

LSG PROTECT[®]

KNIT WELD

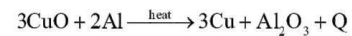
EXOTHERMIC WELDING

KNITWELD EXOTHERMIC WELD

Product Introduction:

LSG PROTECT Weld Exothermic Welding is a simple, efficient, high quality metal connection method Exothermic welding by alumino-thermic reaction generated by high temperature to make metal molten completely, to achieve high quality welding effect. This reaction is conducted in the graphite mold of high temperature resistance, normally a graphite could be used for more than 70 points. Exothermic reaction process takes few seconds only.

Reaction Formula:



LSG PROTECT exothermic welding product was certified by U L, RoHS, C E and compliance with IEEE Std.80, UL467 and IEEE537. It has the national invention patent ZL2004 10021807X.



LSG PROTECT Weld has stable ignition point, good conductivity and corrosion protection and excellent tensile strength. After improved process, the connector is more bright and clean.

Product Features:

1. Safe and easy to operate.
2. No external power or heat source required, convenient to carry.
3. High purity copper connector, corrosion protected.
4. Connected in metallic bond style, fasten and tough.
5. The current-carrying ability of the connector is better than the conductor.
6. Widely application between copper and copper, copper and steel and cast or plated steel tape.
7. Non-degenerated suffering from several surge strike.

Product Application:

1. Horizontal connection of the grounding grid
2. The connection between cathode protection cable and oil or gas pipeline.
3. Connection between grounding cable and steel rail.
4. Cables and bar's
5. Leading wires and copper lugs
6. Other electrical connections.

Grid Connection



KNITWELD WELDING PROCEDURE: - EXOTHERMIC WELD



Note:

1. Before welding, check the mold clamp and adjust properly to make sure it close tightly.
2. Don't observe the welding process, it will hurt your eyes.
3. Don't touch the conductor and the joint after welding to avoid empyrosis.
4. Keep the weld metal in a dry place, don't operate when blowing



Step1:
Before the first welding, heat the mould for 3-5 minutes to make sure it is dry and clean



Step 2:
Heating the conductor to make sure it is dry and



Site 3:
Clean the conductor by steel brush.



Step 4:
Place and fix the conductors into the reaction cavity, put the starting powder on the top of welding powder while some on the lip of the mould.



Step 5:
Place the steel plate at the bottom of



Step 6:
Pour the welding powder into the reaction cavity. Put the starting powder in the top of welding powder while some on the lip of the mould.



Step 7:
Close the lid and ignite the starting powder with lighting gun



Step 8:
After the reaction, wait for 2-3 minutes, Open the mould and clean the welding residue.



The E-Plus exothermic welding electrical connections product is the third generation of **KNITWELD** weld product series, compared with the traditional electronic ignition exothermic welding products, E-Plus type exothermic welding focus on permanent bond with convenient and safer operation.

IY

Features:

I Technical Standards

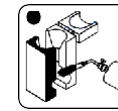
Conform to IEEE 80, IEEE 837, UL467;

II Product Safety

- (A) Completes welds at distances, avoid burns during the exothermic reaction.
- (B) No external power or heat source required, easy to handle, store and transport by air, land or sea in short period.

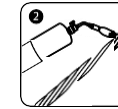
III Comfort Operation

- (A) Shorten the operating time. Operate in three steps- put the welding cup into the mold, connect the electrical quick connector and then start the switch button.
- (B) Environmental friendly, the metal cup melted into the welded joints after exothermic welding reaction.
- (C) E-Plus ensure easy ignition and high ignition rate.
- (D) Electronic Starter. Electronic Starter design by our company, handheld device matching the cup body starting device. Exothermic welding Electronic Starter initiates the reaction in 3 seconds;



Step 1:

Before making your first connection, be sure to dry the mold by heating it with a torch. Make sure that both the crucible, tap and wire cavities are also dried.



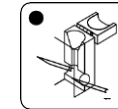
Step 2:

Dry the conductors to be welded with a torch.



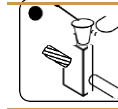
Step 3:

Clean the dried conductor ends with a wire brush to remove any dirt and oxides. When welding to a steel surface, use a rasp or grinding wheel to remove any rustproofing, paint, or oxidation from the area to be welded. Steel surface must be cleaned to bright shiny metal.



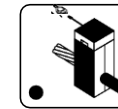
Step 4:

Position the mold over the conductors with the conductor ends under the center of the tap hole. Lock mold handles.



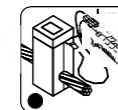
Step 5:

Insert the E-Plus Cup into the mold.



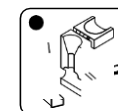
Step 6:

Connect the quick connector between the Electronic Starter and the cup.



Step 7:

Press and hold Electronic Starter switch and wait for the ignition.



Step 8:

Wait approximately 10-15 seconds. Open the mold and remove the finished connection. Remove any remaining slag with a mold cleaning tool. Brush off remaining residue with a natural bristle brush. DO NOT use a wire brush, doing so will damage the mold.

Selection Graphic



Weld metal size

Each joint requires one shot of weld metal



Mold number

Each mold can weld more than 70 connections on average



Handle clamp

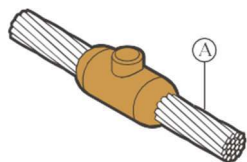
Determined according to construction volume and mold size



Sleeves used in construction

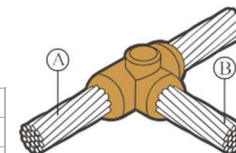
Conductor less than 16mm² must use sleeves

Cable To Cable CC1



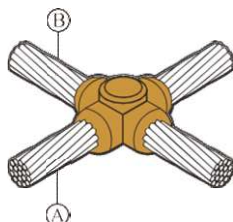
(A)				
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35	#32	CC1-35	HK	
50	#45	CC1-50	HK	
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95	#90	CC1-95	HK	
120	#115	CC1-120	HK	
150	#115	CC1-150	HK	
185	#150	CC1-185	HK	
240	#200	CC1-240	HK	
300	#250	CC1-300	HK	
400	2x#150	CC1-400	HK	

Cable To Cable CC2



16	16	#45	CC2-1616	HK	3xS103
25	25	#45	CC2-2525	HK	
35	35	#45	CC2-3535	HK	
35	25	#45	CC2-3525	HK	
50	50	#90	CC2-5050	HK	
50	35	#65	CC2-5035	HK	
50	25	#65	CC2-5025	HK	
70	70	#90	CC2-7070	HK	
70	50	#90	CC2-7050	HK	
70	35	#65	CC2-7035	HK	
70	25	#65	CC2-7025	HK	
95	95	#115	CC2-9595	HK	
95	70	#90	CC2-9570	HK	
95	50	#90	CC2-9550	HK	
95	35	#90	CC2-9535	HK	
120	120	#150	CC2-120120	HK	
120	95	#150	CC2-12095	HK	
120	70	#90	CC2-12070	HK	
120	50	#90	CC2-12050	HK	
150	150	#200	CC2-150150	HK	
150	120	#150	CC2-150120	HK	
150	95	#150	CC2-15095	HK	
150	70	#90	CC2-15070	HK	
185	185	#200	CC2-185185	HK	
185	150	#200	CC2-185150	HK	
185	120	#200	CC2-185120	HK	
185	95	#150	CC2-18595	HK	
240	240	2x#150	CC2-240240	HK5	
240	185	#200	CC2-240185	HK	
240	150	#200	CC2-240150	HK	
240	120	#200	CC2-240120	HK	
300	300	2x#200	CC2-300300	HK5	
300	240	2x#200	CC2-300240	HK5	
300	185	#250	CC2-300185	HK	
300	150	#200	CC2-300150	HK	

Cable To Cable CC4

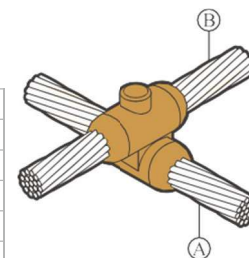


16	16	#65	CC4-1616	HK	4×S103
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35	35	#65	CC4-3535	HK	
35	25	#65	CC4-3525	HK	
50	50	#90	CC4-5050	HK	
50	35	#90	CC4-5035	HK	
50	25	#90	CC4-5025	HK	
70	70	#115	CC4-7070	HK	
70	50	#115	CC4-7050	HK	
70	35	#115	CC4-7035	HK	
70	25	#115	CC4-7025	HK	
95	95	#150	CC4-9595	HK	
95	70	#150	CC4-9570	HK	
95	50	#115	CC4-9550	HK	
95	35	#115	CC4-9535	HK	
120	120	#200	CC4-120120	HK	
120	95	#200	CC4-12095	HK	
120	70	#150	CC4-12070	HK	
120	50	#150	CC4-12050	HK	
150	150	#250	CC4-150150	HK	
150	120	#250	CC4-150120	HK	
150	95	#200	CC4-15095	HK	
150	70	#150	CC4-15070	HK	
185	185	2x#150	CC4-185185	HK5	
185	150	#250	CC4-185150	HK	
185	120	#250	CC4-185120	HK	
185	95	#200	CC4-18595	HK	
185	70	#200	CC4-18570	HK	
240	240	2x#250	CC4-240240	HK7	
240	185	2x#200	CC4-240185	HK5	
240	150	2x#200	CC4-240150	HK5	
240	120	2x#150	CC4-240120	HK5	

Cable To Cable CC11

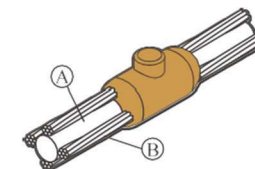


50	50	#150	CC11-5050	HK	
70	70	#200	CC11-7070	HK	
95	95	#250	CC11-9595	HK	
120	120	2x#150	CC11-120120	HK5	
150	150	2x#150	CC11-150150	HK5	
185	185	2x#250	CC11-185185	HK7	
240	240	3×#250	CC11-240240	HK7	
300	120	3×#250	CC11-300120	HK7	
300	300	3×#250	CC11-300300	HK7	

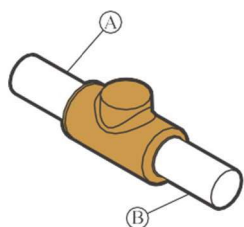


Cable to Rod CC1

A mm	B mm				
240	10×8	2x#150	CC1-24010×8S	HK5	8×S102
300	10×8	2x#150	CC1-30010×8S	HK5	8×S102
500	10×8	2x#200	CC1-50010×8S	HK5	8×S102



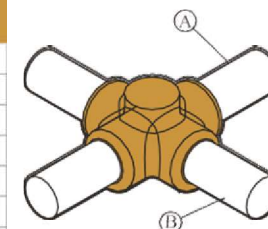
Rod To Rod CC1



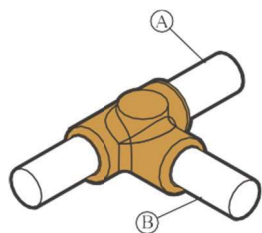
(A) mm'	(B) mm'				
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10	8	#45	CC1-10SC8SC	HK	
10	10	#65	CC1-10SC	HK	
12	8	#90	CC1-12SC8SC	HK	
12	10	#90	CC1-12SC10SC	HK	
12	12	#90	CC1-12SC	HK	
14	14	#115	CC1-14SC	HK	
14	8	#115	CC1-14SC8SC	HK	
14	10	#115	CC1-14SC10SC	HK	
14	12	#115	CC1-14SC12SC	HK	
16	16	#150	CC1-16SC	HK	
16	8	#115	CC1-16SC8SC	HK	
16	10	#115	CC1-16SC10SC	HK	
16	12	#150	CC1-16SC12SC	HK	
16	14	#150	CC1-16SC14SC	HK	
18	18	#150	CC1-18SC	HK	
18	8	#115	CC1-18SC8SC	HK	
18	10	#115	CC1-18SC10SC	HK	
18	12	#150	CC1-18SC12SC	HK	
18	14	#150	CC1-18SC14SC	HK	
18	16	#150	CC1-18SC16SC	HK	
20	20	#200	CC1-20SC	HK	
20	8	#150	CC1-20SC8SC	HK	
20	10	#150	CC1-20SC10SC	HK	
20	12	#150	CC1-20SC12SC	HK	
20	14	#150	CC1-20SC14SC	HK	
20	16	#200	CC1-20SC16SC	HK	
20	18	#200	CC1-20SC18SC	HK	

Rod To Rod CC4

(A) mm'	(B) mm'				
8	8	#90	CC4-8SC8SC	HK	
10	10	#115	CC4-10SC10SC	HK	
12	12	#150	CC4-12SC12SC	HK	
14	14	#200	CC4-14SC14SC	HK	
16	16	#250	CC4-16SC16SC	HK	
18	18	2x#150	CC4-18SC18SC	HK 5	
20	20	#150+#200	CC4-20SC20SC	HK 5	



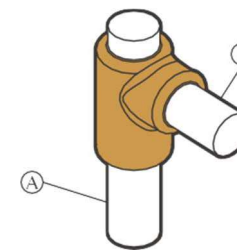
Rod To Rod CC2



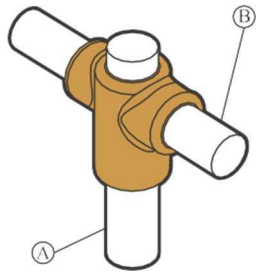
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10	8	#115	CC2-10SC8SC	HK	
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12	8	#115	CC2-12SC8SC	HK	
14	14	#150	CC2-14SC14SC	HK	
14	12	#150	CC2-14SC12SC	HK	
14	10	#150	CC2-14SC10SC	HK	
14	8	#115	CC2-14SC8SC	HK	
16	16	#200	CC2-16SC16SC	HK	
16	14	#200	CC2-16SC14SC	HK	
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16	10	#150	CC2-16SC10SC	HK	
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18	14	#200	CC2-18SC14SC	HK	
18	12	#200	CC2-18SC12SC	HK	
18	10	#150	CC2-18SC10SC	HK	
18	8	#150	CC2-18SC8SC	HK	
20	20	#250	CC2-20SC20SC	HK	
20	18	#250	CC2-20SC18SC	HK	
20	16	#250	CC2-20SC16SC	HK	
20	14	#200	CC2-20SC14SC	HK	
20	12	#200	CC2-20SC12SC	HK	
20	10	#200	CC2-20SC10SC	HK	
20	8	#200	CC2-20SC8SC	HK	

Rod To Rod CR1

A mm	B mm				
12.7	8	#65	CR1-1278SC	HK	
12.7	10	#115	CR1-12710SC	HK	
14.2	8	#90	CR1-1428SC	HK	
14.2	10	#150	CR1-14210SC	HK	
14.2	12	#150	CR1-14212SC	HK	
17.2	8	#90	CR1-1728SC	HK	
17.2	10	#150	CR1-17210SC	HK	
17.2	12	#200	CR1-17212SC	HK	
17.2	14	#200	CR1-17214SC	HK	
20.0	8	#200	CR1-2008SC	HK	
20.0	10	#200	CR1-20010SC	HK	
20.0	12	#250	CR1-20012SC	HK	
20.0	14	#250	CR1-20014SC	HK	



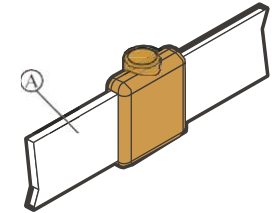
Rod To Rod CR1



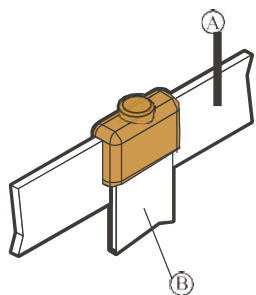
(A) mm	(B) mm				
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12.7	10	#115	CR1-12710SC	HK	
14.2	8	#90	CR1-1428SC	HK	
14.2	10	#150	CR1-14210SC	HK	
14.2	12	#150	CR1-14212SC	HK	
17.2	8	#115	CR1-1728SC	HK	
17.2	10	#200	CR1-17210SC	HK	
17.2	12	#200	CR1-17212SC	HK	
17.2	14	#200	CR1-17214SC	HK	
20.0	8	#200	CR1-2008SC	HK	
20.0	10	#250	CR1-20010SC	HK	
20.0	12	#250	CR1-20012SC	HK	
20.0	14	#250	CR1-20014SC	HK	

Tap To Tap BB1

(A) mm					
20×3	#45	BB1-203	HK		
25×3	#65	BB1-253	HK		
25×4	#90	BB1-254	HK		
25×6	#150	BB1-256	HK		
30×2	#65	BB1-302	HK		
30×3	#90	BB1-303	HK		
30×4	#115	BB1-304	HK		
30×5	#115	BB1-305	HK		
31×3	#90	BB1-313	HK		
31×6	#150	BB1-316	HK		
38×3	#115	BB1-383	HK		
38×5	#150	BB1-385	HK		
38×6	#200	BB1-386	HK		
40×3	#115	BB1-403	HK		
40×4	#150	BB1-404	HK		
40×5	#150	BB1-405	HK		
40×6	#200	BB1-406	HK		
50×3	#150	BB1-503	HK		
50×4	#200	BB1-504	HK		
50×5	#200	BB1-505	HK		
50×6	#250	BB1-506	HK		



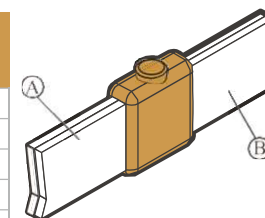
Tap To Tap BB3



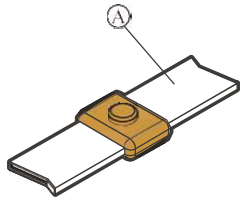
(A) mm	(B) mm				
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25×4	25×4	#90	BB3-254254	HK	
25×6	25×6	#150	BB3-256256	HK	
30×2	30×2	#65	BB3-302302	HK	
30×3	30×3	#90	BB3-303303	HK	
30×4	30×4	#115	BB3-304304	HK	
30×5	30×5	#115	BB3-305305	HK	
31×3	31×3	#115	BB3-313313	HK	
31×6	31×6	#200	BB3-316316	HK	
38×3	38×3	#115	BB3-383383	HK	
38×5	38×5	#150	BB3-385385	HK	
38×6	38×6	#200	BB3-386386	HK	
40×3	40×3	#115	BB3-403403	HK	
40×4	40×4	#150	BB3-404404	HK	
40×5	40×5	#150	BB3-405405	HK	
40×6	40×6	#200	BB3-406406	HK	
50×3	50×3	#200	BB3-503503	HK	
50×4	50×4	#200	BB3-504504	HK	
50×5	50×5	#200	BB3-505505	HK	
50×6	50×6	#250	BB3-506506	HK	

Tap To Tap BB5

(A) mm	(B) mm				
25×4	25×4	#150	BB5-254254	HK	
30×4	30×4	#150	BB5-304304	HK	
40×4	40×4	#250	BB5-404404	HK	
40×5	40×5	#250	BB5-404405	HK	
40×5	40×5	#250	BB5-405405	HK	
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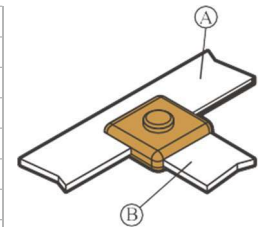
Tap To Tap BB7



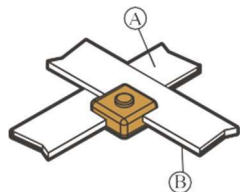
(A)				
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25×4	#90	BB7-254	HK	
25×6	#115	BB7-256	HK	
30×2	#65	BB7-302	HK	
30×3	#65	BB7-303	HK	
30×4	#90	BB7-304	HK	
30×5	#115	BB7-305	HK	
31×3	#65	BB7-313	HK	
31×6	#150	BB7-316	HK	
38×3	#90	BB7-383	HK	
38×5	#150	BB7-385	HK	
38×6	#200	BB7-386	HK	
40×3	#90	BB7-403	HK	
40×4	#115	BB7-404	HK	
40×5	#150	BB7-405	HK	
40×6	#200	BB7-406	HK	
50×3	#150	BB7-503	HK	
50×4	#200	BB7-504	HK	
50×5	#200	BB7-505	HK	
50×6	#250	BB7-506	HK	




Tap To Tap BB14

20×3	20×3	#45	BB14-203203	HK	
25×3	25×3	#65	BB14-253253	HK	
25×4	25×4	#90	BB14-254254	HK	
25×6	25×6	#115	BB14-256256	HK	
30×2	30×2	#65	BB14-302302	HK	
30×3	30×3	#65	BB14-303303	HK	
30×4	30×4	#90	BB14-304304	HK	
30×5	30×5	#115	BB14-305305	HK	
31×3	31×3	#90	BB14-313313	HK	
31×6	31×6	#150	BB14-316316	HK	
38×3	38×3	#90	BB14-383383	HK	
38×5	38×5	#150	BB14-385385	HK	
38×6	38×6	#200	BB14-386386	HK	
40×3	40×3	#90	BB14-403403	HK	
40×4	40×4	#115	BB14-404404	HK	
40×5	40×5	#150	BB14-405405	HK	
40×6	40×6	#200	BB14-406406	HK	
50×3	50×3	#150	BB14-503503	HK	
50×4	50×4	#200	BB14-504504	HK	
50×5	50×5	#200	BB14-505505	HK	
50×6	50×6	#250	BB14-506506	HK	




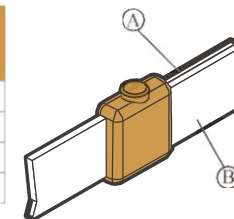
Tap To Tap BB41



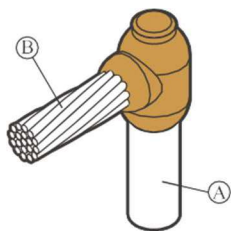
					
20×3	20×3	#65	BB41-203203	HK	
25×3	25×3	#65	BB41-253253	HK	
25×4	25×4	#90	BB41-254254	HK	
25×6	25×6	#115	BB41-256256	HK	
30×2	30×2	#65	BB41-302302	HK	
30×3	30×3	#115	BB41-303303	HK	
30×4	30×4	#115	BB41-304304	HK	
30×5	30×5	#115	BB41-305305	HK	
31×3	31×3	#115	BB41-313313	HK	
31×6	31×6	#115	BB41-316316	HK	
38×3	38×3	#150	BB41-383383	HK	
38×5	38×5	#150	BB41-385385	HK	
38×6	38×6	#200	BB41-386386	HK	
40×3	40×3	#200	BB41-403403	HK	
40×4	40×4	#200	BB41-404404	HK	
40×5	40×5	#200	BB41-405405	HK	
40×6	40×6	#200	BB41-406406	HK	
50×3	50×3	#200	BB41-503503	HK	
50×4	50×4	#200	BB41-504504	HK	
50×5	50×5	#200	BB41-505505	HK	
50×6	50×6	#200	BB41-506506	HK	

Tap To Tap BB51

					
25×4	25×4	#150	BB51-254254	HK	
30×4	30×4	#150	BB51-304304	HK	
40×4	40×4	#250	BB51-404404	HK	
50×4	50×4	2x#150	BB51-505505	HK5	



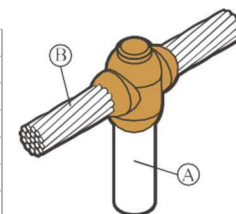
Cable To Rod CR1



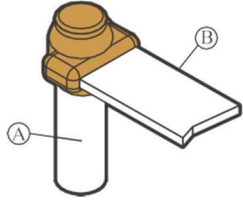
(A) mm²	(B) mm²				
12.7	16	#65	CR1-12716	HK	1×S103
12.7	25	#65	CR1-12725	HK	
12.7	35	#65	CR1-12735	HK	
12.7	50	#65	CR1-12750	HK	
12.7	70	#90	CR1-12770	HK	
12.7	90	#90	CR1-12790	HK	
12.7	120	#90	CR1-127120	HK	
14.2	16	#65	CR1-14216	HK	1×S103
14.2	25	#65	CR1-14225	HK	
14.2	35	#65	CR1-14235	HK	
14.2	50	#90	CR1-14250	HK	
14.2	70	#90	CR1-14270	HK	
14.2	95	#90	CR1-14295	HK	
14.2	120	#90	CR1-142120	HK	
14.2	150	#115	CR1-142150	HK	
14.2	185	#115	CR1-142185	HK	
14.2	240	#150	CR1-142240	HK	
17.2	16	#65	CR1-17216	HK	1×S103
17.2	25	#65	CR1-17225	HK	
17.2	35	#65	CR1-17235	HK	
17.2	50	#90	CR1-17250	HK	
17.2	70	#90	CR1-17270	HK	
17.2	95	#90	CR1-17295	HK	
17.2	120	#90	CR1-172120	HK	
17.2	150	#115	CR1-172150	HK	
17.2	185	#115	CR1-172185	HK	
17.2	240	#150	CR1-172240	HK	
17.2	300	#200	CR1-172300	HK	
20.0	16	#200	CR1-20016	HK	1×S103
20.0	25	#200	CR1-20025	HK	
20.0	35	#200	CR1-20035	HK	
20.0	50	#200	CR1-20050	HK	
20.0	70	#200	CR1-20070	HK	
20.0	95	#250	CR1-20095	HK	
20.0	120	#250	CR1-200120	HK	
20.0	150	#250	CR1-200150	HK	
20.0	185	#250	CR1-200185	HK	
20.0	240	2x#150	CR1-200240	HK5	
20.0	300	2x#150	CR1-200300	HK5	

Cable To Rod CR2

12.7	16	#90	CR2-12716	HK	2×S103
12.7	25	#90	CR2-12725	HK	
12.7	35	#90	CR2-12735	HK	
12.7	50	#90	CR2-12750	HK	
12.7	70	#90	CR2-12770	HK	
12.7	95	#115	CR2-12795	HK	
12.7	120	#150	CR2-127120	HK	
14.2	16	#90	CR2-14216	HK	2×S103
14.2	25	#90	CR2-14225	HK	
14.2	35	#90	CR2-14235	HK	
14.2	50	#90	CR2-14250	HK	
14.2	70	#115	CR2-14270	HK	
14.2	95	#115	CR2-14295	HK	
14.2	120	#150	CR2-142120	HK	
14.2	150	#200	CR2-142150	HK	
14.2	185	#200	CR2-142185	HK	
14.2	240	#250	CR2-142240	HK	
17.2	16	#90	CR2-17216	HK	2×S103
17.2	25	#90	CR2-17225	HK	
17.2	35	#90	CR2-17235	HK	
17.2	50	#115	CR2-17250	HK	
17.2	70	#115	CR2-17270	HK	
17.2	95	#115	CR2-17295	HK	
17.2	120	#150	CR2-172120	HK	
17.2	150	#200	CR2-172150	HK	
17.2	185	#200	CR2-172185	HK	
17.2	240	#250	CR2-172240	HK	
17.2	300	2x#150	CR2-172300	HK5	
20.0	16	#200	CR2-20016	HK	2×S103
20.0	25	#200	CR2-20025	HK	
20.0	35	#200	CR2-20035	HK	
20.0	50	#200	CR2-20050	HK	
20.0	70	#200	CR2-20070	HK	
20.0	95	#200	CR2-20095	HK	
20.0	120	#250	CR2-200120	HK	
20.0	150	#250	CR2-200150	HK	
20.0	185	#250	CR2-200185	HK	
20.0	240	#250	CR2-200240	HK	
20.0	300	#250	CR2-200300	HK	

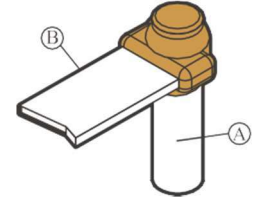


Tap To Rod BR1



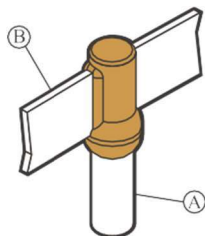
(A) mm	(B) mm				
12.7	20×3	#90	BR1-127203	HK	
12.7	25×3	#90	BR1-127253	HK	
12.7	25×4	#90	BR1-127254	HK	
12.7	30×2	#90	BR1-127302	HK	
12.7	30×3	#90	BR1-127303	HK	
12.7	31×3	#90	BR1-127313	HK	
12.7	38×3	#90	BR1-127383	HK	
12.7	40×3	#90	BR1-127403	HK	
12.7	50×3	#115	BR1-127503	HK	
12.7	50×6	#115	BR1-127506	HK	
14.2	20×3	#90	BR1-142203	HK	
14.2	25×3	#90	BR1-142253	HK	
14.2	25×4	#115	BR1-142254	HK	
14.2	25×6	#115	BR1-142256	HK	
14.2	30×2	#115	BR1-142302	HK	
14.2	30×3	#115	BR1-142303	HK	
14.2	30×4	#150	BR1-142304	HK	
14.2	30×5	#150	BR1-142305	HK	
14.2	31×3	#115	BR1-142313	HK	
14.2	31×6	#150	BR1-142316	HK	
14.2	38×3	#115	BR1-142383	HK	
14.2	38×5	#150	BR1-142385	HK	
14.2	38×6	#200	BR1-142386	HK	
14.2	40×3	#115	BR1-142403	HK	
14.2	40×4	#150	BR1-142404	HK	
14.2	40×5	#150	BR1-142405	HK	
14.2	40×6	#200	BR1-142406	HK	
14.2	50×3	#150	BR1-142503	HK	
14.2	50×4	#200	BR1-142504	HK	
14.2	50×5	#200	BR1-142505	HK	
14.2	50×6	#200	BR1-142506	HK	
17.2	20×3	#115	BR1-172203	HK	
17.2	25×3	#150	BR1-172253	HK	
17.2	25×4	#150	BR1-172254	HK	
17.2	25×6	#200	BR1-172256	HK	
17.2	30×2	#150	BR1-172302	HK	
17.2	30×3	#150	BR1-172303	HK	

Tap To Rod BR1



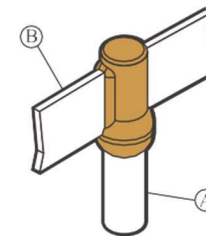
(A) mm	(B) mm				
17.2	30×4	#200	BR1-172304	HK	
17.2	30×5	#200	BR1-172305	HK	
17.2	31×3	#150	BR1-172313	HK	
17.2	31×6	#250	BR1-172316	HK	
17.2	38×3	#200	BR1-172383	HK	
17.2	38×5	#200	BR1-172385	HK	
17.2	38×6	2x#150	BR1-172386	HK5	
17.2	40×3	#200	BR1-172403	HK	
17.2	40×4	#200	BR1-172404	HK	
17.2	40×5	#200	BR1-172405	HK	
17.2	40×6	2x#150	BR1-172406	HK5	
17.2	50×3	2x#150	BR1-172503	HK5	
17.2	50×4	2x#150	BR1-172504	HK5	
17.2	50×5	2x#150	BR1-172505	HK5	
17.2	50×6	2x#150	BR1-172506	HK5	
20.0	20×3	#200	BR1-200203	HK	
20.0	25×3	#200	BR1-200253	HK	
20.0	25×4	#200	BR1-200254	HK	
20.0	25×6	#250	BR1-200256	HK	
20.0	30×2	#200	BR1-200302	HK	
20.0	30×3	#200	BR1-200303	HK	
20.0	30×4	#250	BR1-200304	HK	
20.0	30×5	#250	BR1-200305	HK	
20.0	31×3	#250	BR1-200313	HK	
20.0	31×6	#250	BR1-200316	HK	
20.0	38×3	#250	BR1-200383	HK	
20.0	38×5	#250	BR1-200385	HK	
20.0	38×6	2x#150	BR1-200386	HK5	
20.0	40×3	#250	BR1-200403	HK	
20.0	40×4	#250	BR1-200404	HK	
20.0	40×5	2x#150	BR1-200405	HK5	
20.0	40×6	2x#150	BR1-200406	HK5	
20.0	50×3	#150+#200	BR1-200503	HK5	
20.0	50×4	#150+#200	BR1-200504	HK5	
20.0	50×5	#150+#200	BR1-200505	HK5	
20.0	50×6	#150+#200	BR1-200506	HK5	

Tap To Rod BR2



(A) mm	(B) mm				
12.7	20×3	#90	BR2-127203	HK	
12.7	25×3	#90	BR2-127253	HK	
12.7	25×4	#90	BR2-127254	HK	
12.7	30×2	#90	BR2-127302	HK	
12.7	30×3	#90	BR2-127303	HK	
12.7	31×3	#90	BR2-127313	HK	
12.7	38×3	#90	BR2-127383	HK	
12.7	40×3	#90	BR2-127403	HK	
12.7	50×3	#115	BR2-127503	HK	
14.2	20×3	#90	BR2-142203	HK	
14.2	25×3	#90	BR2-142253	HK	
14.2	25×4	#115	BR2-142254	HK	
14.2	25×6	#150	BR2-142256	HK	
14.2	30×2	#90	BR2-142302	HK	
14.2	30×3	#115	BR2-142303	HK	
14.2	30×4	#150	BR2-142304	HK	
14.2	30×5	#150	BR2-142305	HK	
14.2	31×3	#115	BR2-142313	HK	
14.2	31×6	#150	BR2-142316	HK	
14.2	38×3	#150	BR2-142383	HK	
14.2	38×5	#150	BR2-142385	HK	
14.2	38×6	#200	BR2-142386	HK	
14.2	40×3	#250	BR2-142403	HK	
14.2	40×4	#150	BR2-142404	HK	
14.2	40×5	#150	BR2-142405	HK	
14.2	40×6	#200	BR2-142406	HK	
14.2	50×3	#200	BR2-142503	HK	
14.2	50×4	#200	BR2-142504	HK	
14.2	50×5	#200	BR2-142505	HK	
14.2	50×6	#250	BR2-142506	HK	
17.2	20×3	#150	BR2-172203	HK	
17.2	25×3	#150	BR2-172253	HK	
17.2	25×4	#200	BR2-172254	HK	
17.2	25×6	#200	BR2-172256	HK	
17.2	30×2	#150	BR2-172302	HK	
17.2	30×3	#150	BR2-172303	HK	

Tap To Rod BR2



(A) mm	(B) mm				
17.2	30×4	#200	BR2-172304	HK	
17.2	30×5	#200	BR2-172305	HK	
17.2	31×3	#200	BR2-172313	HK	
17.2	31×6	#250	BR2-172316	HK	
17.2	38×3	#200	BR2-172383	HK	
17.2	38×5	#200	BR2-172385	HK	
17.2	38×6	#250	BR2-172386	HK	
17.2	40×3	#200	BR2-172403	HK	
17.2	40×4	#200	BR2-172404	HK	
17.2	40×5	#200	BR2-172405	HK	
17.2	40×6	#250	BR2-172406	HK	
17.2	50×3	2x#150	BR2-172503	HK5	
17.2	50×4	2x#150	BR2-172504	HK5	
17.2	50×5	2x#150	BR2-172505	HK5	
17.2	50×6	2x#150	BR2-172506	HK5	
20.0	20×3	#250	BR2-200203	HK	
20.0	25×3	2x#150	BR2-200253	HK5	
20.0	25×4	2x#150	BR2-200254	HK5	
20.0	25×6	2x#150	BR2-200256	HK5	
20.0	30×2	2x#150	BR2-200302	HK5	
20.0	30×3	2x#150	BR2-200303	HK5	
20.0	30×4	2x#150	BR2-200304	HK5	
20.0	30×5	2x#150	BR2-200305	HK5	
20.0	31×3	2x#150	BR2-200313	HK5	
20.0	31×6	#150+#200	BR2-200316	HK5	
20.0	38×3	#150+#200	BR2-200383	HK5	
20.0	38×5	#150+#200	BR2-200385	HK5	
20.0	38×6	#150+#200	BR2-200386	HK5	
20.0	40×3	#150+#200	BR2-200403	HK5	
20.0	40×4	#150+#200	BR2-200404	HK5	
20.0	40×5	#150+#200	BR2-200405	HK5	
20.0	40×6	#150+#200	BR2-200406	HK5	
20.0	50×3	2x#200	BR2-200503	HK5	
20.0	50×4	2x#200	BR2-200504	HK5	
20.0	50×5	2x#200	BR2-200505	HK5	
20.0	50×6	2x#200	BR2-200506	HK5	

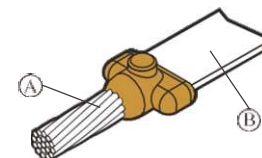
Tube To Tap BR3



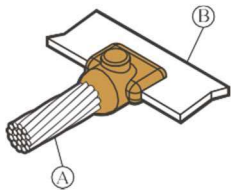
(A) mm ²	(B) mm ²				
50	50×3	2x#150	BR3-500503	Hk5	

Cable To Tap CB1

(A) mm ²	(B) mm ²				
16	20×3	#45	CB1-16203	HK	1×S103
16	25×3	#45	CB1-16253	HK	1×S103
25	20×3	#45	CB1-25203	HK	
25	25×3	#45	CB1-25253	HK	
35	20×3	#45	CB1-35203	HK	
35	25×3	#45	CB1-35253	HK	
50	20×3	#45	CB1-50203	HK	
50	25×3	#65	CB1-50253	HK	
Φ 8mm	20×3	#45	CB1-8SC203	HK	
Φ 8mm	25×3	#65	CB1-8SC253	HK	
70	25×3	#65	CB1-70253	HK	
70	25×4	#65	CB1-70254	HK	
70	25×6	#65	CB1-70256	HK	
Φ 10mm	25×3	#65	CB1-10SC253	HK	
Φ 10mm	25×4	#65	CB1-10SC254	HK	
Φ 10mm	25×6	#65	CB1-10SC256	HK	
95	25×4	#90	CB1-95254	HK	
95	25×6	#90	CB1-95256	HK	
120	25×6	#90	CB1-120256	HK	
120	30×5	#115	CB1-120305	HK	
150	25×6	#115	CB1-150256	HK	
150	30×5	#115	CB1-150305	HK	
150	40×5	#150	CB1-150405	HK	
185	31×6	#150	CB1-185316	HK	
185	40×5	#150	CB1-185405	HK	
185	50×5	#200	CB1-185505	HK	
240	50×5	#200	CB1-240505	HK	
240	50×6	2x#150	CB1-240506	HK5	
300	50×6	2x#150	CB1-300506	HK5	

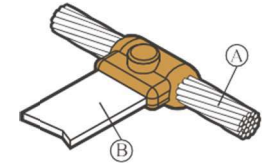


Cable To Tap CB4



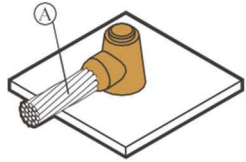
(A) mm²	(B) mm²				
16	20×3	#45	CB4-16203	HK	1×S103
16	25×3	#45	CB4-16253	HK	1×S103
25	20×3	#45	CB4-25203	HK	
25	25×3	#45	CB4-25253	HK	
35	20×3	#45	CB4-35203	HK	
35	25×3	#45	CB4-35253	HK	
50	20×3	#45	CB4-50203	HK	
50	25×3	#45	CB4-50253	HK	
Φ8mm	20×3	#45	CB4-8SC203	HK	
Φ8mm	25×3	#45	CB4-8SC253	HK	
70	25×3	#65	CB4-70253	HK	
70	25×4	#65	CB4-70254	HK	
70	25×6	#90	CB4-70256	HK	
Φ10mm	25×3	#65	CB4-10SC253	HK	
Φ10mm	25×4	#65	CB4-10SC254	HK	
Φ10mm	25×6	#90	CB4-10SC256	HK	
95	25×4	#90	CB4-95254	HK	
95	25×6	#115	CB4-95256	HK	
120	25×6	#115	CB4-120256	HK	
120	30×5	#115	CB4-120305	HK	
150	25×6	#115	CB4-150256	HK	
150	30×5	#115	CB4-150305	HK	
150	40×5	#115	CB4-150405	HK	
185	31×6	#150	CB4-185316	HK	
185	40×5	#150	CB4-185405	HK	
185	50×5	#150	CB4-185505	HK	
240	50×5	#200	CB4-240505	HK	
240	50×6	#250	CB4-240506	HK	
300	50×6	2x#150	CB4-300506	HK5	

Cable To Tap CB5



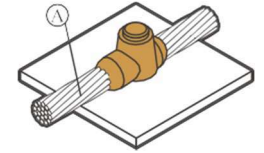
(A) mm²	(B) mm²				
16	20×3	#45	CB5-16203	HK	2×S103
16	25×3	#65	CB5-16253	HK	2×S103
25	20×3	#45	CB5-25203	HK	
25	25×3	#65	CB5-25253	HK	
35	20×3	#45	CB5-35203	HK	
35	25×3	#65	CB5-35253	HK	
50	20×3	#65	CB5-50203	HK	
50	25×3	#65	CB5-50253	HK	
Φ8mm	20×3	#65	CB5-8SC203	HK	
Φ8mm	25×3	#65	CB5-8SC253	HK	
70	25×3	#90	CB5-70253	HK	
70	25×4	#115	CB5-70254	HK	
70	25×6	#115	CB5-70256	HK	
Φ10mm	25×3	#115	CB5-10SC253	HK	
Φ10mm	25×4	#150	CB5-10SC254	HK	
Φ10mm	25×6	#150	CB5-10SC256	HK	
95	25×4	#150	CB5-95254	HK	
95	25×6	#150	CB5-95256	HK	
120	25×6	#150	CB5-120256	HK	
120	30×5	#200	CB5-120305	HK	
150	25×6	#200	CB5-150256	HK	
150	30×5	#200	CB5-150305	HK	
150	40×5	#250	CB5-150405	HK	
185	31×6	#250	CB5-185316	HK	
185	40×5	#250	CB5-185405	HK	
185	50×5	2x#150	CB5-185505	HK5	
240	50×5	2x#150	CB5-240505	HK5	
240	50×6	2x#200	CB5-240506	HK5	
300	50×6	3x#200	CB5-300506	HK7	

Cable To Steel Structure CS1



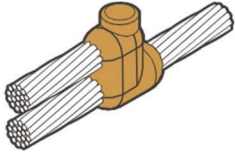
(A)				
16	#65	CS1-16	HK	1×S103
25	#65	CS1-25	HK	
35	#65	CS1-35	HK	
Φ 8mm	#90	CS1-8SC	HK	
50	#90	CS1-50	HK	
Φ 10mm	#90	CS1-10SC	HK	
70	#90	CS1-70	HK	
95	#115	CS1-95	HK	
120	#115	CS1-120	HK	
150	#200	CS1-150	HK	
185	#250	CS1-185	HK	
240	2x#150	CS1-240	HK5	
300	2x#200	CS1-300	HK5	

Cable To Steel Structure CS2



(A)				
16	#65	CS2-16	HK	2×S103
25	#65	CS2-25	HK	
35	#65	CS2-35	HK	
Φ 8mm	#90	CS2-8SC	HK	
50	#90	CS2-50	HK	
Φ 10mm	#115	CS2-10SC	HK	
70	#115	CS2-70	HK	
95	#115	CS2-95	HK	
120	#150	CS2-120	HK	
150	#200	CS2-150	HK	
185	#250	CS2-185	HK	
240	2x#150	CS2-240	HK5	
300	2x#200	CS2-300	HK5	

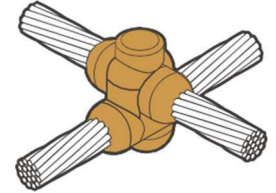
Cable To Cable CC6



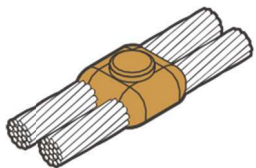
A mm²	B mm²				
16	16	#65	CC6-1616	HK	3×S103
25	25	#45	CC6-2525	HK	
35	35	#65	CC6-3535	HK	
35	25	#65	CC6-3525	HK	
50	50	#90	CC6-5050	HK	
50	35	#65	CC6-5035	HK	
50	25	#65	CC6-5025	HK	
70	70	#115	CC6-7070	HK	
70	50	#115	CC6-7050	HK	
70	35	#90	CC6-7035	HK	
70	25	#90	CC6-7025	HK	
95	95	#150	CC6-9595	HK	
95	70	#115	CC6-9570	HK	
95	50	#115	CC6-9550	HK	
95	35	#115	CC6-9535	HK	
120	120	#200	CC6-120120	HK	
120	95	#200	CC6-12095	HK	
120	70	#150	CC6-12070	HK	
120	50	#115	CC6-12050	HK	

Cable To Cable CC11

A mm²	B mm²				
50	50	#150	CC11-5050	HK	
70	70	#200	CC11-7070	HK	
95	95	#250	CC11-9595	HK	
120	120	2x#150	CC11-120120	HK5	
150	150	2x#200	CC11-150150	HK5	
185	185	2x#250	CC11-185185	HK7	
240	240	3x#200	CC11-240240	HK7	
Φ10	Φ10	#150	CC11-10SC10SC	HK	



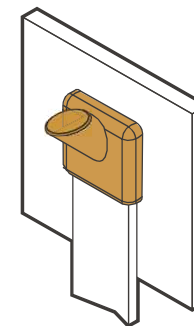
Cable To Cable CC14



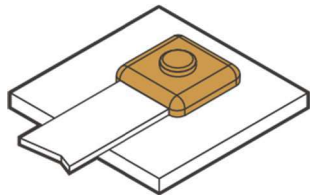
(A) mm²	(B) mm²				
16	16	#65	CC14-1616	HK	4xS103
25	25	#45	CC14-2525	HK	
35	35	#65	CC14-3535	HK	
35	25	#65	CC14-3525	HK	
50	50	#90	CC14-5050	HK	
50	35	#90	CC14-5035	HK	
50	25	#90	CC14-5025	HK	
70	70	#115	CC14-7070	HK	
70	50	#115	CC14-7050	HK	
70	35	#90	CC14-7035	HK	
70	25	#90	CC14-7025	HK	
95	95	#150	CC14-9595	HK	
95	70	#150	CC14-9570	HK	
95	50	#150	CC14-9550	HK	
95	35	#115	CC14-9535	HK	
120	120	#200	CC14-120120	HK	
120	95	#200	CC14-12095	HK	
120	70	#200	CC14-12070	HK	
120	50	#150	CC14-12050	HK	

Tap To Steel Structure BS1

(A) mm²					
20×3	#65	BS1-203	HK		
25×3	#90	BS1-253	HK		
25×4	#90	BS1-254	HK		
25×6	#150	BS1-256	HK		
30×2	#90	BS1-302	HK		
30×3	#90	BS1-303	HK		
30×4	#115	BS1-304	HK		
30×5	#150	BS1-305	HK		
40×3	#150	BS1-403	HK		
40×4	#200	BS1-404	HK		
40×5	#200	BS1-405	HK		
40×6	#250	BS1-406	HK		
50×3	#200	BS1-503	HK		
50×4	#250	BS1-504	HK		
50×5	#250	BS1-505	HK		
50×6	2x#150	BS1-506	HK5		

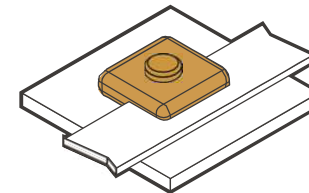


Tap To Steel Structure BS2



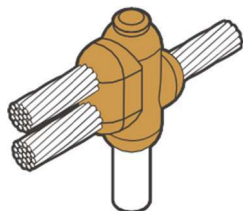
				
20×3	#90	BS2-203	HK	
25×3	#90	BS2-253	HK	
25×4	#90	BS2-254	HK	
25×6	#150	BS2-256	HK	
30×2	#115	BS2-302	HK	
30×3	#115	BS2-303	HK	
30×4	#150	BS2-304	HK	
30×5	#200	BS2-305	HK	
40×3	#115	BS2-403	HK	
40×4	#200	BS2-404	HK	
40×5	#200	BS2-405	HK	
40×6	#250	BS2-406	HK	
50×3	#200	BS2-503	HK	
50×4	2x#150	BS2-504	HK.5	
50×5	2x#150	BS2-505	HK.5	
50×6	2x#150	BS2-506	HK.5	

Tap To Steel Structure BS3



				
20×3	#90	BS3-203	HK	
25×3	#115	BS3-253	HK	
25×4	#115	BS3-254	HK	
25×6	#150	BS3-256	HK	
30×2	#115	BS3-302	HK	
30×3	#115	BS3-303	HK	
30×4	#150	BS3-304	HK	
30×5	#200	BS3-305	HK	
40×3	#150	BS3-403	HK	
40×4	#200	BS3-404	HK	
40×5	#250	BS3-405	HK	
40×6	#250	BS3-406	HK	
50×3	#250	BS3-503	HK	
50×4	#250	BS3-504	HK	
50×5	#250	BS3-505	HK	
50×6	#250	BS3-506	HK	

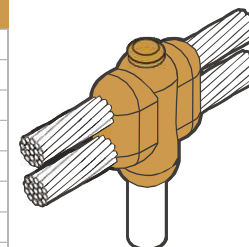
Cable To Rod CR17



(A) mm ²	(B) mm ²				
Φ 14. 2mm	16	#90	CR17-14216	HK	3×S103
Φ 14. 2mm	25	#90	CR17-14225	HK	
Φ 14. 2mm	35	#90	CR17-14235	HK	
Φ 14. 2mm	50	#115	CR17-14250	HK	
Φ 14. 2mm	70	#200	CR17-14270	HK	
Φ 14. 2mm	95	#250	CR17-14295	HK	
Φ 14. 2mm	120	#250	CR17-142120	HK	
Φ 14. 2mm	150	#250	CR17-142150	HK	
Φ 14. 2mm	185	2x#150	CR17-142185	HK5	
Φ 14. 2mm	240	2x#200	CR17-142240	HK5	
Φ 17. 2mm	16	#115	CR17-17216	HK	3×S103
Φ 17. 2mm	25	#115	CR17-17225	HK	
Φ 17. 2mm	35	#115	CR17-17235	HK	
Φ 17. 2mm	50	#115	CR17-17250	HK	
Φ 17. 2mm	70	#200	CR17-17270	HK	
Φ 17. 2mm	95	#250	CR17-17295	HK	
Φ 17. 2mm	120	#250	CR17-172120	HK	
Φ 17. 2mm	150	2x#150	CR17-172150	HK5	
Φ 17. 2mm	185	2x#150	CR17-172185	HK5	
Φ 17. 2mm	240	2x#200	CR17-172240	HK5	
Φ 20mm	16	#250	CR17-20016	HK	3×S103
Φ 20mm	25	#250	CR17-20025	HK	
Φ 20mm	35	#250	CR17-20035	HK	
Φ 20mm	50	2x#150	CR17-20050	HK5	
Φ 20mm	70	2x#150	CR17-20070	HK5	
Φ 20mm	95	2x#150	CR17-20095	HK5	
Φ 20mm	120	#150+#200	CR17-200120	HK5	
Φ 20mm	150	#150+#200	CR17-200150	HK5	
Φ 20mm	185	2x#200	CR17-200185	HK5	
Φ 20mm	240	3x#150	CR17-200240	HK7	

Cable To Rod CR24

(A) mm ²	(B) mm ²				
Φ 14. 2mm	16	#90	CR24-14216	HK	4×S103
Φ 14. 2mm	25	#90	CR24-14225	HK	
Φ 14. 2mm	35	#90	CR24-14235	HK	
Φ 14. 2mm	50	#115	CR24-14250	HK	
Φ 14. 2mm	70	#150	CR24-14270	HK	
Φ 14. 2mm	95	#250	CR24-14295	HK	
Φ 14. 2mm	120	2x#150	CR24-142120	HK5	
Φ 14. 2mm	150	2x#150	CR24-142150	HK5	
Φ 14. 2mm	185	2x#200	CR24-142185	HK5	
Φ 14. 2mm	240	2x#200	CR24-142240	HK5	
Φ 17. 2mm	16	#115	CR24-17216	HK	4×S103
Φ 17. 2mm	25	#115	CR24-17225	HK	
Φ 17. 2mm	35	#115	CR24-17235	HK	
Φ 17. 2mm	50	#250	CR24-17250	HK	
Φ 17. 2mm	70	2x#150	CR24-17270	HK5	
Φ 17. 2mm	95	2x#150	CR24-17295	HK5	
Φ 17. 2mm	120	2x#150	CR24-172120	HK5	
Φ 17. 2mm	150	2x#200	CR24-172150	HK5	
Φ 17. 2mm	185	2x#200	CR24-172185	HK5	
Φ 17. 2mm	240	2x#250	CR24-172240	HK7	
Φ 20mm	16	2x#150	CR24-20016	HK5	4×S103
Φ 20mm	25	2x#150	CR24-20025	HK5	
Φ 20mm	35	2x#150	CR24-20035	HK5	
Φ 20mm	50	#150+#200	CR24-20050	HK5	
Φ 20mm	70	#150+#200	CR24-20070	HK5	
Φ 20mm	95	#150+#200	CR24-20095	HK5	
Φ 20mm	120	2x#200	CR24-200120	HK5	
Φ 20mm	150	2x#200	CR24-200150	HK5	
Φ 20mm	185	3x#150	CR24-200185	HK7	
Φ 20mm	240	2x#250	CR24-200240	HK7	



Exothermic Welding					
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	Cable To Cable CC4	IV-10		Tap To Rod BR2	IV-26
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	Cable To Rod CC1	IV-11		Cable To Tap CB1	IV-31
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