



THIELE  
OFFSHORE LIFTING PRODUCTS

DNV-type approved Components

## Offshore Components

In the Marine and Offshore industry, lifting chains are exposed to rough environmental conditions under strong dynamic loads. For this special application, THIELE as an authorized and certified manufacturer, supplies special calibrated welded lifting chains according to the DNV-ST-E271.

Our products meet the highest quality standards and are certified by the DNV.



## TWN 0805 Offshore Lifting Chains



The grade 80 lifting chains TWN 0805 are made from CrNiMo alloy steel and are used to assemble chain slings and lifting 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.

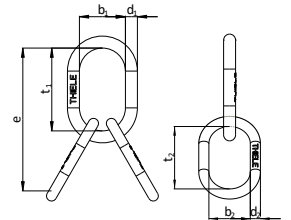
Trade Size	Article-No.				Working Load Limit [t]	Nominal Size $d_n$ [mm]	Pitch $p_n$ [mm]	Inside Width $w_3$ [mm] min.	Outside Width $w_2$ [mm] max.	Weight app. [kgs/m]
	Self-coloured	RAL 9005	Corrothiel	Electro galvanized						
6-8	F01452	F01453	F01454	F01448	1,12	6	18	7,80	22,20	0,82
7-8	F01458	F01459	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

# DNV-type approved Components

## Offshore Master Link Assemblies for Wire Rope Slings

The grade 80 master link assemblies TWN 0797 are used to assemble 3- and 4-leg wire rope slings for offshore applications. The extra-large intermediate links enable easy assembly of the sling ropes. 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 assemblies are DNV-type approved.

### TWN 0797



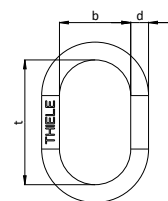
Trade Size	Article-No.	Working Load Limit ( $\beta = 45^\circ$ ) SF= 1:4 [t]	Dimensions [mm]							Weight app. [kgs]
			e	d <sub>1</sub>	t <sub>1</sub>	b <sub>1</sub>	d <sub>2</sub>	t <sub>2</sub>	b <sub>2</sub>	
26/22	F0797268	7,90	340	26	180	100	22	160	90	5,40
32/26	F0797328	11,30	410	32	230	125	26	180	100	9,10
36/32	F0797368	16,00	480	36	250	140	32	230	125	15,10
45/36	F0797458	22,60	570	45	320	175	36	250	140	25,00
50/45	F0797508	26,80	660	50	340	190	45	320	175	42,00
56/50	F0797568	40,00	720	56	380	210	50	340	190	57,00
63/56	F0797638	50,00	810	63	430	240	56	380	210	79,00

The load capacities, manufacturing and testing requirements comply with the DNV-ST-E271 and some exceed the requirements of the DIN EN 1677-1 and EN 1677-4.

## Offshore Master Links Type A

The grade 80 offshore master links TWN 0803 are used to assemble 1- and 2-leg chain slings for offshore applications. 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 master links can also be used to manufacture wire rope slings according to the DIN EN 13414-1. The master links are DNV-type approved.

### TWN 0803



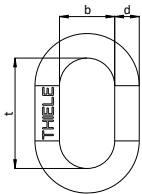
Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]			Weight app. [kgs]
			d	t	b	
20	F0803208	4,75	20	140	80	1,10
22	F0803228	5,60	22	160	90	1,50
26	F0803268	8,00	26	180	100	2,30
32	F0803328	12,50	32	230	125	4,40
36	F0803368	16,00	36	250	140	6,20
40	F0803408	19,00	40	290	160	8,80
45	F0803458	25,00	45	320	175	12,00
50	F0803508	31,50	50	340	190	16,00
56	F0803568	40,00	56	380	210	23,00
63	F0803638	50,00	63	430	240	33,00
70	F0803708	63,00	70	470	260	44,00
80	F0803808	80,00	80	520	290	64,00

The load capacities, manufacturing and testing requirements comply with the DNV-ST-E271 and some exceed the requirements of the DIN EN 1677-1 and EN 1677-4.

## TWN 0804

### Offshore Intermediate Links Type B

The grade 80 offshore intermediate links TWN 0804 are used in welded type chain slings for offshore applications. The dimensions comply with the DIN 5688-3. The intermediate links are DNV-type approved. The manufacturing and testing requirements are based on the DIN EN 1677 parts 1 and 4 and DIN 5688-3.



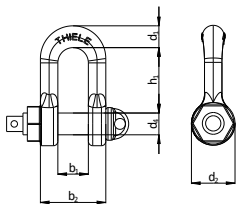
Trade Size	Article-No.	Working Load Limit [t]	Dimensions [mm]			Weight app. [kgs]
			d	t	b	
B13	F0804138	3,35	13	60	30	0,20
B16	F0804168	5,60	16	70	35	0,36
B20	F0804208	8,50	20	90	45	0,73
B22	F0804228	10,00	22	100	50	0,97
B26	F0804268	14,00	26	120	60	1,60
B28	F0804288	16,00	28	130	65	1,90
B32	F0804328	22,40	32	140	70	2,90
B36	F0804368	28,00	36	160	80	4,20
B40	F0804408	33,50	40	180	90	5,80
B45	F0804458	42,50	45	200	100	8,20
B50	F0804508	53,00	50	220	110	11,00

The load capacities, manufacturing and testing requirements comply with the DNV-ST-E271 and some exceed the requirements of the DIN EN 1677-1 and DIN EN 1677-4.

## TWN 0818

### Offshore Bolt Shackles Type C

The shackles type C with bolt, nut and dowel pin TWN 0818 are intended to use in "Lifting Sets" for offshore containers acc. to DNVGL-ST-E271 and are used in portable offshore units acc. to DNV-ST-E273. 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>	b <sub>1</sub>	b <sub>2</sub>	d <sub>1</sub>	d <sub>4</sub>	d <sub>2</sub>	
10-8	F30310NV	1,0	3,15	49	21	47	15	16	32	0,42
13-8	F30320NV	1,6	5,30	61	27	61	19	20	40	0,84
16-8	F30330NV	2,5	8,00	73	33	75	23	24	48	1,49
18/20-8	F30340NV	4,0	12,50	91	42	96	29	30	60	3,10
22-8	F30350NV	5,0	15,00	111	47	107	33	36	72	4,50
26-8	F30360NV	6,0	21,20	120	53	212	37	39	78	6,30
28-8	F30370NV	8,0	25,00	140	60	136	41	45	90	10,10
32-8	F30380NV	10,0	31,50	149	66	152	46	48	95	12,80
36-8	F30390NV	12,0	40,00	158	73	167	50	52	104	15,60
40-8	F30400NV	16,0	50,00	185	81	185	55	60	120	22,20
45-8	F30410NV	20,0	63,00	211	90	206	61	68	136	26,30

The load capacities, manufacturing and testing requirements comply with the DNV-ST-E271 and some exceed the requirements of the DIN EN 1677-1.