



Applications

Sockets are used for fastening steel wire rope to a fixed point to which the socket is to be connected. This can be as an anchoring system for tubes or pipes, anchor wires of dredging material, anchor cables of oil platforms, towing cables or for fastening cables in construction purposes such as bridges, roof construction etc.

Sockets are the strongest steel wire rope end fitting and if they are assembled in the proper way they can meet at least the breaking strength of the steel wire rope. In the past melted zinc was poured into the sockets to attach the steel wire rope; nowadays suitable resins have been developed for this purpose.

Range

Van Beest offers a wide range of sockets, i.e.:

- Closed spelter sockets;
- Open spelter sockets;
- Open wedge sockets;
- Open swage sockets;
- Closed swage sockets;
- Gold Nose sockets.

Design

Green Pin® open and closed spelter sockets and open wedge sockets are made from cast high tensile steel. Upon request forged sockets can be supplied.

Gold Nose sockets are galvanized drop forged "Special Tailboard Anchor Pendant Sockets" ; tested and approved by major offshore drilling contractors on semi-submersible rigs. With the Gold Nose sockets you save thousands of dollars in replacement costs and by eliminating costly downtime.

Swage sockets are drop forged from special bar quality carbon steel C-1035 and spheroidized annealed to be suitable for cold swaging.

Finish

Green Pin® open and closed spelter sockets and open wedge sockets are painted green. Galvanized sockets can be supplied on request.

Certification

Upon request, all sockets can be supplied with a works certificate and a proof load test certificate. All sockets, with the exception of the swage sockets, are marked with the batch number which refers to the supplied certificate.

Instructions for use

1) Open spelter sockets – closed spelter sockets

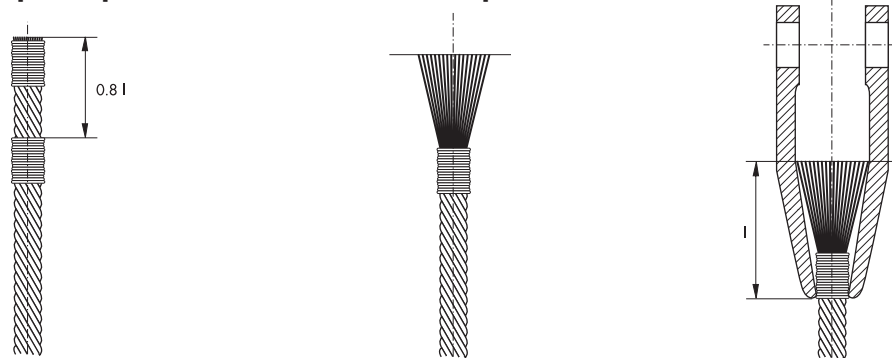


Figure 1

- brooming is done after the wire rope has been placed into the socket
- when using resins always exactly follow the instructions given by the manufacturer of the resins
- socketing is only to be carried out by specialists from a certified sling shop

2) Open wedge sockets

The wedge and body act as a vice which grips the wire rope and locks it in place. Green Pin® wedge sockets may be used within the range of wire rope diameters as shown in the table further on in the catalogue.

When using open wedge sockets the following precautions should be taken:

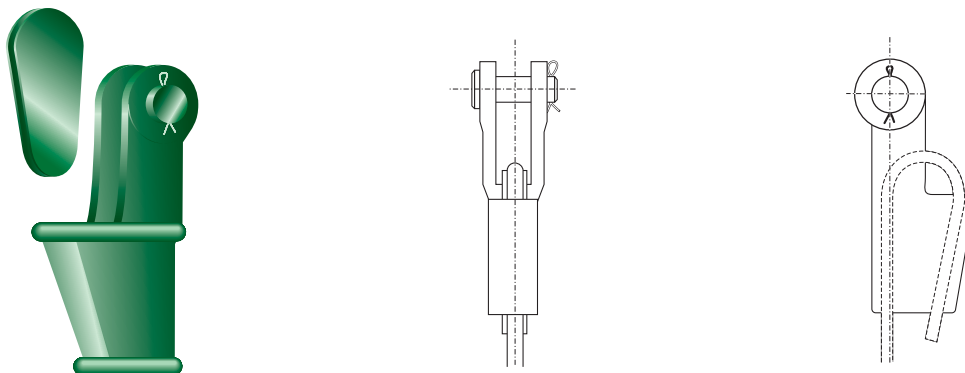
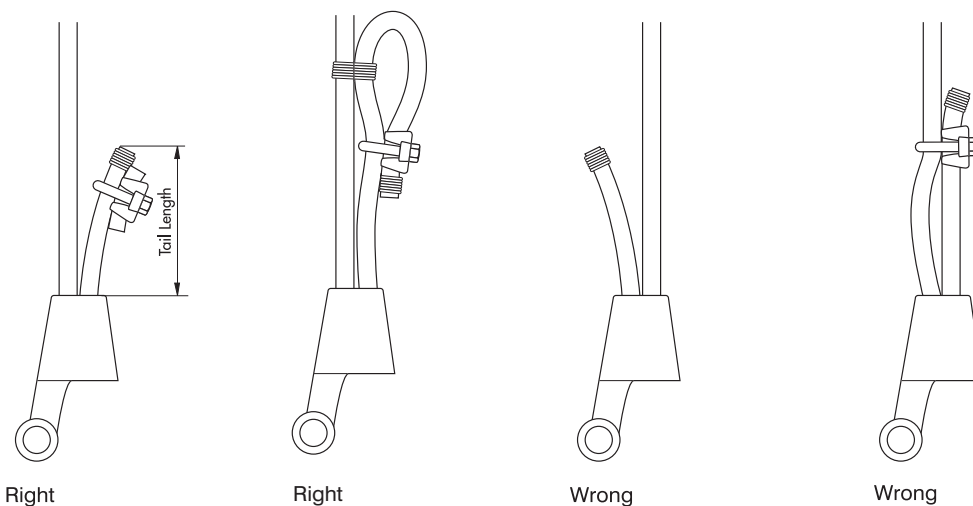


Figure 2

- before use always inspect the socket, the wedge and the pin
- use only with standard 6-8 strand wire rope
- always be sure that socket and wedge have the correct size for the wire rope diameter
- the loaded part of the steel wire rope should be mounted in the centre line of the pin
- when installing the wire rope, always pre-load the wedge with the wire rope in place
- never weld the tail on standard wire rope; the tail should have a length of at least 6 times the wire rope diameter with a minimum of 150 mm, secure the dead end of the rope with a wire rope clip as shown in figure 3
- before applying the first load always use a hammer to seat the wedge and rope as deep as possible into the socket
- check the assembly regularly to re-tighten or re-position if necessary
- never side-load the wedge socket as it has not been designed for that purpose
- load may slip if the connection is not properly installed
- the efficiency of a wire rope - wedge socket connection is 80% of the minimum breaking load of the wire but limited to the minimum breaking load of the socket
- only use the original wedge supplied by the manufacturer of the socket and be sure it is suitable for the diameter of the rope used
- never use a wedge from any other supplier than the original socket supplier as the dimensions will not match



Right

Right

Wrong

Wrong

Figure 3

3) Swage sockets

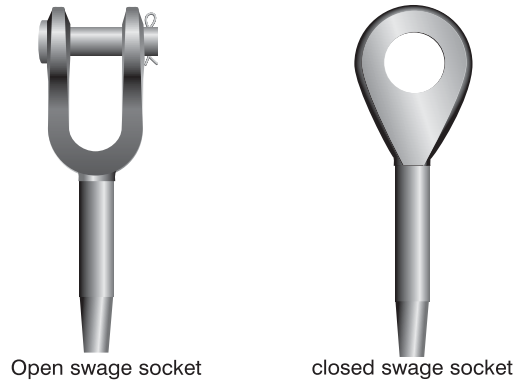
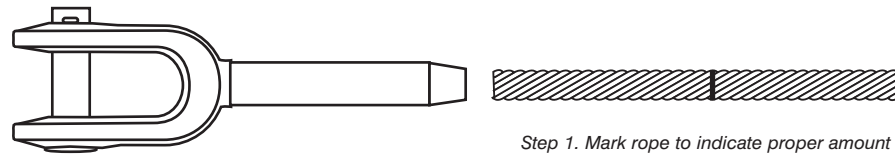


Figure 4

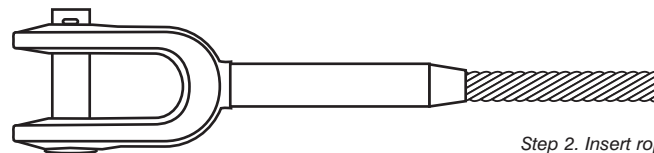
- swage sockets are recommended for use on 6 x 19 or 6 x 37 IWRC regular lay ropes
- mark the rope to indicate the proper length of rope to be inserted into the socket (figure 5)
- insert the rope into the socket and swage the socket with the specified dies (figure 5)
- all slings terminated with swage sockets must be proof loaded
- always swage under supervision of a specialist from a certified sling shop

It is required that the products are regularly inspected and that the inspection should take place in accordance with the safety standards given in the country of use. This is required because the products in use may be affected by wear, misuse, overloading etc. with a consequence of deformation and alteration of the material structure.

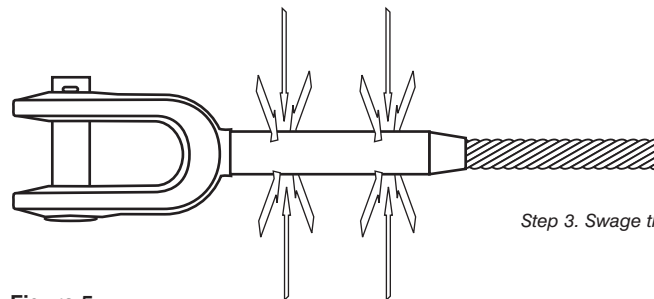
Inspection should take place at least every six months and even more frequently when the sockets are used in severe operating conditions.



Step 1. Mark rope to indicate proper amount to insert into socket.

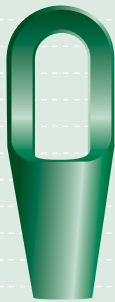


Step 2. Insert rope into socket.

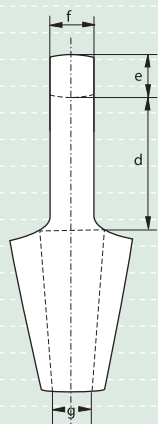
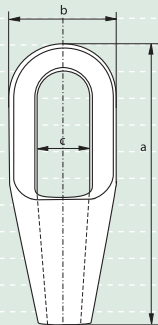


Step 3. Swage the socket.

Figure 5



P-6411
G-6411



Green Pin® sockets

closed spelter socket

- **Material** : high tensile steel GS21Mn5
- **Safety factor** : MBL equals 5 x WLL
- **Finish** : painted green or hot dipped galvanized
- **Certification** : a works certificate and a proof load test certificate can be supplied upon request

number	working load limit	diameter wire rope	length	width	width inside bow	length inside bow	thickness bow	thickness bow	opening	weight per pce
	tons	mm	a mm	b mm	c mm	d mm	e mm	f mm	g mm	kg
298	4	11 - 13	140	51	30	59	17.5	22.5	14	0.7
299	5	14 - 16	162	67	36	65	21	26	17.5	1.3
200	8	18 - 19	194	76	42	78	27	32	21	2.1
201	10	20 - 22	224	92	47	90	33	38	24	3.6
204	12.6	23 - 26	253	104	57	103	36	44	28	5.3
207	16	27 - 30	282	114	63	116	39	51	32	7
212	20	31 - 36	312	127	70	130	43	57	38	9.7
215	25	37 - 39	358	136	79	155	51	63	41	13
217	32	40 - 42	390	146	83	171	54	70	44	17
219	40	43 - 48	443	171	93	198	55	76	51	26
222	50	49 - 54	502	193	100	224	62	82	57	37.5
224	64	55 - 60	548	216	112	247	73	92	63	50
226	80	61 - 68	597	241	140	270	79	102	73	65
227	90	69 - 75	644	273	159	286	79	124	79	94
228	100	76 - 80	686	292	171	298	83	133	86	110
229	120	81 - 86	743	311	184	311	102	146	92	145
230	140	87 - 93	788	330	197	330	102	159	99	168
231	160	94 - 102	845	362	216	356	108	178	108	210
233	200	108 - 115	1000	405	235	425	125	190	125	330
240	240	120 - 130	1110	515	260	475	135	210	138	550

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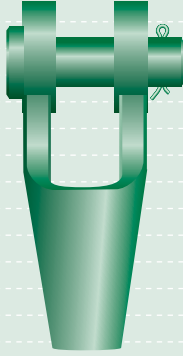
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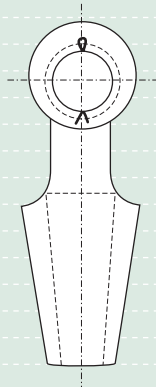
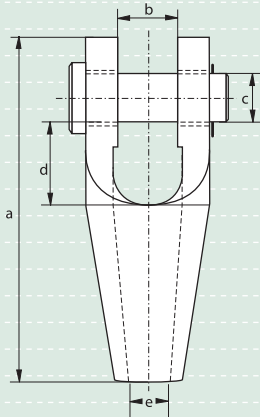
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P-6412
G-6412



Green Pin® sockets

open spelter socket

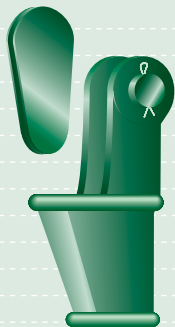
- **Material** : high tensile steel GS21Mn5
- **Safety factor** : MBL equals 5 x WLL
- **Finish** : painted green or hot dipped galvanized
- **Certification** : a works certificate and a proof load test certificate can be supplied upon request

number	working load limit	diameter wire rope	length	width inside	diameter pin	length inside	opening	weight per pce
	tons	mm	a mm	b mm	c mm	d mm	e mm	kg
198	4	11 - 13	142	25	25	38	14	1
199	5	14 - 16	171	32	30	48	17.5	1.8
100	8	18 - 19	205	38	35	58	21	3.2
104	10	20 - 22	235	44	41	68	24	4.6
108	12.6	23 - 26	275	51	51	75	28	8
111	16	27 - 30	306	57	57	85	32	11
115	20	31 - 36	338	63	63	95	38	16
118	25	37 - 39	394	76	70	127	41	23
120	32	40 - 42	418	76	76	127	44	27
125	40	43 - 48	468	89	89	133	51	41
128	50	49 - 54	552	101	95	180	57	58
130	64	55 - 60	598	113	108	196	63	85
132	80	61 - 68	654	127	121	212	73	118
135	90	69 - 75	696	133	127	215	79	155
138	100	76 - 80	737	146	133	219	86	173
140	120	81 - 86	788	159	140	228	92	230
142	140	87 - 93	852	171	152	242	99	265
144	160	94 - 102	914	191	178	254	108	370
146	200	108 - 115	1145	205	195	382	125	525
150	240	120 - 130	1280	225	250	375	138	900

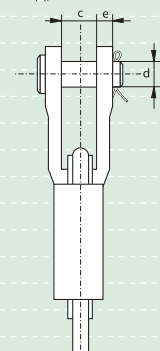
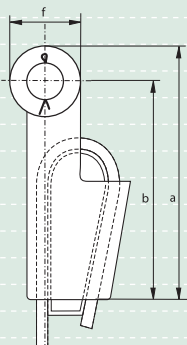
Green Pin® sockets

open wedge socket

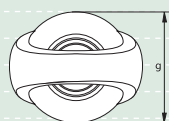
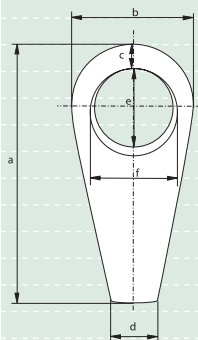
- **Material** : high tensile steel GS21Mn5
- **Safety factor** : MBL equals 5 x WLL
- **Finish** : painted green or hot dipped galvanized
- **Certification** : a works certificate and a proof load test certificate can be supplied upon request



P-6413
G-6413



G-6416



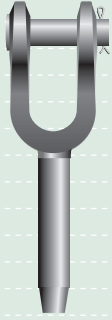
number	working load limit	diameter wire rope	length	length	width	diameter	thickness	diameter	weight per pce
			a	b	c	pin	side plates	eye	
	tons	mm	mm	mm	mm	mm	mm	mm	kg
0.25	1.25	7 - 8	129	110	18	16	9	36	0.8
0.5	2	9 - 10	165	142	21	20	11	46	1.7
1	3.2	11 - 13	174	146	25	25	12	57	2.1
2	5	14 - 16	211	176	31	30	15	70	4
3	6.3	18 - 19	252	212	38	35	16	80	7
4	8	20 - 22	288	240	44	41	19	95	10
5	12.6	24 - 26	329	274	51	51	22	110	15
6	16	27 - 29	375	310	57	57	25	130	21
7	20	30 - 32	423	350	63	64	28	146	31
8	20	34 - 36	474	400	69	64	28	148	37
9	25	37 - 39	527	450	76	70	30	153	51
10	32	40 - 42	580	500	76	76	33	160	64
11	40	43 - 48	643	550	89	89	39	186	96
12	50	49 - 52	737	640	101	95	46	194	130
13	64	54 - 58	775	660	114	108	54	230	180
14	80	60 - 68	960	835	127	121	60	250	275
15	90	72 - 76	1135	1000	146	133	76	270	440
16	100	81 - 86	1250	1100	159	140	79	300	510

Gold Nose™ sockets

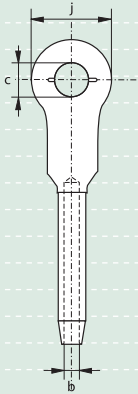
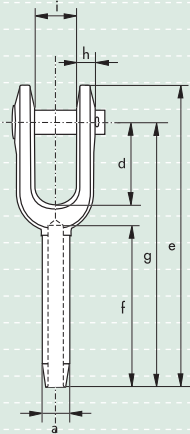
closed spelter socket

- **Material** : drop forged alloy steel SCM 435
- **Finish** : galvanized
- **Certification** : a works certificate and a proof load test certificate can be supplied upon request

diameter wire rope	length	width	thickness	width	length	width	thickness	weight per pce
	a	b	c	d	e	f	g	
inches	mm	mm	mm	mm	mm	mm	mm	kg
1 1/4 - 1 3/8	246	122	38	48	83	76	97	18
1 1/2 - 1 5/8	305	152	40	57	104	92	123	22
1 3/4 - 1 7/8	356	178	47	66	121	112	140	28
2 - 2 1/8	391	202	53	76	133	121	158	32
2 1/4 - 2 3/8	438	221	61	80	146	133	184	44
2 1/2 - 2 5/8	457	264	68	96	165	149	217	56
2 3/4 - 2 7/8	540	273	74	105	178	163	222	68
3 - 3 1/8	584	295	76	115	194	174	243	100
3 1/4 - 3 3/8	626	319	82	121	216	194	260	120
3 1/2 - 3 5/8	670	340	92	127	219	202	270	145
3 3/4 - 3 7/8	698	356	98	133	235	214	290	190
4 - 4 1/4	803	412	112	152	270	242	318	250



S-6414



Green Pin® swage sockets open type

- Material : drop forged steel C-1035
- Finish : self coloured

diameter rope	diameter before swage	max. diameter after swage	diameter inside	diameter pin	length	length	length	length	thickness	width inside	width eye	weight per pce
mm	a	a	b	c	d	e	f	g	h	i	j	kg
6	13	11.7	7	17	38	121	54	102	8	17	35	0.25
8	20	18.0	9	21	44	159	81	135	10	21	41	0.50
10	20	18.0	12	21	44	159	81	135	10	21	41	0.49
11	25	23.1	12	25	51	198	108	169	13	25	51	1.04
13	25	23.1	14	25	51	198	108	169	13	25	51	1.02
14	32	29.5	15	30	57	243	135	206	16	32	63	2.09
16	32	29.5	17	30	57	243	135	206	16	32	63	2.04
19	39	36.1	20	35	70	297	162	254	19	38	76	3.54
22	43	39.4	24	41	83	346	189	295	23	44	86	5.31
25	50	45.7	27	51	95	397	216	340	26	51	102	8.07
29	57	52.1	30	57	108	444	243	381	30	57	114	13.5
32	64	58.4	34	64	121	494	270	419	30	63	127	16.3
35	71	65.0	37	64	133	540	297	460	33	63	133	21.3
38	78	71.4	40	70	146	591	324	502	37	76	146	29.5
44	86	77.7	47	89	171	689	378	584	43	89	178	42.2
51	100	90.4	54	95	203	798	432	679	46	102	203	65.8
57	113	-	60	108	171	835	486	705	65	114	222	93.4
60	125	-	64	108	171	879	498	749	65	114	222	106
63	125	-	67	108	171	879	498	749	65	114	222	103
70	138	-	74	127	219	978	537	838	76	146	241	158
76	151	-	80	133	219	1045	603	905	76	146	241	181

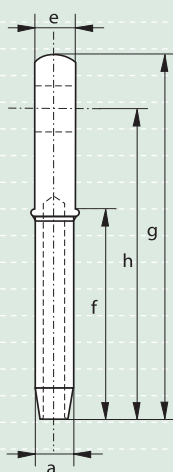
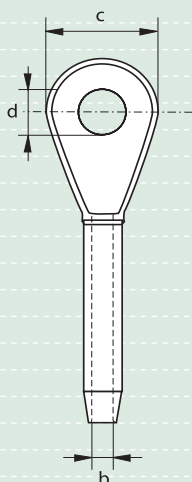


S-6415

Green Pin® swage sockets

closed type

- Material : drop forged steel C-1035
- Finish : self coloured



diameter rope	diameter before swage	max. diameter after swage	diameter inside	diameter eye	diameter eye	thickness	length	length	length	weight per pce
mm	a	a	b	c	d	e	f	g	h	kg
6	13	11.7	7	37	19	13	54	111	89	0.15
8	20	18.0	9	43	22	17	81	140	114	0.36
10	20	18.0	12	43	22	17	81	140	114	0.35
11	25	23.1	12	51	27	22	108	176	146	0.66
13	25	23.1	14	51	27	22	108	176	146	0.63
14	32	29.5	15	63	32	29	135	222	184	1.26
16	32	29.5	17	63	32	29	135	222	184	1.25
19	39	36.1	20	76	37	33	162	264	219	2.27
22	43	39.4	24	89	43	38	189	308	257	3.40
25	50	45.7	27	102	52	44	216	349	292	5.08
29	57	51.1	30	114	59	51	243	387	324	7.17
32	64	58.4	34	127	65	57	270	438	365	10.4
35	71	65.0	37	133	65	57	297	479	400	14.1
38	78	71.4	40	140	71	63	324	518	432	17.7
44	86	77.7	47	171	91	76	378	610	508	23.6
51	100	90.4	54	197	97	83	432	698	584	40.8
57	113	-	60	219	110	102	486	756	632	55.3
60	125	-	64	219	110	102	498	791	664	67.6
63	125	-	67	219	110	102	498	791	667	64.4
70	138	-	74	235	129	137	537	892	752	99.3
76	151	-	80	235	135	137	603	959	816	114

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