



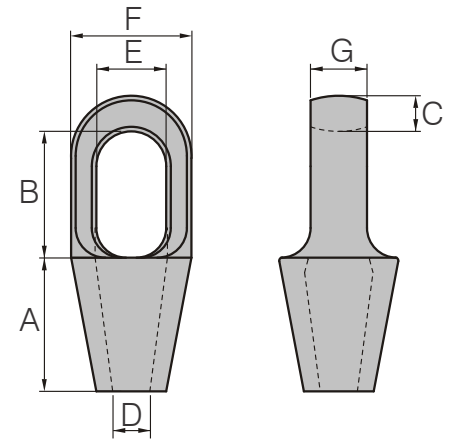
# spelter sockets



# Closed spelter socket

SO1 type

material: cast steel  
standards: US Federal Spec RR-5-550D, type C  
finish: painted / galvanised  
safety factor: 5 : 1

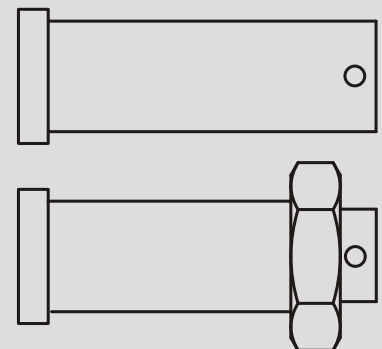


Wire Dia	Wire Dia	WLL	MBL	A	B	C	D	E	F	G	Weight
[mm]	[inch]	[t]	[t]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
6 - 7	1/4	1.6	8	52	46	11	8	20	37	13	0.27
8 - 10	3/8	2.4	12	58	53	14	11	24	43	16	0.44
11 - 13	1/2	4.0	20	64	59	18	14	29	51	22	0.74
14 - 16	5/8	5	25	77	65	21	18	35	67	25	1.40
17 - 19	3/4	8	40	90	75	26	21	42	75	31	2.10
20 - 22	7/8	9	45	101	90	33	24	47	92	38	4.00
23 - 26	1	14	70	114	103	36	28	57	106	45	5.90
27 - 30	1 1/8	20	100	127	116	39	32	63	114	51	7.70
31 - 36	1 1/4 - 1 3/8	25	125	139	130	44	38	70	128	58	11.00
37 - 39	1 1/2	30	150	152	155	51	41	79	137	64	14.00
40 - 42	1 5/8	40	200	165	171	54	44	82	146	70	18.00
43 - 48	1 3/4 - 1 7/8	52	260	190	198	55	51	89	171	77	28.00
49 - 54	2 - 2 1/8	56	280	216	224	62	57	98	194	84	40.00
55 - 60	2 1/4 - 2 3/8	72	360	228	247	73	65	110	216	94	52.00
61 - 68	2 1/2 - 2 5/8	90	450	248	270	80	73	140	241	102	63.00
69 - 75	2 3/4 - 2 7/8	96	480	279	286	79	79	159	273	124	89.00
76 - 80	3 - 3 1/8	104	520	305	298	83	86	171	292	133	111.00
81 - 86	3 1/4 - 3 3/8	120	600	330	311	102	92	184	311	146	143.00
87 - 93	3 1/2 - 3 5/8	140	700	356	330	102	99	197	330	159	166.00
94 - 102	3 3/4 - 4	175	875	381	356	108	108	216	362	178	217.00
108 - 115	4 1/2	220	1100	460	425	120	125	235	405	190	338.00
122 - 130	5	250	1250	500	475	140	138	270	515	210	579.00
140 - 155	5 1/2 - 6	280	1400	580	550	150	160	300	510	250	654.00
158 - 167	6 1/2	320	1600	675	600	175	175	325	600	300	1063.00

## Pin types

Standard pins are used in non permanent and pick and place operations.

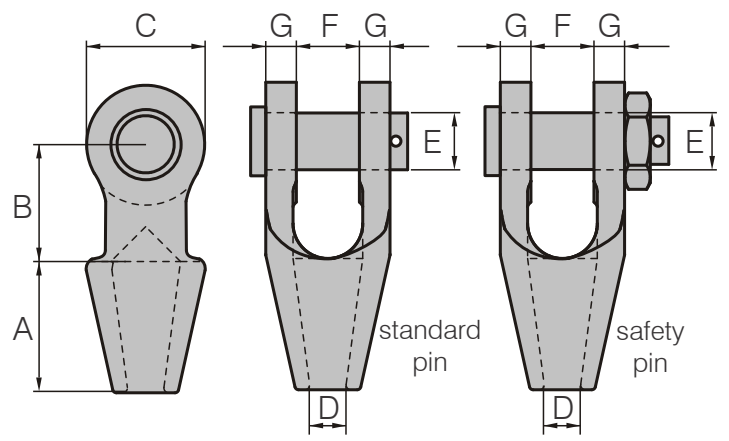
Safety pins are used for more permanent applications or where the load may slide on the pin causing rotation of the pin.



# Open spelter socket

SO2 type

material: cast steel  
 standards: US Federal Spec RR-5-550D, type A  
 finish: painted / galvanised  
 safety factor: 5 : 1



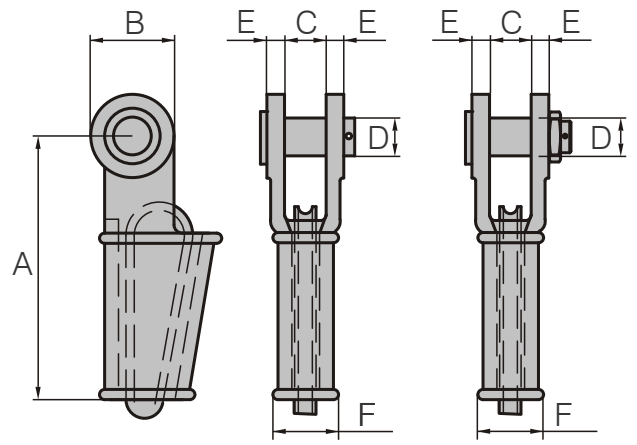
Wire Dia	Wire Dia	WLL	MBL	A	B	C	D	E	F	G	Weight
[mm]	[inch]	[t]	[t]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
6 - 7	1/4	1.6	8	52	40	34	8	18	17	8	0.44
8 - 10	3/8	2.4	12	58	45	40	11	21	20	11	0.81
11 - 13	1/2	4.0	20	64	51	49	14	26	25	12	1.30
14 - 16	5/8	5	25	77	64	62	18	30	32	14	2.30
17 - 19	3/4	8	40	89	76	100	21	35	38	16	3.20
20 - 22	7/8	9	45	101	89	86	24	41	44	19	5.40
23 - 26	1	14	70	114	101	114	28	51	51	22	9.60
27 - 30	1 1/8	20	100	127	114	124	32	57	57	25	12.00
31 - 36	1 1/4 - 1 3/8	25	125	139	127	135	38	63	63	28	16.00
37 - 39	1 1/2	30	150	152	162	152	41	70	76	30	24.00
40 - 42	1 5/8	40	200	165	165	168	44	76	76	33	29.00
43 - 48	1 3/4 - 1 7/8	52	260	191	178	190	51	89	89	39	45.00
49 - 54	2 - 2 1/8	56	280	216	229	206	57	95	101	46	65.00
55 - 60	2 1/4 - 2 3/8	72	360	229	254	225	63	108	113	53	88.00
61 - 68	2 1/2 - 2 5/8	90	450	248	273	251	73	121	127	60	125.00
69 - 75	2 3/4 - 2 7/8	96	480	279	279	266	79	127	133	73	162.00
76 - 80	3 - 3 1/8	104	520	305	286	274	86	133	146	76	195.00
81 - 86	3 1/4 - 3 3/8	120	600	330	298	286	92	140	159	79	224.00
87 - 93	3 1/2 - 3 5/8	140	700	356	318	310	99	152	171	83	280.00
94 - 102	3 3/4 - 4	175	875	381	343	352	108	178	191	89	378.00
108 - 115	4 1/2	220	1100	460	480	430	125	190	208	101	564.00
122 - 130	5	250	1250	500	500	550	138	250	210	120	922.00
140 - 155	5 1/2 - 6	280	1400	580	500	590	160	275	230	140	1295.00
158 - 167	6 1/2	320	1600	675	600	640	175	290	310	175	1950.00



# Open wedge socket

SO3 type

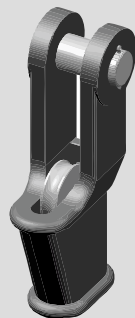
material: cast steel  
standards: US Federal Spec RR-5-550D, type B  
finish: painted / galvanised  
safety factor: 5 : 1



Wire Dia	Wire Dia	WLL	MBL	A	B	C	D	E	F	Weight
[mm]	[inch]	[t]	[t]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
9 - 10	3/8	2.0	10	146	47	21	20	11	26	1.7
11 - 13	1/2	3.2	16	146	57	26	20	12	32	2.3
14 - 16	5/8	5.0	25	176	70	32	30	14	44	3.9
17 - 19	3/4	6.4	32	212	80	38	35	16	44	6.1
20 - 22	7/8	9.0	45	240	96	44	41	19	52	9.3
23 - 26	1	14.0	70	274	114	51	50	22	58	15.0
27 - 29	1 1/8	20.0	100	310	130	57	57	25	66	21.0
30 - 33	1 1/4	25.0	125	350	146	63	63	28	79	33.0
34 - 36	1 3/8	25.0	125	400	148	69	63	28	79	39.0
37 - 40	1 1/2	30.0	150	450	160	76	70	30	93	53.0
41 - 43	1 5/8	40.0	200	500	174	76	76	33	95	68.0
44 - 48	1 3/4 - 1 7/8	52.0	260	550	200	89	89	39	111	98.0
49 - 53	2	56.0	280	650	200	101	95	46	140	123.0
54 - 59	2 1/4	72.0	360	660	250	113	108	53	136	178.0
60 - 68	2 1/2	90.0	450	840	270	127	121	60	161	281.0
72 - 76	3	104.0	520	1000	300	146	133	76	186	469.0
81 - 86	3 1/4 - 3 3/8	125.0	625	1100	300	159	140	79	215	630.0

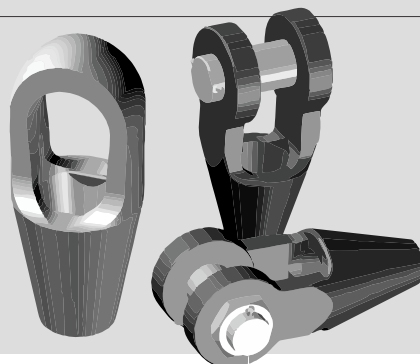
## Termination efficiency

Asymmetrical  
Wedge Sockets



In a pull test, wire rope in asymmetrical wedge sockets achieve between 80% to 95% of the breaking load of the wire used depending on the design of the socket.

Resin or Metallic  
Spelter Sockets

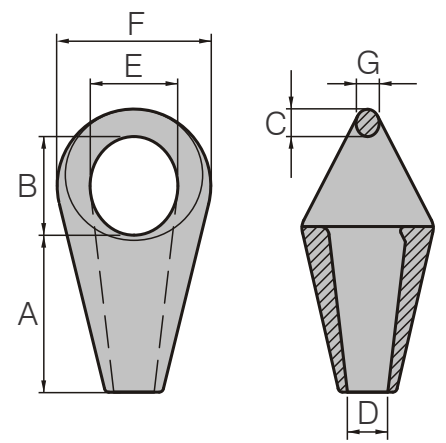


In a pull test, resin or metallic spelter sockets transfer 100% of the breaking load of the wire used.

## CR socket

SO4 type

material: cast steel  
standards: n/a  
finish: painted / galvanised  
safety factor: 5 : 1

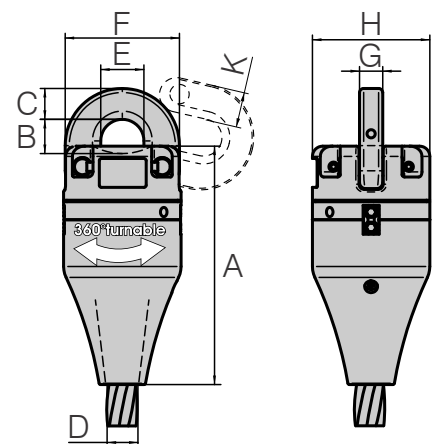


Wire Dia	Wire Dia	WLL	MBL	A	B	C	D	E	F	G	Weight
[mm]	[inch]	[t]	[t]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
31 - 36	1 1/4 - 1 3/8	28	140	140	85	38	39	75	124	35	7.2
38 - 42	1 1/2 - 1 5/8	32	160	160	110	42	44	92	130	38	11.0
43 - 48	1 3/4 - 1 7/8	40	200	188	128	50	51	110	180	45	18.0
49 - 54	2 - 2 1/8	50	250	215	125	55	57	115	200	50	25.0
55 - 60	2 1/4 - 2 3/8	60	300	230	145	65	63	135	230	57	35.0
61 - 68	2 1/2 - 2 5/8	80	400	250	160	75	73	160	262	65	51.0
69 - 75	2 3/4 - 2 7/8	100	500	280	175	80	79	171	278	70	62.0
76 - 80	3 - 3 1/8	120	600	315	210	85	86	184	300	75	75.0
81 - 86	3 1/4 - 3 3/8	140	700	340	205	100	92	204	320	90	93.0
87 - 93	3 1/2 - 3 5/8	160	800	360	220	105	99	215	340	95	110.0
94 - 102	3 3/4 - 4	180	900	380	240	110	108	234	376	100	141.0
108 - 115	4 1/4 - 4 1/2	200	1000	450	260	125	120	252	400	110	186.0
122 - 130	4 3/4 - 5	250	1250	517	293	140	140	275	460	125	317.0

## CR-D socket

SO6 type

material: forged steel R3/R3S/R4/R4S  
standards: n/a  
finish: painted  
safety factor: 5 : 1



Wire Dia	Chain Dia	WLL	MBL	A	B	C	D	E	F	G	H	K	Weight
[inch]	[inch]	[t]	[t]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
1 1/4 - 1 3/8	1 1/4 - 1 3/8	28	140	140	85	38	39	75	124	35	124	35	7.2
1 1/2 - 1 5/8	1 1/2 - 1 5/8	32	160	160	110	42	44	92	130	38	130	38	11.0
1 3/4 - 1 7/8	1 3/4 - 1 7/8	40	200	188	128	50	51	110	180	45	180	45	18.0



# Wirelock resin

Kit size	Kits per case	Weight each
		[kg]
100 cc	20	0.28
250 cc	12	0.56
500 cc	12	1.15
1000 cc	12	2.08
2000 cc	12	4.08

## Guide to amount of Wirelock required

Rope dia [mm]	Required amount [cc]
14	52
16	52
18	86
20	86
22	125
24	160
26	160
28	210
30	350
32	350
36	350
38	420
42	495
44	700
46	700
50	1265
52	1265
54	1265
58	1410
60	1410
62	1830
64	1830
68	2250
70	2250
76	3160

Wirelock is designed to gel in approximately 15 minutes at 18°C storage. To ensure that the kits are not adversely affected by storage they should be kept in a dry place at a temperature of between 10°C and 24°C and away from direct sunlight.

Wirelock wire rope assemblies are 100% efficient when used with steel wire rope, galvanised wire ropes and stainless steel wire ropes.

Wirelock must be mixed and poured within the temperature range of -3°C to 43°C.

Wirelock poured sockets should not be used in environments of strong caustic or acid solutions. Wirelock is not affected by oils or grease or salt water.

Wirelock is approved by most classification societies.



# Installation instructions

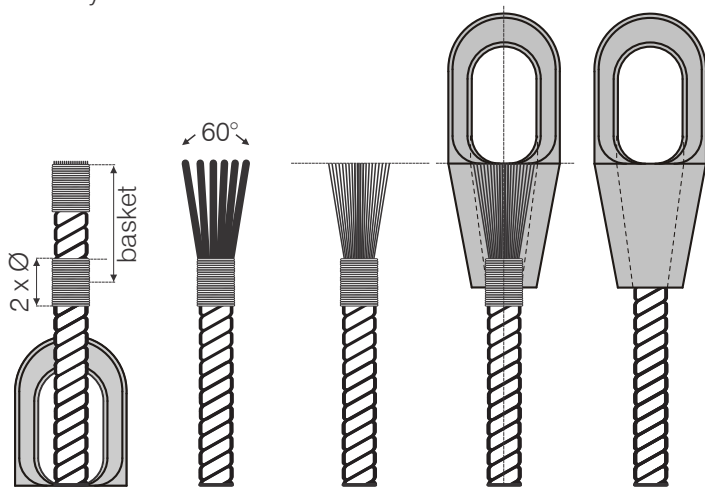


## Introduction

Spelter sockets are used to create an attachment point for steel wire rope, used for lifting, anchoring systems, anchor cables, towing cables or for fastening wire rope in constructions such as bridges or rooves. Sockets, when attached correctly, are the strongest end fittings available and meet at least the breaking strength of the steel wire rope. Sockets have the additional benefit of enabling the user to create an attachment point on-site.

## Fitting spelter sockets using Wirelock® resin

Socketing should only be undertaken by a competent person, using documented work instructions, highlighting all precautions that must be taken. Spelter sockets not fitted correctly may fail below the required load. Socketing depends on the wedging action of the cone within the socket basket to develop full efficiency.

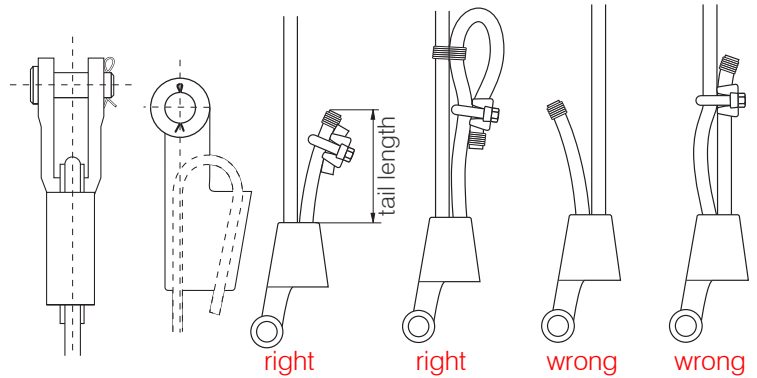


- pull the wire rope through the spelter socket prior to cutting.
- measure the rope ends to be socketed, the rope should be of sufficient length so that the ends of the unlaied wires will be at the top of the socket basket.
- apply seizing one socket basket length from the end of the rope less one rope diameter. The length of the seizing must be at least two rope diameters.
- open the wires outwards to a total included angle not exceeding 60°.
- if the rope has a fibre core or plastic filling, it should be cut out.
- all wires in each strand must be unlaied completely down to the seizing to form the broom so that a good fill of resin occurs to the bottom of the socket.
- clean and degrease the open broom thoroughly removing all traces of lubrication on each strand.
- ensure the broomed wires are uniformly spaced in the basket, with the wire ends at the top edge of the basket and the axes of the rope and fitting aligned.
- mix the resin vigorously for 2 minutes and pour into the socket.

- ensure the resin has penetrated into the bottom of the socket.
- once the resin has set, remove the excess seizing wire from below the socket and re-grease the rope.

## Fitting open wedge sockets

The wedge and body act as a vice which grips the wire rope and locks it in place. Wedge sockets should only be fitted by a competent person.



- only use wedge sockets with 6 - 8 strand wire rope.
- always be sure that the socket and wedge are the correct size for the wire rope.
- the loaded part of the wire rope must be mounted in the centre line of the pin.
- the tail should have a length of at least six times the rope diameter with a minimum of 150mm, secure the dead end of the rope with a wire rope clamp.
- before applying the first load always use a hammer to seat the wedge and rope as firmly as possible into the socket.
- check the assembly regularly and re-tighten or re-position if necessary.
- never side-load the wedge socket.
- only use the original wedge supplied by the manufacturer of the socket and be sure that it is suitable for the diameter of the rope used.
- do not attach the wire rope clamp to the live end of the wire rope.

## Inspection

Spelter sockets should be inspected at regular intervals for cracks, especially in the vicinity of the eye or lugs. The area where the rope leaves the socket should be inspected for wire breaks and for kinks or changes in lay lengths. This is especially the case with boom suspension ropes which are frequently dismantled. Always ensure the rope that protrudes from the bottom of the socket is well lubricated as this lubrication may be removed during the socketing process.

distributors for:



CAPE TOWN (HEAD OFFICE) +27 21 531 0525 JOHANNESBURG +27 11 826 3665  
NELSPRUIT +27 13 757 0334 DURBAN +27 31 205 8071 PEMBA +258 272 20 294

sales@anchor-industries.com  
www.anchor-industries.com