61	0,53
10-8	F33210	3,15	73	12	125	75	0,97
13-8	F33220	5,30	94	15	160	95	2,00
16-8	F33230	8,00	112	18	188	120	3,40
20-8	F33245	12,50	148	22,5	242	141	7,30

**TWN 0827**



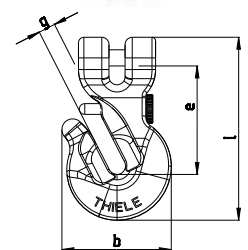
TA8

## Clevis Shortening Hooks with Safety Pin

The grade 80 clevis shortening hooks with safety pin TWN 0827/1 are used to adjust the strand length of chain slings and lashing chains. The clevis design enables the direct attachment to the lifting chain. The safety pin prevents the chain from accidental release. The manufacturing and testing requirements correspond to the DIN EN 1677-1 and DIN 5692.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	g	l	b	
8-8	F33201	2,00	61	9,5	102	61	0,54
10-8	F33211	3,15	73	12	125	75	0,99
13-8	F33221	5,30	94	15	160	95	2,06
16-8	F33231	8,00	112	18	188	120	3,45
20-8	F33246	12,50	148	22,5	242	141	7,35

**TWN 0827/1**

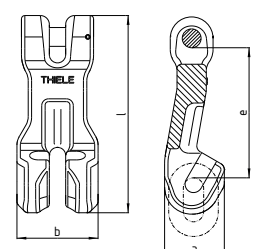


## Clevis Shortening Claws

The grade 80 clevis shortening claws TWN 0851 are used to adjust the strand lengths of chain slings. The clevis design enables the direct attachment to the lifting chain. The manufacturing and testing requirements comply with the DIN EN 1677-1.

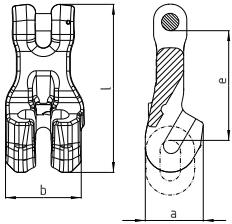
Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	a	b	l	
18-8	F34960	10,00	162	69	98	241	5,40
20-8	F34970	12,50	158	69	98	241	5,40
22-8	F34980	15,00	198	84	118	295	8,82
26-8	F34985	21,20	195	94	130	309	12,00
32-8	F34990	31,50	240	115	160	381	23,90

**TWN 0851**



## TWN 0851/1

## Clevis Shortening Claws with Safety Pin NEW



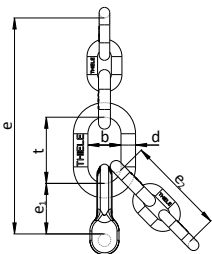
The grade 80 clevis shortening claws with safety pin TWN 0851/1 are used to adjust the strand lengths of chain slings, lifting and lashing chains. The clevis design enables the direct attachment to the lifting chain. The safety pin prevents unintentional detachment of the chain. The manufacturing and testing requirements comply with the DIN EN 1677-1 and DIN 5692. The shortening claws have been tested in interaction with lifting chain. The chain pockets ensure a particularly tight fit for the inserted chain link. The safety bolt enables the use in lashing chains according to the DIN EN 12195-3.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	a	b	l	
6-8	F349101	1,12	51	27	37	78	0,25
8-8	F349201	2,00	65	34	45,5	100	0,50
10-8	F349301	3,15	81	43	56	124	0,93
13-8	F349401	5,30	106	56	73	162	2,03
16-8	F349501	8,00	130	68	88	193	3,60
20-8*	F349601	12,50	161	85	109	246	6,00
22-8*	F349701	15,00	177	94	120	271	8,00
26-8	F349801	21,20	196	109	135	307	13,20
32-8	F349901	31,50	240	135	166	376	24,42

\*on request

## TWN 0896

## Shortening Devices for Fixed Size Master Links



The grade 80 shortening devices for fixed size master links TWN 0896 are used in chain slings and enable the strand lengths to be adapted to the conditions of use. The manufacturing and testing requirements are based on the DIN EN 818-4, DIN EN 1677 parts 1 and 4 and the DIN 5688-3.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]						Weight app. [kgs]
			e	e <sub>1</sub>	e <sub>2</sub>	d	t	b	
6-8	F0896068	1,12	137	31	60	10	46	23	0,32
8-8	F0896088	2,00	176	38	78	13	60	30	0,70
10-8	F0896108	3,15	215	46	99	16	70	35	1,40
13-8	F0896138	5,30	270	59	126	18	85	40	2,60
16-8	F0896168	8,00	326	76	150	22	100	50	4,50
18-8	F0896188	10,00	347	79	168	22	100	50	6,20
22-8	F0896228	15,00	450	100	210	32	140	70	12,00

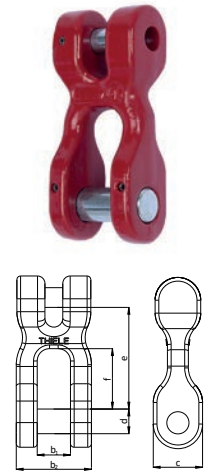
## Special Chain Coupling Links

The grade 80 special chain couplings TWN 0861 are used as end fittings in chain slings. The clevis design enables the direct attachment to the lifting chain. The special chain couplings may also be mounted directly on straps and traverses.

The manufacturing and testing requirements are based on the DIN EN 1677-1.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]						Weight app. [kgs]
			e	d	c	f	b <sub>1</sub>	b <sub>2</sub>	
10-8	F30601	3,15	65	16	32	37	21	47	0,58
13-8	F30611	5,30	83	20	40	49	27	62	1,17
16-8	F30621	8,00	100	24	48	57	34	76	2,13
18-8	F30631	10,00	116	30	60	64	42	97	3,90

TWN 0861



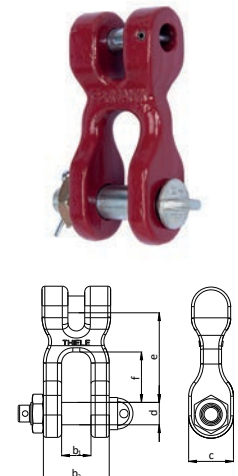
## Chain Coupling Links with Bolts, Nut and Pin

The grade 80 chain couplings with bolts, nut and roll pin TWN 0862 are used as end fittings in chain slings. The clevis design enables the direct attachment to the lifting chain. The chain couplings may also be mounted directly on straps and traverses.

The manufacturing and testing requirements are based on the DIN EN 1677-1.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]						Weight app. [kgs]
			e	d	c	f	b <sub>1</sub>	b <sub>2</sub>	
10-8	F30600	3,15	65	16	32	37	21	47	0,66
13-8	F30610	5,30	83	20	40	49	27	62	1,31
16-8	F30620	8,00	100	24	48	57	34	76	2,33
18-8	F30630	10,00	116	30	60	64	42	97	4,29

TWN 0862



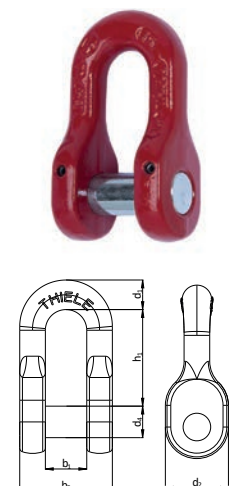
## Special Bolt Shackles

The Grade 80 special shackles with bolt TWN 0870 are used as end fittings in chain slings. The shackles can be mounted directly on straps and traverses. The dimensions of the special shackles comply with DIN 82101.

The manufacturing and testing requirements are based on DIN EN 1677-1.

Trade Size	Article-No.	Trade Size [DIN 82101]	Working Load Limit [t]	Dimensions [mm]						Weight app. [kgs]
				h <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>4</sub>	b <sub>1</sub>	b <sub>2</sub>	
10-8	F30311	1	3,15	49	15	32	16	21	47	0,35
13-8	F30321	1,6	5,30	61	19	40	20	27	61	0,71
16-8	F30331	2,5	8,00	73	23	48	24	33	75	1,26
18/20-8	F30341	4	12,50	91	29	60	30	41	96	2,60
22-8	F30351	5	15,00	111	33	72	36	47	107	4,00
26-8	F30361	6	21,20	120	37	78	39	53	121	5,70
28-8	F30371	8	25,00	140	41	90	45	60	136	10,00
32-8	F30381	10	31,50	147	45	96	48	66	150	10,50
36-8	F30391	12	40,00	158	50	104	52	73	167	13,90
40-8	F30401	16	50,00	185	55	120	60	81	185	20,50
45-8	F30411	20	63,00	211	61	136	68	90	206	28,09

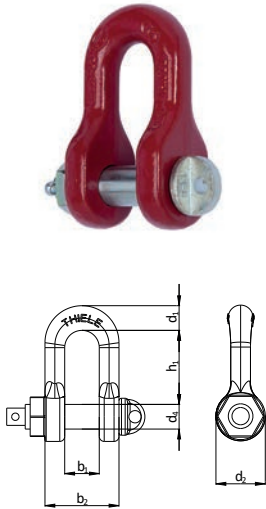
TWN 0870



## TWN 0871

### Bolt Shackles Type C with Nut and Roll Pin

The grade 80 shackles type C with bolt, nut and roll pin TWN 0871 are used as end fittings in chain slings. The shackles can be mounted directly on straps and traverses. The dimensions of the shackles type C comply with the DIN 82101. The manufacturing and testing requirements are based on the DIN EN 1677-1.



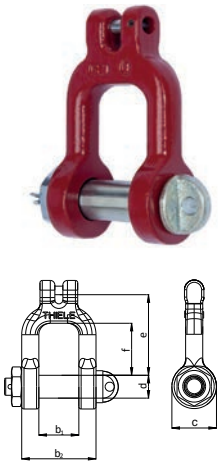
Trade Size	Article-No.	Trade Size [DIN 82101]	Working Load Limit [t]	Dimensions [mm]						Weight app. [kgs]
				h <sub>1</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>4</sub>	b <sub>1</sub>	b <sub>2</sub>	
6-8*	Z04147	0,4	1,12	30	10	20	10	14	30	0,10
8-8	Z04145	0,6	2,00	33	12	24	12	16	37	0,20
10-8	F30310	1	3,15	49	15	32	16	21	47	0,42
13-8	F30320	1,6	5,30	61	19	40	20	27	61	0,84
16-8	F30330	2,5	8,00	73	23	48	24	33	75	1,49
18/20-8	F30340	4	12,50	91	29	60	30	42	96	3,10
22-8	F30350	5	15,00	111	33	72	36	47	107	4,50
26-8	F30360	6	21,20	120	37	78	39	53	121	6,30
28-8	F30370	8	25,00	140	41	90	45	60	136	10,10
32-8	F30380	10	31,50	147	45	96	48	66	150	12,30
36-8	F30390	12	40,00	158	50	104	52	73	167	15,23
40-8	F30400	16	50,00	185	55	120	60	81	185	22,20
45-8	F30410	20	63,00	211	61	136	68	90	206	30,86

\*Finish: electro galvanized, welded on nut

## TWN 0897

### Special Coupling Shackles with Bolt, Nut and Roller Pin

The grade 80 special coupling shackles with bolt, nut and roll pin TWN 0897 are used as end fittings in chain slings. The clevis design enables the direct attachment to the lifting chain. The special coupling shackles can also be mounted directly on straps and traverses. The manufacturing and testing requirements are based on the DIN EN 1677-1.



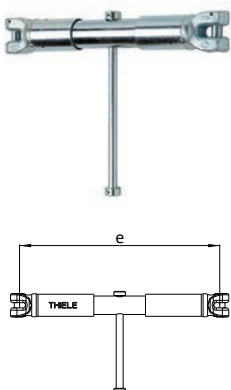
Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]						Weight app. [kgs]
			e	d	c	f	b <sub>1</sub>	b <sub>2</sub>	
6-8	F30586	1,12	70	20	39	46	35	65	0,68
8-8	F30596	2,00	70	20	40	46	35	65	0,77

## Chain Tensioners

## TWN 1450

### Chain Tensioners with Toggle

The grade 80 chain tensioners with toggle TWN 1450 are used as tensioning elements in lashing chains. The chain tensioners can also be used in chain slings for stepless adjustment of the strand lengths when lifting loads. The manufacturing and testing requirements are based on the DIN EN 1677-1.



Trade Size	Article-No.	Working Load Limit [t]	Normal straight load [daN]	Lashing Capacity (LC) [daN]	Dimensions [mm]			Weight app. [kgs]
					e <sub>max</sub>	e <sub>min</sub>	lift	
8-8	F34179	2,00	1.800	4.000	345	270	75	2,10
10-8	F34199	3,15	2.200	6.300	375	275	100	2,70
13-8	F34189	5,30	2.600	10.000	460	330	130	4,00

If the products are initially used for lifting, e.g. internal transport, up to the load capacity, they can still be used as lashing products. If lifting products are used for lashing, they may no longer be used for lifting anymore!

## Chain Tensioners/ Special Sling Components

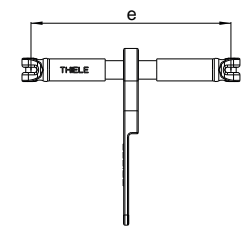
### Chain Tensioners with Ratchet

The grade 80 chain tensioners with ratchet TWN 1451 are used as tensioning elements in lashing chains. The chain tensioners can also be used in chain slings for stepless adjustment of the strand lengths when lifting loads. The manufacturing and testing requirements are based on the DIN EN 1677-1.

Trade Size	Article-No.	Working Load Limit [t]	Normal straight load [daN]	Lashing Capacity (LC) [daN]	Dimensions [mm]			Weight app. [kgs]
					e <sub>max</sub>	e <sub>min</sub>	lift	
8-8	F34175	2,00	1.800	4.000	345	270	75	2,50
10-8	F34195	3,15	2.200	6.300	375	275	100	3,50
13-8	F34185	5,30	2.600	10.000	460	330	130	5,00

If the products are initially used for lifting, e.g. internal transport, up to the load capacity, they can still be used as lashing products. If lifting products are used for lashing, they may no longer be used for lifting anymore!

**TWN 1451**



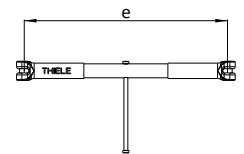
### Chain Tensioners with Toggle (Large Lift)

The grade 80 chain tensioners with toggle TWN 1452 are used as tensioning elements in lashing chains. The chain tensioners can also be used in chain slings for stepless adjustment of the strand lengths when lifting loads. The chain tensioners have a particularly large lift. The chain tensioner with ratchet and trapezoidal thread achieve a high pretensioning force with little force impact. This property is of fundamental importance when lashing down, as the level of the pretensioning force contributes to load securing. The manufacturing and testing requirements are based on the DIN EN 1677-1.

Trade Size	Article-No.	Working Load Limit [t]	Normal straight load [daN]	Lashing Capacity (LC) [daN]	Dimensions [mm]			Weight app. [kgs]
					e <sub>max</sub>	e <sub>min</sub>	lift	
13-8	F341871	5,30	2.600	10.000	675	445	230	7,20
16-8	F34197	8,00	3.100	16.000	830	550	280	11,80

If the products are initially used for lifting, e.g. internal transport, up to the load capacity, they can still be used as lashing products. If lifting products are used for lashing, they may no longer be used for lifting anymore!

**TWN 1452**



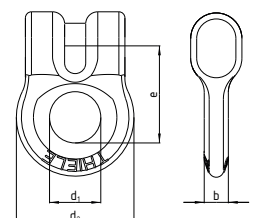
## Special Sling Components

### Ring Shackles

The grade 80 ring shackles TWN 0812 are used to connect lifting chains with sling components to assemble chain slings. The manufacturing and testing requirements are based on the DIN EN 1677-1.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	d <sub>1</sub>	d <sub>2</sub>	b	
6-8	F31700	1,12	31	17	39	8	0,10
8-8	F31710	2,00	37	21	50	11	0,23
10-8	F31720	3,15	47	26	62	14	0,46
13-8	F31730	5,30	59	33	79	18	0,87
16-8	F31740	8,00	77	42	100	23	1,60
18-8	F31750	10,00	79	47	111	25	2,50
22-8	F31760	15,00	100	55	136	31	3,80

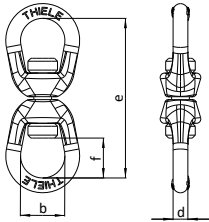
**TWN 0812**



## TWN 0845

### Swivels

The grade 80 swivels TWN 0845 are used to assemble chain slings. The swivels enable the chain strands to be aligned without twisting. The lifting chains are assembled by using connecting links, e.g. THI-LOK®s TWN 1320. The manufacturing and testing requirements comply with the DIN EN 1677-1.

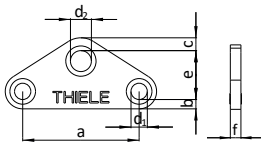


Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]				Weight app. [kgs]
			e	d	f	b	
6-8	F34000	1,12	108	10	27	30	0,33
8-8	F34010	2,00	168	16	44	44	1,33
10-8	F34020	3,15	168	16	44	44	1,33
13-8	F34030	5,30	184	19	46	51	2,10
16-8	F34040	8,00	252	25	66	64	4,45

## TWN 0882

### Balancers

The grade 80 balancers TWN 0882 are used for even load distribution in multi-leg chain slings. A length compensation of different strand lengths is achieved. The manufacturing and testing requirements are based on the DIN EN 1677-1.

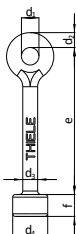


Trade Size	Article-No.	Working Load Limit [t]		Breaking Force [kN] min.	Dimensions [mm]						Weight app. [kgs]	
		0° < β ≤ 45°	45° < β ≤ 60°		e	a	d <sub>1</sub>	d <sub>2</sub>	b	c		f
6-8	F48300	1,60	1,12	71	42	100	14	18	8	11	10	0,40
8-8	F48303	2,80	2,00	124	56	130	18	22	10	15	12	0,80
10-8	F48306	4,25	3,15	200	70	160	22	28	13	19	15	1,50
13-8	F48309	7,50	5,30	340	91	210	28	40	16	25	20	3,40
16-8	F48312	11,20	8,00	490	110	260	36	42	20	30	25	6,60
18-8	F48313	14,00	10,00	628	130	290	40	54	23	34	25	8,40
20-8	F48322	17,00	12,50	785	130	300	42	54	25	35	30	10,90
22-8	F48315	21,20	15,00	950	140	330	46	56	28	39	35	15,20
26-8	F48319	30,00	21,20	1.300	170	390	54	66	33	46	40	24,70
32-8	F48321	45,00	31,50	1.960	210	480	68	80	40	56	50	47,40
32-8	F48325	45,00	31,50	1.960	200	700	68	80	38	54	50	63,62

## TWN 0892

### Key Hooks

The grade 80 key hooks TWN 0892 are used in chain slings as end fittings, predominantly for the transportation of metal sheets with keyhole openings. The manufacturing and testing requirements are based on the DIN EN 1677-1.



Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]					Weight app. [kgs]	
			e	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>		f
10-8	F34250	3,15	168	17	20	17	40	25	0,72

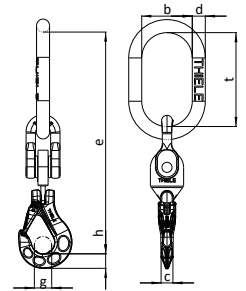
# Special Sling Components

## Isolation Assemblies

The grade 80 isolation assemblies TWN 0893 are used for the transportation of components that require isolation to the crane hook. They isolate an electrical current flow up to a maximum of 1,000 volts. The manufacturing and testing requirements are based on the DIN EN 818-4.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]							Weight app. [kgs]
			e	d	c	b	g	t	h	
6-8	F08904	1,12	310	18	17	70	24	130	20	1,70
8-8	F08912	2,00	333	18	22	70	30	130	25	2,10
10-8	F08898	3,15	376	18	28	70	37	130	32	3,25
13-8	F08899	5,30	430,5	22	35	90	42	160	39	5,20

TWN 0893

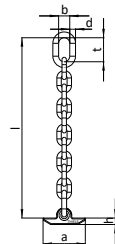


## T-Handle Chains

The grade 80 T-handle chains TWN 0894 are predominantly used in civil engineering for the vertical transport of sheet piles. The manufacturing and testing requirements are based on the DIN EN 818-4.

Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]						Weight app. [kgs]
			l	d	h	b	a	t	
10-8	F08811	1,60	405,5	13	14,5	30	95	60	1,70
10-8	F08812	1,60	675,5	13	14,5	30	95	60	2,30

TWN 0894



## Magnet Chain Slings

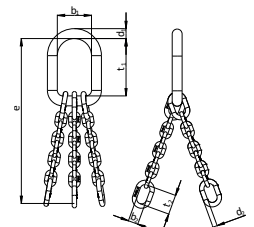
Magnet sling chains according to TWN 0601 are usually being fixed to magnets.

After the magnet sling chain is being attached to the crane hook, it is possible to lift and transport magnetic material like e.g. steel scrap.

The design of the magnetic sling chains is based on ASTM A906/A906M. The dimensions, the working load limit and the manufacturing and testing requirements of the chain slings are based on the ASTM A391/A391M. The dimensions of the connecting or intermediate links type B comply with the DIN 5688-3.

Trade Size	Article-No.	Working Load Limit $0^\circ < \beta \leq 30^\circ$ [t]	Reach e [mm]		D-Link [mm]			Master-Link [mm]			Weight app. [kgs]
			$\alpha = 90^\circ$ $\beta = 0^\circ$	$\alpha = 60^\circ$ $\beta = 30^\circ$	$d_1$	$t_1$	$b_1$	$d_2$	$t_2$	$b_2$	
16-8	F08945	21,30	828	752	45	260	155	20	90	45	23,70
20-8	F08946	33,40	940	849	51	260	155	22	100	50	35,50
22-8	F08947	40,25	1.002	909	57	300	165	26	120	60	46,00
26-8	F08948	56,25	1.126	1.015	57	300	165	32	140	70	64,00
32-8	F08961	85,20	1.362	1.224	63	330	165	40	180	90	109,00

TWN 0601





## TWN 1400

### Lashing Chains with Tensioner



The grade 80 lashing chains with toggle and shortenable lashing chains TWN 1400 have a standard length of 3,5 m and are used for heavy-duty lashing applications. The chain tensioners with toggle and trapezoidal thread achieves a high pretensioning force with little force impact. This property is of fundamental importance when lashing down, as the level of the pretensioning force contributes to load securing. The manufacturing and testing requirements are based on the DIN EN 12195-3.

Trade Size	Article-No.	Lashing Capacity (LC) under straight load [daN] max.	Weight app. [kgs]
8-8	F34171	4.000	8,50
10-8	F34172	6.300	12,50
13-8	F34173	10.000	21,00
16-8	F34174	16.000	37,70

*Other lengths available on request.*

## TWN 1401

### Lashing Chains with Ratchet



The grade 80 lashing chains with ratchet and shortenable lashing chains TWN 1401 have a standard length of 3,5 m and are used in the heavy-duty area for lashing loads in road traffic. The chain tensioners with ratchet and trapezoidal thread achieves a high pretensioning force with little force impact. This property is of fundamental importance when lashing down, as the level of the pretensioning force contributes to load securing. The manufacturing and testing requirements are based on the DIN EN 12195-3.

Trade Size	Article-No.	Lashing Capacity (LC) under straight load [daN] max.	Weight app. [kgs]
8-8	F34171R	4.000	8,50
10-8	F34172R	6.300	12,50
13-8	F34173R	10.000	21,00

*Other lengths available on request.*



## Spare Parts and Accessoires

### Spare Part Sets for Clevis Design

The spare part sets TWN 0904/0 consist of a bolt and dowel pin and are suitable for THIELE products with the grade 80 fixed size clevis design.

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
6-8	F48694	1 set	0,01
8-8	F48352	1 set	0,01
10-8	F48355	1 set	0,03
13-8	F48358	1 set	0,07
16-8	F48361	1 set	0,11
18-8	F48364	1 set	0,20
20-8	F48369	1 set	0,26
22-8	F48367	1 set	0,31
26-8	F48373	1 set	0,50
32-8	F48371	1 set	0,91

### TWN 0904/0



### Spare Part Sets for Shackles

The spare part sets TWN 0905 / 0906 consist of a bolt and 2 dowel pins and are suitable for grade 80 coupling shackles TWN 0861 and bolt shackles TWN 0870.

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
10-8	F48036	1 set	0,07
13-8	F48039	1 set	0,14
16-8	F48042	1 set	0,25
18/20-8	F48045	1 set	0,44
22-8	F48048	1 set	0,78
26-8	F48051	1 set	1,05
28-8	F48054	1 set	1,60
32-8	F48057	1 set	2,02
36-8	F48060	1 set	2,60
40-8	F48063	1 set	3,89

### TWN 0905 / 0906



## TWN 0920 - 0922 Spare Part Sets for Sling Hooks



The spare part sets TWN 0920 - 0922 consist of a safety latch, spring and a semi-tubular rivet and are suitable for grade 80 swivel hooks TWN 0854 and eye sling hooks TWN 0855/1.

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
0,75 t	F48421	1 set	0,01
6-8	F48420	1 set	0,02
8-8	F48423	1 set	0,03
10-8	F48426	1 set	0,04
13-8	F48429	1 set	0,11
16-8	F48469	1 set	0,19
36-8	Z06163	1 set	0,80
40-8	Z06164	1 set	1,00
45-8	Z06165	1 set	1,40
50-8	Z06166	1 set	1,90

## TWN 0930 Spare Part Sets for Shackles



The spare part sets TWN 0930 consist of a head bolt, nut and splint and are suitable for grade 80 chain coupling shackles TWN 0862 and shackles type C TWN 0871.

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
10-8	F30451	1 set	0,13
13-8	F30461	1 set	0,25
16-8	F30471	1 set	0,36
18/20-8	F30481	1 set	0,97
22-8	F30491	1 set	1,31
26-8	F30501	1 set	1,99
28-8	F30511	1 set	2,89
32-8	F30521	1 set	3,12
36-8	F30531	1 set	4,48
40-8	F30541	1 set	6,65
45-8	F30551	1 set	8,20

## TWN 0940 Identification Tags for single- and multi-leg Chain Slings



The grade 80 identification tags TWN 0940 are used to identify chain slings and provide important information for the operator. Chain slings may not be used without an identification tag.

Article-No. Single-leg	Article-No. Multi-leg	Diameter [mm]	Weight app. [kgs]
F08040 <sup>1)</sup>	F08044 <sup>1)</sup>	70	0,11
F08042 <sup>2)</sup>	F08046 <sup>2)</sup>	70	0,11

<sup>1)</sup> without welded ring, <sup>2)</sup> with welded ring

## Spare Parts and Accessoires

### Chain File

The chain file TWN 0944 is used for the documentation of carried out chain inspections.

Article-No.	Packing Units	Weight app. [kgs]
Z04575	1 pc.	0,01

### TWN 0944



### Assembly Kit

The assembly kit TWN 0945 is used for easy disassembly of bolts and dowel pins of clevis connections.

Article-No.	Packing Units	Weight app. [kgs]
Z03303	1 set	0,60

### TWN 0945



### Chain Gauge Set

The chain gauge set TWN 0946 is used to check the discard criteria of grade 80 chains.

Article-No.	Packing Units	Weight app. [kgs]
F48856	1 set	0,20

### TWN 0946



### Spare Part Sets for Shortening Hooks

The spare part sets TWN 0950 - 0952 consist of a locking pin, spring and knurled nut and are suitable for grade 80 shortening hooks TWN 0827/1.

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
8-8	F48330	1 set	0,01
10-8	F48328	1 set	0,02
13-8	F48329	1 set	0,03
16-8	F48339	1 set	0,05
20-8	F48345	1 set	0,10

### TWN 0950 - 0952



## TWN 0962



### Spare Part Sets for Skip Suspension Links

The spare part sets TWN 0962 consist of a safety latch, spring and dowel pins and are suitable for skip suspension links TWN 0869 (previous version).

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
13/16-8	F31404	1 set	0,28

## TWN 0967/0



### Spare Part Sets for Self-Locking Hooks

The spare part sets TWN 0967/0 consist of a bolt and a dowel pin and are suitable for grade 80 clevis self-locking hooks TWN 0799.

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
6-8	F333700	1 set	0,01
8-8	F333711	1 set	0,02
10-8	F333721	1 set	0,03
13-8	F333730	1 set	0,06
16-8	F333741	1 set	0,17
18/20-8	F0922057	1 set	0,28

## TWN 0967/1



### Spare Part Sets for Self-Locking Hooks

The trigger sets TWN 0967/1 consist of a retainer, spring and dowel pin and are suitable for grade 80 self-locking hooks TWN 0798 and TWN 0799.

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
6-8	F329090	1 set	0,02
8-8	F329190	1 set	0,03
10-8	F329290	1 set	0,04
13-8	F329390	1 set	0,06
16-8	F329490	1 set	0,11
18/20-8   22-8	F0922056	1 set	0,18

## Spare Parts and Accessoires

### Spare Part Sets for Skip Suspension Hooks and Links NEW

The spare part sets TWN 0968 consist of a bolt and a roll pin and are suitable for the clevis connections of skip suspension links TWN 0869 and the skip loader hooks TWN 1399.

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
13-8	F480131	1 set	0,07
16-8	F480161	1 set	0,12

#### TWN 0968



### Spare Part Sets for Skip Suspension Links

The spare part sets TWN 0969 consist of a forged safety latch, spring and dowel pins and are suitable for the skip loader links TWN 0869 and TWN 1869.

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
13-8/ 16-8 (G100   G80)	F314081	1 set	0,20

#### TWN 0969



### Spare Part Sets for Skip Loader Hooks NEW

The spare part sets TWN 0970 consist of a retainer, spring and dowel pin and are suitable for skip loader hooks TWN 1399 and 1899.

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
13-8/ 16-8 (G100   G80)	F48332	1 set	0,11

#### TWN 0970



### Spare Part Sets for Clevis Shortening Claws NEW

The spare part sets TWN 0971 consist of a locking pin, threaded pin, spring and bearing and are suitable for the clevis shortening claws with safety pin TWN 0851/1 and TWN 1851/1.

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
6-8 (G100   G80)	F483110	1 set	0,01
8-8 (G100   G80)	F483112	1 set	0,01
10-8 (G100   G80)	F483113	1 set	0,02
13-8 (G100   G80)	F483114	1 set	0,03
16-8 (G100   G80)	F483115	1 set	0,05
18-8 (G100   G80)	F483116	1 set	0,06
20-8 (G100   G80)	F483117	1 set	0,07
22-8 (G100   G80)	F483118	1 set	0,09
26-8 (G100   G80)	F483119	1 set	0,12
32-8 (G100   G80)	F483120	1 set	0,17

#### TWN 0971



## TWN 1402



### Identification Tag for Lashing Chains

The identification tag TWN 0940 is used to identify lashing chains and provide important information for operation. Lashing chains may not be used without identification tag.

Article-No.	Packing Units	Weight app. [kgs]
207264	1 pc.	0,05

## TWN 1908/0



### Spare Part Sets for Hooks

The spare part sets TWN 1908/0 consist of a safety latch, spring and 2 dowel pins and are suitable for grade 100 sling hooks TWN 1835/1, TWN 1840/1, TWN 1841/1 and also fit the grade 80 sling hooks TWN 0835/1, TWN 0850/1, TWN 1340/1 and TWN 0858/1.

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
6-8	F48731	1 set	0,05
7/8-8	F48733	1 set	0,08
10-8	F48735	1 set	0,14
13-8	F48737	1 set	0,31
16-8	F48739	1 set	0,38
18/20-8	F48743	1 set	0,71
22-8	F48745	1 set	0,89
26-8	F48748	1 set	1,41
32-8	F48749	1 set	1,77

## TWN 1920



### Spare Part Sets for THI-LOK® Connectors

The spare part sets TWN 1920 consist of a bolt and a clamping bush and are suitable for connecting links THI-LOK® TWN 1320.

Trade Size	Article-No.	Packing Units	Weight app. [kgs]
18-8	F48615	1 set	0,19
20-8	F48617	1 set	0,31
22-8	F48619	1 set	0,32
26-8	F48622	1 set	0,53
32-8	F48625	1 set	0,95
36-8	<b>NEW</b> F486224	1 set	1,65
40-8	<b>NEW</b> F486224	1 set	1,65

# THIELE Design Key

## Mounted chain slings



TA8

**TA 2 A / 10-8 T 2000 TWN 1340/1 RAL 9005 RAL 3003**

THIELE chain slings	TA
No. of chain strands (1 ... 4)	2
Execution (master- or intermediate link)	A
Trade size – grade	10-8
Type of assembly	T
THI-LOK® / Ring shackle / Connector	2000
Use length in mm (rounded up)	TWN 1340/1
TWN of bottom components	1
Surface finish of chain	RAL 9005
Standard: black coloured (RAL 9005) Colour of components	RAL 3003
Standard: red coloured (RAL 3003)	

**Please always indicate the THIELE key design in case of order.**

Example (Picture in the middle): TA 2 A / 10-8 \_\_\_\_ TWN 0856 (RAL 9005, RAL 3003)

### Complement to THIELE key design for slings with shortening components:

Key design as above	<b>+1 VK</b>	Shortening claw with pin coupling (TWN 0851)
Key design as above	<b>+1 VE/VK</b>	Shortening device (TWN 0896) plus Shortening claws (TWN 0851)
Key design as above	<b>+1 VH</b>	Shortening hook (TWN 0827)
Key design as above	<b>+1 VE/VH</b>	Shortening device (TWN 0896) plus Shortening hook (TWN 0827)
Key design as above	<b>+1 VHS</b>	Shortening hook with pin coupling (TWN 0827/1)
Key design as above	<b>+1 VEA/VHS</b>	Shortening device (TWN 0896) plus Shortening hook with pin coupling (TWN 0827/1)
		<b>No. of shortenings (only 2 legs off)</b>

## Table of available components for mounted chain slings

### Available fittings for standard sling chains

Master Link	... TWN 1313	Intermediate Link	... TWN 0795
Master Link for single leg w. Pin Coupling	... TWN 0820		
Suspension Shackle for Skips	... TWN 0869		
Chain Coupling Bolt Shackle	... TWN 0862	Special Chain Coupling Shackle	... TWN 0861
Special Coupling Shackle	... TWN 0897	Foundry or Container Hook with Pin Coupling	... TWN 0859
Foundry Hook Cont. or Cont. Eye Hook	... TWN 0856	Ringshackle	... TWN 0812
Bolt Shackle	... TWN 0871		
Sling Hook w. Pin Coupl. and Safety Latch	... TWN 1340/1	Clevis Sling Hooks with Safety Latch	... TWN 0858/1
	... TWN 0835/1		
Self-locking Eye Hook	... TWN 0798	Self-locking clevis Hook	... TWN 0799
Special Chain Shackle	... TWN 0870	THI-LOK®	... TWN 1320
Shortening Hook with Pin Coupling	... TWN 0827	Swivel Hook with Latch	... TWN 0854
Shortening Hook w. Pin Coupling a. Safety Latch	... TWN 0827/1	Swivel	... TWN 0845

## Endless Chains



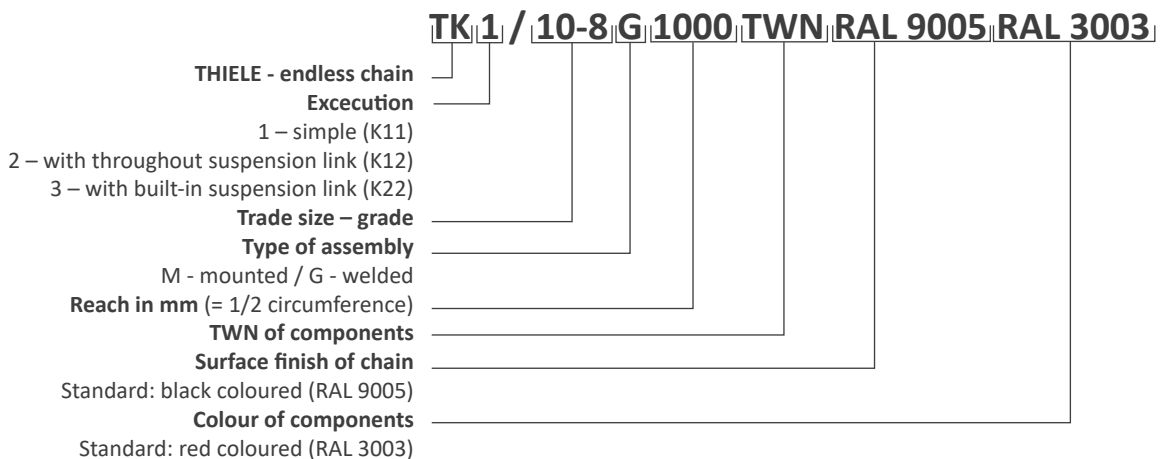
Type K11



Type K12



Type K22



Please always indicate the THIELE key design in case of order.

Example: TK 1 / 10-8 G 1000 RAL 9005 (Endless chain Type K11 with black coloured chain)



## Examples for the THIELE Design Key

Type Sling Chain	No. of loops	Execution	Trade Size	Type of Assembly	Reach [mm]	Component [TWN]	Surface Finish		Plant Standard [TWN]
							Chain [RAL-No.]	Components [RAL-No.]	
TA	1	A	/	T		1313			0449
TA	1	A	/	T		1340/1			0450/1
TA	1	A	/	T		0854			0454
TA	1	A	/	T		0856			0456
TA	1	A	/	T		0870			0458
TA	1	A	/	T		0871			0459
TA	1	A	/	T		0859			0460
TA	1	A	/	T		0861			0461
TA	1	A	/	T		0862			0462
TA	1	A	/	T		0858/1			0476/1
TA	2	A	/	T		1313			0529
TA	2	A	/	T		0835/1			0530/1
TA	2	A	/	T		0854			0534
TA	2	A	/	T		0856			0536
TA	2	A	/	T		0858/1			0566/1
TA	2	A	/	T		0870			0538
TA	2	A	/	T		0871			0539
TA	2	A	/	T		0859			0540
TA	2	A	/	T		0861			0541
TA	2	A	/	T		0862			0542
TK	1	1	/	M		1313			0560
TA	2	A	/	T		1320			0563
TA	4	A	/	T		1314			0709
TA	4	A	/	T		1340/1			0710/1
TA	4	A	/	T		0854			0714
TA	4	A	/	T		0856			0716
TA	4	A	/	T		0858/1			0735/1
TA	4	A	/	T		0870			0718
TA	4	A	/	T		0871			0719
TA	4	A	/	T		0859			0720
TA	4	A	/	T		0861			0721
TA	4	A	/	T		0862			0722
TK	2	3	/	M		1313			0731
TA	4	A	/	T		1320			0733



# Examples for Chain Slings

## 1-leg Chain Slings

TWN 0449	TWN 0450/1	TWN 0455/1	TWN 0454















TWN 0456	TWN 0458	TWN 0459	TWN 0460

TWN 0461	TWN 0462	TWN 0473	TWN 0475

TWN 0477/1			

# Examples for Chain Slings

## 2-leg Chain Slings

TWN 0529	TWN 0530/1	TWN 0535/1	TWN 0534
			
TWN 0536	TWN 0538	TWN 0539	TWN 0540
			
TWN 0541	TWN 0542	TWN 0545	TWN 0560
			
TWN 0563	TWN 0567/1		
			



# Examples for Chain Slings

## 4-leg Chain Slings

TWN 0709	TWN 0710/1	TWN 0715/1	TWN 0714
TWN 0716	TWN 0718	TWN 0719	TWN 0720
TWN 0721	TWN 0722	TWN 0730	TWN 0731
TWN 0733	TWN 0736/1		