

## History in Engineering eXcellence



- Cable Terminal Ends & Connectors
- Crimping Tools
- Earthing & Lightning Protection
- Din Rail / Strut Channel





HEX Factory situated near Vapi, Gujarat.

1992 self-starter, dedicated engineers ventured to seed the Asia's largest industry of Cable Accessories and Connectors. The values set forth then, have been the cornerstone of the group's vision. Today the business of HEX in India abroad carries the hallmark, that would continue as a legacy. At HEX we pay tribute to our founders and pledge to uphold the HEX values and make them a way of life at work, in our personal lives and in the lives of those whom we touch.

HEX enjoys a close working relationship with all its retail chains. With an extensive network of dealers and distributors worldwide, you'll never be away from a HEX stockist. HEX ensures the best of advice from its trained staff, backed up with fast product availability.

A HEX customer can always count on systematically structured commercial organization that provides the most complete and advanced, pre and post sales service.

Its centralized services are designed to reap the benefits of economies of scale for newer opportunities and ancillaries, Growth and service is our essence. We are sure you will join those who have discovered HEX's outstanding record and its commitment recognizing its quality and professional service.



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## DEFINITIONS

### **CABLE TERMINAL ENDS :**

As per IS-8337-1967. Cable Terminal is a connecting device with barrel accommodating respective conductor size of electrical cable and which has fixing arrangements of termination by means of a bolt fixing or pin insertions in tunnel type terminal blocks.

### **IN - LINE CONNECTORS :**

This is a connecting device accommodating two electrical conductors to form a straight line.

## PRODUCT USAGE

### **1. TERMINAL ENDS:**

These are the most commonly used types of terminal ends. These tubular terminal ends, both for crimping and soldering, are manufactured from soft drawn, pure, high conductivity Copper tubes conforming to BS 1997. They are fully annealed to ensure qualities of electrical and mechanical strength and are also produced from Aluminium tube as per IS 5082. (mainly used with power distribution cables)

### **2. IN - LINE CONNECTORS & FERRULES :**

These are manufactured from soft drawn bare Copper tube as per BS 1977 and Aluminium as per IS 5082 to obtain high electrical & mechanical strength. They are used for straight through joints for joining of cable conductors.

### **3. RING TYPE TERMINAL ENDS:**

These are manufactured from high conductivity Copper and are electro-tinned for corrosion resistance. Ring type terminal ends are available in different sizes to serve the different joining techniques such as Crimping, Soldering & Welding.

### **4. PIN TYPE TERMINAL ENDS :**

These terminal ends are available in three types i.e. Round, Regular & Flat. They are mainly used for control cables, terminal station, flexible cord, for smaller sizes of cables etc. Pin type terminal ends are generally available for crimping type of connections which are made out of high conductivity Copper.

### **5. FORK TYPE TERMINAL ENDS :**

These types of terminal ends are mainly used for termination of Flexibles, Cords, Control cables, Meters for control panel cubicles, Contractors etc. They are made of high conductivity Copper.

### **6. REDUCER TYPE TERMINAL ENDS:**

Reducers of Copper Pin Terminals are produced to meet the needs of cable entering, Copper tunnel clamps such as Fine Gears, Cutouts, Meters etc. They can be connected by the soldering or crimping method and are made of Copper for crimping and of brass for soldering.

## FIELD OF APPLICATION

Various Industries, Product & Areas where the Terminal ends can be used are as given below:

- |   |                                   |
|---|-----------------------------------|
| 1. Electrical Industries :-<br>a) Control panels<br>b) Switch Gears<br>c) Transformers<br>d) Circuit Breakers | 6. Shipping Industries            |
| 2. Electricity Boards like<br>MSEB, BSES etc.   | 7. Automobile Industries          |
| 3. Power projects like<br>NTPC, NHPC, EIL, NPC etc.   | 8. Steel & Fertilizers Industries |
| 4. Satellite & Communications Ind.  | 9. Railways                       |
| 5. Power Generation & Distribution  | 10. Chemical Projects             |
|   | 11. Cement & Textile Industries   |
|   | 12. Electronic Industries         |
|   | 13. Mining Industries             |
|   | 14. Aeronautics Industries        |
|   | 15. Defence                       |
|   | 16. Domestic                      |

## A CONVENIENT SOLUTION

**HEX Cable Terminal Ends offer the following advantages :-**

- 1) Safe and low cost both in design and use.
- 2) All Copper products are Electro-tinned to B. S. standard and this prevents it from corrosion and oxidation.
- 3) P. V. C. insulation is provided to terminals for exceptional Die-Electric strength and for supporting the wire insulation at the base of the terminal, thereby ensuring that no bare wire is exposed.
- 4) Entry to the wire barrel is shock-proof, or bell mouthed for faster and easier conductor entry.
- 5) P. V. C. insulation with copper sleeve fitted over the terminal barrel provides circumferential insulation support to the wire and prevents the loss of connection due to vibration, of flexing in use.
- 6) All products are manufactured under strict Quality control and conform fully to the specification and requirements. Our services are also available to solve customer problems and to provide improvement.

**PRODUCT SPECIFICATION & QUALITY CONTROL CHART for CABLE TERMINAL ENDS**

**(A) RAW MATERIALS**

MTL / FORM	PARAMETERS CHECKED	TYPE / METHOD & INSTRUMENTS OF INSPECTION	ACCEPTANCE SPECIFICATION	STANDARD VALUES
------------	--------------------	---	--------------------------	-----------------

<b>(A) Copper</b>	Chemical composition	Testing done at renowned lab supplier Test Certificate	BS 1877 IS 191 (part - v)	- -
i) Tubes	Diameters	Verniers/ Go & No Go Gauges	BS 1877	-
	Surface roughness Ovality	Visual / Verniers	Visual -	- -
	Hardness	Hardness testing M/C	DO	65 RF (60 HV)
	Conductivity	Conductivity meter	DO	99.25% I. A. C. S
	Resistivity	Resistivity Meter	DO	0.0172 ohm mm <sup>2</sup> /m at 20 degree C
	Flattening	Press	IS 5071 OR BS 1977	Should not crack when Flattened
ii) Strips	Dimensions	Verniers/mm	IS 1897	-
	Surface roughness	V' Block / Vice	Visual	-
	Bend test		IS 3260 - 1965	Should not crack when bent
	Hardness	Hardness testing Machine	DO	65 RF (60 Hv)
	Conductivity	Conductivity Meter	DO	99.25% I. A. C. S
	Resistivity	Resistivity Meter	IS 3635 1960	0.0172 ohm mm <sup>2</sup> /m at 20 degrees C
iii) Rods	Diameters	Verniers / mm	IS 613 - 1984	-
	Surface Roughness		Visual	-
	Hardness	Hardness testing Machine		60 RF (85 HV)
	Conductivity	Conductivity Meter		99.25% I. A. C. S
	Resistivity	Resistivity Meter		0.0172 ohm mm <sup>2</sup> /m at 20 degrees C
<b>(B) Aluminium</b>	Chemical Composition	Testing done at Renowned Lab/ Test Certificate	IS 5082 - 1982	
i) Tubes	Diameters	Verniers / Go & No Go Gauges	IS 5082	-
	Surface Roughness		Visual	-
	Ovality	Visual	-	-
	Hardness	Hardness tester	DO	30 BHN max
	Conductivity	Conductivity Meter	DO	60% I. A. C. S
	Resistivity	Resistivity Meter	DO	2.87 micro ohm cm at 20 degree C
	Flattening	Press		Should not crack when Flattened
<b>(C) PVC sleeves</b>	Diameters	Verniers/ Go & No Go gauges	IS 1951 - 1961	-
	Surface roughness	Visual	-	-
	Ovality	Vernier / Visual	IS 1951 - 1961	-
	Colour	Visual	-	0.75 Yellow, 1.5 Red, 2.5 Blue, 4.6 Yellow 10.16 Black
	Hardness	Pliers	IS 1951 - 1961	Should not crack when flattened
	Flattening	Pliers	DO	
<b>(D) Phosphorous Bronze Sheet</b>	Surface Roughness		Visual	-
	Hardness	Hardness testing M/C	IS 7814 - 1975	150 HV min
	Bend test	V' Block / Vice	IS 3260 - 1965	Should not crack when bent



## (B) PROCESS INSPECTION

SR. NOS	PRODUCT PROCESS	PARAMETERS CHECKED	TYPE / METHOD & INSTRUMENTS OF INSPECTION	ACCEPTANCE SPECIFICATION	STANDARD VALUES
<b>I Copper &amp; Aluminium Tubular Terminal End</b>					
(a)	Cutting	Length	Verniers	As per drawing	Design dimension
(b)	Punching	Flam Width	Verniers	-	DO
(c)	Holing	Stud Hole	Verniers/Go No Go Gauges	-	DO
(d)	Stamping	Stamp marking	Visual	-	DO
(e)	Serrations		Visual	-	DO
(f)	Champhering	Bell Mouth on Barrel	Visual	-	DO
<b>II Ferrules and In-line Connector</b>					
		Length	Verniers	-	DO
		Diameter	Vernier/Go & No Go Gauges	-	DO
		Serrations	Visual	-	DO
<b>III Ring Tongue &amp; Pin Type, Fork Type, Snap On Type Terminal</b>					
(a)	Cutting	Blank piece	Visual / Verniers	-	DO
(b)	Holing/ Stamping	Stud Hole/ Stamp Marking	Visual / Verniers Go & No Go Gauges	- As per drawing	DO Design dimension
(c)	O' Bending	Barrel Dia	Vernier/Go & No Go Gauges	-	DO
(d)	Champhering/ Serrations	Bell Mouth on barrel	Visual	-	DO
(e)	Soldering	Solder finish	Visual	-	DO
<b>IV Reducers or Wire pin Terminals</b>					
(a)	Cutting	Length	Vernier	-	DO
(b)	Turning	Diameter	Vernier	-	DO
(c)	Drilling	Inner-Dia	Vernier	-	DO
(d)	Champhering	Bell Mouth on Barrel	Visual	-	DO

### COPPER

#### Raw Material Grade :

Electrolytic Copper grade as per  
BS 1977 / IS 1897

**Conductivity :** 99.25% IACS

#### Chemical Composition:

Copper + Silver	- 99.9%
Bismuth Max	- 0.001%
Lead Max	- 0.005%
Impurities	- 0.003%

**Resistivity :** 0.017% ohm.mm<sup>2</sup>/m at 20° C

#### Physical Properties:

1. Tensile strength  
(above 0.5 mm thick) : 205 MP a Min
2. Hardness : 60 Hv (RF) Min

### ALUMINIUM

#### Raw Material Grade :

Electrolytic as per IS 5082

**Conductivity :** 60% IACS

#### Chemical Composition:

Aluminium	- 99.5%
Copper Max	- 0.04%
Silicon	- 0.15%
Iron Max	- 0.35%
Titanium	- 0.02%
Magnesium	
Zirconium	- 0.02% each

**Tensile Strength :** 60 MP a Min

#### Resistivity :

2.87 Micro Ohm. cm

## (C) Finished Goods

<b>I</b>	<b>Copper &amp;</b>	<b>Dimensions</b>	<b>Tol: + 5%</b>	<b>IS 8309</b>	<b>-</b>	
Aluminium Type Tubular Terminal Ends	a) Dia of Barrel	Vernier / Go & No Go	DO	-	-	
		Gauges	DO	-	-	
		b) Stud Hole	DO	DO	-	-
		c) Palm Width	DO	DO	-	-
	d) Barrel Length	DO	DO	-	-	
		Conductivity	Conductivity Meter	DO	99.25% I.A.S (Cu) 60% I.A.C.S (Al) 5M to 10M (Cu)	
	Tinning Thickness	Tin Coating Thickness measurement M/C	DO	40 N / mm <sup>2</sup> Depends on the Size of Cable / Lugs and Nature of Crimping		
Pull Test	Tensile Testing M/C	DO				
Millivolt Drop	Voltage Drop Meter					
<b>II</b>	<b>In-line Connector</b>	<b>Dimension</b>	<b>Tol: + 5%</b>	<b>IS 8309</b>	<b>-</b>	
Copper and Type	a) Diameter	Vernier / Go & No Go	DO	-	-	
		Gauges	DO	-	-	
Aluminium	b) Length	Vernier	DO	-	-	
		Conductivity	Conductivity Meter	DO	99.25% (Cu), 60% (Al) * 5M to 10M (Cu)	
	Tinning Thickness (Cu)	Tinning Thickness measurement M/C		40 N/M <sup>2</sup>		
	Pull Test	tensile Testing M/C	IS 8337-1976	Depends on size of Cable / lugs		
	Millivolt drop	Voltage Drop Meter	-			
<b>III</b>	<b>Copper Ring Type</b>	<b>Dimension</b>	<b>Tol: + 5%</b>	<b>-</b>	<b>-</b>	
Ring Tongue Type,	a) Barrel Diameter	Vernier / Go & No Go	-	-	-	
		Gauges	-	-	-	
Fork Type	b) Stud Hole	DO	-	-	-	
		DO	-	-	-	
Terminal End & Snap On Type terminal	c) Palm Width / Dia	DO	-	-	-	
		DO	-	-	-	
d) Barrel Length	Conductivity	DO	-	-	-	
		Conductivity Meter	-	99.25% I.A.C.S		
Tinning Thickness	Tinning Thickness measurement M/C	Tin Coating Thickness	-	* 5M to 10M (Cu)		
		DO				
Pull Test	Tensile Testing M/C	IS 8337-1976	40 N/mm <sup>2</sup>			
Millivolt drop	Voltage drop Meter	-	Depends upon size of Cable / Lugs and Nature of Crimping			
<b>IV</b>	<b>Reducers or</b>	<b>Dimension</b>	<b>Vernier</b>	<b>-</b>	<b>-</b>	
Wire Pin Type Terminal	Hardness Tinning Thickness	Hardness testing M/C	IS 613	65RF (60 HV)		
		Tinning Thickness Measurement M/C		5M to 10M		

\*M = Microns (1 M= 0.001 mm)

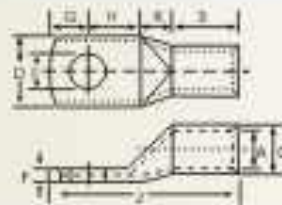


# CABLE TERMINAL ENDS & IN-LINE CONNECTORS



## CRIMPING TYPE TINNED COPPER CABLE TERMINAL ENDS

Material : Copper Tube to BS 1977 / IS 191 (part v)  
Specification : E.C. Grade 99.25% IACS  
Finish : Electro Tinned to BS 1872 (1984)



CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	G	J	
2.5	5.2	2.0	3.7	9	1.0	7	3	5	5	20	HS-05
4	6.5	3.1	4.8	11	1.0	7	3	6	6	22	HS-06
6	6.5	3.8	5.5	11	1.0	9	3	6	6	24	HS-07
10	6.5	4.4	6.2	11	1.3	9	3	6	6	24	HS-08
16	6.5	5.3	7.1	11	1.6	12	4	8	6	30	HS-09
25	6.5	7.0	9.0	13	2.0	12	5	12	8	37	HS-10
35	6.5	8.0	10.0	15	2.0	12	5	12	8	37	HS-11
35	8.2	8.0	10.0	15	2.0	12	5	12	8	37	HS-12
50	6.5	9.2	11.2	16	2.0	16	8	12	9	45	HS-13
50	8.2	9.2	11.2	16	2.0	16	8	12	9	45	HS-14
50	10.2	9.2	11.2	16	2.0	16	8	12	9	45	HS-15
70	8.2	11.5	13.8	20	2.3	18	10	15	13	56	HS-16
70	10.2	11.5	13.8	20	2.3	18	10	15	13	56	HS-17
70	12.7	11.5	13.8	20	2.3	18	10	15	13	56	HS-18
95	10.2	12.8	15.6	23	2.8	20	10	15	13	58	HS-19
95	12.7	12.8	15.6	23	2.8	20	10	15	13	58	HS-20
120	10.2	14.8	17.8	26	3.0	22	10	16	14	62	HS-21
120	12.7	14.8	17.8	26	3.0	22	10	16	14	62	HS-22
120	16.2	14.8	17.8	26	3.0	22	10	16	14	62	HS-23
150	10.2	16.0	19.6	28	3.6	26	11	18	15	70	HS-24
150	12.7	16.0	19.6	28	3.6	26	11	18	15	70	HS-25
150	16.2	16.0	19.6	28	3.6	26	11	18	15	70	HS-26
185	12.7	18.0	22.0	32	4.0	28	13	21	21	83	HS-27
185	16.2	18.0	22.0	32	4.0	28	13	21	21	83	HS-28
225	16.2	20.0	24.0	35	4.0	32	15	24	24	95	HS-231
240	16.2	22.0	26.0	38	4.0	34	15	24	24	97	HS-29
240	20.3	22.0	26.0	38	4.0	34	15	24	24	97	HS-30
300	16.2	24.0	28.7	42	4.7	36	16	25	25	103	HS-31
300	20.3	24.0	28.7	42	4.7	36	16	25	25	103	HS-32
400	20.3	28.0	33.2	49	5.2	44	18	27	27	116	HS-33
500	20.3	30.0	36.0	53	6.0	48	18	27	27	120	HS-34
630	20.3	35.0	41.5	61	6.5	53	20	33	31	137	HS-35
800	-	39.0	46.3	67	7.3	68	25	38	37	165	HS-062
1000	-	43.0	53.8	76	10.8	90	30	45	45	210	HS-076

## TINNED COPPER HEAVY DUTY CABLE TERMINAL ENDS

CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	G	J	
25	8.2	7	9	13	2.0	16	5	12	8	41	HS-282
35	8.2	8	11	15	2.6	20	5	14	9	48	HS-283
50	8.2	9.2	12	17	3.0	26	7	16	10	59	HS-284
70	10	12	15	20	3.5	28	7	19	12	66	HS-285
95	13	13	17	24	4.2	32	10	20	12	74	HS-286
120	13	15	20	28	4.8	35	10	23	14	82	HS-287
150	13	16	21	30	5.2	38	10	24	14	86	HS-288
185	13	18	24	34	6.0	43	12	23	17	95	HS-289
240	16	22	28	40	6.0	50	12	30	20	112	HS-290

### SOLDERING TYPE TINNED COPPER

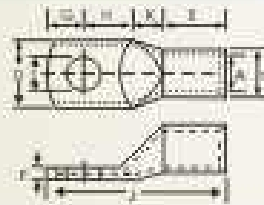
#### CABLE TERMINAL ENDS

(As per table 2A of BS 91 (1954) revised 1960)

Material : Copper Tube to BS 1977 / IS 191 (part v)

Specification : E.C. Grade 99.25% IACS

Finish : Electro Tinned to BS 1872 (1984)



AMPS	HOLE		DIMENSIONS									PROD. CODE
	E	A	C	D	F	B	K	H	G	J		
15	3.2	3.9	4.8	7	0.9	7	2	6	4	19	HSS-201	
30	5.1	5.2	6.3	9	1.1	9	3	6	5	23	HSS-202	
60	6.4	8.1	9.5	14	1.4	14	4	9	9	36	HSS-203	
100	9.5	10.9	12.7	19	1.8	19	8	11	11	49	HSS-204	
150	9.5	13.9	15.9	24	2.0	23	8	13	13	57	HSS-205	
200	12.7	16.6	19.0	28	2.4	27	11	14	14	66	HSS-206	
300	12.7	19.0	22.2	33	3.2	28	13	20	20	80	HSS-207	
400	15.9	22.2	25.4	38	3.2	32	15	21	21	89	HSS-208	
500	19.0	25.4	28.6	43	3.2	38	17	25	25	105	HSS-209	
600	19.0	27.8	31.8	47	4.0	44	17	27	27	115	HSS-210	
800	23.8	31.7	38.1	56	6.4	47	18	28	28	121	HSS-211	
1000	23.8	38.1	44.5	66	6.4	56	20	42	42	152	HSS-212	
1000	-	50.0	57.3	85	7.3	62	20	46	46	164	HSS-295	

### TINNED COPPER CABLE TERMINAL ENDS (As per table 2A of BS 91 (1954) revised 1960)

BSS.	REF.	AMPS	HOLE		DIMENSIONS								PROD. CODE
			E	A	C	D	F	B	K	H	G	J	
2E	15	5.1	4.8	6.2	9	1.4	10	3	6	5	24	HSS-6	
4EL	30	7.1	6.4	8.0	12	1.6	13	4	10	6	33	HSS-7	
7EL	60	10.3	9.5	11.3	17	1.8	14	8	13	9	44	HSS-8	
10EL	100	11.9	11.9	13.9	21	2.0	19	9	14	13	55	HSS-9	
11EL	150	13.5	14.3	17.1	25	2.8	22	10	16	14	62	HSS-10	
13EL	200	13.5	16.7	19.9	29	3.2	29	11	21	17	78	HSS-11	
14EL	300	16.7	20.6	24.2	35	3.6	32	13	21	20	86	HSS-12	
15EL	400	16.7	23.8	27.8	41	4.0	38	14	24	24	100	HSS-13	
17EL	500	19.8	26.2	31.4	46	5.2	44	16	24	27	111	HSS-14	

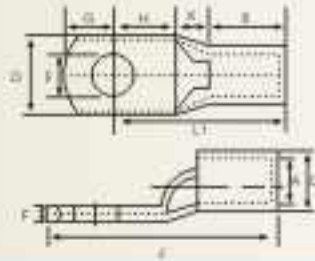
### TINNED COPPER CABLE TERMINAL ENDS (As per table 2 of BS - 91 - 1973)

BSS.	REF.	CABLE Size	HOLE		DIMENSIONS								PROD. CODE
			Old	New	E	A	C	D	F	B	K	H	
-	1T	6	5.5	4.4	6.0	9	1.6	10	3	6	5	24	HSS-15
-	2T	16	6.6	6.0	8.0	11	2.0	13	5	7	6	31	HSS-16
-	5T	25	9	7.6	10.0	14	2.4	13	6	12	10	41	HSS-17
-	6T	35	9	9.6	12.0	17	2.4	16	8	12	10	46	HSS-18
10E	7T	50/70	11	12.0	16.6	23	4.6	19	9	14	13	55	HSS-23
11E	9T	95	14	14.3	19.5	28	5.2	22	10	16	14	62	HSS-24
13E	10T	120	14	16.7	22.5	32	5.8	29	11	20	18	78	HSS-25
14E	11T	150/185	14	20.6	27.8	40	7.2	32	13	21	20	86	HSS-26
15E	13T	240	18	23.8	31.0	45	7.2	38	14	24	24	100	HSS-27
17E	14T	300	18	26.2	34.2	49	8.0	44	16	24	27	111	HSS-28
18E	15T	400/500	22	31.7	40.9	59	9.2	48	18	25	30	121	HSS-29
20E	19T	625	26	36.5	46.1	67	9.6	56	20	29	34	139	HSS-30



**CRIMPING TYPE TINNED COPPER HEAVY DUTY  
CABLE TERMINAL ENDS WITH INSPECTION  
SLOT (for XLPE CABLES)**

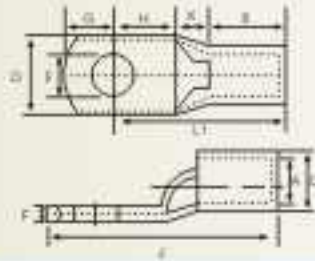
Material : Copper Tube to BS 1977 / IS 191 (part v)  
Specification : E.C. Grade 99.25% IACS  
Finish : Electro Tinned to BS 1872 (1984)



CABLE mm <sup>2</sup>	STUD HOLE E	DIMENSIONS							PROD. CODE
		A	C	D	G	H	B	J	
1.5	4.2	1.8	3.7	8	4	5	6	17	HT 1.5-4
	5.2	1.8	3.7	8	4	5	6	17	HT 1.5-5
	6.5	1.8	3.7	10	4	6	6	18	HT 1.5-6
2.5	4.2	2.4	4	8	4	5	8	19	HT 2.5-4
	5.2	2.4	4	8	4	5	8	19	HT 2.5-5
	6.5	2.4	4	10	5	6	8	21	HT 2.5-6
	8.4	2.4	4.2	12	6	9	8	26	HT 2.5-8
4	4.2	3.1	4.8	10	5	6	8	21	HT 4-4
	5.2	3.1	4.8	10	5	6	8	21	HT 4-5
	6.5	3.1	4.8	10	5	6	8	21	HT 4-6
	8.4	3.1	4.8	12	6	9	8	26	HT 4-8
6	5.2	3.8	5.5	10	5	6	10	24	HT 6-5
	6.5	3.8	5.5	10	5	6	10	24	HT 6-6
	8.4	3.8	5.5	12	6	9	10	28	HT 6-8
	10.5	3.8	6.0	15	8	11	10	32	HT 6-10
10	6.5	4.5	6.2	11	6	7	10	26	HT 10-6
	8.4	4.5	6.2	12	6	9	10	28	HT 10-8
	10.5	4.5	6.8	15	8	11	11	33	HT 10-10
16	6.5	5.4	7.1	12	7	7	12	30	HT 16-6
	8.4	5.4	7.1	12	7	7	12	30	HT 16-8
	10.5	5.4	7.6	15	8	12	12	36	HT 16-10
	13	5.4	7.6	17	11	13	12	39	HT 16-12
20	8.4	6	7.7	12	7	7	12	32	HT 20-8
25	6.5	6.8	8.8	13	7	7	12	30	HT 25-6
	8.4	6.8	8.8	13	7	7	12	30	HT 25-8
	10.5	6.8	8.8	15	10	11	13	38	HT 25-10
	13	6.8	9.2	17	10	12	15	41	HT 25-12
35	6.5	8.2	10.6	16	9	9	13.5	37	HT 35-6
	8.4	8.2	10.6	16	9	9	13.5	37	HT 35-8
	10.5	8.2	10.6	16	9	9	13.5	37	HT 35-10
	13	8.2	10.6	18	10	12	13.5	41	HT 35-12
	17	8.2	10.6	22	14	18	13.5	50	HT 35-16
50	8.4	9.5	12.4	18	9	10	17	42	HT 50-8
	10.5	9.5	12.4	18	9	10	17	42	HT 50-10
	13	9.5	12.4	20	10	12	17	45	HT 50-12
	17	9.5	12.4	22	15	15	18	54	HT 50-16
70	8.4	11.3	14.6	21	11	11	18.5	47	HT 70-8
	10.5	11.3	14.6	21	11	11	18.5	47	HT 70-10
	13	11.3	14.6	21	11	11	18.5	47	HT 70-12
	14.5	11.3	14.6	22	14	15	18.5	55	HT 70-14
	17	11.3	14.6	26	14	16	18.5	56	HT 70-16
95	10.5	13.5	17.4	25	12	13	21	53	HT 95-10
	13	13.5	17.4	25	12	13	21	53	HT 95-12
	14.5	13.5	17.4	25	14	15	22	55	HT 95-14
	17	13.5	17.4	25	14	16	22	56	HT 95-16

**CRIMPING TYPE TINNED COPPER HEAVY DUTY  
CABLE TERMINAL ENDS WITH INSPECTION  
SLOT (for XLPE CABLES)**

Material : Copper Tube to BS 1977 / IS 191 (part v)  
Specification : E.C. Grade 99.25% IACS  
Finish : Electro Tinned to BS 1872 (1984)

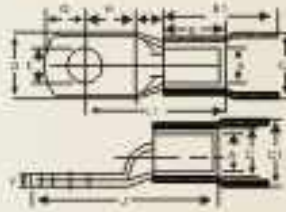


CABLE mm <sup>2</sup>	STUD HOLE E	DIMENSIONS							PROD. CODE
		A	C	D	G	H	B	J	
120	13	15	19.4	28	13	14	23	60	HT120-12
	14.5	15	19.4	28	13	14	23	60	HT120-14
	17	15	19.4	28	16	16	23	64	HT120-16
150	13	16.5	21.2	30	16	16	27	70	HT150-12
	14.5	16.5	21.2	30	16	16	27	70	HT150-14
	17	16.5	21.2	30	16	16	27	70	HT150-16
	21	16.5	21.2	30	19	16	27	73	HT150-20
185	13	18.5	23.5	34	17	19	32	80	HT185-12
	14.5	18.5	23.5	34	17	19	32	80	HT185-14
	17	18.5	23.5	34	17	19	32	80	HT185-16
	21	18.5	23.5	34	17	19	32	80	HT185-20
240	13	21	26.5	38	20	20	37	94	HT240-12
	17	21	26.5	38	20	20	37	94	HT240-14
	17	21	26.5	38	20	20	37	94	HT240-16
	21	21	26.5	38	20	20	37	94	HT240-20
	-	21	26.5	38	-	-	37	94	HT240-BL
300	13	23.5	30	43	22	22	42	102	HT300-12
	14.5	23.5	30	43	22	22	42	102	HT300-14
	17	23.5	30	43	22	22	42	102	HT300-16
	21	23.5	30	43	22	22	42	102	HT300-20
	-	23.5	30	43	-	-	42	102	HT300-BL
400	13	28.5	36.5	52.5	26	26	44	114	HT400-12
	14.5	28.5	36.5	52.5	26	26	44	114	HT400-14
	17	28.5	36.5	52.5	26	26	44	114	HT400-16
	21	28.5	36.5	52.5	26	26	44	114	HT400-20
	-	28.5	36.5	52.5	-	-	44	114	HT400-BL
500	17	30	39	56	28	28	48	121	HT500-16
	21	30	39	56	28	28	48	121	HT500-20
	-	30	39	56	-	-	48	121	HT500-BL
630	17	35	45	63.8	33	33	58	144	HT630-16
	21	35	45	63.8	33	33	58	144	HT630-20
	-	35	45	63.8	-	-	58	144	HT630-BL
*630	16	35	41.5	61	25	25	70	144	HLT630-16
*630	20	35	41.5	61	25	25	70	144	HLT630-20
800	-	39	50.6	72	-	-	78	170	HT800-BL
1000	-	43	56.2	78.5	-	-	90	200	HT1000-BL



## CRIMPING TYPE TUBULAR CABLE LUGS WITH INSULATION

Material : Copper Tube to BS 1977 / IS 191 (part v)  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)

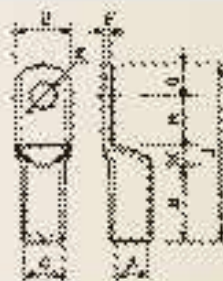


CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS									PROD. CODE
		A	C	C1	D	G	H	B	B1	J	
10	6.5	4.5	6.2	8	12	6	7	9	17	25	HTI 10-6
10	8.4	4.5	6.2	8	12	6	9	9	17	27	HTI 10-8
10	10.5	4.5	6.2	8	15	9	11	9	17	32	HTI 10-10
16	6.5	5.4	7.1	10	12	7	7	12	21	30	HTI 16-6
16	8.4	5.4	7.1	10	12	7	7	12	21	32	HTI 16-8
16	10.5	5.4	7.8	10	15	9	11	12	21	36	HTI 16-10
16	13.0	5.4	7.8	10	18	10	12	12	21	38	HTI 16-12
20	8.4	6.0	7.7	10	12	7	9	12	21	32	HTI 20-8
25	6.5	6.8	8.8	11	13	7	7	12	24	30	HTI 25-6
25	8.4	6.8	8.8	11	16	7	7	12	24	37	HTI 25-8
25	10.5	6.8	8.8	11	18	10	11	12	24	37	HTI 25-10
25	13.0	6.8	8.8	11	18	10	11	12	24	37	HTI 25-12
35	6.5	8.2	10.6	14	15.3	9	9	12	27	35	HTI 35-6
35	8.4	8.2	10.6	14	15.3	9	9	12	27	35	HTI 35-8
35	10.5	8.2	10.6	14	18	10	11	12	27	38	HTI 35-10
35	13.0	8.2	10.6	14	18	10	11	12	27	38	HTI 35-12
35	13.0	8.2	10.6	14	20	12	13	12	27	43	HTI 35-16
50	8.4	9.5	12.4	16	17.8	10	11	16	32	43	HTI 50-8
50	10.5	9.5	12.4	16	17.8	10	11	16	32	43	HTI 50-10
50	13.0	9.5	12.4	16	18	10	11	16	32	43	HTI 50-12
50	16.0	9.5	12.4	16	20	12	13	16	32	47	HTI 50-16
70	8.4	11.2	14.7	18	21	12	13	18	33	50	HTI 70-8
70	10.5	11.2	14.7	18	21	12	13	18	33	50	HTI 70-10
70	13.0	11.2	14.7	18	21	12	13	18	33	50	HTI 70-12
70	14.7	11.2	14.7	18	28	16	16	18	33	57	HTI 70-14
70	17.0	11.2	14.7	18	28	16	16	18	33	57	HTI 70-16
95	10.5	13.5	17.4	20	25	13	13	20	40	55	HTI 95-10
95	13.0	13.5	17.4	20	25	16	16	20	40	55	HTI 95-12
95	14.7	13.5	17.4	20	28	16	16	20	40	61	HTI 95-14
95	17.0	13.5	17.4	20	28	13	13	20	40	55	HTI 95-16
120	13.0	15.0	19.4	22	28	14	14	22	40	60	HTI 120-12
120	14.7	15.0	19.4	22	28	16	16	22	40	64	HTI 120-14
120	17.0	15.0	19.4	22	28	16	16	22	40	64	HTI 120-16
150	13.0	16.5	21.2	24	30	16	16	26	48	69	HTI 150-12
150	14.7	16.5	21.2	24	30	16	16	26	48	69	HTI 150-14
150	17.0	16.5	21.2	24	30	16	16	26	48	69	HTI 150-16
150	21.0	16.5	21.2	24	34	19	23	26	48	79	HTI 150-20



## CRIMPING TYPE COPPER TUBULAR TERMINAL ENDS WITH LONG BARREL FOR ALUMINIUM CONECTORS

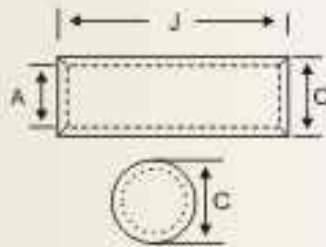
Material : OFHC COPPER BS 1977  
Finish : Electro Tinned



CABLE mm <sup>2</sup>	BOLT E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	G	J	
2.5	M5	2.0	3.7	9	1.0	10.5	3	5	5	23.5	HEB - 05
4	M6	3.1	4.8	11	1.0	10.5	3	6	6	23.5	HEB - 06
6	M6	3.8	5.5	11	1.0	13.5	3	6	6	28.5	HEB - 07
10	M6	4.4	6.2	11	1.3	13.5	3	6	6	28.5	HEB - 08
16	M6	5.3	7.1	11	1.6	18.0	4	8	6	36.0	HEB - 09
25	M6	7.0	9.0	13	2.0	18.0	5	12	8	43.0	HEB - 10
35	M6	8.0	10.0	15	2.0	18.0	5	12	8	43.0	HEB - 11
35	M8	8.0	10.0	15	2.0	18.0	5	12	8	43.0	HEB - 12
50	M6	9.2	11.2	16	2.0	24.0	8	11	10	53.0	HEB - 13
50	M8	9.2	11.2	16	2.0	24.0	8	11	10	53.0	HEB - 14
50	M10	9.2	11.2	16	2.0	24.0	8	11	10	53.0	HEB - 15
70	M8	11.6	13.8	20	2.2	27	10	15	13	65.0	HEB - 16
70	M10	11.6	13.8	20	2.2	27	10	15	13	65.0	HEB - 17
70	M12	11.6	13.8	20	2.2	27	10	15	13	65.0	HEB - 18
95	M10	12.8	15.6	23	2.8	30	10	15	13	68.0	HEB - 19
95	M12	12.8	15.6	23	2.8	30	10	15	13	68.0	HEB - 20
120	M10	14.8	17.8	26	3.0	33.0	10	16	14	73.0	HEB - 21
120	M12	14.8	17.8	26	3.0	33.0	10	16	14	73.0	HEB - 22
120	M16	14.8	17.8	26	3.0	33.0	10	16	14	73.0	HEB - 23
150	M10	16.0	19.6	28	3.6	39.0	11	18	15	83.0	HEB - 24
150	M12	16.0	19.6	28	3.6	39.0	11	18	15	83.0	HEB - 25
150	M16	16.0	19.6	28	3.6	39.0	11	18	15	83.0	HEB - 26
185	M12	18.0	22.0	32	4.0	45.0	11	21	21	98.0	HEB - 27
185	M16	18.0	22.0	32	4.0	45.0	11	21	21	98.0	HEB - 28
225	M16	20.0	24.0	35	4.0	51.0	13	24	24	112.0	HEB - 231
240	M16	22.0	26.0	38	4.0	54.0	13	24	24	115.0	HEB - 29
240	M20	22.0	26.0	38	4.0	54.0	13	24	24	115.0	HEB - 30
300	M16	24.0	28.7	42	4.7	58.0	13	26	25	112.0	HEB - 31
300	M20	24.0	28.7	42	4.7	58.0	13	26	25	112.0	HEB - 32
400	M20	28.0	33.2	49	5.2	66.0	18	27	27	138.0	HEB - 33
500	M20	30.0	36.0	53	6.0	72.0	18	27	27	144.0	HEB - 34
630	M20	35.0	41.5	61	6.5	83.0	18	33	31	165.0	HEB - 35
800	-	39.0	46.3	67	7.3	98.0	25	38	37	198.0	HEB - 62
1000	-	43.0	53.8	76	10.8	135.0	30	45	45	255.0	HEB - 76

**CRIMPING TYPE  
TINNED COPPER IN - LINE CONNECTORS**

Material : Copper Tube to BS 1977 / IS 191 (part v)  
Specification : E.C. Grade 99.25% IACS  
Finish : Electro Tinned to BS 1872 (1984)



CABLE SIZE mm <sup>2</sup>	DIMENSIONS			PROD. CODE
	A	C	J	
1.5	1.6	3.2	7	HI - 450
2.5	2.4	4.0	7	HI - 451
4 - 6	3.5	5.5	7	HI - 452
10	4.4	6.2	9	HI - 456
16	5.6	8.0	10	HI - 457
25	7.5	11.1	11	HI - 484
35	9.0	12.6	12	HI - 485
50	10.5	14.1	16	HI - 477
70	12.0	16.0	18	HI - 478
95	13.5	18.1	20	HI - 479

CABLE SIZE mm <sup>2</sup>	DIMENSIONS			PROD. CODE
	A	C	J	
1.5	1.6	3.2	15	HI - 453
2.5	2.4	4.0	15	HI - 454
4 - 6	3.5	5.5	15	HI - 455
10	4.4	6.2	20	HI - 460
16	5.6	8.0	23	HI - 461
25	7.5	11.1	25	HI - 486
35	9.0	12.6	27	HI - 487
50	10.5	14.1	38	HI - 480
70	12.0	16.0	42	HI - 481
95	13.5	18.1	48	HI - 482

**TINNED COPPER  
IN - LINE CONNECTORS**

CABLE SIZE mm <sup>2</sup>	DIMENSIONS			PROD. CODE
	A	C	J	
1.5	1.6	3.2	15	HI - 453
2.5	2	3.7	15	HI - 23
6	3.1	4.8	15	HI - 3
10	3.8	5.5	15	HI - 4
10	4.4	6.2	20	HI - 460
16	5.3	7.1	20	HI - 6
25	7	9.0	25	HI - 7
35	8	10.0	30	HI - 8
50	9.2	11.2	35	HI - 9
70	11.5	13.8	40	HI - 10
95	12.8	15.6	45	HI - 11
120	14.8	17.8	50	HI - 12
150	16	19.6	55	HI - 13
185	18	22.0	60	HI - 14
225	20	24.0	65	HI - 20
240	22	26.0	65	HI - 15
300	24	28.7	75	HI - 16
400	28	33.2	90	HI - 17
500	30	36.0	95	HI - 18
625	35	41.2	105	HI - 19
800	39	46.3	120	HI - 21
1000	43	53.8	150	HI - 22

**TINNED COPPER  
IN - LINE CONNECTORS - HEAVY DUTY**

CABLE SIZE mm <sup>2</sup>	DIMENSIONS			PROD. CODE
	A	C	J	
2.5	2.4	4.0	15	HI - 454
4	3.1	4.8	15	HI - 3
6	3.8	5.5	15	HI - 4
10	4.5	6.2	20	HI - 460
16	5.4	7.1	20	HI - 6
25	6.8	8.8	32	HI - 24
35	8.2	10.6	36	HI - 25
50	9.5	12.4	40	HI - 26
70	11.2	14.7	50	HI - 27
95	13.5	17.4	60	HI - 28
120	15.0	19.4	65	HI - 29
150	16.5	21.2	70	HI - 30
185	18.5	23.5	75	HI - 31
240	21.0	26.5	90	HI - 32
300	23.5	30.0	100	HI - 33
400	28.5	36.5	120	HI - 34
500	30.0	39.0	130	HI - 35
625	35.0	45.0	140	HI - 36



## CRIMPING TYPE TINNED COPPER CABLE END SEALING FERRULES

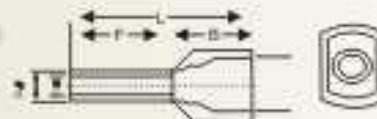
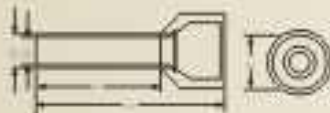
Material : Copper Tube to BS 1977 / IS 191 (part v)  
 Specification : E.C. Gade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)



CABLE SIZE mm <sup>2</sup>	DIMENSIONS						PROD. CODE
	A	C	C1	K	R	J	
0.50	1.0 - 1.1	1.4 - 1.5	2.1	0.7	0.8	6	HSF - 508
0.75	1.4 - 1.5	1.8 - 1.9	2.5	0.7	0.8	6	HSF - 509
1.0	1.6 - 1.7	2.0 - 2.1	2.7	0.7	0.8	6	HSF - 510
1.0	1.6 - 1.7	2.0 - 2.1	2.7	0.7	0.8	10	HSF - 511
1.5	1.8 - 1.9	2.2 - 2.3	2.9	1.0	1.2	7	HSF - 512
1.5	1.8 - 1.9	2.2 - 2.3	2.9	1.0	1.2	10	HSF - 513
2.5	2.3 - 2.4	2.7 - 2.8	3.5	1.0	1.2	7	HSF - 514
2.5	2.3 - 2.4	2.7 - 2.8	3.5	1.0	1.2	12	HSF - 515
4	2.8 - 2.9	3.2 - 3.3	4.0	1.0	1.2	9	HSF - 516
4	2.8 - 2.9	3.2 - 3.3	4.0	1.0	1.2	12	HSF - 517
6	3.7 - 3.8	4.1 - 4.2	4.8	1.0	1.2	10	HSF - 518
6	3.7 - 3.8	4.1 - 4.2	4.8	1.0	1.2	12	HSF - 519
6	3.7 - 3.8	4.1 - 4.2	4.8	1.0	1.2	15	HSF - 520
10	4.6 - 4.7	5.0 - 5.1	5.8	1.2	1.2	12	HSF - 521
10	4.6 - 4.7	5.0 - 5.1	5.8	1.2	1.2	15	HSF - 522
10	4.6 - 4.7	5.0 - 5.1	5.8	1.2	1.2	18	HSF - 523
16	5.9 - 6.0	6.3 - 6.4	7.5	1.5	1.6	12	HSF - 524
16	5.9 - 6.0	6.3 - 6.4	7.5	1.5	1.6	15	HSF - 525
16	5.9 - 6.0	6.3 - 6.4	7.5	1.5	1.6	18	HSF - 526

## INSULATED END-SEALING FERRULES

Material : E - Copper • Finish : Electro Tinned



## TWIN END SEALING FERRULES

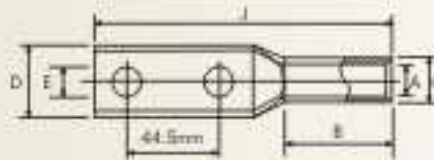
CABLE mm <sup>2</sup>	TYPE	COLOUR	DIMENSIONS				
			F	L	W	D	C
0.5	E 0506	White	6.0	12.0	--	--	--
0.5	E 0508	White	8.0	14.0	2.8	1.3	1.0
0.5	E 0510	White	10.0	16.0	--	--	--
0.75	E 7506	Blue	6.0	12.4	--	--	--
0.75	E 7508	Blue	8.0	14.6	2.8	1.5	1.2
0.75	E 7510	Blue	10.0	16.4	--	--	--
1	E 1006	Red	6.0	12.4	--	--	--
1	E 1008	Red	8.0	14.6	3.0	1.7	1.4
1	E 1010	Red	10.0	16.4	--	--	--
1.5	E 1508	Black	8.0	14.6	3.5	2.0	1.7
1.5	E 1510	Black	10.0	16.4	--	--	--
2.5	E 2508	Gray	8.0	15.2	4.0	2.6	2.3
2.5	E 2510	Gray	10.0	17.2	--	--	--
4	E 4008	Orange	8.0	16.5	4.4	3.2	2.8
4	E 4012	Orange	12.0	19.4	--	--	--
6	E 6012	Green	12.0	20.0	6.3	3.9	3.5
10	E 10-12	Brown	12.0	21.5	7.8	4.9	4.5
16	E 16-12	White	12.0	22.2	8.8	6.2	5.8

CONDUCTOR mm <sup>2</sup>	COLOR	DIMENSIONS						PROD. CODE
		F	L	W	B	D	C	
2 X0.50	White	8.0	14.5	5.0	6.5	1.8	1.5	HTSFI 0508
2 X0.75	Blue	8.0	14.7	5.5	6.7	2.1	1.8	HTSFI 7508
2 X0.75	Blue	10.0	16.7	5.5	7.1	2.3	2.0	HTSFI 7510
2 X1.00	Red	8.0	15.1	5.5	7.1	2.3	2.0	HTSFI 1008
2 X1.00	Red	10.0	17.1	5.5	7.2	2.6	2.3	HTSFI 1010
2 X1.50	Black	8.0	15.5	6.4	7.5	2.6	2.3	HTSFI 1508
2 X1.50	Black	12.0	19.5	6.4	8.5	3.3	2.9	HTSFI 1512
2 X2.50	Grey	10.0	18.5	8.0	8.5	3.3	2.9	HTSFI 2510
2 X2.50	Grey	13.0	21.5	8.0	5.0	5.0	5.0	HTSFI 2513
2 X4.00	Orange	12.0	23.1	8.8	11.1	4.2	3.8	HTSFI 4012
2 X6.00	Green	14.0	26.1	9.5	12.1	5.3	4.9	HTSFI 6014
2 X10.00	Brown	14.0	27.0	13.0	12.0	7.0	7.0	HTSFI 10-14
2 X16.00	Ivory	14.0	31.3	19.0	17.0	8.7	8.3	HTSFI 16-14



### CRIMPING TYPE COPPER CABLE TERMINAL ENDS WITH EXTENDED PALM ( 2 HOLE )

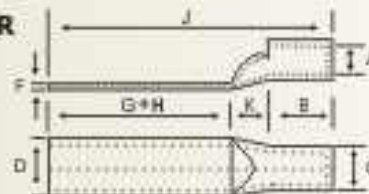
Material : E - Copper Tube to BS 1977 / IS 191 (part v)  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)



CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS					PROD. CODE
		A	C	D	B	J	
18	10.5	5.4	7.6	14.5	16	100	HT16 2E10
25	10.5	6.8	8.8	15	16	100	HT25 2E10
35	10.5	8.2	10.6	16.5	16	100	HT35 2E10
50	10.5	9.5	12.4	17	25	109	HT50 2E10
50	13	9.5	12.4	17	25	109	HT50 2E12
70	10.5	11.3	14.7	21	30	114	HT70 2E10
70	13	11.3	14.7	21	30	114	HT70 2E12
95	10.5	13.5	17.4	25	30	116	HT95 2E10
95	13	13.5	17.4	25	30	116	HT95 2E12
120	10.5	15	19.4	27.5	35	122	HT120 2E10
120	13	15	19.4	27.5	35	122	HT120 2E12
150	10.5	16.5	21.2	30	40	126	HT150 2E10
150	13	16.5	21.2	30	40	126	HT150 2E12
185	10.5	18.5	23.5	33.5	42	132	HT185 2E10
185	13	18.5	23.5	33.5	42	132	HT185 2E12
240	10.5	21	26.5	38.5	50	143	HT240 2E10
240	13	21	26.5	38.5	50	143	HT240 2E12
300	13.7	23.5	30	43	55	144	HT3002E10
400	13.7	28.5	36.5	52.5	60	149	HT4002E10
500	13.7	30	39	56	65	160	HT5002E10
630	13.7	35	45	58.8	75	160	HT6302E10

### CRIMPING TYPE TINNED COPPER TRANSFORMER TERMINAL ENDS LONG PALM WITHOUT HOLE

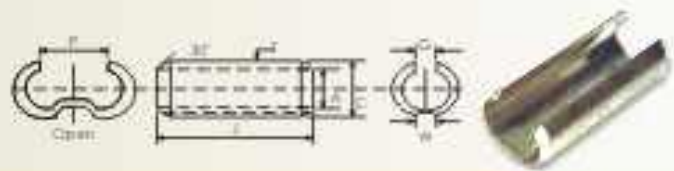
Material : Copper Tube to BS 1977 / IS 191 (part v)  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)



CABLE SIZE mm <sup>2</sup>	DIMENSIONS								PROD. CODE
	A	C	D	F	B	K	G+H	J	
50	9.5	12.4	18	2.9	16	6	42	64	HS-466
70	11.2	14.7	21	3.5	18	7	50	75	HS-467
95	13.5	17.4	25	3.9	20	9	52	81	HS-468
120	15.0	19.4	28	4.4	22	10	56	88	HS-469
150	16.5	21.2	30	4.7	26	11	64	101	HS-470
185	18.5	23.5	34	5.0	32	12	68	112	HS-471
240	21.0	26.5	38	5.5	38	14	80	132	HS-472
300	23.5	30.0	43	6.5	42	15	88	145	HS-473
400	28.5	36.5	53	8.0	44	18	104	166	HS-474
500	30.0	39.0	56	9.0	48	20	112	180	HS-475
625	35.0	45.0	65	10.0	56	22	132	210	HS-476

**SOLDERING TYPE COPPER WEAK BACK FERRULES**

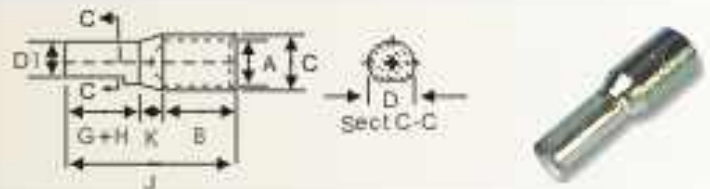
Material : E - Copper Tube to BS 1977 / IS 191 (part v)  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)



CABLE SIZE mm <sup>2</sup>	DIMENSIONS						PROD. CODE
	A	C	G	J	P	W	
6	3.0	4.6	2	20	3	-	HWB - 6
10	4.4	6.0	2	25	4	-	HWB - 10
16	5.5	7.5	2	25	5	1.5	HWB - 16
25	7.0	9.0	2	30	7	1.5	HWB - 25
35	8.0	10.4	2	35	8	1.5	HWB - 35
50	9.5	11.9	2	40	9	1.5	HWB - 50
70	12.0	14.8	3	45	12	3.0	HWB - 70
95	13.5	16.3	3	50	13	3.0	HWB - 95
120	15.5	18.7	4	55	15	3.0	HWB - 120
150	17.0	20.6	4	60	16	3.0	HWB - 150
185	18.5	22.9	4	65	18	5.0	HWB - 185
225	20.5	24.9	5	75	20	5.0	HWB - 225
240	22.0	26.4	5	80	21	5.0	HWB - 240
300	24.0	29.6	5	85	23	5.0	HWB - 300
400	28.5	34.7	7	95	27	5.0	HWB - 400
500	30.5	37.5	7	105	30	5.0	HWB - 500
625	34.5	42.5	8	115	33	5.0	HWB - 625

**CRIMPING TYPE TINNED COPPER REDUCER TYPE TERMINAL ENDS**

Material : Copper Tube to BS 1977 / IS 191 (part v)  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)

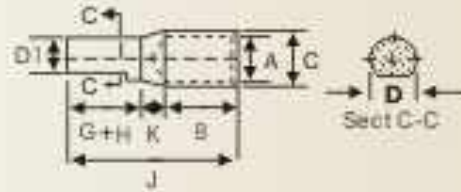


CABLE SIZE mm <sup>2</sup>	DIMENSIONS								PROD. CODE
	A	C	D	D1	B	K	G+H	J	
2.5	2.5	4.7	3.8	3.3	6	4	10	20	HPC - 7
4	2.8	4.7	3.8	3.3	6	4	10	20	HPC - 16
6	3.1	4.7	3.8	3.3	6	4	10	20	HPC - 18
10	3.8	5.5	3.8	3.3	9	4	10	23	HPC - 20
16	5.3	7.1	3.8	3.3	12	5	13	30	HPC - 2
25	7.0	9.0	6.0	5.5	12	5	15	32	HPC - 25
25	7.0	9.0	7.5	6.5	12	5	20	37	HPC - 3
35	8.0	10.0	7.5	6.5	12	5	20	37	HPC - 4
50	9.2	11.2	7.5	6.5	16	5	20	41	HPC - 26
70	11.5	13.8	7.5	6.5	18	5	20	43	HPC - 27
70	11.5	13.8	11.5	10.5	18	5	25	48	HPC - 6
70	11.5	13.8	11.5	10.5	18	5	32	55	HPC - 28
95	12.8	15.6	11.5	10.5	20	6	25	51	HPC - 29
95	12.8	15.6	7.5	6.5	20	6	22	48	HPC - 31
95	12.8	15.6	15.6	14.0	20	6	27	53	HPC - 8
120	14.8	17.8	11.5	10.5	22	6	25	53	HPC - 32
120	14.8	17.8	7.5	6.5	22	6	22	50	HPC - 34
120	14.8	17.8	11.5	10.5	22	6	32	60	HPC - 35
150	16.0	19.6	11.5	10.5	26	6	32	64	HPC - 37
185	18.0	22.0	11.5	10.5	32	6	32	70	HPC - 38
240	22.0	26.0	16.0	15.0	38	8	42	88	HPC - 44
300	24.0	28.7	16.0	15.0	42	8	42	92	HPC - 45
400	28.0	33.2	15.6	14.0	46	12	32	90	HPC - 48



## CRIMPING TYPE ALUMINIUM REDUCER TYPE TERMINAL ENDS

Material : Aluminium  
Finish : Natural / Passivated Al.

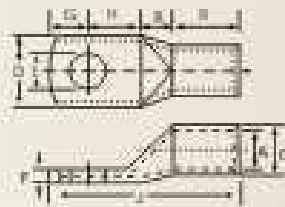


CABLE SIZE mm <sup>2</sup>	DIMENSIONS								PROD. CODE
	A	C	D	B	D1	G+H	K	J	
2.5	2.0	5.5	4.5	7	4.0	10	4	21	HPA - 01
2.5	2.6	5.5	3.8	7	3.3	10	4	21	HPA - 07
4	2.9	5.5	4.5	7	4.0	10	4	21	HPA - 15
4	2.9	5.5	3.8	7	3.3	10	4	21	HPA - 16
6	3.5	5.5	4.5	7	4.0	10	4	21	HPA - 17
6	3.5	5.5	3.8	7	3.3	10	4	21	HPA - 18
10	3.8	7.4	4.5	9	4.0	10	4	23	HPA - 19
10	3.8	7.4	3.8	9	3.3	10	4	23	HPA - 20
10	4.4	7.4	4.5	9	4.0	10	4	23	HPA - 21
10	4.4	7.4	3.8	9	3.3	10	4	23	HPA - 22
16	5.4	8.3	6.0	13	5.5	15	5	33	HPA - 23
16	5.4	8.3	6.0	13	5.5	20	5	38	HPA - 24
16	5.4	8.3	3.8	13	3.3	13	5	31	HPA - 02
25	7.0	10.0	6.0	16	5.5	15	5	36	HPA - 25
25	7.0	10.0	7.5	16	6.5	20	5	41	HPA - 03
35	8.0	10.8	7.5	18	6.5	20	5	43	HPA - 04
50	9.3	13.0	7.5	22	6.5	20	5	47	HPA - 26
50	10.4	14.0	14.0	22	1.3	24	7	53	HPA - 05
70	11.6	16.0	7.5	26	6.5	20	5	51	HPA - 27
70	11.6	16.0	11.5	26	10.5	25	5	56	HPA - 06
70	11.6	16.0	11.5	26	10.5	32	5	63	HPA - 28
95	12.9	17.1	11.5	28	10.5	25	6	59	HPA - 29
95	12.9	17.1	15.6	28	14.0	27	6	61	HPA - 08
95	12.9	17.1	7.5	28	6.5	22	6	56	HPA - 31
95	12.9	17.1	12.8	28	11.8	32	6	66	HPA - 32
120	14.8	19.6	11.5	32	10.5	25	6	63	HPA - 33
120	14.8	19.6	7.5	32	6.5	22	6	60	HPA - 34
120	14.8	19.6	11.5	32	10.5	32	6	70	HPA - 35
120	14.8	19.6	15.6	32	14.0	32	6	70	HPA - 36
150	16.1	21.2	15.6	34	14.0	32	6	72	HPA - 10
150	16.1	21.2	11.5	34	10.5	32	6	72	HPA - 37
185	18.0	23.7	15.6	36	14.0	32	6	74	HPA - 30
185	18.0	23.7	11.5	36	10.5	32	6	74	HPA - 38
225	20.6	27.0	15.6	40	14.0	32	8	80	HPA - 39
225	20.6	27.0	21.0	40	18.0	42	8	90	HPA - 46
225	20.6	27.0	16.0	40	15.0	42	8	90	HPA - 42
240	22.0	28.0	16.0	44	15.0	42	8	94	HPA - 44
240	22.0	28.0	15.6	44	14.0	32	8	84	HPA - 43
300	24.0	31.0	16.0	47	15.0	42	8	97	HPA - 45
300	24.0	31.0	15.6	47	14.0	32	8	87	HPA - 47



**CRIMPING TYPE ALUMINUM CABLE TERMINAL ENDS for ALUMINUM CONDUCTORS**

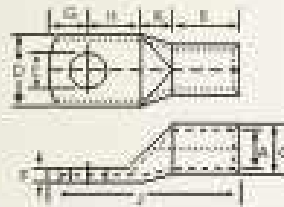
Material : Aluminum  
Finish : Natural / Passivated Al



CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	G	J	
2.5	3.2	2.0	5.5	6.6	3.5	7	3	4	4	18	HAS - 151
2.5	3.7	2.6	5.5	7.0	2.9	7	3	4	4	18	HAS - 309
4	4.2	2.9	5.5	7.2	2.6	7	3	4	4	18	HAS - 155
4	5.1	2.9	5.5	12	1.2	7	4	7	6	23	HAS - 317
6	5.2	3.5	5.5	7.5	2.0	7	4	7	6	24	HAS - 158
6	6.5	3.5	5.5	12.0	1.1	7	4	7	6	24	HAS - 313
10	4.2	3.8	6.2	8.4	2.4	7	4	9	8	28	HAS - 159
10	6.4	4.4	7.2	9.7	2.8	9	4	9	8	30	HAS - 214
10	8.2	4.4	7.2	15.0	1.8	9	4	9	8	30	HAS - 215
16	6.4	5.4	8.3	11.4	2.9	13	4	11	9	37	HAS - 252
16	8.2	5.4	8.3	11.4	2.9	13	4	11	9	37	HAS - 216
16	10.2	5.4	8.3	18.0	1.8	13	4	11	9	37	HAS - 217
25	6.4	7.0	9.7	13.7	2.7	16	7	12	9	44	HAS - 253
25	8.2	7.0	9.7	13.7	2.7	16	7	12	9	44	HAS - 218
25	10.2	7.0	9.7	20.0	1.7	16	7	11	10	44	HAS - 219
25	12.7	7.0	9.7	20.0	1.7	16	7	11	10	44	HAS - 220
35	6.4	8.0	10.8	15.4	2.8	18	7	11	11	47	HAS - 254
35	8.2	8.0	10.8	15.4	2.8	18	7	11	11	47	HAS - 221
35	10.2	8.0	10.8	20.0	2.1	18	7	11	11	47	HAS - 222
50	8.2	9.3	13.0	18.3	3.7	22	8	13	11	54	HAS - 255
50	10.2	9.3	13.0	23.0	2.8	22	8	13	11	54	HAS - 312
50	12.7	9.3	13.0	23.0	2.8	22	8	12	12	54	HAS - 224
70	8.2	11.6	16.0	22.6	4.4	26	8	13	13	60	HAS - 256
70	10.2	11.6	16.0	22.6	4.4	26	8	13	13	60	HAS - 225
70	12.7	11.6	16.0	22.6	4.4	26	8	13	13	60	HAS - 226
95	10.2	12.9	17.1	24.5	4.2	28	8	14	14	64	HAS - 227
95	12.7	12.9	17.1	24.5	4.2	28	8	14	14	64	HAS - 228
95	16.2	12.9	17.1	24.5	4.2	28	8	14	14	64	HAS - 229
120	10.2	15.0	19.6	28.2	4.6	32	11	15	15	73	HAS - 257
120	12.7	15.0	19.6	28.2	4.6	32	11	15	15	73	HAS - 230
120	16.2	15.0	19.6	28.2	4.6	32	11	15	15	73	HAS - 231
150	10.2	16.5	21.5	30.9	5.0	34	11	17	17	79	HAS - 258
150	12.7	16.5	21.5	30.9	5.0	34	11	17	17	79	HAS - 232
150	16.2	16.5	21.5	30.9	5.0	34	11	17	17	79	HAS - 233
185	12.7	18.6	24.0	34.6	5.5	36	12	18	18	84	HAS - 311
185	12.7	18.5	24.0	34.6	5.5	36	12	18	18	84	HAS - 234
185	16.2	18.5	24.0	34.6	5.5	36	12	18	18	84	HAS - 235
225	12.7	21.0	27.0	39.0	6.0	40	14	20	20	94	HAS - 320
240	12.7	22.0	28.6	41.2	6.6	44	14	22	22	102	HAS - 236
240	16.2	22.0	28.6	41.2	6.6	44	14	22	22	102	HAS - 237
300	16.2	25.0	32.0	46.3	7.0	47	14	27	27	115	HAS - 300
300	20.3	25.0	32.0	46.3	7.0	47	14	27	27	115	HAS - 259
400	20.3	29.0	37.5	54.1	8.5	56	13	31	30	130	HAS - 260
500	20.3	31.0	41.0	58.7	10.0	60	15	33	32	140	HAS - 296
630	20.3	36.0	46.0	66.6	10.0	69	16	35	34	154	HAS - 261
800	-	39.0	51.0	73.3	12.0	77	25	39	39	180	HAS - 318
1000	-	43.5	57.0	81.9	13.5	100	30	45	45	220	HAS - 319

**CRIMPING TYPE ALUMINIUM BI - METALLIC TIN PLATED CABLE TERMINAL ENDS**

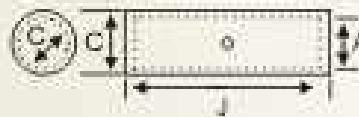
Material : Aluminium  
Finish : Tinned



CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	G	J	
2.5	3.2	2.0	5.5	6.6	3.5	7	3	4	4	18	HBAS - 151
2.5	3.7	2.6	5.5	7.0	2.9	7	3	4	4	18	HBAS - 309
4	4.2	2.9	5.5	7.2	2.6	7	3	4	4	18	HBAS - 155
4	5.1	2.9	5.5	12.0	1.2	7	4	7	6	23	HBAS - 317
6	5.2	3.5	5.5	7.5	2.0	7	4	7	6	24	HBAS - 158
6	6.5	3.5	5.5	12.0	1.1	7	4	7	6	24	HBAS - 313
10	4.2	3.8	6.2	8.4	2.4	7	4	9	8	28	HBAS - 159
10	6.4	4.4	7.2	9.7	2.8	9	4	9	8	30	HBAS - 214
10	8.2	4.4	7.2	15.0	1.8	9	4	9	8	30	HBAS - 215
16	6.4	5.4	8.3	11.4	2.9	13	4	11	9	37	HBAS - 252
16	8.2	5.4	8.3	11.4	2.9	13	4	11	9	37	HBAS - 216
16	10.2	5.4	8.3	18.0	1.8	13	4	11	9	37	HBAS - 217
25	6.4	7.0	9.7	13.7	2.7	16	7	12	9	44	HBAS - 253
25	8.2	7.0	9.7	13.7	2.7	16	7	12	9	44	HBAS - 218
25	10.2	7.0	9.7	20.0	1.7	16	7	11	10	44	HBAS - 219
25	12.7	7.0	9.7	20.0	1.7	16	7	11	10	44	HBAS - 220
35	6.4	8.0	10.8	15.4	2.8	18	7	11	11	47	HBAS - 254
35	8.2	8.0	10.8	15.4	2.8	18	7	11	11	47	HBAS - 221
35	10.2	8.0	10.8	20.0	2.1	18	7	11	11	47	HBAS - 222
50	8.2	9.3	13.0	18.3	3.7	22	8	13	11	54	HBAS - 255
50	10.2	9.3	13.0	23.0	2.8	22	8	13	11	54	HBAS - 312
50	12.7	9.3	13.0	23.0	2.8	22	8	12	12	54	HBAS - 224
70	8.2	11.6	16.0	22.6	4.4	26	8	13	13	60	HBAS - 256
70	10.2	11.6	16.0	22.6	4.4	26	8	13	13	60	HBAS - 225
70	12.7	11.6	16.0	22.6	4.4	26	8	13	13	60	HBAS - 226
95	10.2	12.9	17.1	24.5	4.2	28	8	14	14	64	HBAS - 227
95	12.7	12.9	17.1	24.5	4.2	28	8	14	14	64	HBAS - 228
95	16.2	12.9	17.1	24.5	4.2	28	8	14	14	64	HBAS - 229
120	10.2	15.0	19.6	28.2	4.6	32	11	15	15	73	HBAS - 257
120	12.7	15.0	19.6	28.2	4.6	32	11	15	15	73	HBAS - 230
120	16.2	15.0	19.6	28.2	4.6	32	11	15	15	73	HBAS - 231
150	10.2	16.5	21.5	30.9	5.0	34	11	17	17	79	HBAS - 258
150	12.7	12.7	21.5	30.9	5.0	34	11	17	17	79	HBAS - 232
150	16.2	16.5	21.5	30.9	5.0	34	11	17	17	79	HBAS - 233
185	12.7	18.6	24.0	34.6	5.5	36	12	18	18	84	HBAS - 311
185	12.7	18.5	24.0	34.6	5.5	36	12	18	18	84	HBAS - 234
185	16.2	18.5	24.0	34.6	5.5	36	12	18	18	84	HBAS - 235
225	12.7	21.0	27.0	39.0	6.0	40	14	20	20	94	HBAS - 320
240	12.7	22.0	28.6	41.2	6.6	44	14	22	22	102	HBAS - 236
240	16.2	22.0	28.6	41.2	6.6	44	14	22	22	102	HBAS - 237
300	16.2	25.0	32.0	46.3	7.0	47	14	27	27	115	HBAS - 300
300	20.3	25.0	32.0	46.3	7.0	47	14	27	27	115	HBAS - 259
400	20.3	29.0	37.5	54.1	8.5	56	13	31	30	130	HBAS - 260
500	20.3	31.0	41.0	58.7	10.0	60	15	33	32	140	HBAS - 296
630	20.3	36.0	46.0	66.6	10.0	69	16	35	34	154	HBAS - 261
800	-	39.0	51.0	73.3	12.0	77	25	39	39	180	HBAS - 318
1000	-	43.5	57.0	81.9	13.5	100	30	45	45	220	HBAS - 319

**CRIMPING TYPE ALUMINIUM IN - LINE CONNECTORS for ALUMINIUM CONDUCTORS**

Material : Aluminium  
Finish : Natural / Passivated Al.



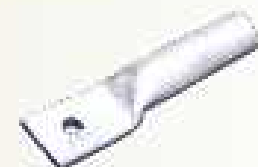
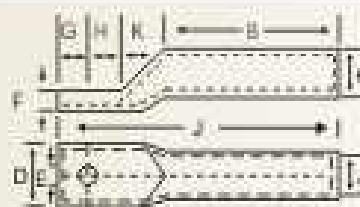
CABLE SIZE mm <sup>2</sup>	DIMENSIONS			PROD. CODE
	A	C	J	
2.5	2.0	5.5	16	HAI - 145
2.5	2.6	5.5	16	HAI - 6
4	2.9	5.5	16	HAI - 5
6	3.5	5.5	16	HAI - 13
10	3.8	6.2	20	HAI - 146
10	4.4	7.4	20	HAI - 14
16	5.4	8.3	26	HAI - 4
25	7.0	9.7	35	HAI - 3
35	8.0	10.8	40	HAI - 2
50	9.3	13.0	45	HAI - 12
70	11.6	16.0	55	HAI - 1
95	12.9	17.1	60	HAI - 15
120	15.0	19.6	65	HAI - 9
150	16.5	21.2	70	HAI - 10
185	18.5	24.0	75	HAI - 11
225	21.0	27.0	85	HAI - 147
240	22.0	28.6	90	HAI - 16
300	25.0	32.0	100	HAI - 17
400	29.0	37.5	115	HAI - 18
500	31.0	41.0	125	HAI - 19
630	36.0	46.0	140	HAI - 20
800	39.0	51.0	160	HAI - 148
1000	43.5	57.0	210	HAI - 149

**HEAVY DUTY LONG BARREL ALUMINIUM IN-LINE CONNECTOR for XLPE CABLE**

CABLE SIZE mm <sup>2</sup>	DIMENSIONS			PROD. CODE
	A	C	J	
25	7.2	9.6	82	HAXL - 25
35	8.3	11.1	90	HAXL - 35
50	10.1	13.5	100	HAXL - 50
70	10.2	14.5	104	HAXL - 70
95	12.0	16.9	108	HAXL - 95
120	13.7	19.0	112	HAXL - 120
150	15.1	21.2	116	HAXL - 150
185	16.6	23.9	128	HAXL - 185
225	18.6	26.1	136	HAXL - 225
240	19.3	27.2	148	HAXL - 240
300	21.8	30.2	160	HAXL - 300
400	25.0	34.8	182	HAXL - 400
500	28.2	39.1	190	HAXL - 500
630	31.7	44.4	200	HAXL - 630
800	35.7	49.5	225	HAXL - 800
1000	41.0	56.0	250	HAXL - 1000

**CRIMPING TYPE HEAVY DUTY LONG BARREL ALUMINIUM TERMINAL ENDS for XLPE CABLE**

Material : Aluminium  
Finish : Natural / Passivated Al.

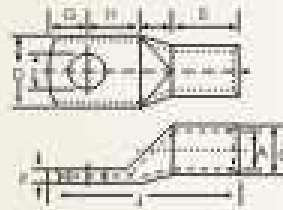


CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	G	J	
25	8	7.2	9.6	14.0	2.4	41	7	12	9	69	HAC - 25
35	8	8.3	11.1	16.0	2.8	50	7	11	11	79	HAC - 35
50	10	10.1	13.5	19.5	3.4	49	8	13	11	81	HAC - 50
70	10	10.2	14.5	20.5	4.3	62	8	13	13	96	HAC - 70
95	13	12.0	16.9	23.5	4.9	73	8	14	14	109	HAC - 95
120	13	13.7	19.0	26.5	5.3	73	11	15	15	114	HAC - 120
150	13	15.1	21.1	29.5	6.1	83	11	17	17	128	HAC - 150
185	13	16.6	23.9	33.0	7.3	83	12	18	18	131	HAC - 185
225	13	18.6	26.1	36.0	7.5	86	14	20	20	140	HAC - 225
240	13	19.3	27.2	37.5	7.9	86	14	22	22	144	HAC - 240
300	20	21.8	30.2	42.0	8.4	89	14	27	27	157	HAC - 300
400	20	25.0	34.8	48.0	9.8	113	13	30	30	187	HAC - 400
500	20	28.2	39.1	54.0	11.0	125	15	32	32	205	HAC - 500
630	20	31.7	44.4	61.0	13.0	140	16	34	34	225	HAC - 625
800	20.3	35.7	49.5	68.0	13.8	147	25	39	39	250	HAC - 800
1000	20.3	41.0	56.0	77.5	15.0	160	30	45	45	280	HAC - 1000



**CRIMPING TYPE ALUMINIUM TUBULAR TERMINAL ENDS WITH LONG BARREL FOR ALUMINIUM CONDUCTORS**

Material : Aluminium IS 5082

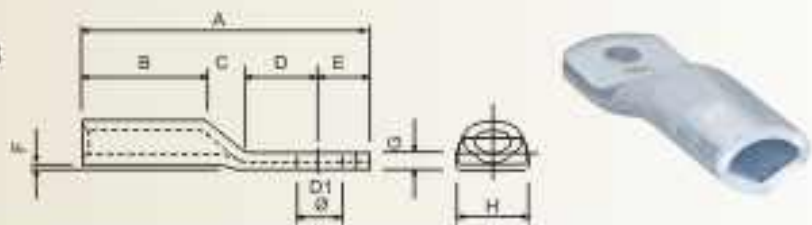


CABLE mm <sup>2</sup>	DIMENSIONS							PROD. CODE
	E	A	C	D	B	GH	J	
2.5	3.2	2.0	5.5	7.0	10.5	8	21.5	HASL-551
2.5	3.7	2.6	5.5	7.0	10.5	8	21.5	HASL-509
4	4.2	2.9	5.5	7.0	10.5	8	21.5	HASL-555
4	5.1	2.9	5.5	12.0	10.5	14	27.5	HASL-517
6	5.2	3.5	5.5	7.5	10.5	14	27.5	HASL-558
6	6.5	3.5	5.5	12.0	10.5	14	27.5	HASL-513
10	6.4	4.4	7.4	10	13.5	17	34.5	HASL-514
10	8.2	4.4	7.4	15	13.5	17	34.5	HASL-515
16	6.4	5.4	8.3	11.4	19.5	20	43.5	HASL-552
16	8.2	5.4	8.3	11	19.5	20	43.5	HASL-516
16	10.2	5.4	8.3	18.0	19.5	20	43.5	HASL-617
25	8.2	7.0	10	14	24	22	52	HASL-518
25	10.2	7.0	10	20.0	24	22	52	HASL-519
25	12.7	7.0	10	20.0	24	22	52	HASL-520
35	8.2	8.0	10.8	15.0	27	22	56	HASL-521
35	10.2	8.0	10.8	20.0	27	22	56	HASL-522
50	8.2	9.3	13.0	18.0	33	27	65	HASL-655
50	10.2	9.3	13.0	23.0	33	27	65	HASL-512
50	12.7	9.3	13.0	23.0	33	27	65	HASL-524
70	8.2	11.6	16.0	22.6	39	29	73	HASL-526
70	10.2	11.6	16.0	22.0	39	29	73	HASL-525
70	12.7	11.6	16.0	22.0	39	29	73	HASL-526
95	10.2	12.9	17.1	25.0	42	30	78	HASL-527
95	12.7	12.9	17.1	25.0	42	30	78	HASL-528
95	16.2	12.9	17.1	25.0	42	30	78	HASL-529
120	10.2	14.8	19.6	28.0	48	33	89	HASL-557
120	12.7	14.8	19.6	28.0	48	33	89	HASL-530
120	16.2	14.8	19.6	28.0	48	33	89	HASL-531
150	10.2	16.1	21.2	31.0	51	36	96	HASL-658
150	12.7	16.1	21.2	31.0	51	36	96	HASL-532
150	16.2	16.1	21.2	31.0	51	36	96	HASL-533
185	10.2	18.0	23.7	34.0	54	36.5	102	HASL-511
185	12.7	18.0	23.7	34.0	54	36.5	102	HASL-534
185	16.2	18.0	23.7	34.0	54	36.5	102	HASL-535
225	12.7	20.6	27	39	60	40	114	HASL-620
240	12.7	22	28	40	66	44	124	HASL-536
240	16.2	22	28	40	66	44	124	HASL-537
300	16.2	24	31	45.7	70.5	53	138.5	HASL-500
300	20.3	24	31	45.7	70.5	53	138.5	HASL-559
400	20.3	28	36	51	84	61	158	HASL-560
500	20.3	30	41	58.0	90	65	170	HASL-596
625	20.3	35	46	66.0	103.5	69	188.5	HASL-561
800	BL	39	51	73.0	115.5	78	218.5	HASL-618
1000	BL	43.5	57	81.0	150	90	270	HASL-619

### ALUMINIUM 3-CORE SECTOR CABLE LUGS

Material : Aluminium

Finish : Natural / Passivated Aluminium

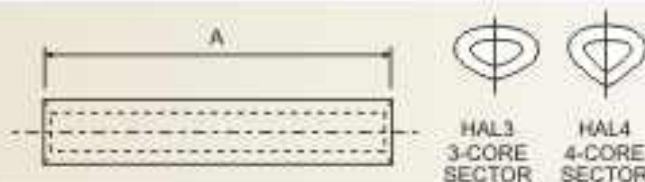


CABLE mm <sup>2</sup>	STUD Ø	DIMENSIONS									PROD. CODE
		A	B	C	D	E	F	G	H	D1Ø	
25	8	65	25	8	17	12	1	4.1	15.2	8.4	HAL3-8-25
25	10	65	25	8	17	12	1	4.1	15.2	10.4	HAL3-10-25
25	12	65	25	8	17	12	1	2.9	21	12.5	HAL3-12-25
35	8	68	30	8	17	12	1	4.4	17.6	8.4	HAL3-8-35
35	10	68	30	8	17	12	1	4.4	17.6	10.4	HAL3-10-35
35	12	68	30	8	17	12	1	3.6	21	12.5	HAL3-12-35
50	10	68	32	10	17	12	1	4.5	20.3	8.4	HAL3-10-50
50	12	71	32	10	17	12	1	4.5	20.3	10.4	HAL3-12-50
50	16	71	32	10	17	12	1	2.9	21	12.5	HAL3-16-50
70	10	76	35.5	11	17	12	1	5	23.2	10.4	HAL3-10-70
70	12	76	35.5	11	17	12	1	5	23.2	12.5	HAL3-12-70
70	16	76	35.5	11	17	12	1	4.6	26	16.5	HAL3-16-70
95	10	82	39	14	17	12	1.5	5.7	27.7	10.4	HAL3-10-95
95	12	82	39	14	17	12	1.5	5.7	27.7	12.5	HAL3-12-95
95	16	82	39	14	17	12	1.5	5.7	27.7	16.5	HAL3-16-95
120	12	88	44	15	17	12	1.5	6.5	31	10.4	HAL3-12-120
120	16	88	44	15	17	12	1.5	6.5	31	12.5	HAL3-16-120
120	20	88	44	15	17	12	1.5	6.5	31	16.5	HAL3-20-120
150	12	100	47.5	16	20.5	16	1.5	7.2	34.7	12.4	HAL3-12-150
150	16	100	47.5	16	20.5	16	1.5	7.2	34.7	16.5	HAL3-16-150
150	20	100	47.5	16	20.5	16	1.5	7.2	34.7	20.5	HAL3-20-150
185	12	106	47.5	16	20.5	16	1.5	7.2	34.7	12.4	HAL3-12-185
185	16	106	47.5	16	20.5	16	1.5	7.2	34.7	16.5	HAL3-16-185
185	20	106	47.5	16	20.5	16	1.5	7.2	34.7	20.5	HAL3-20-185
240	20	116	55.5	20.5	22	18	2	5.7	43.6	20.5	HAL3-0-240
300	20	128.5	60.5	23	25	20	2	9.7	49.2	20.5	HAL3-0-300

### ALUMINIUM SECTOR FERRULES

Material : Aluminium

Finish : Natural / Passivated Aluminium



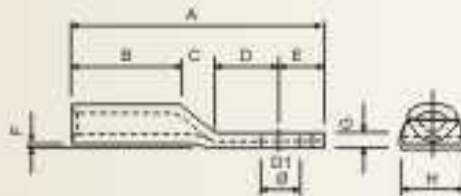
CABLE mm <sup>2</sup>	A	PROD. CODE	
		3-CORE SECTOR	4-CORE SECTOR
25	66	HAL-3F-25	HAL-4F-25
35	70	HAL-3F-35	HAL-4F-35
50	74	HAL-3F-50	HAL-4F-50
70	78	HAL-3F-70	HAL-4F-70
95	84	HAL-3F-95	HAL-4F-95
120	91	HAL-3F-120	HAL-4F-120
150	102	HAL-3F-150	HAL-4F-150
185	108	HAL-3F-185	HAL-4F-185
240	118	HAL-3F-240	HAL-4F-240
300	130	HAL-3F-300	HAL-4F-300
400	140	-	-
500	155	-	-
630	172	-	-
800	-	-	-
1000	-	-	-



## ALUMINIUM 4-CORE SECTOR CABLE LUGS

Material : Aluminium

Finish : Natural / Passivated Aluminium



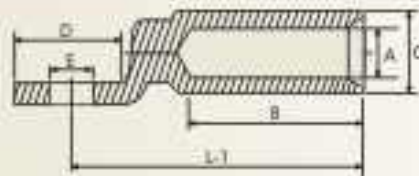
CABLE mm <sup>2</sup>	STUD Ø	DIMENSIONS									PROD. CODE
		A	B	C	D	E	F	G	H	D10	
25	8	65	25	8	17	12	1	4.1	15.2	8.4	HAL4-8-25
25	10	65	25	8	17	12	1	4.1	15.2	10.4	HAL4-10-25
25	12	65	25	8	17	12	1	2.9	21	12.5	HAL4-12-25
35	8	68	30	8	17	12	1	4.4	17.6	8.4	HAL4-8-35
35	10	68	30	8	17	12	1	4.4	17.6	10.4	HAL4-10-35
35	12	68	30	8	17	12	1	3.6	21	12.5	HAL4-12-35
50	10	71	32	10	17	12	1	4.5	20.3	8.4	HAL4-10-50
50	12	71	32	10	17	12	1	4.5	20.3	10.4	HAL4-12-50
50	16	71	32	10	17	12	1	2.9	21	12.5	HAL4-16-50
70	10	76	35.5	11	17	12	1	5	23.2	10.4	HAL4-10-70
70	12	76	35.5	11	17	12	1	5	23.2	12.5	HAL4-12-70
70	16	76	35.5	11	17	12	1	4.6	26	16.5	HAL4-16-70
95	10	82	39	14	17	12	1.5	5.7	27.7	10.4	HAL4-10-95
95	12	82	39	14	17	12	1.5	5.7	27.7	12.5	HAL4-12-95
95	16	82	39	14	17	12	1.5	5.7	27.7	16.5	HAL4-16-95
120	12	88	44	15	17	12	1.5	6.5	31	10.4	HAL4-12-120
120	16	88	44	15	17	12	1.5	6.5	31	12.5	HAL4-16-120
120	20	88	44	15	17	12	1.5	6.5	31	16.5	HAL4-20-120
150	12	100	47.5	16	20.5	16	1.5	7.2	34.7	12.4	HAL4-12-150
150	16	100	47.5	16	20.5	16	1.5	7.2	34.7	16.5	HAL4-16-150
150	20	100	47.5	16	20.5	16	1.5	7.2	34.7	20.5	HAL4-20-150
185	12	116	47.5	16	20.5	16	1.5	7.2	34.7	12.4	HAL4-12-185
185	16	106	47.5	16	20.5	16	1.5	7.2	34.7	16.5	HAL4-16-185
185	20	116	47.5	16	20.5	16	1.5	7.2	34.7	20.5	HAL4-20-185
240	20	116	55.5	20.5	22	18	2	5.7	43.6	20.5	HAL4-20-240
300	20	128.5	60.5	23	25	20	2	9.7	49.2	20.5	HAL4-20-300

## ALUMINIUM forged CABLE LUGS

(AS PER DIN 46329)

Material : Aluminium

Finish : Natural / Passivated Aluminium



CABLE mm <sup>2</sup>	HOLE E	DIMENSIONS						PROD. CODE
		BOLT	A	C	D	B	L1	
16	8.4	M 8	5.8	12	20	30	50	HAF1 16-8
25	8.4	M 8	6.8	12	20	30	50	HAF1 25-8
35	8.4	M 8	8	14	25	42	62	HAF1 35-8
50	8.4	M 8	9.8	16	25	42	62	HAF1 50-8
70	8.4	M 8	11.2	18	25	52	72	HAF1 70-8
95	10.5	M 10	13.2	22	25	56	75	HAF1 95-10
120	10.5	M 10	14.7	22	30	56	80	HAF1 120-10
150	10.5	M 10	16.3	25	30	60	90	HAF1 150-10
185	10.5	M 10	18.3	28	30	60	91	HAF1 185-10
240	10.5	M 10	21	32	38	70	103	HAF1 240-10
300	13	M12	23.3	34	38	70	103	HAF1 300-12
400	13	M12	26	38	38	73	116	HAF1 400-12
500	13	M12	29	44	44	79	122	HAF1 500-12

\* Other Hole sizes available on request.

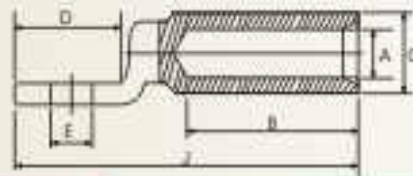
Note : All dimensions in mm

\* ONLY ON SPECIAL REQUEST : Barrels can be capped & filled with grease to avoid oxidation of the conductor.



### ALUMINIUM - COPPER BI-METAL TERMINALS (WITH COPPER PALMS)

Al-Cu Bi-metal terminals are used for connecting Aluminium cables to Copper busbars.



\* Square Palm

Note : All dimensions in mm

Crimping Test Applied Force :

Upto 240 mm<sup>2</sup> - 1.2 x 10<sup>5</sup> N.

300 mm<sup>2</sup> to 630 mm<sup>2</sup> - 2.0 x 10<sup>5</sup> N.

Above 630 mm<sup>2</sup> - 4.0 x 10<sup>5</sup> N.

Construction :

Forged circular Copper palm is friction welded to an EC grade

Aluminium circular barrel thus achieving the best possible transition.

Made to order Bi - Metallic terminals

as per the customer's specifications / samples / diagrams are also available.

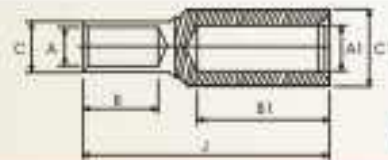
CABLE mm <sup>2</sup>	DIMENSIONS						PROD. CODE
	A	C	D	E	J	B	
16	5.5	16	20	10.3	79	43	HBT 16-10
25	6.5	16	20	10.3	79	43	HBT 25-10
35	8	16	20	10.3	79	43	HBT 35-10
50	9	20	25	12.8	85	43	HBT 50-12
70	11	20	25	12.8	85	43	HBT 70-12
95	12.5	20	25	12.8	85	43	HBT 95-12
120	13.7	25	30	12.8	108	59	HBT 120-12
150	15.5	25	30	12.8	108	59	HBT 150-12
185	17	32	35	14.5	115	59	HBT 185-14
240	19.5	32	35	14.5	115	59	HBT 240-14
300	23.3	40	36	16.5	137	85	HBT 300-16
400	26	40	36	16.5	153.5	85	HBT 400-16
500*	29.1	47	60X60	4 ø 9	196	95	HBT 500-16
630*	33.5	47	60X60	4 ø 9	196	95	HBT 630 4 X 9
800*	37.5	53	80X80	4 ø 9	232	100	HBT 800 4 X 9
1000*	42	60	80X80	4 ø 9	256	126	HBT 1000 4 X 9
1300*	46.5	65	80X80	4 ø 11	267	136	HBT 1300.4 X 11

### ALUMINIUM - COPPER BI - METAL CONNECTOR / SPLICE

Material : E - Copper

Finish : Uncoated / Electro Tinned

Al-Cu Bi-Metal splice are used for joining Aluminium Cable to Copper Cable.



Note : All dimensions in mm

Crimping Test Applied Force :

Upto 240 mm<sup>2</sup> - 1.2 x 10<sup>5</sup> N.

300 mm<sup>2</sup> to 630 mm<sup>2</sup> -

2.0 x 10<sup>5</sup> N.

Above 630 mm<sup>2</sup> -

4.0 x 10<sup>5</sup> N.

Construction: EC Grade

Copper is friction welded to

EC Grade Aluminium.

Further machined to required size.

Made to order Bi - Metallic

terminals as per the

customer's specifications /

samples / diagrams are

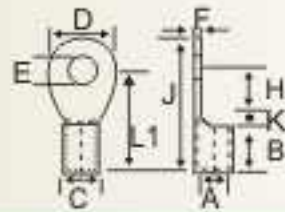
also available.

CABLE AREA mm <sup>2</sup>	DIMENSIONS								PROD. CODE	
	AL. SOLID OR STRANDED	COPPER STRANDED	A	C	B	A1	C1	B1		J
16	16	16	5.6	12.2	29	5.5	16	43	88	HBS 16 - 16
25	16	16	5.6	12.2	29	6.5	16	43	88	HBS 25 - 16
25	25	25	7	12.2	29	6.5	16	43	88	HBS 25 - 25
35	16	16	5.6	12.2	29	8	16	43	88	HBS 35 - 16
35	25	25	7	12.2	29	8	16	43	88	HBS 35 - 25
35	35	35	8	12.2	29	8	16	43	88	HBS 35 - 35
50	25	25	7	12.2	29	9	20	43	88	HBS 50 - 25
50	35	35	8	12.2	29	9	20	43	88	HBS 50 - 35
50	50	50	9.5	12.2	29	9	20	43	88	HBS 50 - 50
70	35	35	8	12.2	29	11	20	43	88	HBS 70 - 35
70	50	50	9.5	12.2	29	11	20	43	88	HBS 70 - 50
70	70	70	11	12.2	33	11	20	43	90	HBS 70 - 70
95	50	50	9.5	21	29	12.5	20	43	88	HBS 95 - 50
95	70	70	11	12.2	33	12.5	20	43	90	HBS 95 - 70
95	95	95	13	21	33	12.5	20	43	90	HBS 95 - 95
120	70	70	11	21	33	13.7	25	59	107	HBS 120 - 70
120	95	95	13	21	33	13.7	25	59	107	HBS 120 - 95
120	120	120	14.2	21	33	13.7	25	59	107	HBS 120 - 120
150	95	95	13	21	33	15.5	25	59	107	HBS 150 - 95
150	120	120	14.2	21	33	15.5	25	59	107	HBS 150 - 120
150	150	150	16	21	33	15.5	25	59	107	HBS 150 - 150
185	120	120	14.2	21	33	17	32	59	107	HBS 185 - 120
185	150	150	16	21	33	17	32	59	107	HBS 185 - 150
185	185	185	18	26.2	43	17	32	59	120	HBS 185 - 185
240	150	150	16	21	33	19.5	32	59	107	HBS 240 - 150
240	185	185	18	26.2	43	19.5	32	59	120	HBS 240 - 185
240	240	240	20	26.2	43	19.5	32	59	120	HBS 240 - 240



**CRIMPING TYPE TINNED COPPER RING TYPE  
CABLE TERMINAL ENDS**

Material : Copper Strip / Tape to IS -1897  
Specification : E.C. Grade 99.25% IACS  
Finish : Electro Tinned to BS 1872 (1984)



CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	L1	J	
1.5	3.2	1.6	3.2	6.8	0.8	5	1	3.6	9.6	13	HR-7153
1.5	3.7	1.6	3.2	6.8	0.8	5	1	3.6	9.6	13	HR-7048
1.5	4.2	1.6	3.2	6.8	0.8	5	1	3.6	9.6	13	HR-7049
1.5	2.2	1.6	3.2	6	0.8	5	2	4	11	14	HR-7103
1.5	2.6	1.6	3.2	6	0.8	5	2	4	11	14	HR-7000
1.5	3.2	1.6	3.2	6	0.8	5	2	4	11	14	HR-7001
1.5	3.7	1.6	3.2	6	0.8	5	2	4	11	14	HR-7002
1.5	4.2	1.6	3.2	6	0.8	5	2	4	11	14	HR-7003
1.5	4.2	1.6	3.2	7	0.8	5	1	5	11	14.5	HR-7154
1.5	3.2	1.6	3.2	8	0.8	5	2	5	12	16	HR-7104
1.5	4.2	1.6	3.2	8	0.8	5	2	5	12	16	HR-7004
1.5	5.2	1.6	3.2	8	0.8	5	2	5	12	16	HR-7005
1.5	4.2	1.6	3.2	10	0.8	5	2	6	13	18	HR-7105
1.5	5.2	1.6	3.2	10	0.8	5	2	6	13	18	HR-7006
1.5	6.4	1.6	3.2	10	0.8	5	2	6	13	18	HR-7007
1.5	6.4	1.6	3.2	12	0.8	5	1	6	12	18	HR-7106
2.5	3.2	2.3	3.9	6.5	0.8	5	1	3.5	9.5	12.7	HR-7107
2.5	3.7	2.3	3.9	6.5	0.8	5	1	3.5	9.5	12.7	HR-7008
2.5	3.7	2.3	3.9	8	0.8	5	2	5	12	16	HR-7108
2.5	4.2	2.3	3.9	8	0.8	5	2	5	12	16	HR-7009
2.5	5.2	2.3	3.9	8	0.8	5	2	5	12	16	HR-7010
2.5	5.2	2.3	3.9	10	0.8	5	1	7	13	18	HR-7109
2.5	6.4	2.3	3.9	10	0.8	5	1	7	13	18	HR-7011
2.5	5.2	2.3	3.9	12	0.8	5	2	9	16	22	HR-7110
2.5	6.4	2.3	3.9	12	0.8	5	2	9	16	22	HR-7012
2.5	8.2	2.3	3.9	12	0.8	5	2	9	16	22	HR-7013
2.5	6.4	2.3	3.9	16	0.8	5	2	10	17	25	HR-7111
2.5	8.2	2.3	3.9	16	0.8	5	2	10	17	25	HR-7014
2.5	10.2	2.3	3.9	16	0.8	5	2	10	17	25	HR-7015
2.5	10.2	2.3	3.9	18	0.8	5	1	14	20	29	HR-7151
2.5	12.7	2.3	3.9	18	0.8	5	1	14	20	29	HR-7047
4-6	4.2	3.5	5.5	8	1.0	6	2	5	13	17	HR-7155
4-6	5.2	3.5	5.5	8	1.0	6	2	5	13	17	HR-7050
4-6	4.2	3.5	5.5	10	1.0	6	3	5	14	19	HR-7112
4-6	5.2	3.5	5.5	10	1.0	6	3	5	14	19	HR-7016
4-6	5.2	3.5	5.5	12	1.0	6	2	6	14	20	HR-7113
4-6	6.4	3.5	5.5	12	1.0	6	2	6	14	20	HR-7017
4-6	8.2	3.5	5.5	12	1.0	6	2	6	14	20	HR-7018
4-6	5.2	3.5	5.5	12	1.0	6	3	7	16	22	HR-7114
4-6	6.4	3.5	5.5	12	1.0	6	3	7	16	22	HR-7019
4-6	5.2	3.5	5.5	8	1.0	6	3	9.8	18.8	22.8	HR-7157
4-6	6.4	3.5	5.5	14	1.0	6	2	10.5	18.5	25.5	HR-7115
4-6	8.2	3.5	5.5	14	1.0	6	2	10.5	18.5	25.5	HR-7020
4-6	9.7	3.5	5.5	14	1.0	6	2	10.5	18.5	25.5	HR-7021
4-6	8.2	3.5	5.5	16	1.0	6	3	13	22	30	HR-7116
4-6	10.2	3.5	5.5	16	1.0	6	3	13	22	30	HR-7022
4-6	8.2	3.5	5.5	18	1.0	6	3	12	21	30	HR-7117
4-6	10.2	3.5	5.5	18	1.0	6	3	12	21	30	HR-7023
4-6	12.7	3.5	5.5	18	1.0	6	3	12	21	30	HR-7024

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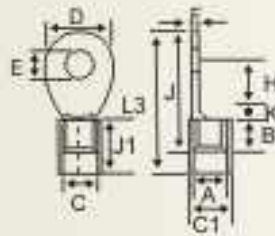
**CRIMPING TYPE TINNED COPPER RING TYPE  
CABLE TERMINAL ENDS**


CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	L1	J	
10	4.2	4.3	6.3	10	1.0	8	2	7	17	22	HR-7118
10	5.2	4.3	6.3	10	1.0	8	2	7	17	22	HR-7025
10	4.2	4.3	6.3	10	1.0	8	3	4	15	20	HR-7119
10	5.2	4.3	6.3	10	1.0	8	3	4	15	20	HR-7026
10	6.4	4.3	6.3	12	1.0	8	2	7	17	23	HR-7120
10	8.2	4.3	6.3	16	1.0	8	4	7	19	27	HR-7121
10	8.2	4.3	6.3	18	1.0	8	4	9	21	30	HR-7122
10	10.2	4.3	6.3	18	1.0	8	4	9	21	30	HR-7027
10	10.2	4.3	6.3	22	1.0	8	5	10	23	34	HR-7123
10	12.7	4.3	6.3	22	1.0	8	5	10	23	34	HR-7028
16	5.2	5.6	8.0	10	1.2	10	3	6	19	24	HR-7124
16	5.2	5.6	8.0	12	1.2	10	4	6	20	26	HR-7125
16	6.4	5.6	8.0	12	1.2	10	4	6	20	26	HR-7029
16	6.4	5.6	8.0	16	1.2	10	4	8	22	30	HR-7126
16	8.2	5.6	8.0	16	1.2	10	4	8	22	30	HR-7030
16	9.7	5.6	8.0	16	1.2	10	4	8	22	30	HR-7031
16	8.2	5.6	8.0	18	1.2	10	4	10	24	33	HR-7127
16	10.2	5.6	8.0	18	1.2	10	4	10	24	33	HR-7032
16	10.2	5.6	8.0	22	1.2	10	6	8	24	35	HR-7128
16	12.7	5.6	8.0	22	1.2	10	6	8	24	35	HR-7033
25	6.4	7.5	11.1	12	1.8	11	4	10	25	31	HR-7156
25	8.2	7.5	11.1	12	1.8	11	4	10	25	31	HR-7051
25	6.4	7.5	11.1	16	1.8	11	5	6	22	30	HR-7129
25	8.2	7.5	11.1	16	1.8	11	5	6	22	30	HR-7034
25	10.2	7.5	11.1	16	1.8	11	5	6	22	30	HR-7035
25	6.4	7.5	11.1	16	1.8	11	4	10	25	33	HR-7130
25	8.2	7.5	11.1	16	1.8	11	4	10	25	33	HR-7036
25	10.2	7.5	11.1	18	1.8	11	5	9	25	34	HR-7131
25	10.2	7.5	11.1	22	1.8	11	6	14	31	42	HR-7132
25	12.7	7.5	11.1	22	1.8	11	6	14	31	42	HR-7037
35	6.4	9.0	12.6	16	1.8	12	5	6	23	31	HR-7133
35	8.2	9.0	12.6	16	1.8	12	5	6	23	31	HR-7038
35	8.2	9.0	12.6	18	1.8	12	5	10	27	36	HR-7134
35	10.2	9.0	12.6	18	1.8	12	5	10	27	36	HR-7039
35	10.2	9.0	12.6	22	1.8	12	4	15	31	42	HR-7135
35	12.7	9.0	12.6	22	1.8	12	4	15	31	42	HR-7040
50	8.2	10.5	14.1	18	1.8	16	6	12	34	43	HR-7136
50	10.2	10.5	14.1	18	1.8	16	6	12	34	43	HR-7041
50	10.2	10.5	14.1	22	1.8	16	7	9	32	43	HR-7137
50	10.2	10.5	14.1	24	1.8	16	6	14	36	48	HR-7138
50	12.7	10.5	14.1	24	1.8	16	6	14	36	48	HR-7042
50	16.2	10.5	14.1	32	1.8	16	7	15	38	54	HR-7139
70	10.2	12.0	16.0	22	2.0	18	7	11	36	47	HR-7140
70	12.7	12.0	16.0	22	2.0	18	7	11	36	47	HR-7043
70	12.7	12.0	16.0	24	2.0	18	8	10	36	48	HR-7141
70	16.2	12.0	16.0	28	2.0	18	6	16	40	54	HR-7142
95	10.2	13.5	18.1	22	2.3	20	5	10	35	46	HR-7143
95	10.2	13.5	18.1	24	2.3	20	6	12	38	50	HR-7144
95	12.7	13.5	18.1	24	2.3	20	6	12	38	50	HR-7044
95	16.2	13.5	18.1	28	2.3	20	7	17	44	58	HR-7145
120	12.7	15.0	20.2	26	2.6	22	10	7	39	52	HR-7146
120	23.0	15.0	20.2	40	2.6	22	10	20	52	72	HR-7148
150	12.7	16.5	23.7	34	3.6	24	9	16	49	66	HR-7149
150	16.2	16.5	23.7	34	3.6	24	9	16	49	66	HR-7045
150	16.2	16.5	23.7	40	3.6	24	10	20	54	74	HR-7150
150	20.3	16.5	23.7	40	3.6	24	10	20	54	74	HR-7046



## CRIMPING TYPE INSULATED TINNED COPPER RING TYPE TERMINALS

Material : Copper Strip / Tape to IS -1897  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)  
 Colour Coding of Insulation Sleeve  
**SIZE** : 1.5 2.5 4-6  
**COLOUR** : RED BLUE YELLOW

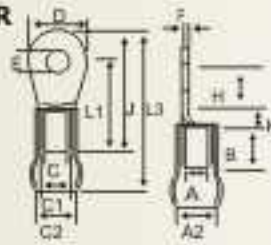


CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS											PROD. CODE
		A	C	D	F	B	K	H	J	J1	L3	C1	
1.5	3.2	1.6	3.2	6.8	0.8	5	1	3.6	13	10	14.6	4.8	HRI - 7057
1.5	3.7	1.6	3.2	6.8	0.8	5	1	3.6	13	10	14.6	4.8	HRI - 7058
1.5	4.2	1.6	3.2	6.8	0.8	5	1	3.6	13	10	14.6	4.8	HRI - 7059
1.5	2.2	1.6	3.2	6	0.8	5	2	4	14	10	16	4.8	HRI - 7052
1.5	2.6	1.6	3.2	6	0.8	5	2	4	14	10	16	4.8	HRI - 7053
1.5	3.2	1.6	3.2	6	0.8	5	2	4	14	10	16	4.8	HRI - 7054
1.5	3.7	1.6	3.2	6	0.8	5	2	4	14	10	16	4.8	HRI - 7055
1.5	4.2	1.6	3.2	6	0.8	5	2	4	14	10	16	4.8	HRI - 7056
1.5	4.2	1.6	3.2	7	0.8	5	1	5	14.5	10	16	4.8	HRI - 7063
1.5	3.2	1.6	3.2	8	0.8	5	2	5	16	10	17	4.8	HRI - 7060
1.5	4.2	1.6	3.2	8	0.8	5	2	5	16	10	17	4.8	HRI - 7061
1.5	5.2	1.6	3.2	8	0.8	5	2	5	16	10	17	4.8	HRI - 7062
1.5	4.2	1.6	3.2	10	0.8	5	2	6	18	10	18	4.8	HRI - 7064
1.5	5.2	1.6	3.2	10	0.8	5	2	6	18	10	18	4.8	HRI - 7065
1.5	6.4	1.6	3.2	10	0.8	5	2	6	18	10	18	4.8	HRI - 7066
1.5	6.4	1.6	3.2	12	0.8	5	1	6	18	10	17	4.8	HRI - 7067
2.5	3.2	2.3	3.9	6.5	0.8	5	1	3.5	12.7	10	14.5	5.5	HRI - 7068
2.5	3.7	2.3	3.9	6.5	0.8	5	1	3.5	12.7	10	14.5	5.5	HRI - 7069
2.5	3.7	2.3	3.9	8	0.8	5	2	5	16	10	17	5.5	HRI - 7070
2.5	4.2	2.3	3.9	8	0.8	5	2	5	16	10	17	5.5	HRI - 7071
2.5	5.2	2.3	3.9	8	0.8	5	2	5	16	10	17	5.5	HRI - 7072
2.5	5.2	2.3	3.9	10	0.8	5	1	7	18	10	18	5.5	HRI - 7073
2.5	6.4	2.3	3.9	10	0.8	5	1	7	18	10	18	5.5	HRI - 7074
2.5	5.2	2.3	3.9	12	0.8	5	2	9	22	10	21	5.5	HRI - 7075
2.5	6.4	2.3	3.9	12	0.8	5	2	9	22	10	21	5.5	HRI - 7076
2.5	8.2	2.3	3.9	12	0.8	5	2	9	22	10	21	5.5	HRI - 7077
2.5	6.4	2.3	3.9	16	0.8	5	2	10	25	10	22	5.5	HRI - 7078
2.5	8.2	2.3	3.9	16	0.8	5	2	10	25	10	22	5.5	HRI - 7079
2.5	10.2	2.3	3.9	16	0.8	5	2	10	25	10	22	5.5	HRI - 7080
2.5	10.2	2.3	3.9	18	0.8	5	1	14	29	10	25	5.5	HRI - 7081
2.5	12.7	2.3	3.9	18	0.8	5	1	14	29	10	25	5.5	HRI - 7082
4-6	4.2	3.5	5.5	8	1.0	6	2	5	17	14	21	7.1	HRI - 7083
4-6	5.2	3.5	5.5	8	1.0	6	2	5	17	14	21	7.1	HRI - 7084
4-6	4.2	3.5	5.5	10	1.0	6	3	5	19	14	22	7.1	HRI - 7085
4-6	5.2	3.5	5.5	10	1.0	6	3	5	19	14	22	7.1	HRI - 7086
4-6	5.2	3.5	5.5	12	1.0	6	2	6	20	14	22	7.1	HRI - 7088
4-6	6.4	3.5	5.5	12	1.0	6	2	6	20	14	22	7.1	HRI - 7089
4-6	8.2	3.5	5.5	12	1.0	6	2	6	20	14	22	7.1	HRI - 7090
4-6	5.2	3.5	5.5	12	1.0	6	3	7	22	14	26	7.1	HRI - 7087
4-6	6.4	3.5	5.5	12	1.0	6	3	7	22	14	24	7.1	HRI - 7091
4-6	5.2	3.5	5.5	8	1.0	6	3	9.8	22.8	14	24	7.1	HRI - 7092
4-6	6.4	3.5	5.5	14	1.0	6	2	10.5	25.5	14	26.5	7.1	HRI - 7093
4-6	8.2	3.5	5.5	14	1.0	6	2	10.5	25.5	14	26.5	7.1	HRI - 7094
4-6	9.7	3.5	5.5	14	1.0	6	2	10.5	25.5	14	26.5	7.1	HRI - 7095
4-6	8.2	3.5	5.5	16	1.0	6	3	13	30	14	30	7.1	HRI - 7096
4-6	10.2	3.5	5.5	16	1.0	6	3	13	30	14	30	7.1	HRI - 7097
4-6	8.2	3.5	5.5	18	1.0	6	3	12	30	14	30	7.1	HRI - 7098
4-6	10.2	3.5	5.5	18	1.0	6	3	12	30	14	29	7.1	HRI - 7099
4-6	12.7	3.5	5.5	18	1.0	6	3	12	30	14	29	7.1	HRI - 7100



**CRIMPING TYPE INSULATED TINNED COPPER  
RING TYPE CABLE TERMINAL ENDS  
WITH METAL REINFORCEMENT**

Material : Copper Strip / Tape to IS -1897  
Specification : E.C. Grade 99.25% IACS  
Finish : Electro Tinned to BS 1872 (1984)  
SIZE : 1.5 2.5 4-6  
COLOUR : RED BLUE YELLOW

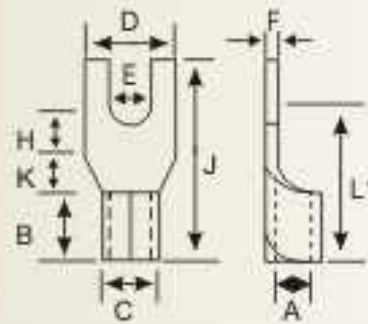


CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS													PROD. CODE
		A	C	D	F	B	K	H	J	L1	A2	C1	C2	L3	
1.5	2.2	1.6	3.2	6	0.8	5	2	4	14	10	3.6	4.8	5.4	16	HRR -7435
1.5	2.6	1.6	3.2	6	0.8	5	2	4	14	10	3.6	4.8	5.4	16	HRR -7436
1.5	3.2	1.6	3.2	6	0.8	5	2	4	14	10	3.6	4.8	5.4	16	HRR -7437
1.5	3.7	1.6	3.2	6	0.8	5	2	4	14	10	3.6	4.8	5.4	16	HRR -7438
1.5	4.2	1.6	3.2	6	0.8	5	2	4	14	10	3.6	4.8	5.4	16	HRR -7439
1.5	3.2	1.6	3.2	6.8	0.8	4	1	3	11.4	10	3.6	4.8	5.4	14.6	HRR -7440
1.5	3.7	1.6	3.2	6.8	0.8	4	1	3	11.4	10	3.6	4.8	5.4	14.6	HRR -7441
1.5	4.2	1.6	3.2	6.8	0.8	4	1	3	11.4	10	3.6	4.8	5.4	14.6	HRR -7442
1.5	3.2	1.6	3.2	8	0.8	5	2	5	16	10	3.6	4.8	5.4	17	HRR -7443
1.5	4.2	1.6	3.2	8	0.8	5	2	5	16	10	3.6	4.8	5.4	17	HRR -7444
1.5	5.2	1.6	3.2	8	0.8	5	2	5	16	10	3.6	4.8	5.4	17	HRR -7445
1.5	4.2	1.6	3.2	7	0.8	5	1	5	14.5	10	3.6	4.8	5.4	16	HRR -7446
1.5	4.2	1.6	3.2	10	0.8	5	2	5	18	10	3.6	4.8	5.4	18	HRR -7447
1.5	5.2	1.6	3.2	10	0.8	5	2	6	18	10	3.6	4.8	5.4	18	HRR -7448
1.5	6.4	1.6	3.2	10	0.8	5	2	6	18	10	3.6	4.8	5.4	18	HRR -7449
1.5	6.4	1.6	3.2	12	0.8	5	1	6	18	10	3.6	4.8	5.4	17	HRR -7450
2.5	3.2	2.3	3.9	6.5	0.8	5	1	3.5	12.7	10	4.4	5.4	6.0	17.7	HRR -7451
2.5	3.7	2.3	3.9	6.5	0.8	5	1	3.5	12.7	10	4.4	5.4	6.0	17.7	HRR -7452
2.5	3.7	2.3	3.9	8	0.8	5	2	5	16	10	4.4	5.4	6.0	17	HRR -7453
2.5	4.2	2.3	3.9	8	0.8	5	2	5	16	10	4.4	5.4	6.0	17	HRR -7454
2.5	5.2	2.3	3.9	8	0.8	5	2	5	16	10	4.4	5.4	6.0	17	HRR -7455
2.5	5.2	2.3	3.9	10	0.8	5	1	7	18	10	4.4	5.4	6.0	18	HRR -7456
2.5	6.4	2.3	3.9	10	0.8	5	1	7	18	10	4.4	5.4	6.0	18	HRR -7457
2.5	5.2	2.3	3.9	12	0.8	5	2	9	22	10	4.4	5.4	6.0	21	HRR -7458
2.5	6.4	2.3	3.9	12	0.8	5	2	9	22	10	4.4	5.4	6.0	21	HRR -7459
2.5	8.2	2.3	3.9	12	0.8	5	2	9	22	10	4.4	5.4	6.0	21	HRR -7460
2.5	6.4	2.3	3.9	16	0.8	5	2	10	25	10	4.4	5.4	6.0	22	HRR -7461
2.5	8.2	2.3	3.9	16	0.8	5	2	10	25	10	4.4	5.4	6.0	22	HRR -7462
2.5	10.2	2.3	3.9	16	0.8	5	2	10	25	10	4.4	5.4	6.0	22	HRR -7463
2.5	10.2	2.3	3.9	18	0.8	5	1	14	29	10	4.4	5.4	6.0	25	HRR -7464
2.5	12.7	2.3	3.9	18	0.8	5	1	14	29	10	4.4	5.4	6.0	25	HRR -7465
4-6	4.2	3.5	5.5	8	1.0	6	2	5	17	15	6.4	7.1	8.6	22	HRR -7466
4-6	5.2	3.5	5.5	8	1.0	6	2	5	17	15	6.4	7.1	8.6	22	HRR -7467
4-6	4.2	3.5	5.5	10	1.0	6	3	5	19	15	6.4	7.1	8.6	23	HRR -7468
4-6	5.2	3.5	5.5	10	1.0	6	3	5	19	15	6.4	7.1	8.6	23	HRR -7469
4-6	5.2	3.5	5.5	8	1.0	6	3	9.8	22.8	15	6.4	7.1	8.6	31.8	HRR -7470
4-6	5.2	3.5	5.5	12	1.0	6	2	6	22	15	6.4	7.1	8.6	23	HRR -7471
4-6	6.4	3.5	5.5	12	1.0	6	2	6	20	15	6.4	7.1	8.6	23	HRR -7472
4-6	8.2	3.5	5.5	12	1.0	6	2	6	20	15	6.4	7.1	8.6	23	HRR -7473
4-6	5.2	3.5	5.5	12	1.0	6	3	7	22	15	6.4	7.1	8.6	25	HRR -7474
4-6	6.4	3.5	5.5	12	1.0	6	3	7	22	15	6.4	7.1	8.6	25	HRR -7475
4-6	6.4	3.5	5.5	14	1.0	6	2	10.5	25.5	15	6.4	7.1	8.6	27.5	HRR -7476
4-6	8.2	3.5	5.5	14	1.0	6	2	10.5	25.5	15	6.4	7.1	8.6	27.5	HRR -7477
4-6	9.7	3.5	5.5	14	1.0	6	2	10.5	25.5	15	6.4	7.1	8.6	27.5	HRR -7478
4-6	8.2	3.5	5.5	16	1.0	6	3	13	30	15	6.4	7.1	8.6	31	HRR -7479
4-6	10.2	3.5	5.5	16	1.0	6	3	13	30	15	6.4	7.1	8.6	31	HRR -7480
4-6	8.2	3.5	5.5	18	1.0	6	3	12	30	15	6.4	7.1	8.6	30	HRR -7481
4-6	10.2	3.5	5.5	18	1.0	6	3	12	30	15	6.4	7.1	8.6	30	HRR -7482
4-6	12.7	3.5	5.5	18	1.0	6	3	12	30	15	6.4	7.1	8.6	30	HRR -7483



### CRIMPING TYPE TINNED COPPER FORK TYPE CABLE TERMINAL ENDS

Material : Copper Strip / Tape to IS -1897  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)

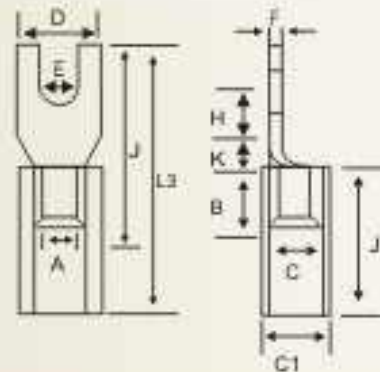


CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	L1	J	
1.5	5.1	1.6	3.2	8.0	0.8	5	2	10.0	17.0	21	HF-7214
1.5	3.5	1.6	3.2	6.8	0.8	4	-	4.8	8.8	13	HF-7249
1.5	3.0	2.0	2.8	6.2	0.4	5	2.4	3.1	10.5	13	HF-7250
2.5	3.5	2.3	3.9	6.5	0.8	5	2.5	4.3	11.8	15	HF-7251
2.5	5.0	2.6	4.6	10.6	1.0	6.2	-	6.2	12.4	21	HF-7280
4-6	3.1	3.5	5.5	6.0	1.0	6	-	5.5	11.5	15	HF-7252
4-6	3.5	3.5	5.5	6.0	1.0	6	-	5.0	11.0	15	HF-7253
10	6.5	4.5	6.9	16.0	1.2	8	-	11.0	19.0	27	HF-7254
10	8.2	4.5	6.9	16.0	1.2	8	-	11.0	19.0	27	HF-7255

### CRIMPING TYPE INSULATED TINNED COPPER FORK TYPE CABLE TERMINAL ENDS

Material : Copper Strip / Tape to IS -1897  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)

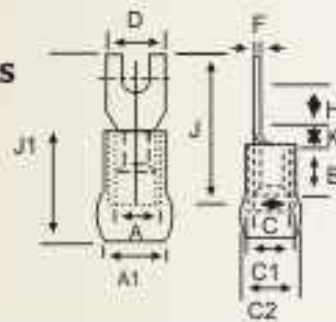
SIZE : 1.5 2.5 4-6 10  
 COLOUR : RED BLUE YELLOW BLACK



CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS										PROD. CODE	
		A	C	D	F	B	K	H	J	C1	J1		L3
1.5	5.1	1.6	3.2	8.0	0.8	5	2.0	10.0	21	4.8	10	27	HF1-7925
1.5	3.5	1.6	3.2	6.8	0.8	4	-	4.8	13	4.8	10	20.8	HF1-7926
1.5	3.0	2.0	2.8	6.2	0.4	5	2.4	3.1	13	4.8	10	20.5	HF1-7927
2.5	3.5	2.3	3.9	6.5	0.8	5	2.5	4.3	15	5.5	10	21.8	HF1-7928
2.5	5.0	2.6	4.6	10.6	1.6	6.2	-	6.2	21	5.5	10	20	HF1-7929
4-6	3.1	3.5	5.5	6.0	1.0	6	-	5.5	15	7.0	14	27.5	HF1-7930
4-6	3.5	3.5	5.5	6.0	1.0	6	-	5.0	15	7.1	14	27	HF1-7931
10	6.5	4.5	6.9	16.0	1.2	8	-	11.0	27	7.9	16	35	HF1-7932
10	8.2	4.5	6.9	16.0	1.2	8	-	11.0	27	7.9	16	35	HF1-7933

**CRIMPING TYPE INSULATED TINNED COPPER FORK TYPE CABLE TERMINAL ENDS WITH METAL REINFORCEMENT**

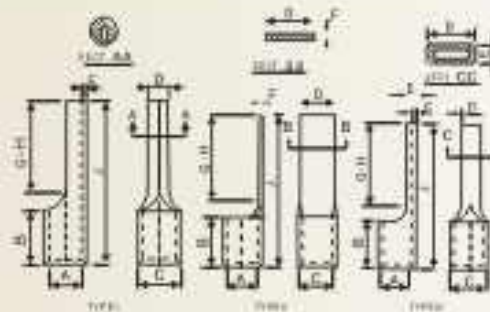
Material : Copper Strip / Tape to IS -1897  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)  
**SIZE** : 1.5 2.5 4-6 10  
**COLOUR** : RED BLUE YELLOW BLACK



CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS													PROD. CODE
		A	C	D	F	B	K	H	J	J1	A1	C1	C2	L3	
1.5	5.1	1.6	3.2	8.0	0.8	5	2.0	10.0	21	10	3.6	4.8	5.4	22.0	HFR - 7934
1.5	3.5	1.6	3.2	6.8	0.8	4	-	4.8	13	10	3.6	4.8	5.4	14.8	HFR - 7935
1.5	3.0	2.0	2.8	6.2	0.4	5	2.4	3.1	13	10	3.6	4.8	5.4	15.5	HFR - 7936
2.5	3.5	2.3	3.9	6.5	0.8	5	2.5	4.3	15	10	4.4	5.4	6.0	16.8	HFR - 7937
2.5	5.0	2.6	4.6	10.6	1.0	6.2	-	6.2	21	10	4.4	5.4	6.0	16.2	HFR - 7938
4-6	3.1	3.5	5.5	6.0	1.0	6	-	5.5	15	15	6.4	7.1	8.6	20.5	HFR - 7939
4-6	3.5	3.5	5.5	6.0	1.0	6	-	5.0	15	15	6.4	7.1	8.6	20.0	HFR - 7640
10	6.5	4.5	6.9	16	1.2	8	-	11.0	27	17	6.8	8.3	9.5	28.0	HFR - 7941
10	8.2	4.5	6.9	16	1.2	8	-	11.0	27	17	6.8	8.3	9.5	28.0	HFR - 7942

**CRIMPING TYPE TINNED COPPER PIN TYPE CABLE TERMINAL ENDS**

Material : Copper Strip / Tape to IS -1897  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)



CABLE SIZE mm <sup>2</sup>	Hole E	DIMENSIONS								PROD. CODE
		A	C	D	F	B	G+H	J	TYPE	
1.5	-	1.6	3.2	1.9	0.8	5	10	17	I	HP - 9
2.5	-	2.3	3.9	1.9	0.8	5	10	17	I	HP - 1
2.5	-	2.3	3.9	3.1	0.8	5	10	17	II	HP - 2
4	-	2.9	4.9	2.7	1.0	6	10	20	I	HP - 3
4	-	3.6	5.6	5.1	1.0	6	10	20	II	HP - 4
6	-	3.6	5.6	2.7	1.0	6	10	20	I	HP - 5
6	-	4.0	6.0	2.7	1.0	6	10	20	I	HP - 6
10	2.4	4.5	6.7	4.3	1.1	8	12	22	III	HP - 7
16	2.6	5.8	8.2	5.5	1.2	10	13	26	III	HP - 8



**CRIMPING TYPE INSULATED TINNED  
COPPER PIN TYPE CABLE TERMINAL ENDS**

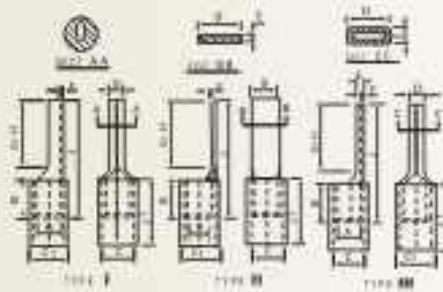
Material : Copper Strip / Tape to IS -1897

Specification : E.C. Grade 99.25% IACS

Finish : Electro Tinned to BS 1872 (1984)

SIZE : 1.5 2.5 4 6 10 16

COLOUR : RED BLUE YELLOW BLACK



CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS										PROD. CODE
		A	C	D	F	B	G+H	J	C1	J1	TYPE	
1.5	-	1.6	3.2	1.9	0.8	5	10	17	4.8	10	I	HPI-17
2.5	-	2.3	3.9	1.9	0.8	5	10	17	5.5	10	I	HPI-18
2.5	-	2.3	3.9	3.1	0.8	5	10	17	5.5	10	II	HPI-19
4	-	2.9	4.9	2.7	1.0	6	10	20	7.1	14	I	HPI-20
4	-	3.6	5.6	5.1	1.0	6	10	20	7.1	14	II	HPI-21
6	-	3.6	5.6	2.7	1.0	6	10	20	7.1	14	I	HPI-22
6	-	4.0	6.0	2.7	1.0	6	10	20	7.9	14	I	HPI-23
10	2.4	4.5	6.7	4.3	1.1	8	12	22	7.9	16	III	HPI-24
16	2.6	5.8	8.2	5.5	1.2	10	13	26	10.0	20	III	HPI-25

**CRIMPING TYPE INSULATED TINNED  
COPPER PIN TYPE CABLE TERMINAL ENDS  
WITH METAL REINFORCEMENT**

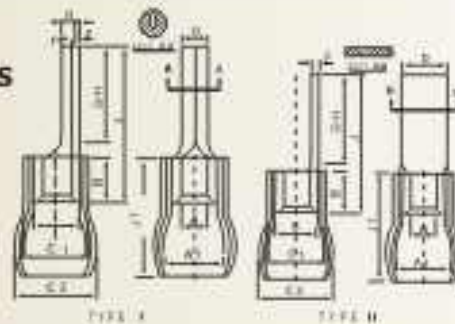
Material : Copper Strip / Tape to IS -1897

Specification : E.C. Grade 99.25% IACS

Finish : Electro Tinned to BS 1872 (1984)

SIZE : 1.5 2.5 4 6

COLOUR : RED BLUE YELLOW

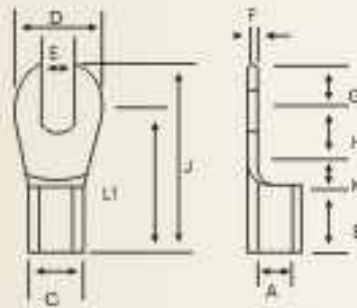


CABLE SIZE mm <sup>2</sup>	DIMENSIONS											PROD. CODE	
	A	C	D	F	B	G+H	J	J1	A1	C1	C2		TYPE
1.5	1.6	3.2	1.9	0.8	5	10	17	10	3.6	4.8	5.4	I	HPR-26
2.5	2.3	3.9	1.9	0.8	5	10	17	10	4.4	5.4	6.0	I	HPR-27
2.5	2.3	3.9	3.1	0.8	5	10	17	10	4.4	5.4	6.0	II	HPR-28
4	2.9	4.9	2.7	1.0	6	10	20	15	6.4	7.2	8.6	I	HPR-29
4	3.6	5.6	5.1	1.0	6	10	20	15	6.4	7.2	8.6	II	HPR-30
6	3.6	5.6	2.7	1.0	6	10	20	15	6.4	7.2	8.6	I	HPR-31
6	4.0	6.0	2.7	1.0	6	10	20	15	6.4	7.2	8.6	I	HPR-32



**CRIMPING TYPE TINNED COPPER RING FORK (U-CUT) CABLE TERMINAL ENDS**

Material : Copper Strip / Tape to IS -1897  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro-Tinned to BS 1872 (1984)

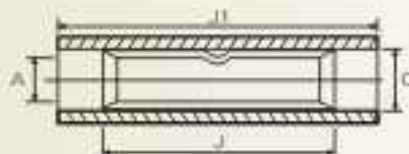


CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS										PROD. CODE
		A	C	D	F	B	K	H	G	L1	J	
1.5	3.1	1.6	3.2	6	0.8	5	2	4	3	11	14	HU - 7235
1.5	3.6	1.6	3.2	6	0.8	5	2	4	3	11	14	HU - 7240
1.5	3.1	1.6	3.2	6.8	0.8	5	-	4.6	3.4	9.6	13	HU - 7241
1.5	3.6	1.6	3.2	6.8	0.8	5	-	4.6	3.4	9.6	13	HU - 7244
1.5	4.1	1.6	3.2	7	0.8	5	1	5	3.5	11	14	HU - 7237
1.5	4.1	1.6	3.2	8	0.8	5	2	5	4	12	16	HU - 7236
1.5	5.1	1.6	3.2	10	0.8	5	2	6	5	13	18	HU - 7238
1.5	6.1	1.6	3.2	10	0.8	5	2	6	5	13	18	HU - 7861
2.5	3.1	2.3	3.9	6.5	0.8	5	1	3.5	3.2	9.5	12.7	HU - 7862
2.5	3.6	2.3	3.9	6.5	0.8	5	1	3.5	3.2	9.5	12.7	HU - 7863
2.5	4.1	2.3	3.9	8	0.8	5	2	5	4	12	16	HU - 7239
2.5	5.1	2.3	3.9	10	0.8	5	1	7	5	13	18	HU - 7242
2.5	6.1	2.3	3.9	10	0.78	5	1	7	5	13	18	HU - 7864
4-6	4.1	3.5	5.5	8	1.0	6	2	5	4	13	17	HU - 7243
4-6	4.1	3.5	5.5	10	1.0	6	3	5	5	14	19	HU - 7245
4-6	5.1	3.5	5.5	10	1.0	6	3	5	5	14	19	HU - 7246
4-6	5.1	3.5	5.5	12	1.0	6	3	7	6	16	22	HU - 7247
4-6	6.1	3.5	5.5	12	1.0	6	3	7	6	16	22	HU - 7248
10	4.1	4.3	6.3	10	1.0	8	2	7	5	17	22	HU - 7865
10	5.1	4.3	6.3	10	1.0	8	2	7	5	17	22	HU - 7866
10	6.1	4.3	6.3	12	1.0	8	2	7	6	17	23	HU - 7867
10	8.1	4.3	6.3	16	1.0	8	4	7	8	19	27	HU - 7868
16	5.1	5.6	8.0	10	1.2	10	3	6	5	19	24	HU - 7869
16	6.1	5.6	8.0	12	1.2	10	4	6	6	20	26	HU - 7870
16	8.1	5.6	8.0	16	1.2	10	4	8	8	22	30	HU - 7871
16	8.1	5.6	8.0	18	1.2	10	4	10	9	24	33	HU - 7872

**INSULATED IN-LINE CONNECTORS**

Material : E - Copper • Finish : Electro Tinned  
 Connectors are fully PVC insulated.

SIZE : 1.5 2.5 4-6  
 COLOUR : RED BLUE YELLOW



CABLE mm <sup>2</sup>	DIMENSIONS				PROD. CODE
	A	C	J	J1	
1.5	1.8	3.7	12.00	20.00	HTIC - 1.5
2.5	2.4	4.0	15.00	25.00	HTIC - 2.5
4.0	3.1	3.8	15.00	25.00	HTIC - 4
6.0	3.8	5.5	15.00	27.00	HTIC - 6

### CRIMPING TYPE INSULATED RING FORK (U-CUT) CABLE TERMINAL ENDS

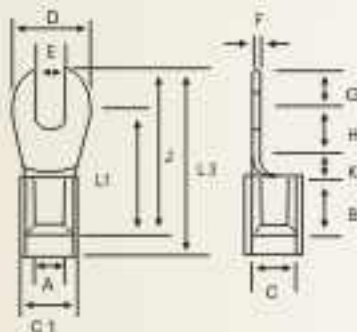
Material : Copper Strip / Tape to IS -1897

Specification : E.C. Grade 99.25% IACS

Finish : Electro Tinned to BS 1872 (1984)

SIZE : 1.5 2.5 4-6 10 16

COLOUR : RED BLUE YELLOW BLACK BLACK



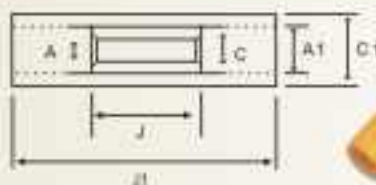
CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS												PROD. CODE
		A	C	D	F	B	K	H	G	J	L1	C1	L3	
1.5	3.1	1.6	3.2	6	0.8	5	2	4	3	14	10	4.8	16	HUI-7873
1.5	3.6	1.6	3.2	6	0.8	5	2	4	3	14	10	4.8	16	HUI-7874
1.5	3.1	1.6	3.2	6.8	0.8	5	-	4.6	3.4	13	10	4.8	14.6	HUI-7875
1.5	3.6	1.6	3.2	6.8	0.8	5	-	4.6	3.4	13	10	4.8	14.6	HUI-7876
1.5	4.1	1.6	3.2	7	0.8	5	1	5	3.5	14	10	4.8	16	HUI-7877
1.5	4.1	1.6	3.2	8	0.8	5	2	5	4	16	10	4.8	17	HUI-7878
1.5	5.1	1.6	3.2	10	0.8	5	2	6	5	18	10	4.8	18	HUI-7879
1.5	6.1	1.6	3.2	10	0.8	5	2	6	5	18	10	4.8	18	HUI-7880
2.5	3.1	2.3	3.9	6.5	0.8	5	1	3.5	3.2	12.7	10	5.5	14.5	HUI-7881
2.5	3.6	2.3	3.9	6.5	0.8	5	1	3.5	3.2	12.7	10	5.5	14.5	HUI-7882
2.5	4.1	2.3	3.9	8	0.8	5	2	5	4	16	10	5.5	17	HUI-7883
2.5	5.1	2.3	3.9	10	0.8	5	1	7	5	18	10	5.5	18	HUI-7884
2.5	6.1	2.3	3.9	10	0.8	5	1	7	5	18	10	5.5	18	HUI-7885
4-6	4.1	3.5	5.5	8	1.0	6	2	5	4	17	14	7.1	21	HUI-7886
4-6	4.1	3.5	5.5	10	1.0	6	3	5	5	19	14	7.1	22	HUI-7887
4-6	5.1	3.5	5.5	10	1.0	6	3	5	5	19	14	7.1	22	HUI-7888
4-6	5.1	3.5	5.5	12	1.0	6	3	7	6	22	14	7.1	24	HUI-7889
4-6	6.1	3.5	5.5	12	1.0	6	3	7	6	22	14	7.1	24	HUI-7890
10	4.1	4.3	6.3	10	1.0	8	2	7	5	22	16	7.9	25	HUI-7891
10	5.1	4.3	6.3	10	1.0	8	2	7	5	22	16	7.9	25	HUI-7892
10	6.1	4.3	6.3	12	1.0	8	2	7	6	23	16	7.9	25	HUI-7893
10	8.1	4.3	6.3	16	1.0	8	4	7	8	27	16	7.9	27	HUI-7894
16	5.1	5.6	8.0	10	1.2	10	3	6	5	24	20	10.0	29	HUI-7895
16	6.1	5.6	8.0	12	1.2	10	4	6	6	26	20	10.0	30	HUI-7896
16	8.1	5.6	8.0	16	1.2	10	4	8	8	30	20	10.0	32	HUI-7897
16	8.1	5.6	8.0	18	1.2	10	4	10	9	33	20	10.0	34	HUI-7898

### CRIMPING TYPE COPPERTUBULAR ENDS & IN-LINE CONNECTORS (INSULATED) FOR COPPER/ALUMINIUM CONDUCTORS

Material : Copper Strip / Tape to IS -1897

Specification : E.C. Grade 99.25% IACS

Finish : Electro Tinned to BS 1872 (1984)



CABLE SIZE mm <sup>2</sup>	DIMENSIONS						PROD. CODE
	A	C	J	A1	C1	J1	
1.5	1.6	3.2	7.0	3.3	4.9	17.0	HII-473
2.5	2.4	4.0	7.0	4.1	5.5	17.0	HII-474
4-6	3.5	5.5	7.0	5.6	7.2	21.0	HII-475
1.5	1.6	3.2	15.0	3.3	4.9	25.0	HII-463
2.5	2.4	4.0	15.0	4.1	5.5	25.0	HII-464
4-6	3.5	5.5	15.0	5.6	7.2	27.0	HII-465



**CRIMPING TYPE INSULATED RING FORK (U-CUT) CABLE TERMINAL ENDS WITH METAL REINFORCEMENT**

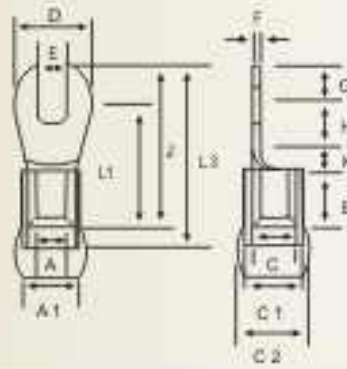
Material : Copper Strip / Tape to IS -1897

Specification : E.C. Grade 99.25% IACS

Finish : Electro Tinned to BS 1872 (1984)

SIZE : 1.5 2.5 4-6 10 16

COLOUR : RED BLUE YELLOW BLACK BLACK

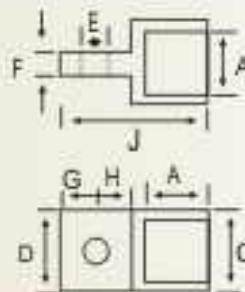


CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS													PROD. CODE
		A	C	D	F	B	K	H	J	L1	A1	C1	C2	L3	
1.5	3.1	1.6	3.2	6	0.8	5	2	4	14	10	3.6	4.8	5.4	16	HUR - 7899
1.5	3.6	1.6	3.2	6	0.8	5	2	4	14	10	3.6	4.8	5.4	16	HUR - 7900
1.5	3.1	1.6	3.2	6.8	0.8	5	-	4.6	13	10	3.6	4.8	5.4	14.6	HUR - 7901
1.5	3.6	1.6	3.2	6.8	0.8	5	-	4.6	13	10	3.6	4.8	5.4	14.6	HUR - 7902
1.5	4.1	1.6	3.2	7	0.8	5	1	5	14	10	3.6	4.8	5.4	16	HUR - 7903
1.5	4.1	1.6	3.2	8	0.8	5	2	5	16	10	3.6	4.8	5.4	17	HUR - 7904
1.5	5.1	1.6	3.2	10	0.8	5	2	6	18	10	3.6	4.8	5.4	18	HUR - 7905
1.5	6.1	1.6	3.2	10	0.8	5	2	6	18	10	3.6	4.8	5.4	18	HUR - 7906
2.5	3.1	2.3	3.9	6.5	0.8	5	1	3.5	12.7	10	4.4	5.4	6.0	14.5	HUR - 7907
2.5	3.6	2.3	3.9	6.5	0.8	5	1	3.5	12.7	10	4.4	5.4	6.0	14.5	HUR - 7908
2.5	4.1	2.3	3.9	8	0.8	5	2	5	16	10	4.4	5.4	6.0	17	HUR - 7909
2.5	5.1	2.3	3.9	10	0.8	5	1	7	18	10	4.4	5.4	6.0	18	HUR - 7910
2.5	6.1	2.3	3.9	10	0.8	5	1	7	18	10	4.4	5.4	6.0	18	HUR - 7911
4-6	4.1	3.5	5.5	8	1.0	6	2	5	17	15	6.4	7.1	8.6	22	HUR - 7912
4-6	4.1	3.5	5.5	10	1.0	6	3	5	19	15	6.4	7.1	8.6	23	HUR - 7913
4-6	5.1	3.5	5.5	10	1.0	6	3	5	19	15	6.4	7.1	8.6	23	HUR - 7914
4-6	5.1	3.5	5.5	12	1.0	6	3	7	22	15	6.4	7.1	8.6	25	HUR - 7915
4-6	6.1	3.5	5.5	12	1.0	6	3	7	22	15	6.4	7.1	8.6	25	HUR - 7916
10	4.1	4.3	6.3	10	1.0	8	2	7	22	17	6.8	8.3	9.5	26	HUR - 7917
10	5.1	4.3	6.3	10	1.0	8	2	7	22	17	6.8	8.3	9.5	26	HUR - 7918
10	6.1	4.3	6.3	12	1.0	8	2	7	23	17	6.8	8.3	9.5	26	HUR - 7919
10	8.1	4.3	6.3	16	1.0	8	4	7	27	17	6.8	8.3	9.5	28	HUR - 7920
16	5.1	5.6	8.0	10	1.2	10	3	6	24	23	10.9	9.9	12.9	32	HUR - 7921
16	6.1	5.6	8.0	12	1.2	10	4	6	26	23	10.9	9.9	12.9	33	HUR - 7922
16	8.1	5.6	8.0	16	1.2	10	4	8	30	23	10.9	9.9	12.9	35	HUR - 7923
16	8.1	5.6	8.0	18	1.2	10	4	10	33	23	10.9	9.9	12.9	37	HUR - 7924

**CRIMPING TYPE CENTRAL PALM ALUMINIUM TERMINAL ENDS FOR ALUMINIUM CONDUCTORS**

Material : Aluminium

Finish : Natural / Passivated Al.

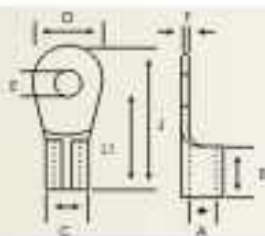


CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS										PROD. CODE
		A	C	D	F	B	K	H	G	J		
70	19/2.24	8.2	11.6	16.0	16.0	6	18	4	9.5	9.5	41	HADC - 25
120	37/2.06	8.2	14.8	19.6	19.6	6	22	6	9.5	9.5	47	HADC - 26
70	19/2.24	8.2	11.6	19.6	19.6	6	22	6	9.5	9.5	47	HADC - 33



### SOLDERING TYPE TINNED COPPER OPEN - CLOSE CABLE TERMINAL ENDS

Material : Copper Strip / Tape to IS -1897  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)



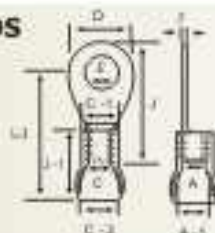
CABLE SIZE mm <sup>2</sup>	CABLE SIZE	HOLE E	DIMENSIONS							PROD. CODE
			A	C	D	F	B	I	J	
1.5	1/1.4	4.2	1.6	3.2	7	0.8	5	11.5	15	HOC-371
2.5	3/1.06	5.2	2.1	3.9	9	0.8	6	13.5	18	HOC-372
4	7/0.85	5.2	2.8	4.8	9	1.0	6	15.5	20	HOC-373
6	7/1.06	6.5	3.6	5.6	12	1.0	7	18	24	HOC-374
10	7/1.4	6.5	4.4	6.4	12	1.0	9	21	27	HOC-375
16	7/1.7	8.2	5.4	7.8	15	1.2	11	24.5	32	HOC-376
25	7/2.24	8.2	7.0	10.2	15	1.6	14	28.5	36	HOC-377
35	7/2.5	8.2	8.0	11.2	18	1.6	15	32	41	HOC-378
50	19/1.8	10.2	9.5	13.1	24	1.8	18	38	50	HOC-379
70	19/2.24	10.2	11.8	15.8	28	2.0	23	44	58	HOC-380
95	19/2.5	12.7	13.5	18.7	32	2.6	25	50	66	HOC-381
120	37/2.06	12.7	15.5	21.1	34	2.8	29	56	73	HOC-382
150	37/2.5	12.7	16.5	22.9	38	3.2	30	60	79	HOC-383
185	37/2.8	16.2	18.5	25.7	42	3.6	35	66	87	HOC-384
225	61/2.24	16.2	21.0	28.2	44	3.6	40	70	92	HOC-385
240	361/2.5	16.2	22.5	30.5	48	4.0	42	76	100	HOC-386
300	61/3.0	20.3	25.0	34.0	54	4.5	45	83	110	HOC-387
400	91/2.65	20.3	29.5	39.5	62	5.0	54	94	125	HOC-388
500	91/3.0	20.3	32.0	42.8	62	5.4	58	106	137	HOC-389
625	-	20.3	36.0	46.8	70	5.4	65	113	148	HOC-390

### CRIMPING TYPE COPPER RING TONGUE TERMINAL ENDS (INSULATED WITH METAL REINFORCEMENT) FOR COPPER / ALUMINIUM CONDUCTORS

Material : Copper Strip / Tape to IS -1897  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)

SIZE : 1.5 2.5 4

COLOUR : RED BLUE YELLOW

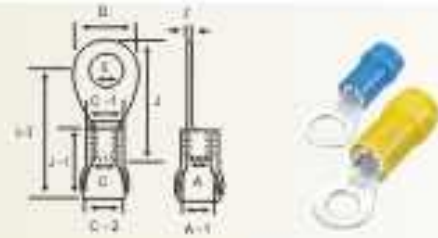


CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS											PROD. CODE	
		A	C	D	F	B	H	J	J1	A1	C1	C2		L3
1.5	3.2	1.6	3.2	5.5	0.8	5.0	4.8	12.5	14.3	3.6	4.8	5.4	19.1	HRR-8067
1.5	4.2	1.6	3.2	8.0	0.8	5.0	7.0	16.0	14.3	3.6	4.8	5.4	21.3	HRR-8068
1.5	5.2	1.6	3.2	8.0	0.8	5.0	7.0	16.0	14.3	3.6	4.8	5.4	21.3	HRR-8069
1.5	6.4	1.6	3.2	11.9	0.8	5.0	11.9	22.8	14.3	3.6	4.8	5.4	26.2	HRR-8070
1.5	8.2	1.6	3.2	11.9	0.8	5.0	11.9	22.8	14.3	3.6	4.8	5.4	26.2	HRR-8071
2.5	3.2	2.4	4.0	6.4	0.8	4.0	5.5	12.7	14.3	4.4	5.4	6.0	19.8	HRR-8072
2.5	4.4	2.4	4.0	8.7	0.8	4.0	8.3	16.6	14.3	4.4	5.4	6.0	22.6	HRR-8073
2.5	5.2	2.4	4.0	8.7	0.8	4.0	8.3	16.6	14.3	4.4	5.4	6.0	22.6	HRR-8074
2.5	6.7	2.4	4.0	11.9	0.8	4.0	12.3	22.2	14.3	4.4	5.4	6.0	26.6	HRR-8075
2.5	8.3	2.4	4.0	11.9	0.8	4.0	12.3	22.2	14.3	4.4	5.4	6.0	26.6	HRR-8076
2.5	9.9	2.4	4.0	13.5	0.8	4.0	14.7	25.4	14.3	4.4	5.4	6.0	29.0	HRR-8077
4	3.2	3.1	5.5	7.2	1.2	5.5	8.4	17.5	19.0	6.4	7.1	8.6	27.4	HRR-8078
4	4.4	3.1	5.5	8.7	1.2	5.5	9.2	19.0	19.0	6.4	7.1	8.6	28.2	HRR-8079
4	5.2	3.1	5.5	8.7	1.2	5.5	9.2	19.0	19.0	6.4	7.1	8.6	28.2	HRR-8080
4	6.7	3.1	5.5	13.5	1.2	5.5	12.8	25.0	19.0	6.4	7.1	8.6	31.8	HRR-8081
4	8.3	3.1	5.5	13.5	1.2	5.5	12.8	25.0	19.0	6.4	7.1	8.6	31.8	HRR-8082
4	9.9	3.1	5.5	13.5	1.2	5.5	12.8	25.0	19.0	6.4	7.1	8.6	31.8	HRR-8083
4	3.2	3.3	5.5	7.2	1.1	5.5	8.4	17.5	19.0	6.4	7.1	8.6	27.4	HRR-8084
4	4.4	3.3	5.5	9.5	1.1	5.5	9.6	19.8	19.0	6.4	7.1	8.6	28.6	HRR-8085
4	5.2	3.3	5.5	9.5	1.1	5.5	9.6	19.8	19.0	6.4	7.1	8.6	28.6	HRR-8086
4	6.7	3.3	5.5	13.5	1.1	5.5	13.5	25.7	19.0	6.4	7.1	8.6	32.5	HRR-8087
4	8.3	3.3	5.5	13.5	1.1	5.5	13.5	25.7	19.0	6.4	7.1	8.6	32.5	HRR-8088
4	9.9	3.3	5.5	15.9	1.1	5.5	15.9	29.3	19.0	6.4	7.1	8.6	34.9	HRR-8089
4	13.1	3.3	5.5	19.0	1.1	5.5	17.9	32.9	19.0	6.4	7.1	8.6	36.9	HRR-8090



**CRIMPING TYPE COPPER RING TONGUE TERMINAL ENDS  
(INSULATED WITH METAL REINFORCEMENT)  
FOR COPPER / ALUMINIUM CONDUCTORS REF : D. L. W.**

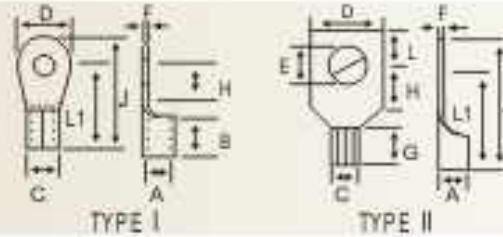
Material : Copper Strip / Tape to IS -1897  
Specification : E.C. Grade 99.25% IACS  
Finish : Electro Tinned to BS 1872 (1984)  
**SIZE** : 2.5 4-6  
**COLOUR** : BLUE YELLOW



CABLE SIZE	HOLE	DIMENSIONS												PROD. CODE
		F	A	C	D	F	B	H	J	J1	A1	C1	C2	
4-6	8.3	3.1	5.5	13.5	1.2	5.5	11.1	23.35	15	6.4	7.1	8.6	26.6	HRR-8037
4-6	9.9	3.1	5.5	13.5	1.2	5.5	11.1	23.35	15	6.4	7.1	8.6	26.6	HRR-8038
2.5	4.0	2.4	4.0	6.4	0.8	4.0	5.5	12.7	10	4.4	5.4	6.0	15.5	HRR-8039
4-6	8.3	3.1	5.5	13.5	1.2	5.5	11.1	25.75	15	6.4	7.1	8.6	28.5	HRR-8040
4-6	5.2	3.3	5.5	9.5	1.1	5.5	9.6	19.85	15	6.4	7.1	8.6	24.6	HRR-8041
4-6	6.7	3.3	5.5	12.7	1.1	5.5	10.8	22.65	15	6.4	7.1	8.6	25.8	HRR-8042
4-6	13.1	3.3	5.5	19.0	1.1	5.5	17.9	32.90	15	6.4	7.1	8.6	32.9	HRR-8043
2.5	8.3	2.4	4.0	11.9	0.8	4.0	12.3	22.25	10	4.4	5.4	6.0	22.3	HRR-8044
4-6	4.4	3.1	5.5	8.7	1.2	5.5	9.2	19.05	15	6.4	7.1	8.6	24.2	HRR-8045
2.5	5.2	2.4	4.0	8.7	0.8	4.0	8.3	16.65	10	4.4	5.4	6.0	18.3	HRR-8046
2.5	6.7	2.4	4.0	11.9	0.8	4.0	12.3	22.25	10	4.4	5.4	6.0	22.3	HRR-8047
2.5	9.9	2.4	4.0	13.5	0.8	4.0	14.7	25.45	10	4.4	5.4	6.0	24.7	HRR-8048
2.5	4.4	2.4	4.0	8.7	0.8	4.0	8.3	16.65	10	4.4	5.4	6.0	18.3	HRR-8049
4-6	5.2	3.1	5.5	8.7	1.2	5.5	9.2	19.05	15	6.4	7.1	8.6	24.2	HRR-8050
4-6	5.2	3.3	5.5	15.9	1.1	5.5	15.9	29.35	15	6.4	7.1	8.6	30.9	HRR-8051
4-6	6.7	3.1	5.5	13.5	1.2	5.5	12.8	25.05	15	6.4	7.1	8.6	27.8	HRR-8052

**CRIMPING TYPE COPPER RING &  
RECTANGULAR TERMINAL ENDS FOR  
COPPER CONDUCTORS REF.: I.C.F**

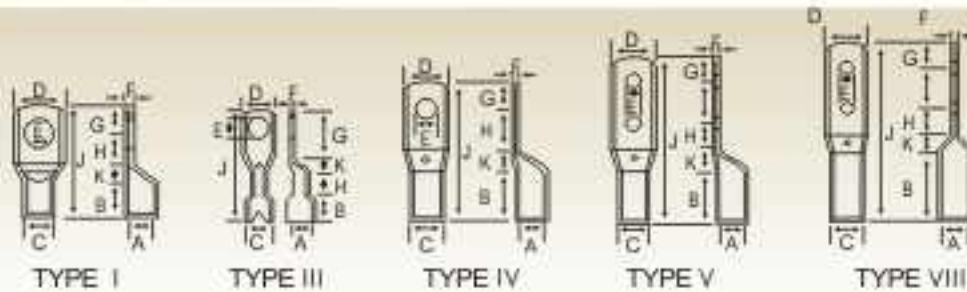
Material : Copper Strip / Tape to IS -1897  
Specification : E.C. Grade 99.25% IACS  
Finish : Electro Tinned to BS 1872 (1984)



CABLE SIZE	HOLE	DIMENSIONS									PROD. CODE
		E	A	C	D	F	B	H	L1	J	
15	9.5	6.0	10.0	16	2.0	10	14.0	24.0	32.0	I	HR-7829
42	9.5	10.0	14.0	22	2.0	17	14.0	31.0	42.0	I	HR-7830
42	13.0	10.0	14.0	22	2.0	17	14.0	31.0	42.0	I	HR-7831
100	9.5	16.0	22.0	28	3.0	21	21.0	42.0	56.0	I	HR-7832
133	9.5	17.0	23.0	36	3.0	29	19.0	48.0	66.0	I	HR-7833
133	13.0	17.0	23.0	36	3.0	29	19.0	48.0	66.0	I	HR-7834
5-8	5.2	4.2	6.2	9.6	1.0	8	13.0	21.0	25.8	I	HR-7205
5-8	6.4	4.2	6.2	12	1.0	8	15.8	23.8	29.8	I	HR-7206
5-8	8.2	4.2	6.2	16	1.0	8	20.5	28.5	36.5	I	HR-7207
5-8	10.2	4.2	6.2	16	1.0	8	20.5	28.5	36.5	I	HR-7835
5-8	13.0	4.2	6.2	19	1.0	8	21.0	29.0	38.5	I	HR-7222
5-8	13.0	4.2	6.6	24	1.2	11	19.8	30.8	42.8	II	HR-7208
8-11	5.2	5.0	7.4	16	1.2	8	22.3	30.3	38.3	I	HR-7217
8-11	6.4	5.0	7.4	16	1.2	8	22.3	30.3	38.3	I	HR-7836
8-11	8.2	5.0	7.4	16	1.2	8	22.3	30.3	38.3	I	HR-7837
8-11	10.2	5.0	7.4	16	1.2	8	22.3	30.3	38.3	I	HR-7838
8-11	13.0	5.0	7.4	19	1.2	8	22.5	30.5	40.0	I	HR-7223
8-11	13.0	5.0	7.4	24	1.2	11	19.8	30.8	42.8	II	HR-7209
11-17	13.0	6.0	8.4	19	1.2	8	24.0	32.0	41.5	I	HR-7224
11-17	13.0	6.0	8.4	24	1.2	11	19.8	30.8	42.8	II	HR-7210
17-23	13.0	7.1	9.5	19	1.2	8	25.5	33.5	43.0	I	HR-7225
17-23	13.0	7.1	10.3	28.6	1.6	17.5	20.5	38.0	52.3	II	HR-7221

**CRIMPING TYPE COPPER TUBULAR TERMINAL ENDS FOR  
COPPER CONDUCTORS. REF.: C. L. W**

Material : Copper Tube to BS 1977 / IS 191 (part V)  
Specification : E.C. Grade 99.25% IACS  
Finish : Electro Tinned to BS 1872 (1984)



mm <sup>2</sup>	CABLE SIZE	HOLE E	DIMENSIONS										Type	PROD. CODE
			A	C	D	F	B	K	H	G	J	N		
3	45/0.3	3.2	2.6	4.6	7.0	1.6	5.5	-	6.5	3.5	15.5	-	I	HS-66
3	45/0.3	3.2	2.6	4.6	5.0	2.0	5.5	-	6.5	2.5	14.5	-	I	HS-67
3	45/0.3	4.2	2.6	4.6	7.3	1.5	5.5	-	6.5	4	16	-	I	HS-65
3	45/0.3	4.2	2.6	4.6	8.0	1.4	5.5	-	6.5	4	16	-	I	HS-209
3	45/0.3	5.2	2.6	4.6	8.0	1.4	5.5	-	6.5	4	16	-	I	HS-210
3	45/0.3	6.2	2.6	5.0	10.0	1.4	8	3	10	5	34	1.5	III	HS-211
10	144/0.3	6.2	5.0	7.0	10.0	2.0	10	4	11	7	40	3	VII	HS-228
10	144/0.3	8.2	5.0	7.0	12.0	1.6	10	4	11	7	40	3	VII	HS-68
10	144/0.3	10.2	5.0	7.0	14.0	1.4	10	4	11	7	40	3	VII	HS-69
25	127/0.5	6.2	8.0	10.0	15.0	2.0	16	5	14	10	45	3	IV	HS-212
25	127/0.5	8.2	8.0	10.0	15.0	2.0	16	5	14	10	45	3	IV	HS-56
35	-	8.2	9.6	12.0	17.0	2.4	20	5	21	14	60	3	IV	HS-187
50	175/0.5	10.5	10.8	14.0	20.0	3.2	20	6	20	14	60	3	IV	HS-87
50	175/0.6	15.0	10.8	14.0	20.0	3.2	20	6	20	14	60	3	IV	HS-230
70	-	11.0	12.8	17.0	24.0	4.2	25	10	18	12	65	4	IV	HS-229
120	427/0.6	14.0	17.0	22.2	32.2	5.2	30	13	27	18	88	4	IV	HS-55
120	427/0.6	21.0	17.0	22.2	32.2	5.2	30	13	27	18	88	4	IV	HS-70
150	525/0.6	16.0	18.0	24.0	34.0	6.0	35	12	25	18	90	5	IV	HS-54
225	760/0.6	16.0	22.0	28.0	40.0	6.0	45	12	25	18	100	5	IV	HS-213
225	760/0.6	11.0	22.0	28.0	40.0	6.0	45	12	22	15	130	5	V	HS-214
225	760/0.6	11.0	22.0	28.0	40.0	6.0	45	12	25	18	100	5	IV	HS-71
270	950/0.6	11.0	26.0	32.0	40.0	6.0	55	12	24	15	142	5	VIII	HS-215
270	950/0.6	-	26.0	-	-	-	-	-	-	-	70	-	VI	HS-72
475	1680/0.6	11.0	36.5	46.1	50.0	9.6	75	15	24	15	165	5	VIII	HS-74
475	1680/0.6	22.0	36.5	46.1	50.0	9.6	75	15	33	22	145	5	IV	HS-73
475	1680/0.6	11.0	36.5	46.1	50.0	9.6	75	15	33	22	145	5	IV	HS-75

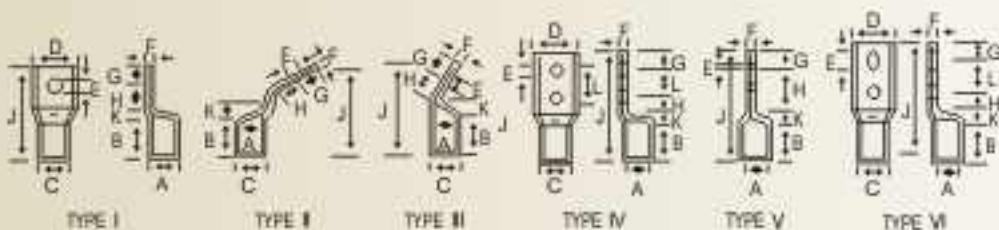


### CRIMPING TYPE COPPER TUBULAR TERMINAL ENDS FOR COPPER CONDUCTORS. REF. : D. L. W.

Material : Copper Tube to BS 1977 / IS 191 (part V)

Specification : E.C. Grade 99.25% IACS

Finish : Electro Tinned to BS 1872 (1984)



mm <sup>2</sup>	CABLE SIZE	HOLE E	DIMENSIONS										PROD. CODE	
			A	C	D	F	B	K	H	G	J	L		Type
133	650/0.5	10.1	17.0	22.2	32	5.2	27	8	28	19	82	-	I	HS-36
133	650/0.5	13.5	17.0	22.2	32	5.2	27	8	28	19	82	-	I	HS-37
133	650/0.5	13.5	17.0	22.2	32	5.2	27	7	19	14	67	-	I	HS-38
133	650/0.5	10.3	17.0	22.2	32	5.2	27	7	19	14	67	-	I	HS-39
133	650/0.5	10.3	17.0	22.2	32	5.2	27	12	19	14	62	-	II	HS-40
133	650/0.5	10.3	17.0	22.2	32	5.2	27	12	19	14	67	-	III	HS-41
133	650/0.5	8.7	17.0	22.2	32	5.2	27	8	11	11	79	22.2	V	HS-47
133	650/0.5	8.7	17.0	22.2	32	5.2	27	11	14	13	109	44.4	VI	HS-51
270	1325/0.5	16.6	24.6	31.7	46	7.1	40	11	22	21	94	-	I	HS-42
270	1325/0.5	13.5	24.6	31.7	46	7.1	40	11	22	21	94	-	I	HS-43
270	1325/0.5	13.5	24.6	31.7	46	7.1	35	15	22	21	86	-	III	HS-44
270	1325/0.5	10.3	24.6	31.7	46	7.1	40	8	13	12	97	25.4	V	HS-48
270	1325/0.5	13.5	24.6	31.7	46	7.1	40	8	13	12	105	31.7	IV	HS-49
400	1925/0.5	17.4	29.3	37.2	53	7.9	47	10	29	22	108	-	I	HS-45
400	1925/0.5	13.5	29.3	37.2	53	7.9	47	10	29	22	108	-	I	HS-46
400	1925/0.5	14.3	29.3	37.2	53	7.9	51	7	27	13	130	31.7	IV	HS-50

### CRIMPING TYPE COPPER TUBULAR END SEALING FERRULES FOR COPPER / ALUMINIUM CONDUCTORS

Material : Copper Tube to BS 1977 / IS 191 (part V)

Specification : E.C. Grade 99.25% IACS

Finish : Electro Tinned to BS 1872 (1984)



CABLE SIZE mm <sup>2</sup>	DIMENSIONS			PROD. CODE
	A	C	J	
1.5	1.8	2.6	10	HI-459
2.5	2.4	3.2	10	HI-466
4	2.7	3.5	15	HI-495
6	3.5	4.3	15	HI-568
10	4.4	5.2	15	HI-569
16	5.3	6.1	18	HI-570
25	7.0	7.8	18	HI-571
35	8.0	8.8	18	HI-500
50	9.3	10.1	21	HI-572
70	11.5	12.3	21	HI-497
95	12.8	13.6	21	HI-573
120	14.8	15.6	21	HI-574
150	16.0	16.8	21	HI-575
185	18.0	18.8	21	HI-496



**CRIMPING TYPE COPPER TUBULAR TERMINAL ENDS FOR  
COPPER CONDUCTORS. REF.: I. C. F**

Material : Copper Tube to BS 1977 / IS 191 (part V)  
Specification : E.C. Grade 99.25% IACS  
Finish : Electro Tinned to BS 1872 (1984)

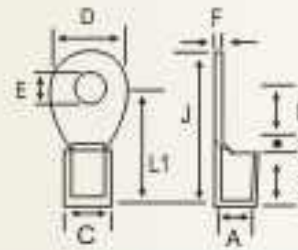


CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	G	J	
11-17	5.2	6.0	8.5	11.9	2.5	14	3	10	6	33	HS-106
11-17	6.5	6.0	8.5	11.9	2.5	14	3	10	6	33	HS-145
11-17	8.2	6.0	8.5	16.0	1.7	14	3	11	9	37	HS-146
11-17	10.2	6.0	8.5	16.0	1.7	14	4	11	9	37	HS-109
17-23	5.2	7.1	10.2	14.3	3.1	18	4	10	7	39	HS-107
17-23	6.5	7.1	10.2	14.3	3.1	18	4	10	7	39	HS-147
17-23	8.2	7.1	10.2	14.3	3.1	18	4	10	7	39	HS-148
17-23	10.2	7.1	10.0	19.0	2.2	18	4	12	10	44	HS-108
23-29	5.2	8.0	11.7	16.3	3.7	18	4	11	8	41	HS-110
23-29	6.5	8.0	11.7	16.3	3.7	18	4	11	8	41	HS-149
23-29	8.2	8.0	11.7	16.3	3.7	18	4	11	8	41	HS-150
23-29	10.2	8.0	11.7	20.0	2.8	18	4	14	11	47	HS-151
23-29	13.0	8.0	11.7	20.0	2.8	18	4	14	11	47	HS-111
29-45	5.2	9.8	13.7	19.3	3.9	18	5	10	10	43	HS-116
29-45	6.5	9.8	13.7	19.3	3.9	18	5	10	10	43	HS-152
29-45	8.2	9.8	13.7	19.3	3.9	18	5	10	10	43	HS-153
29-45	10.2	9.8	13.7	19.3	3.9	18	5	10	10	43	HS-154
29-45	13.0	9.8	13.7	22.0	3.2	18	5	14	11	48	HS-113
45-57	6.5	11.1	15.8	22.0	4.7	24	6	15	11	56	HS-112
45-57	8.2	11.1	15.8	22.0	4.7	24	6	15	11	56	HS-155
45-57	10.2	11.1	15.8	22.0	4.7	24	6	15	11	56	HS-156
45-57	13.0	11.1	15.8	22.0	4.7	24	6	15	11	56	HS-157
57-75	6.5	12.6	17.8	25.0	5.2	24	6	15	13	58	HS-114
57-75	8.2	12.6	17.8	25.0	5.2	24	6	15	13	58	HS-158
57-75	10.2	12.6	17.8	25.0	5.2	24	6	15	13	58	HS-159
57-75	13.0	12.6	17.8	25.0	5.2	24	6	15	13	58	HS-160
75-90	6.5	13.7	19.1	26.9	5.4	24	6	16	13	59	HS-137
75-90	8.2	13.7	19.1	26.9	5.4	24	6	16	13	59	HS-161
75-90	10.2	13.7	19.1	26.9	5.4	24	6	16	13	59	HS-162
75-90	13.0	13.7	19.1	26.9	5.4	24	6	16	13	59	HS-163
90-110	6.5	15.3	20.9	29.6	5.6	24	6	17	15	62	HS-115
90-110	8.2	15.3	20.9	29.6	5.6	24	6	17	15	62	HS-164
90-110	13.0	15.3	20.9	29.6	5.6	24	6	17	15	62	HS-166
110-146	8.2	17.5	24.0	34.0	6.5	29	7	18	17	71	HS-138
110-146	10.2	17.5	24.0	34.0	6.5	29	7	18	17	71	HS-167
110-146	13.0	17.5	24.0	34.0	6.5	29	7	18	17	71	HS-168
110-146	17.0	17.5	24.0	34.0	6.5	29	7	18	17	71	HS-169
146-183	10.2	19.8	26.9	38.2	7.1	29	8	21	18	76	HS-128
146-183	13.0	19.8	26.9	38.2	7.1	29	8	21	18	76	HS-170
146-183	17.0	19.8	26.9	38.2	7.1	29	8	21	18	76	HS-171
183-225	10.2	21.9	29.7	42.2	7.8	29	9	24	21	83	HS-139
183-225	13.0	21.9	29.7	42.2	7.8	29	9	24	21	83	HS-172
183-225	17.0	21.9	29.7	42.2	7.8	29	9	24	21	83	HS-173
183-225	21.0	21.9	29.7	42.2	7.8	29	9	24	21	83	HS-174
225-299	13.0	25.4	34.0	48.5	8.6	29	10	26	24	89	HS-140
225-299	17.0	25.4	34.0	48.5	8.6	29	10	26	24	89	HS-175
225-299	21.0	25.4	34.0	48.5	8.6	29	10	26	24	89	HS-176
299-366	13.0	28.0	37.6	53.6	9.6	38	11	29	27	105	HS-141
299-366	17.0	28.0	37.6	53.6	9.6	38	11	29	27	105	HS-177
299-366	21.0	28.0	37.6	53.6	9.6	38	11	29	27	105	HS-178
366-437	13.0	30.5	41.7	59.1	11.2	38	12	32	29	111	HS-142
366-437	17.0	30.5	41.7	59.1	11.2	38	12	32	29	111	HS-179
366-437	21.0	30.5	41.7	59.1	11.2	38	12	32	29	111	HS-180



## CRIMPING TYPE COPPER RING TONGUE TERMINAL ENDS FOR COPPER / ALUMINIUM CONDUCTORS

Material : Copper Strip / Tape to IS - 1897  
 Specification : E.C. Grade 99.25% IACS  
 Finish : Electro Tinned to BS 1872 (1984)



CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	L1	J	
0.75	4.2	0.9	2.1	8.0	0.6	4.0	-	8.0	12.0	16.0	HR-7317
1.0	4.2	1.2	2.8	8.0	0.8	4.0	-	8.0	12.0	16.0	HR-7318
1.5	2.3	1.6	3.2	4.6	0.8	5.0	-	4.7	9.7	12.0	HR-7319
1.5	3.0	1.6	3.2	4.6	0.8	5.0	-	4.7	9.7	12.0	HR-7320
1.5	3.2	1.6	3.2	5.5	0.8	5.0	-	4.8	9.8	12.6	HR-7321
1.5	3.7	1.6	3.2	5.5	0.8	5.0	-	4.8	9.8	12.6	HR-7322
1.5	3.2	1.6	3.2	6.0	0.8	4.8	-	7.5	12.3	15.3	HR-7323
1.5	5.1	1.6	3.2	7.2	0.8	5.0	-	7.4	12.4	16.0	HR-7324
1.5	5.0	1.6	3.2	8.0	0.8	5.0	-	9.0	14.0	18.0	HR-7325
1.5	6.4	1.6	3.2	11.9	0.8	5.0	-	11.9	16.9	22.9	HR-7326
1.5	8.2	1.6	3.2	11.9	0.8	5.0	-	11.9	16.9	22.9	HR-7327
1.5	5.2	1.8	3.4	10.0	0.8	5.0	-	8.0	13.0	18.0	HR-7188
1.5	6.4	1.8	3.4	12.0	0.8	5.0	-	11.0	16.0	22.0	HR-7189
1.5	5.2	1.8	3.8	10.0	1.0	5.0	2.0	8.0	15.0	20.0	HR-7328
2.5	3.7	2.3	3.9	6.5	0.8	5.0	-	8.0	13.0	16.2	HR-7329
2.5	4.2	2.5	5.1	10.0	1.3	6.0	2.0	7.0	15.0	20.0	HR-7330
2.5	5.2	2.5	5.1	10.0	1.3	6.0	2.0	7.0	15.0	20.0	HR-7331
2.5	4.2	2.6	5.0	8.0	1.2	6.0	2.0	5.0	13.0	17.0	HR-7332
2.5	5.2	2.6	5.0	8.0	1.2	6.0	2.0	5.0	13.0	17.0	HR-7333
3.0	4.2	2.9	5.3	10.0	1.2	6.0	2.0	7.0	15.0	20.0	HR-7334
3.0	5.2	2.9	5.3	10.0	1.2	6.0	2.0	7.0	15.0	20.0	HR-7335
3.0	5.2	2.9	5.3	12.0	1.2	6.0	2.0	8.0	16.0	22.0	HR-7336
3.0	6.4	2.9	5.3	12.0	1.2	6.0	2.0	8.0	16.0	22.0	HR-7337
4.0	6.4	3.0	5.0	12.0	1.0	6.0	-	8.0	14.0	20.0	HR-7190
4.0	10.2	3.0	5.0	16.0	1.0	6.0	-	16.0	22.0	30.0	HR-7191
4.0	3.2	3.1	5.5	7.2	1.2	6.0	-	8.4	14.4	18.0	HR-7338
4.0	4.2	3.1	5.5	8.0	1.2	6.0	2.0	5.0	13.0	17.0	HR-7339
4.0	5.2	3.1	5.5	8.0	1.2	6.0	2.0	5.0	13.0	17.0	HR-7340
4.0	5.2	3.1	5.5	10.0	1.2	6.0	3.0	5.0	14.0	19.0	HR-7341
4.0	6.4	3.1	5.5	12.0	1.2	6.0	2.0	6.0	14.0	20.0	HR-7342
4.0	6.4	3.1	5.5	12.0	1.2	6.0	3.0	7.0	16.0	22.0	HR-7343
4.0	5.2	3.1	5.5	14.0	1.2	6.0	2.0	10.5	18.5	25.5	HR-7344
4.0	6.4	3.1	5.5	14.0	1.2	6.0	2.0	10.5	18.5	25.5	HR-7345
4.0	6.7	3.3	5.3	13.5	1.0	6.0	6.0	3.3	15.3	22.0	HR-7346
4.0	6.4	3.3	5.7	14.0	1.2	6.0	2.0	10.5	18.5	25.5	HR-7347
4.0	8.2	3.3	5.3	14.0	1.0	6.0	2.0	10.5	18.5	25.5	HR-7348
4-6	3.2	3.5	5.5	7.2	1.0	6.0	-	8.4	14.4	18.0	HR-7349
4-6	5.2	3.5	5.5	14.0	1.0	6.0	2.0	10.5	18.5	25.5	HR-7350
4-6	5.2	3.5	5.5	16.0	1.0	6.0	3.0	13.0	22.0	30.0	HR-7351
4-6	6.4	3.5	5.5	18.0	1.0	6.0	3.0	12.0	21.0	30.0	HR-7352
6.0	4.2	4.0	6.0	8.0	1.0	6.0	2.0	5.0	13.0	17.0	HR-7353
6.0	6.4	4.0	6.0	14.0	1.0	6.0	2.0	10.5	18.5	25.5	HR-7354
6.0	6.4	4.0	6.0	14.0	1.0	10.0	-	15.0	25.0	32.0	HR-7356
6.0	8.2	4.0	6.0	16.0	1.0	6.0	-	16.0	22.0	30.0	HR-7357
6.0	8.4	4.0	6.0	18.0	1.0	10.0	-	15.0	25.0	34.0	HR-7358
6.0	8.2	4.2	6.2	16.0	1.0	6.5	2.5	13.0	22.0	30.0	HR-7359

Contd. .... on next page.

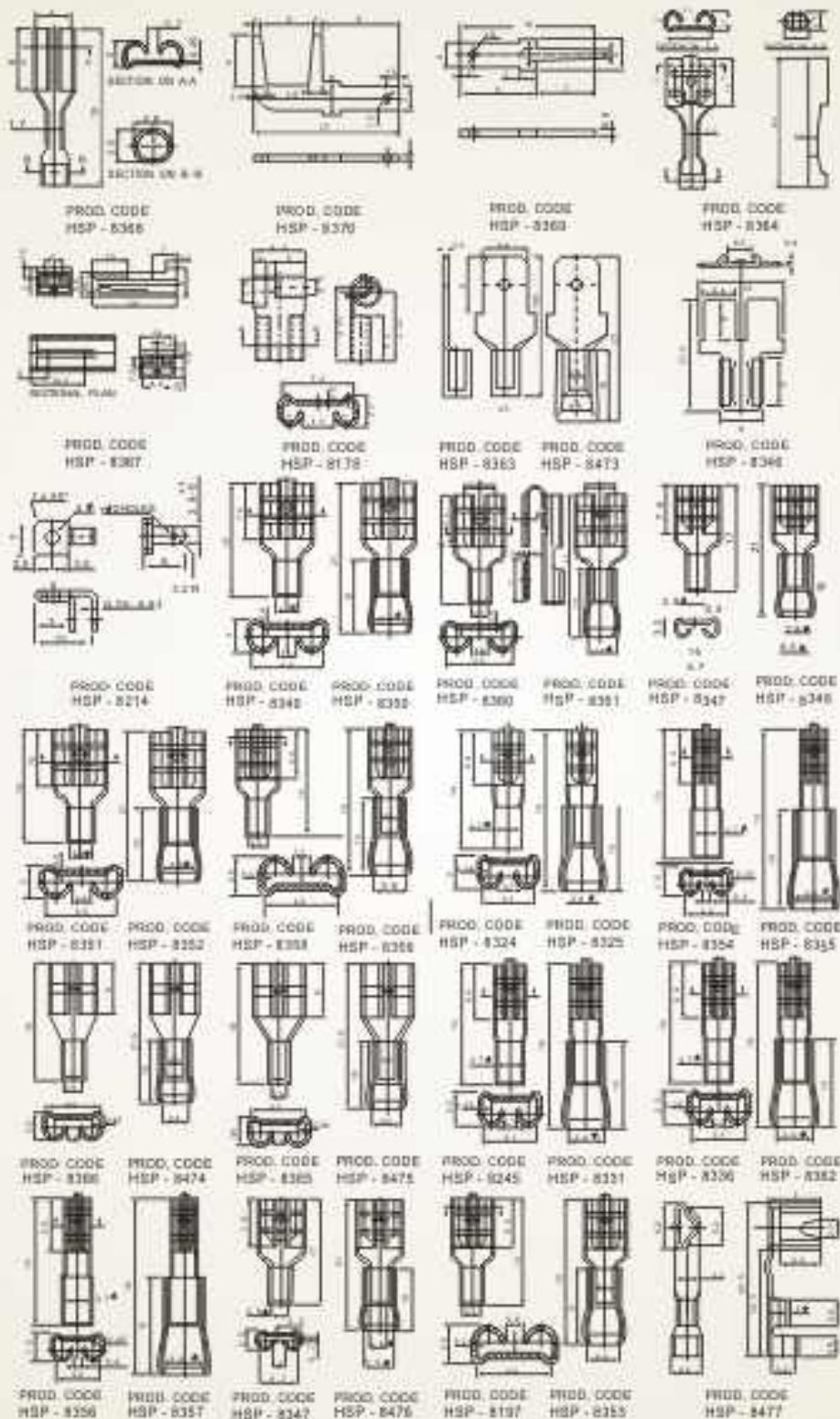


**CRIMPING TYPE COPPER RING TONGUE TERMINAL ENDS FOR COPPER / ALUMINUM CONDUCTORS.**

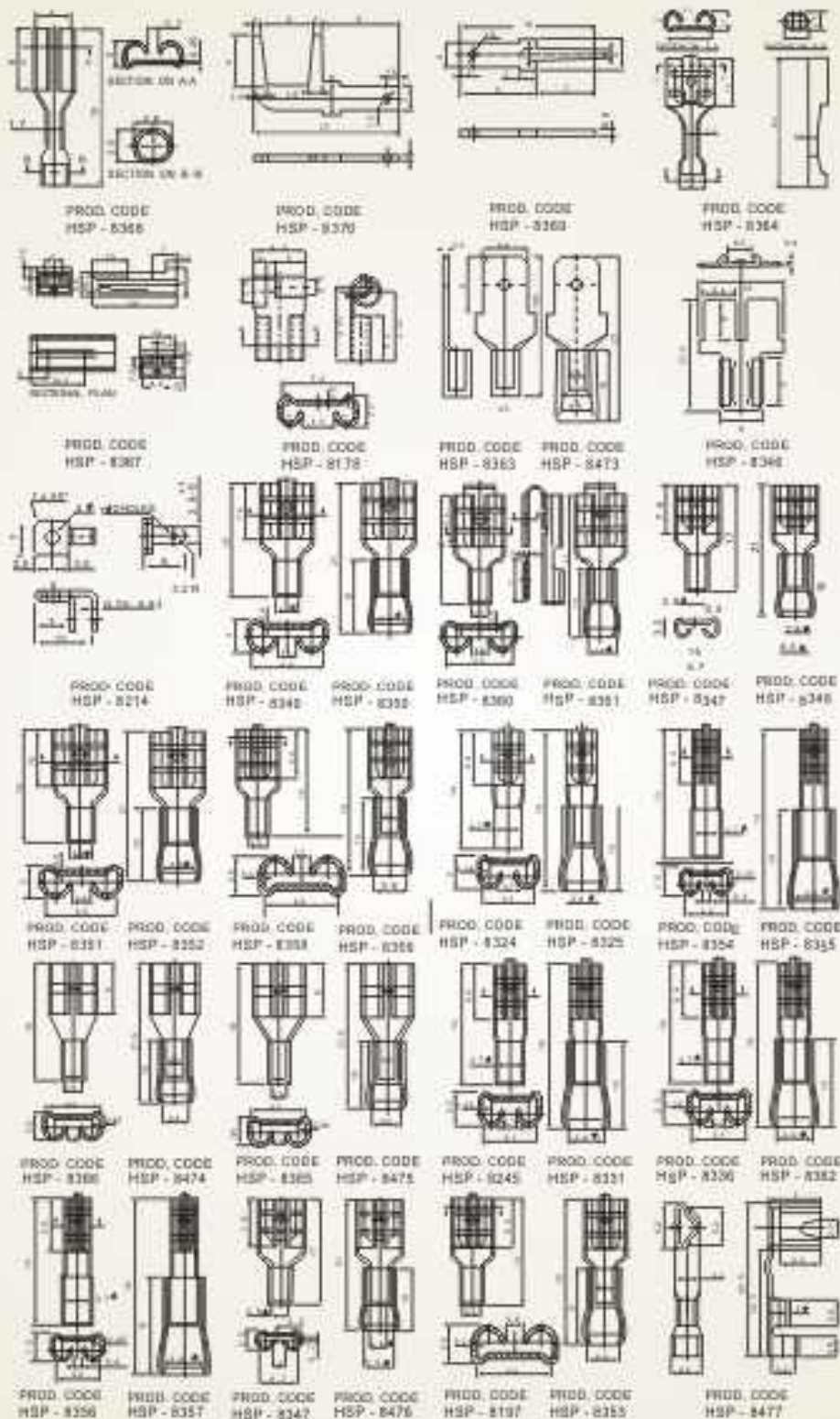

CABLE SIZE mm <sup>2</sup>	HOLE E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	L1	J	
10	8.2	4.3	6.7	16	1.2	10	4	8	22	30	HR-7360
10	6.4	4.5	6.5	12	1.0	8	-	9	17	23	HR-7199
10	8.2	4.5	6.5	16	1.0	8	-	11	19	27	HR-7200
10	8.2	5.2	7.6	18.2	1.2	10	-	14	24	-	HR-7215
10	8.4	5.2	8.4	18	1.6	8	-	28	36	45	HR-7173
10	10.5	5.2	8.4	22	1.6	8	-	32	40	49	HR-7361
16	6.4	5.3	7.7	12	1.2	10	-	10	20	26	HR-7192
16	8.2	5.3	7.7	16	1.2	10	-	12	22	30	HR-7193
16	10.2	5.3	7.7	18	1.2	10	-	14	24	33	HR-7194
10	6.4	5.4	7.8	14	1.2	10	4	10	24	31	HR-7169
10	8.2	5.4	7.8	18	1.2	10	4	10	24	33	HR-7362
16	10.2	5.6	8.0	16	1.2	10	4	8	22	30	HR-7363
16	10.2	5.6	8.8	22	1.6	10	6	8	24	35	HR-7364
16	12.7	5.6	8.8	22	1.6	10	6	8	24	35	HR-7365
16	6.4	5.9	8.3	12	1.2	10	-	10	20	26	HR-7211
16	8.2	5.9	8.3	16	1.2	10	-	12	22	30	HR-7212
16	10.2	5.9	8.3	18	1.2	10	-	14	24	33	HR-7175
15	8.2	6.0	10.0	16	2.0	10	-	14	24	32	HR-7366
15	10.2	6.0	10.0	16	2.0	10	-	14	24	32	HR-7367
16	10.2	6.3	8.7	16	1.2	11	4	10	25	33	HR-7368
16	8.2	6.5	8.9	18.2	1.2	11	-	14	25	34	HR-7216
16	8.4	6.5	9.7	18	1.6	8	-	32	40	49	HR-7369
16	8.2	6.7	9.1	18	1.2	11	3	11	25	34	HR-7370
16	10.2	6.7	10.3	22	1.8	11	6	14	31	42	HR-7371
25	6.4	7.0	10.2	12	1.6	11	-	14	25	31	HR-7177
25	10.2	7.0	10.2	18	1.6	11	-	14	25	34	HR-7176
25	6.4	7.7	10.9	12	1.6	11	-	14	25	31	HR-7179
25	10.2	7.7	10.9	18	1.6	11	-	14	25	34	HR-7178
35	8.2	7.9	11.5	16	1.8	11	-	14	25	33	HR-7183
35	10.2	7.9	11.5	18	1.8	11	-	14	25	34	HR-7182
25	8.4	8.2	11.4	18	1.6	11	-	14	25	34	HR-7372
35	10.2	9.0	12.6	32	1.8	16	7	15	38	54	HR-7373
35	16.2	9.0	12.6	32	1.8	16	7	15	38	54	HR-7374
50	10.2	9.4	13.0	22	1.8	16	-	16	32	43	HR-7180
50	12.7	9.4	13.0	24	1.8	16	-	20	36	48	HR-7213
50	10.2	9.5	12.7	24	1.6	16	6	14	36	48	HR-7375
50	12.7	10.5	14.1	32	1.8	16	7	15	38	54	HR-7376
50	11.0	10.8	14.8	22	2.0	18	-	18	36	47	HR-7377
50	10.2	11.0	17.4	32	3.2	29	-	25	54	70	HR-7378
70	10.2	11.5	15.5	22	2.0	18	-	18	36	47	HR-7181
70	12.7	11.5	15.5	24	2.0	18	-	18	36	48	HR-7187
70	16.2	11.5	15.1	32	1.8	18	-	33	51	67	HR-7201
70	6.4	12.0	16.0	24	2.0	18	8	10	36	48	HR-7379
95	10.2	12.8	17.4	22	2.3	20	-	15	35	46	HR-7195
95	12.7	12.8	17.4	24	2.3	20	-	18	38	50	HR-7196
120	10.2	15.0	20.2	28	2.6	21	-	21	42	56	HR-7380
150	10.2	16.5	21.7	28	2.6	19	-	22	41	55	HR-7202
150	16.2	17.5	24.7	36	3.6	25	10	18	53	71	HR-7170
150	16.2	17.5	24.7	36	3.6	25	10	28	63	81	HR-7220
150	13.0	19.5	25.9	36	3.2	29	14	24	67	85	HR-7381
150-192	13.0	21.4	28.4	38	3.5	28	13	10.5	50.5	67	HR-7382
200	14.0	22.0	30.0	44	4.0	39	12	10.25	54.76	98	HR-7383
205	13	24.4	31.8	43	3.7	32	12	10.5	54.5	70	HR-7384
250	16.2	25.0	33.0	44	4.0	37	11	28	76	98	HR-7385
250	20.3	25.0	33.0	50	4.0	40	12	28	80	105	HR-7386
252-304	20.0	28.0	37.0	50	4.5	36	16	28	80	105	HR-7387



# HEX RANGE OF SNAP ON TERMINALS

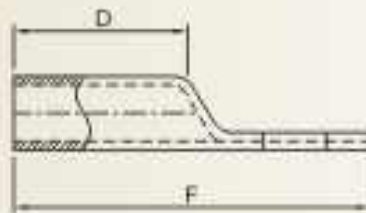


# HEX RANGE OF SNAP ON TERMINALS



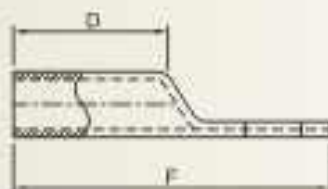


**COPPER COMPRESSION LUGS -  
SHORT BARREL**



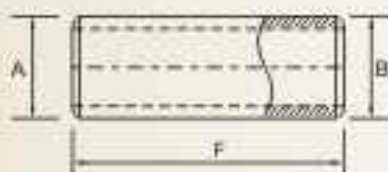
WIRE SIZE	BOLT SIZE	COLOUR CODE	DIMENSIONS		PROD. CODE
			D	F	
8	#10	RED	7/16	1-1/8	HCRA-8
6	#10	BLUE	13/16	1-1/2	HCRA-6
6	1/4	BLUE	13/16	1-1/2	HCRA-6
4	#10	GRAY	13/16	1-1/2	HCRA-4
4	5/16	GRAY	13/16	1-1/2	HCRA-4-516
4	1/4	GRAY	13/16	1-1/2	HCRA-4
3	1/4	WHITE	13/16	1-1/2	HCRA-3
2	1/4	BROWN	7/8	1-26/32	HCRA-2
2	5/16	BROWN	7/8	1-27/32	HCRA-2
2	3/8	BROWN	1-3/32	1-27/32	HCRA-2
1	5/16	GREEN	7/8	1-7/8	HCRA-1
1	1/4	GREEN	7/8	1-7/8	HCRA-1-14
1	3/8	GREEN	7/8	1-7/8	HCRA-1-38
1/0	5/16	PINK	7/8	1-7/8	HCRA-0
1/0	1/4	PINK	7/8	1-7/8	HCRA-0-14
1/0	3/8	PINK	7/8	1-7/8	HCRA-0
2/0	3/8	BLACK	15/16	2-3/32	HCRA-2/0
2/0	1/4	BLACK	15/16	2-3/32	HCRA-2/0-14
2/0	5/16	BALCK	1-7/32	2-3/32	HCRA-2/0
3/0	3/8	ORANGE	1	2-5/16	HCRA-3/0
3/0	1/4	ORANGE	1	2-5/16	HCRA-3/0-14
3/0	1/2	ORANGE	1	2-5/16	HCRA-3/0
3/0	5/16	ORANGE	1-5/16	2-5/16	HCRA-3/0
4/0	3/8	PURPLE	1	2-11/32	HCRA-4/0
4/0	1/4	PURPLE	1	2-11/32	HCRA-4/0-14
4/0	1/2	PURPLE	1	2-11/32	HCRA-4/0
4/0	5/16	PURPLE	1-11/32	2-5/16	HCRA-4/0
250MCM	1/2	YELLOW	1-1/16	2-5/8	HCRA-250
250MCM	3/8	YELLOW	1-1/16	2-5/8	HCRA-250-38
300MCM	1/2	WHITE	1-1/16	2-5/8	HCRA-300
300MCM	3/8	WHITE	1-1/16	2-5/8	HCRA-300-38
300MCM	5/16	WHITE	1-1/16	2-5/8	HCRA-300-516
300MCM	5/8	WHITE	1-1/16	2-5/8	HCRA-300-58
350MCM	1/2	RED	1-1/8	2-11/16	HCRA-350
400MCM	5/8	BLUE	1-3/16	3-5/16	HCRA-400
400MCM	1/2	BLUE	1-3/16	3-5/16	HCRA-400-12
500MCM	5/8	BROWN	1-3/8	3-1/2	HCRA-500
500MCM	1/2	BROWN	1-3/8	3-1/2	HCRA-500-12
600MCM	5/8	GREEN	1-1/2	3-5/8	HCRA-600
600MCM	1/2	GREEN	1-1/2	3-5/8	HCRA-600-12
*700MCM	5/8	PINK	1-3/8	3-31/32	*HCRA-700
*750MCM	5/8	BLACK	1-5/8	4-11/32	*HCRA-750
*1000MCM	5/8	WHITE	1-7/8	4-7/8	*HCRA-1000

## COPPER COMPRESSION LUGS - LONG BARREL



WIRE SIZE	BOLT SIZE	COLOUR	DIMENSIONS		PROD. CODE
			D	F	
8	-	RED	1-1/8	1-5/2	HCRB-8L
6	0.250	BLUE	1-1/8	1-13/16	HCRB-6L
4	0.250	GRAY	1-1/8	1-13/16	HCRB-4L
4	0.312	GRAY	1-1/8	1-13/16	HCRB-4L-516
3	0.250	WHITE	1-1/8	1-13/16	HCRA-3L
2	0.312	BROWN	1-1/4	2-7/32	HCRB-2L
2	0.250	BROWN	1-1/4	2-7/32	HCRB-2L-14
2	0.375	BROWN	1-1/4	2-7/32	HCRB-2L-38
1	0.312	GREEN	1-3/8	2-3/8	HCRA-1L
1/0	0.312	PINK	1-3/8	2-3/8	HCRA-1/0L
2/0	0.375	BLACK	1-1/2	2-21/32	HCRA-2/0L
3/0	0.500	ORANGE	1-1/2	2-29/32	HCRB-3/0L
4/0	0.500	PURPLE	1-5/8	2-31/32	HCRB-4/0L
250MCM	0.500	YELLOW	1-5/8	3-3/16	HCRA-250L
300MCM	0.500	WHITE	2	3-9/16	HCRA-300L
350MCM	0.500	RED	2	3-9/16	HCRA-350L
400MCM	0.625	BLUE	2-1/8	4-1/4	HCRA-400L
500MCM	0.625	BROWN	2-1/4	4-3/8	HCRA-500L
600MCM	0.625	GREEN	2-1/4	4-15/32	HCRA-600L
*750MCM	0.625	BLACK	2-7/8	5-15/32	*HCRA-750L
*1000MCM	0.625	WHITE	3	6.0	*HCRA-1000L

## COPPER COMPRESSION SLEEVES - SHORT BARREL



WIRE SIZE	COLOUR	DIMENSIONS			PROD. CODE
		F	A	B	
8	RED	1-1/8	9/32	11/64	HCT-8
6	BLUE	1-3/4	19/64	13/34	HCT-6
4	GRAY	1-7/8	11/32	1/4	HCT-4
3	WHITE	1-3/4	3/8	9/32	HCT-3
2	BROWN	1-7/8	27/64	5/16	HCT-2
1	GREEN	1-7/8	15/32	23/64	HCT-1
1/0	PINK	1-7/8	33/64	25/64	HCT-1/0
2/0	BLACK	2	9/16	7/16	HCT-2/0
3/0	ORANGE	2-1/8	39/64	31/64	HCT-3/0
4/0	PURPLE	2-1/8	11/16	35/64	HCT-4/0
300MCM	WHITE	2-1/4	13/16	21/32	HCT-300
350MCM	RED	2-3/8	7/8	11/16	HCT-350
400MCM	BLUE	2-1/2	15/16	3/4	HCT-400
500MCM	BROWN	2-7/8	1-1/16	53/64	HCT-500
600MCM	GREEN	2-7/8	1-5/16	59/64	HCT-600
*750MCM	BLACK	3.375	1.313	1.031	*HCT-750

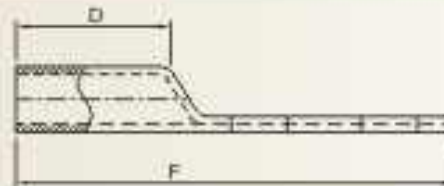


**COPPER COMPRESSION SLEEVES -  
LONG BARREL**



WIRE SIZE	COLOUR	DIMENSIONS			PROD. CODE
		F	A	B	
8	RED	1-3/4	9/32	11/64	HCTL-8
6	BLUE	2-3/8	19/64	13/64	HCTL-6
4	GRAY	2-3/8	11/32	1/4	HCTL-4
3	WHITE	2-3/8	3/2	9/32	HCTL-3
2	BROWN	2-5/8	27/64	5/16	HCTL-2
1	GREEN	2-7/8	15/32	23/64	HCTL-1
1/0	PINK	2-7/8	33/64	25/64	HCTL-1/0
2/0	BLACK	3-1/8	9/16	7/16	HCTL-2/0
3/0	ORANGE	3-1/8	39/64	31/64	HCTL-3/0
4/0	PURPLE	3-3/8	11/16	35/64	HCTL-4/0
300MCM	WHITE	4-1/8	13/16	21/32	HCTL-300
400MCM	BLUE	4-3/8	15/16	3/4	HCTL-400
500MCM	BROWN	4-5/8	1-1/16	53/64	HCTL-500
600MCM	GREEN	4-5/8	1-3/16	59/64	HCTL-600

**COPPER COMPRESSION LUGS -  
LONG BARREL, 2 HOLES**



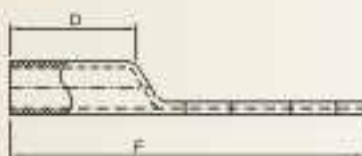
WIRE SIZE	BOLT SIZE	COLOUR CODE	DIMENSIONS		PROD. CODE
			D	F	
2	5/16(2)	BROWN	1-1/4	3	HCRB-2L2
2	1/2(2)	BROWN	1-1/4	4-13/16	HCRC-2L2
2	#10(2)	BROWN	1-1/4	3-5/16	HCRA-2L2-10-34
2	1/4(2)	BROWN	1-1/4	3-5/16	HCRA-2L2-14-58
2	1/4(2)	BROWN	1-1/4	3-5/16	HCRA-2L2-14-34
2	1/4(2)	BROWN	1-1/4	3-5/16	HCRA-2L2-14-1
2	5/16(2)	BROWN	1-1/4	3-5/16	HCRA-2L2-516-58
2	5/16(2)	BROWN	1-1/4	3-5/16	HCRB-2L2-516-34
2	5/16(2)	BROWN	1-1/4	3-5/16	HCRA-2L2-516-1
2	3/8(2)	BROWN	1-1/4	3-5/16	HCRA-2L2-38-58
2	3/8(2)	BROWN	1-1/4	3-5/16	HCRA-2L2-38-34
2	3/8(2)	BROWN	1-1/4	3-5/16	HCRA-2L2-38-78
2	3/8(2)	BROWN	1-1/4	3-5/16	HCRA-2L2-38-1
2	4-1/2	BROWN	1-1/4	4-1/2	HCRB-2L2-12-134
1	3-7/16	GREEN	1-3/8	3-7/16	HCRA-1L2
1	3-7/16	GREEN	1-3/8	3-7/16	HCRA-1L2-14-58
1	4-3/4	GREEN	1-3/8	4-3/4	HCRC-1L2
1/0	5/16(2)	PINK	1-3/8	3-7/16	HCRA-1/0L2
1/0	1/2(2)	PINK	1-3/8	4-29/32	HCRC-1/0L2
8	5/16(2)	RED	13/16	2.19	HCRA-8L2
8	1/2(2)	RED	13/16	2.19	HCRB-8L2

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**COPPER COMPRESSION LUGS -  
LONG BARREL, 2 HOLES**

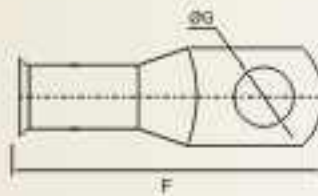


WIRE SIZE	BOLT SIZE	COLOUR CODE	DIMENSIONS		PROD. CODE
			D	F	
6	1/4(2)	BLUE	1.125	2.8125	HCRB-6L2
6	#10(2)	BLUE	1.125	3.1875	HCRA-6L2-10-34
6	1/4(2)	BLUE	1.125	3.1875	HCRB-6L2-14-58
6	1/4(2)	BLUE	1.125	3.1875	HCRA-6L2-14-34
6	1/4(2)	BLUE	1.125	3.1875	HCRA-6L2-14-1
6	5/16(2)	BLUE	1.125	3.1875	HCRB-6L2-516-1
6	3/8(2)	BLUE	1.125	3.1875	HCRB-6L2-38-34
6	3/8(2)	BLUE	1.125	3.1875	HCRB-6L2-38-78
6	3/8(2)	BLUE	1.125	3.1875	HCRB-6L2-38-1
4	1/4(2)	BLUE	1.125	2.8125	HCRB-4L2
4	1/2(2)	GRAY	1.125	4.875	HCRC-4L2
4	#10(2)	GRAY	1.125	3.1875	HCRA-4L2-10-34
4	1/4(2)	GRAY	1.125	3.1875	HCRB-4L2-14-58
4	1/4(2)	GRAY	1.125	3.1875	HCRA-4L2-14-34
4	1/4(2)	GRAY	1.125	3.1875	HCRA-4L2-14-1
4	5/16(2)	GRAY	1.125	3.1875	HCRA-4L2-516-58
4	5/16(2)	GRAY	1.125	3.1875	HCRA-4L2-516-34
4	5/16(2)	GRAY	1.125	3.1875	HCRA-4L2-516-1
4	3/8(2)	GRAY	1.125	3.1875	HCRB-4L2-38-34
4	3/8(2)	GRAY	1.125	3.1875	HCRB-4L2-38-1
4	1/2(2)	GRAY	1.125	4.375	HCRB-4L2-12-134
3	1/4(2)	WHITE	1.125	2.8125	HCRA-3L2
3	3/8(2)	WHITE	1.125	2.8125	HCRA-3L2
2/0	1/2(2)	BLACK	1.5	4.78	HCRA-2/0L2
3/0	1/2(2)	ORANGE	1.5	4.97	HCRB-3/0L2
4/0	1/2(2)	PURPLE	1.63	4.97	HCRB-4/0L2
250MCM	1/2(2)	YELLOW	1.63	5.06	HCRA-250L2
250MCM	3/8(2)	YELLOW	1.63	5.06	HCRA-250L2-38-1
250MCM	3/8(2)	YELLOW	1.63	5.06	HCRA-250L2-38-134
300MCM	1/2(2)	WHITE	2	5.44	HCRA-300L2
350MCM	1/2(2)	RED	2	5.44	HCRA-350L2
400MCM	1/2(2)	BLUE	2.13	5.75	HCRA-400L2
500MCM	1/2(2)	BROWN	2.25	5.75	HCRA-500L2
600MCM	1/2(2)	GREEN	2.25	6.06	HCRA-600L2
*700MCM	1/2(2)	PINK	2.25	6.06	HCRA-700L2
*750MCM	1/2(2)	BLACK	2.88	6.53	HCRA-750L2
*1000MCM	1/2(2)	WHITE	3	6.88	HCRA-1000L2



## COPPER STANDARD WALL STARTER TERMINAL ENDS

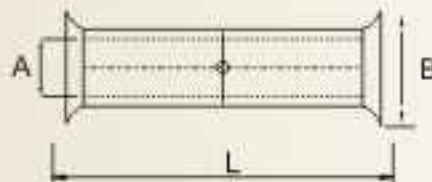
Material : E-copper • Finish : Copper



AMP RATING	WIRE SIZE	BOLT SIZE	DIMENSIONS		PROD. CODE
			F	GØ	
35	8	1/4	32.00	6.40	HABL - 88
35	8	5/16	32.00	6.41	HABL - 88
35	8	3/8	35.18	10.49	HABL - 810
35	8	1/2	42.55	13.00	HABL - 812
50	6	1/4	32.64	6.40	HABL - 88
50	6	5/16	32.64	6.41	HABL - 88
50	6	3/8	32.64	10.49	HABL - 810
50	6	1/2	42.55	13.00	HABL - 812
70	4	1/4	40.64	6.40	HABL - 48
70	4	5/16	40.64	6.41	HABL - 48
70	4	3/8	40.64	10.49	HABL - 410
70	4	1/2	40.64	13.00	HABL - 412
90	2	1/4	43.94	6.40	HABL - 28
90	2	5/16	43.94	6.41	HABL - 28
90	2	3/8	43.94	10.49	HABL - 210
90	2	1/2	43.94	13.00	HABL - 212
125	1/0	1/4	48.56	6.40	HABL - 108
125	1/0	5/16	48.56	6.41	HABL - 108
125	1/0	3/8	48.56	10.49	HABL - 1010
125	1/0	1/2	48.56	13.00	HABL - 1012
150	2/0	1/4	55.88	6.40	HABL - 208
150	2/0	5/16	55.88	6.41	HABL - 208
150	2/0	3/8	55.88	10.49	HABL - 2010
150	2/0	1/2	55.88	13.00	HABL - 2012
175	3/0	3/8	57.15	6.40	HABL - 3010
175	3/0	1/2	57.15	13.00	HABL - 3012
225	4/0	3/8	85.29	10.49	HABL - 4010
225	4/0	1/2	85.29	13.00	HABL - 4012

## BUTT CONNECTOR

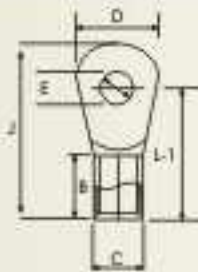
Material : E-copper • Finish : Copper



WIRE SIZE	DIMENSIONS			PROD. CODE
	A	B	L	
8	4.72	6.35	27.94	HBC - T8
6	5.89	7.92	29.21	HBC - T6
3	7.14	9.04	30.99	HBC - T3
2	8.43	10.67	34.04	HBC - T2
1	8.94	11.18	34.04	HBC - T1
1/0	10.19	12.65	39.62	HBC - T11
2/0	11.58	14.22	45.97	HBC - T12
3/0	12.93	15.62	48.26	HBC - T13
4/0	14.94	17.63	62.48	HBC - T14

**RING TYPE TINNED COPPER CABLE  
TERMINAL ENDS (NON INSULATED)**

Material : E - Copper • Finish : Electro Tinned  
Specification : E. C. Grade 99.9% IACS



CABLE mm <sup>2</sup>	STUD HOLE E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	L-1	J	
1.5	3.2	1.6	3.2	6.8	0.8	5	1.0	3.6	9.6	13.0	HR - 7153
1.5	3.7	1.6	3.2	6.8	0.8	5	1.0	3.6	9.6	13.0	HR - 7048
1.5	4.2	1.6	3.2	6.8	0.8	5	1.0	3.6	9.6	13.0	HR - 7049
1.5	2.2	1.6	3.2	6.0	0.8	5	2.0	4.0	11.0	14.0	HR - 7103
1.5	2.6	1.6	3.2	6.0	0.8	5	2.0	4.0	11.0	14.0	HR - 7000
1.5	3.2	1.6	3.2	6.0	0.8	5	2.0	4.0	11.0	14.0	HR - 7001
1.5	3.7	1.6	3.2	6.0	0.8	5	2.0	4.0	11.0	14.0	HR - 7002
1.5	4.2	1.6	3.2	6.0	0.8	5	2.0	4.0	11.0	14.0	HR - 7003
1.5	4.2	1.6	3.2	7.0	0.8	5	1.0	5.0	11.0	14.5	HR - 7154
1.5	3.2	1.6	3.2	8.0	0.8	5	2.0	5.0	12.0	16.0	HR - 7104
1.5	4.2	1.6	3.2	8.0	0.8	5	2.0	5.0	12.0	16.0	HR - 7004
1.5	5.2	1.6	3.2	8.0	0.8	5	2.0	5.0	12.0	16.0	HR - 7005
1.5	4.2	1.6	3.1	10.0	0.8	5	2.0	6.0	13.0	18.0	HR - 7105
1.5	5.2	1.6	3.2	10.0	0.8	5	2.0	6.0	13.0	18.0	HR - 7006
1.5	6.4	1.6	3.2	10.0	0.8	5	2.0	6.0	13.0	18.0	HR - 7007
1.5	6.4	1.6	3.2	12.0	0.8	5	1.0	6.0	12.0	18.0	HR - 7106
2.5	3.2	2.3	3.9	6.5	0.8	5	1.0	3.5	9.5	12.7	HR - 7107
2.5	3.7	2.3	3.9	6.5	0.8	5	1.0	3.5	9.5	12.7	HR - 7008
2.5	3.7	2.3	3.9	8.0	0.8	5	2.0	5.0	12.0	16.0	HR - 7108
2.5	4.2	2.3	3.9	8.0	0.8	5	2.0	5.0	12.0	16.0	HR - 7009
2.5	5.2	2.3	3.9	8.0	0.8	5	2.0	5.0	12.0	16.0	HR - 7010
2.5	5.2	2.3	3.9	10.0	0.8	5	1.0	7.0	13.0	18.0	HR - 7109
2.5	6.4	2.3	3.9	10.0	0.8	5	1.0	7.0	13.0	18.0	HR - 7011
2.5	5.2	2.3	3.9	12.0	0.8	5	2.0	9.0	16.0	22.0	HR - 7110
2.5	6.4	2.3	3.9	12.0	0.8	5	2.0	9.0	16.0	22.0	HR - 7012
2.5	8.2	2.3	3.9	12.0	0.8	5	2.0	9.0	16.0	22.0	HR - 7013
2.5	6.4	2.3	3.9	16.0	0.8	5	2.0	10.0	17.0	25.0	HR - 7111
2.5	8.2	2.3	3.9	16.0	0.8	5	2.0	10.0	17.0	25.0	HR - 7014
2.5	10.2	2.3	3.9	16.0	0.8	5	2.0	10.0	17.0	25.0	HR - 7015
2.5	10.2	2.3	3.9	18.0	0.8	5	1.0	14.0	20.0	29.0	HR - 7151
2.5	12.7	2.3	3.9	18.0	0.8	5	1.0	14.0	20.0	29.0	HR - 7047
4 - 6	4.2	3.5	5.5	8.0	1.0	6	2.0	5.0	13.0	17.0	HR - 7155
4 - 6	5.2	3.5	5.5	8.0	1.0	6	2.0	5.0	13.0	17.0	HR - 7050
4 - 6	4.2	3.5	5.5	10.0	1.0	6	3.0	5.0	14.0	19.0	HR - 7112
4 - 6	5.2	3.5	5.5	10.0	1.0	6	3.0	5.0	14.0	19.0	HR - 7016
4 - 6	5.2	3.5	5.5	12.0	1.0	6	2.0	6.0	14.0	20.0	HR - 7113
4 - 6	6.4	3.5	5.5	12.0	1.0	6	2.0	6.0	14.0	20.0	HR - 7017
4 - 6	8.2	3.5	5.5	12.0	1.0	6	2.0	6.0	14.0	20.0	HR - 7018
4 - 6	5.2	3.5	5.5	12.0	1.0	6	3.0	7.0	16.0	22.0	HR - 7114
4 - 6	6.4	3.5	5.5	12.0	1.0	6	3.0	7.0	16.0	22.0	HR - 7019
4 - 6	5.2	3.5	5.5	8.0	1.0	6	3.0	9.8	18.8	22.8	HR - 7157
4 - 6	6.4	3.5	5.5	14.0	1.0	6	2.0	10.5	18.5	25.5	HR - 7115
4 - 6	8.2	3.5	5.5	14.0	1.0	6	2.0	10.5	18.5	25.5	HR - 7020
4 - 6	9.7	3.5	5.5	14.0	1.0	6	2.0	10.5	18.5	25.5	HR - 7021
4 - 6	8.2	3.5	5.5	16.0	1.0	6	3.0	13.0	22.0	30.0	HR - 7116
4 - 6	10.2	3.5	5.5	16.0	1.0	6	3.0	13.0	22.0	30.0	HR - 7022
4 - 6	8.2	3.5	5.5	18.0	1.0	6	3.0	12.0	21.0	30.0	HR - 7117
4 - 6	10.2	3.5	5.5	18.0	1.0	6	3.0	12.0	21.0	30.0	HR - 7023
4 - 6	12.7	3.5	5.5	18.0	1.0	6	3.0	12.0	21.0	30.0	HR - 7024
10	4.2	4.3	6.3	10.0	1.0	8	2.0	7.0	17.0	22.0	HR - 7118
10	5.2	4.3	6.3	10.0	1.0	8	2.0	7.0	17.0	22.0	HR - 7025
10	4.2	4.3	6.3	10.0	1.0	8	3.0	4.0	15.0	20.0	HR - 7119







**RING TYPE TINNED COPPER CABLE  
TERMINAL ENDS (NON INSULATED)**



CABLE mm <sup>2</sup>	STUD HOLE E	DIMENSIONS									PROD. CODE
		A	C	D	F	B	K	H	L-1	J	
10	4.2	4.3	6.3	10	1.0	8	2.0	7.0	17	22	HR - 7118
10	5.2	4.3	6.3	10	1.0	8	2.0	7.0	17	22	HR - 7025
10	4.2	4.3	6.3	10	1.0	8	3.0	4.0	15	20	HR - 7119
10	5.2	4.3	6.3	10	1.0	8	3.0	4.0	15	20	HR - 7026
10	6.4	4.3	6.3	12	1.0	8	2.0	7.0	17	23	HR - 7120
10	8.2	4.3	6.3	16	1.0	8	4.0	7.0	19	27	HR - 7121
10	8.2	4.3	6.3	18	1.0	8	4.0	9.0	21	30	HR - 7122
10	10.2	4.3	6.3	18	1.0	8	4.0	9.0	21	30	HR - 7027
10	10.2	4.3	6.3	22	1.0	8	5.0	10.0	23	34	HR - 7123
10	12.7	4.3	6.3	22	1.0	8	5.0	10.0	23	34	HR - 7028
16	5.2	5.6	8.0	10	1.2	10	3.0	6.0	19	24	HR - 7124
16	5.2	5.6	8.0	12	1.2	10	4.0	6.0	20	26	HR - 7125
16	6.4	5.6	8.0	12	1.2	10	4.0	6.0	20	26	HR - 7029
16	6.4	5.6	8.0	16	1.2	10	4.0	6.0	22	30	HR - 7126
16	8.2	5.6	8.0	16	1.2	10	4.0	8.0	22	30	HR - 7030
16	9.7	5.6	8.0	16	1.2	10	4.0	8.0	22	30	HR - 7031
16	8.2	5.6	8.0	18	1.2	10	4.0	10.0	24	33	HR - 7127
16	10.2	5.6	8.0	18	1.2	10	4.0	10.0	24	33	HR - 7032
16	10.2	5.6	8.0	22	1.2	10	6.0	8.0	24	35	HR - 7128
16	12.7	5.6	8.0	22	1.2	10	6.0	8.0	24	35	HR - 7033
25	6.4	7.5	11.1	12	1.8	11	4.0	10.0	25	31	HR - 7156
25	8.2	7.5	11.1	12	1.8	11	4.0	10.0	25	31	HR - 7051
25	6.4	7.5	11.1	16	1.8	11	5.0	6.0	22	30	HR - 7129
25	8.2	7.5	11.1	16	1.8	11	5.0	6.0	22	30	HR - 7034
25	10.2	7.5	11.1	16	1.8	11	5.0	6.0	22	30	HR - 7035
25	6.4	7.5	11.1	16	1.8	11	4.0	10.0	25	33	HR - 7130
25	8.2	7.5	11.1	16	1.8	11	4.0	10.0	25	33	HR - 7036
25	10.2	7.5	11.1	18	1.8	11	5.0	9.0	25	34	HR - 7131
25	10.2	7.5	11.1	22	1.8	11	6.0	14.0	31	42	HR - 7132
25	12.7	7.5	11.1	22	1.8	11	6.0	14.0	31	42	HR - 7037
35	6.4	9.0	12.6	16	1.8	12	5.0	6.0	23	31	HR - 7133
35	8.2	9.0	12.6	16	1.8	12	5.0	6.0	23	31	HR - 7038
35	8.2	9.0	12.6	18	1.8	12	5.0	10.0	27	36	HR - 7134
35	10.2	9.0	12.6	18	1.8	12	5.0	10.0	27	36	HR - 7039
35	10.2	9.0	12.6	22	1.8	12	4.0	15.0	31	42	HR - 7135
35	12.7	9.0	12.6	22	1.8	12	4.0	15.0	31	42	HR - 7040
50	8.2	10.5	14.1	18	1.8	16	6.0	12.0	34	43	HR - 7136
50	10.2	10.5	14.1	18	1.8	16	6.0	12.0	34	43	HR - 7041
50	10.2	10.5	14.1	22	1.8	16	7.0	9.0	32	43	HR - 7137
50	10.2	10.5	14.1	24	1.8	16	6.0	14.0	36	48	HR - 7138
50	12.7	10.5	14.1	24	1.8	16	6.0	14.0	36	48	HR - 7042
50	16.2	10.5	14.1	32	1.8	16	7.0	15.0	38	54	HR - 7139
70	10.2	12.0	16.0	22	2.0	18	7.0	11.0	36	47	HR - 7140
70	12.7	12.0	16.0	22	2.0	18	7.0	11.0	36	47	HR - 7043
70	12.7	12.0	16.0	24	2.0	18	8.0	10.0	36	48	HR - 7141
70	16.2	12.0	16.0	28	2.0	18	6.0	16.0	40	54	HR - 7142
95	10.2	13.5	18.1	22	2.3	20	5.0	10.0	35	46	HR - 7143
95	10.2	13.5	18.1	24	2.3	20	6.0	12.0	38	50	HR - 7144
95	12.7	13.5	18.1	24	2.3	20	6.0	12.0	38	50	HR - 7044
95	16.2	13.5	18.1	28	2.3	20	7.0	17.0	44	58	HR - 7145
120	12.7	15.0	20.2	26	2.6	22	10.0	7.0	39	52	HR - 7146
120	23.0	15.0	20.2	40	2.6	22	10.0	20.0	52	72	HR - 7148
150	12.7	16.5	23.7	34	3.6	24	8.0	16.0	49	66	HR - 7149
150	16.2	16.5	23.7	34	3.6	24	9.0	16.0	49	66	HR - 7045
150	16.2	16.5	23.7	40	3.6	24	10.0	20.0	54	74	HR - 7150
150	20.3	16.5	23.7	40	3.6	24	10.0	20.0	54	74	HR - 7046

## HEXPRESS CRIMPING TOOLS



HEXPRESS A - 6  
Crimping Capacity : 0.5mm<sup>2</sup> to 6mm<sup>2</sup>  
Weight : 0.340gms



HEXPRESS B - 16  
Crimping Capacity : 0.5mm<sup>2</sup> to 16mm<sup>2</sup>  
Weight : 0.600gms



HEXPRESS E - 95  
Dies : R - 1 to R - 10  
Crimping Capacity : 10mm<sup>2</sup> to 95mm<sup>2</sup>  
Weight : 5.200kgs



HEXPRESS F - 185  
Dies : R - 1 to R - 13  
Crimping Capacity : 10mm<sup>2</sup> to 185mm<sup>2</sup>  
Weight : 7.400kgs



HEXPRESS F1 - 185  
Dies : R - 1 to R - 13  
Crimping Capacity : 10mm<sup>2</sup> to 185mm<sup>2</sup> (Al.& Cu.)  
Weight : 6.450kgs



HEXPRESS G - 400  
Dies : Hex profile  
Crimping Capacity : 50mm<sup>2</sup> to 400mm<sup>2</sup> (Al.)  
50mm<sup>2</sup> to 240mm<sup>2</sup> (Cu.)  
Weight : 9.600kgs



## HEXPRESS CRIMPING TOOLS



HEXPRESS H - 50  
( Dieless )  
Crimping Capacity :  
for Cu. & Al. crimping socket : 25mm<sup>2</sup>, 35mm<sup>2</sup> & 50mm<sup>2</sup>  
for Ring Type : 16mm<sup>2</sup>, 25mm<sup>2</sup> & 35mm<sup>2</sup>  
Weight : 1.700kgs



HEXPRESS H - 70  
( Dieless )  
for Ring Type only  
Crimping Capacity : 16mm<sup>2</sup> to 70mm<sup>2</sup>  
Weight : 2.950kgs



HEXPRESS G1 - 400  
(Gear Operated)  
Crimping Capacity : 50mm<sup>2</sup> to 400mm<sup>2</sup> (Al.)  
50mm<sup>2</sup> to 300mm<sup>2</sup> (Cu.)  
Weight : 9.500kgs



HEXPRESS H - 95  
( Dieless )  
Crimping Capacity :  
for Cu. & Al. crimping socket : 10mm<sup>2</sup> to 95mm<sup>2</sup>  
Weight : 3.600kgs



HEXPRESS HYF - 400  
(Hydraulic Foot Operated)  
Crimping Capacity : 50mm<sup>2</sup> to 400mm<sup>2</sup>  
Weight : 17kgs



HEXPRESS HSC - 100  
Anti Corrosive Compound



HEXPRESS HY - 400  
( Hydraulic )  
Dies : R - 11 to R - 18  
Crimping Capacity : 50mm<sup>2</sup> to 400mm<sup>2</sup>  
Weight : 16.500kgs

HEXPRESS HY - 1000  
( Hydraulic )  
Dies : R - 11 to R - 29  
Crimping Capacity : 50mm<sup>2</sup> to 1000mm<sup>2</sup>  
Weight : 25.500kgs

## HEXPRESS CRIMPING TOOLS



**HEXPRESS 01**  
(For Insulated)  
Crimping Capacity:  
1.5mm<sup>2</sup>, 2.5mm<sup>2</sup>, 4.6mm<sup>2</sup>  
Weight : 0.556gms



**HEXPRESS 02**  
(2 in 1) Insulation & End Sealing Ferrules  
Crimping capacity: 0.5mm<sup>2</sup> - 2.5mm<sup>2</sup>  
Weight : 0.414gms



**HEXPRESS 03**  
(For End Sealing ferrules)  
Crimping Capacity: 0.25mm<sup>2</sup> - 6mm<sup>2</sup>  
Weight : 0.420gms



**HEXPRESS 04**  
(For End Sealing Ferrules)  
Crimping Capacity: 6mm<sup>2</sup> - 16mm<sup>2</sup>  
Weight : 0.556gms



**HEXPRESS 05**  
(3 IN 1) Insulation, End Sealing & ordinary Lugs  
Crimping Capacity: 0.5mm<sup>2</sup> - 6mm<sup>2</sup>  
HEXPRESS 05



**HEXPRESS 06**  
(Hydraulic Hand Operated)  
Crimping capacity:  
16mm<sup>2</sup> - 300mm<sup>2</sup>  
Weight : 5.100kgs



**HEXPRESS 07 (HEAVY DUTY)**  
(Hydraulic Hand Operated)  
Crimping capacity: 16mm<sup>2</sup> - 300mm<sup>2</sup>  
Weight : 5.317kgs



**HEXPRESS 08**  
(Ratcheting Cable Cutter)  
Crimping capacity: upto 240mm<sup>2</sup>  
Weight : 0.680gms



**HEXPRESS 09**  
(Wire Cutter)  
Crimping capacity: upto 30mm<sup>2</sup>  
Weight : 0.160gms



**HEXPRESS 10**  
(Wire stripper cum cutter) (2 in 1)  
Crimping capacity: 0.6mm<sup>2</sup> - 5mm<sup>2</sup>  
Weight : 0.290gms



**HEXPRESS 11**  
(Fastening Tool for Cable Tie)  
Suitable for just bind wire &  
automatic cutting  
Weight : 0.330gms



**HEXPRESS 12**  
(snap on)  
Crimping capacity :  
1.5, 2.5 & 4.6 mm<sup>2</sup>  
Weight : 0.548gms

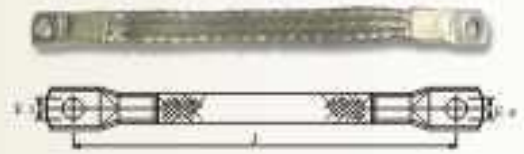
**HEXPRESS 13**  
(cable cutter)  
Crimping capacity:  
upto 500mm<sup>2</sup>  
Weight : 2.724kgs





**TINNED COPPER FLEXIBLE BRAIDS - CRIMPED with CONNECTORS / TERMINALS**

MATERIAL : E - COPPER • FINISH : ELECTRO TINNED



HFT- crimped with lugs

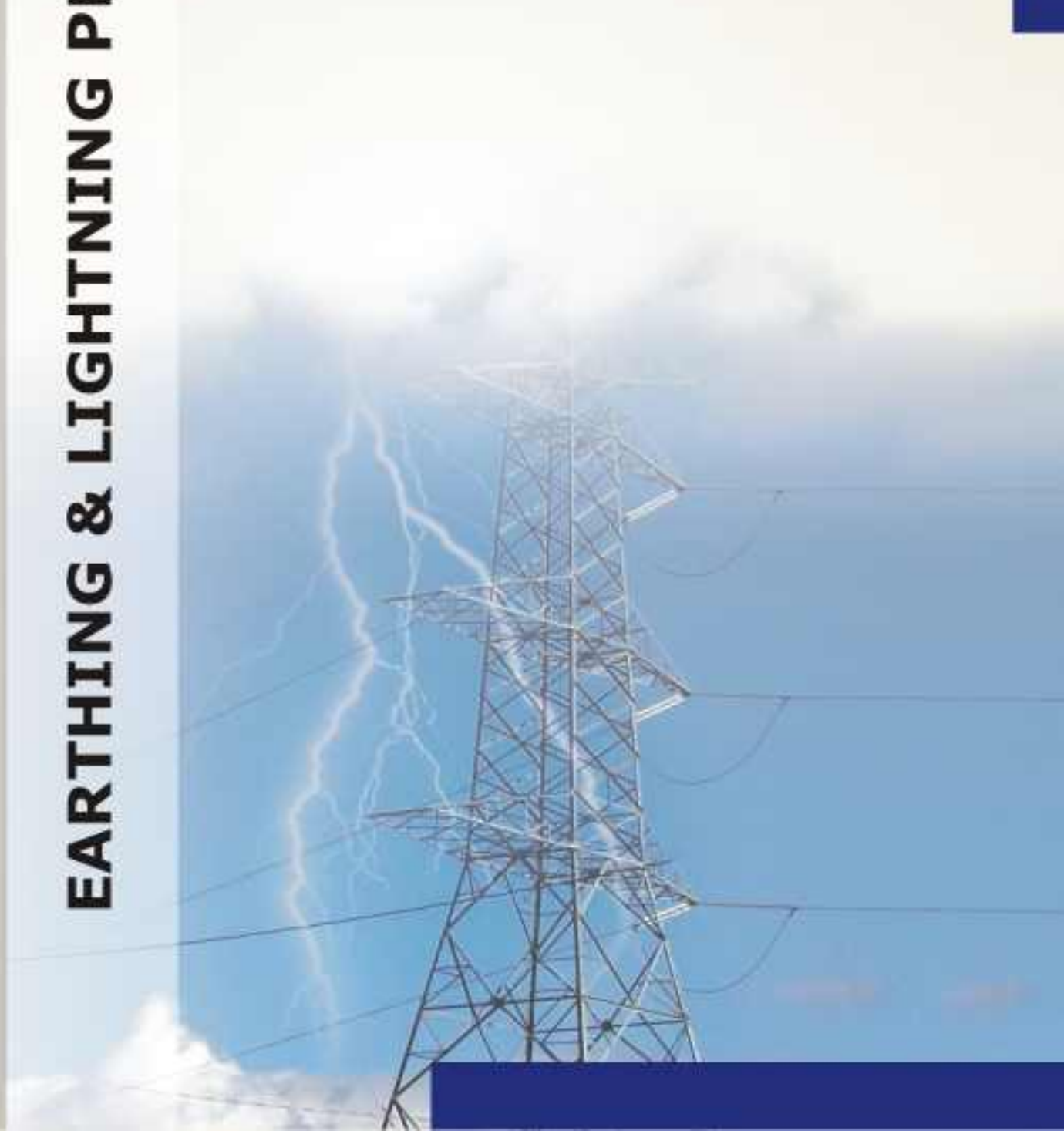


HFC- crimped with connectors

CABLE WIDTH	DIMENSIONS			CURRENT RATING AMP	PROD. CODE CRIMPED WITH LUGS	PROD. CODE CRIMPED WITH CONNECTOR
	J	E1	E2			
4	50	6	6	50	HFT4 - 50 - 50	HFC4 - 50 - 50
4	100	6	6	50	HFT4 - 100 - 50	HFC4 - 100 - 50
4	150	6	6	50	HFT4 - 150 - 50	HFC4 - 150 - 50
4	200	6	6	50	HFT4 - 200 - 50	HFC4 - 200 - 50
10	50	6	6	90	HFT10 - 50 - 90	HFC10 - 50 - 90
10	100	6	6	90	HFT10 - 100 - 90	HFC10 - 100 - 90
10	150	6	6	90	HFT10 - 150 - 90	HFC10 - 150 - 90
10	200	6	6	90	HFT10 - 200 - 90	HFC10 - 200 - 90
16	100	8.5	8.5	125	HFT16 - 100 - 125	HFC16 - 100 - 125
16	150	8.5	8.5	125	HFT16 - 150 - 125	HFC16 - 150 - 125
16	200	8.5	8.5	125	HFT16 - 200 - 125	HFC16 - 200 - 125
16	250	8.5	8.5	125	HFT16 - 250 - 125	HFC16 - 250 - 125
16	300	8.5	8.5	125	HFT16 - 300 - 125	HFC16 - 300 - 125
25	100	10	10	160	HFT25 - 100 - 160	HFC25 - 100 - 160
25	150	10	10	160	HFT25 - 150 - 160	HFC25 - 150 - 160
25	200	10	10	160	HFT25 - 200 - 160	HFC25 - 200 - 160
25	250	10	10	160	HFT25 - 250 - 160	HFC25 - 250 - 160
25	300	10	10	160	HFT25 - 300 - 160	HFC25 - 300 - 160
30	100	10	10	180	HFT30 - 100 - 180	HFC30 - 100 - 180
30	150	10	10	180	HFT30 - 150 - 180	HFC30 - 150 - 180
30	200	10	10	180	HFT30 - 200 - 180	HFC30 - 200 - 180
30	250	10	10	180	HFT30 - 250 - 180	HFC30 - 250 - 180
30	300	10	10	180	HFT30 - 300 - 180	HFC30 - 300 - 180
35	100	10	10	210	HFT35 - 100 - 210	HFC35 - 100 - 210
35	150	10	10	210	HFT35 - 150 - 210	HFC35 - 150 - 210
35	200	10	10	210	HFT35 - 200 - 210	HFC35 - 200 - 210
35	250	10	10	210	HFT35 - 250 - 210	HFC35 - 250 - 210
35	300	10	10	210	HFT35 - 300 - 210	HFC35 - 300 - 210
50	100	12	12	250	HFT50 - 100 - 250	HFC50 - 100 - 250
50	150	12	12	250	HFT50 - 150 - 250	HFC50 - 150 - 250
50	200	12	12	250	HFT50 - 200 - 250	HFC50 - 200 - 250
50	250	12	12	250	HFT50 - 250 - 250	HFC50 - 250 - 250
50	300	12	12	250	HFT50 - 300 - 250	HFC50 - 300 - 250

Also available with other hole sizes, current rating, lengths etc. as per customer specifications.

# EARTHING & LIGHTNING PROTECTION







**DUVAL MESSIEN**



54

Schutz 3



Tepe Taster S 3



Itane Copper Tape

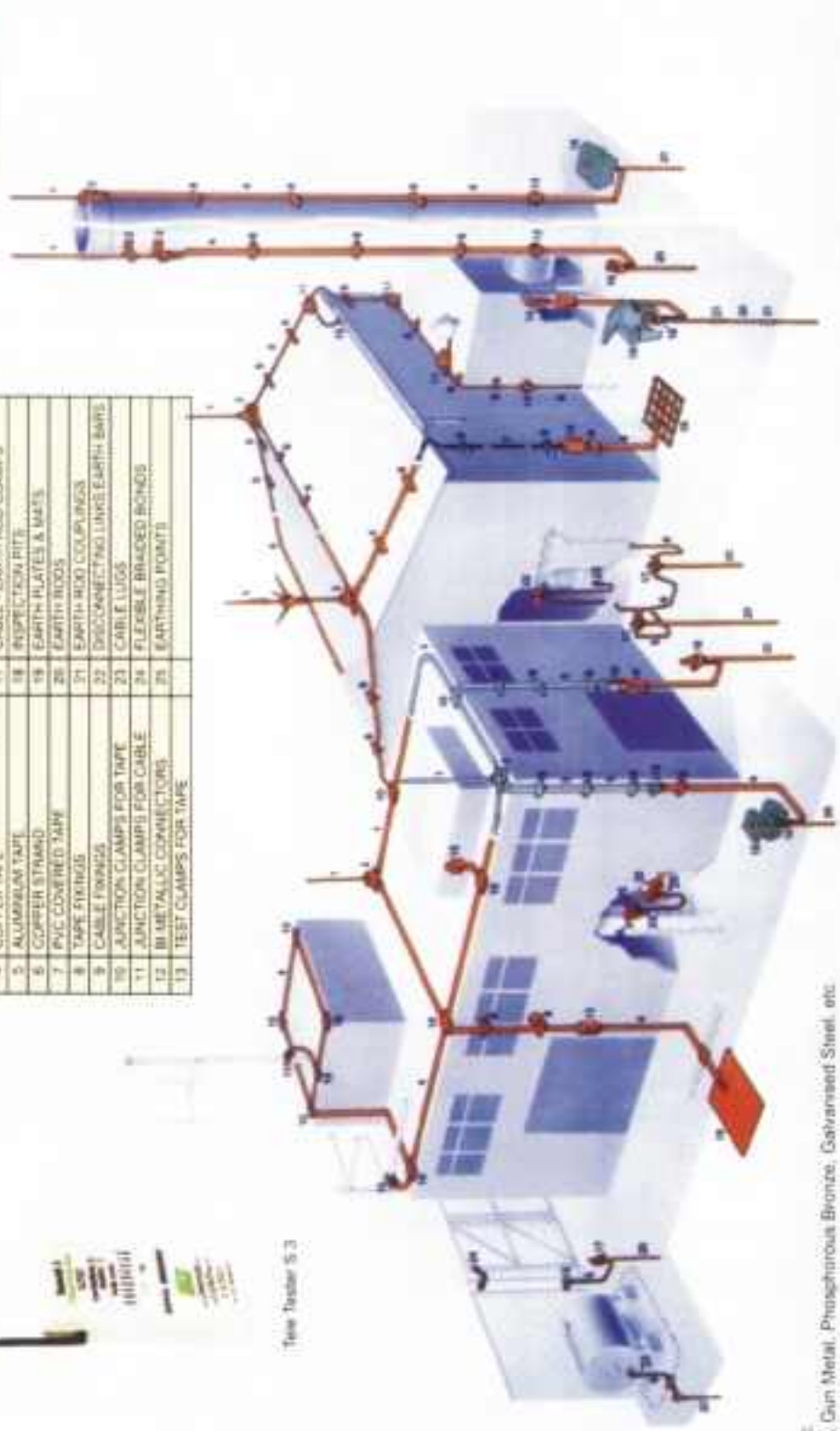


Earth Plate



Earthing Accessories

REV NO	DESCRIPTION	REV NO	DESCRIPTION
1	AIR TERMINALS	14	TEST CLAMPS FOR CABLE BONDS
2	AIR TERMINAL FRINGS FOR TAPE	15	BONDS
3	AIR TERMINAL FRINGS FOR CABLE OR WIRE	16	TAPE - EARTH ROD CLAMPS
4	COPPER TAPE	17	CABLE - EARTH ROD CLAMPS
5	ALUMINIUM TAPE	18	INSPECTION RITE
6	COPPER STRAND	19	EARTH PLATES & MATS
7	PVC COVERED TAPE	20	EARTH RODS
8	TAPE FININGS	21	EARTH ROD COUPLINGS
9	CABLE FININGS	22	DISCONNECTING LINKS EARTH BARS
10	JUNCTION CLAMPS FOR TAPE	23	CABLE LUGS
11	JUNCTION CLAMPS FOR CABLE	24	FLEXIBLE BRACED BONDS
12	BI METALLIC CONNECTORS	25	EARTHING POINTS
13	TEST CLAMPS FOR TAPE		



Standards : BS, DIN, ANSI, IEC, etc.  
 Material : Copper, Aluminium, Brass, Gun Metal, Phosphorous Bronze, Galvanised Steel, etc.  
 Please contact us at our offices for a detailed quotation of any of the above mentioned materials.

## H-TECH LIGHTENING PROTECTION SYSTEM



## COPPER BONDED GROUNDING ROD

"HEX" copper bonded earth rod are made from low Carbon Steel of Grade BS 970 or AISI 1018 with a high tensile strength of at least 600 N/mm<sup>2</sup>. Low Carbon Steel core are molecularly bonded with 99.9% pure Electrolytic Copper.

Salient Features :

- Perfectly bonded rod will last longer, drive easier and will not crack.
- Corrosion resistance while providing the lowest resistance to ground.
- Threads are rolled by roll threading process, which ensures that an even copper covering is maintained, even at the root of the thread. Roll thread gives greater strength than cut thread.
- Thread rolling process raises the surface of the rod, so that Thread dia. (T) is greater than Shank dia. (S).

DIMENSIONS ROD SIZE (DIA x LENGTH)	ACTUAL ROD DIA. 'S' in mm	THREAD DIA. 'T' in mm	PROD. CODE
9.5 x 1200 (UN-THREADED)	9.5	-	HBR - 012
9.5 x 1800 (UN-THREADED)	9.5	-	HBR - 018
14 x 1200	12	14	HBR - 1412
14 x 1500	12	14	HBR - 1415
14 x 1800	12	14	HBR - 1418
14 x 2000	12	14	HBR - 1420
14 x 2400	12	14	HBR - 1424
5/8" x 4' or 16 mm x 1200	14.2	5/8"	HBR - 112
5/8" x 5' or 16 mm x 1500	14.2	5/8"	HBR - 115
5/8" x 6' or 16 mm x 1800	14.2	5/8"	HBR - 118
5/8" x 8' or 16 mm x 2400	14.2	5/8"	HBR - 124
5/8" x 10' or 16 mm x 3000	14.2	5/8"	HBR - 130
5/8" x 4' or 16 mm x 1200	16	5/8"	HBR - 312
5/8" x 5' or 16 mm x 1500	16	5/8"	HBR - 315
5/8" x 6' or 16 mm x 1800	16	5/8"	HBR - 318
3/4" x 4' or 19 mm x 1200	17.2	3/4"	HBR - 212
3/4" x 5' or 19 mm x 1500	17.2	3/4"	HBR - 215
3/4" x 6' or 19 mm x 1800	17.2	3/4"	HBR - 218
3/4" x 8' or 19 mm x 2400	17.2	3/4"	HBR - 224
3/4" x 10' or 19 mm x 3000	17.2	3/4"	HBR - 230



← Rod Dia. 'S'

← Thread Dia. 'T'

### EARTH ROD - ACCESSORIES

#### DRIVING STUD

Material : High Tensile Steel  
These are used to drive the Earth Rod to the Ground.

SIZE	PROD. CODE
14 mm	HDS - 14
5/8" or 16 mm	HDS - 16
3/4" or 19 mm	HDS - 19
1/2"	HDS - 12



#### COUPLER

Material : Copper Alloys  
Couplers are counter bored to completely enclose threads & protect from damage and corrosion.

SIZE	PROD. CODE BRASS	PROD. CODE AL. BRONZE	PROD. CODE GUNMETAL
14 mm	HEC - 14	HEC - 15	HEC - 15G
16 mm or 5/8"	HEC - 16	HEC - 17	HEC - 17G
19 mm or 3/4"	HEC - 19	HEC - 20	HEC - 20G





## SOLID COPPER GROUNDING ROD

"HEX" solid Copper earth rods are made from 99.9% pure Electrolytic Copper. Solid Copper rods offers greater resistance to corrosion. They are ideally used in applications where soil conditions are very aggressive, for eg. soil with high salt content.

DIMENSION	ROD DIA.	LENGTH	PROD. CODE
16 x 1200 or 4'	15 mm	1200 mm or 4'	HSC - 512
16 x 1500 or 5'	15 mm	1500 mm or 5'	HSC - 515
20 x 1200 or 6'	20 mm	1200 mm or 4'	HSC - 520
16 x 1500 or 5'	20 mm	1500 mm or 5'	HSC - 521

## SOLID COPPER EARTH ROD - ACCESSORIES

SIZE	ITEM	PROD. CODE
15 mm	Driving Head	HDH - 15
20 mm	Driving Head	HDH - 20
15 mm	Coupling Dowel	HCD - 15
20 mm	Coupling Dowel	HCD - 20
15 mm	Driving Tip	HDT - 15
20 mm	Driving Tip	HDT - 20

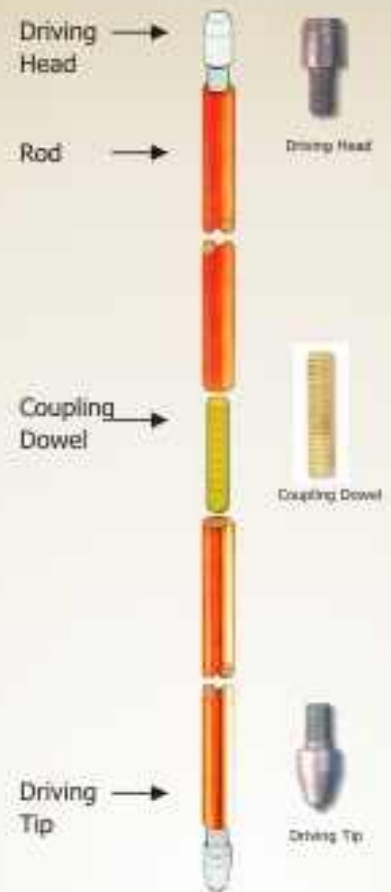
## MECHANICALLY CLADED /

### COATED COPPER GROUNDING ROD

Mechanically cladded Copper coated grounding rod is made when Electrolytic Grade 99.9% Copper tube with wall thickness of 0.25 (250 microns) is cladded to a low Carbon Steel rod,

ROD SIZE "S"	LENGTH	PROD CODE.
12	1200 (4 ft)	HCR - 1412
12	1800 (6 ft)	HCR - 1418
12	2400 (8 ft)	HCR - 1424
12	1200 (4 ft)	HCR - 112
14	1800 (6 ft)	HCR - 118
14	2400 (8 ft)	HCR - 124
14	1200 (4 ft)	HCR - 312
16	1800 (6 ft)	HCR - 318
16	2400 (8 ft)	HCR - 324
16	3000 (10 ft)	HCR - 330
16	1200 (4 ft)	HCR - 412
19	1800 (6 ft)	HCR - 418
19	2400 (8 ft)	HCR - 424
19	3000 (10 ft)	HCR - 430

This rod can also be supplied with threading and can be made as per customer specification.



## STAINLESS STEEL GROUND ROD

\* HEX " Stainless Steel ground rods are used to overcome many of the problems caused by galvanic corrosion which can take place between dissimilar metals buried in close proximity. Other advantages of Stainless Steel rod are that they are highly resistant to corrosion and are much more anodic than Copper.

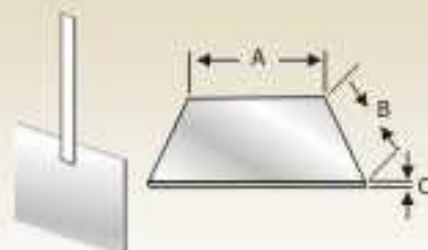
DIAMETER		LENGTH		PKG.	WEIGHT UNIT (KG)	PROD. CODE
INCHES	mm	INCH	M			
5/8"	14.2	5'	1.50	10	2,05	HSS - 145
5/8"	14.2	8'	2.44	10	3,28	HSS - 148
5/8"	14.2	10'	3.05	10	4,10	HSS - 1410
3/4"	17.2	5'	1.50	5	2,75	HSS - 175
3/4"	17.2	10'	3.05	5	5,50	HSS - 1710
1.0"	23.1	10'	3.05	1	10,23	HSS - 2410



## EARTH PLATE

Solid Copper Earth Plate  
Mtl : Electrolytic Copper

SIZE (A x B x C)	PROD. CODE
600 x 600 x 3	HSCP - 63
600 x 600 x 5	HSCP - 65
500 x 500 x 3	HSCP - 53
500 x 500 x 5	HSCP - 55
1000 x 1000 x 3	HSCP - 103
1000 x 1000 x 5	HSCP - 105
500 x 500 x 5	HSCP-55



## Copper Bonded Earth Plate

Mtl : Steel

SIZE (A x B x C)	PROD. CODE
600 x 600 x 1.5	HBP - 615
500 x 500 x 1.5	HBP - 515
600 x 600 x 3	HBP - 63
900 x 900 x 3	HBP - 93
500 x 500 x 3	HBP - 53





## COPPER ALLOY CLAMPS

These clamps are made from Copper alloy body which gives strong resistance to corrosion. HEX offers following:

### Clamp - A type

Suitable for Rod dia. 12 mm  
Material : Brass with MS fastener  
PROD. CODE : HAC - 1



### Rod to Tape Clamp - B type

SIZE	MAX COND.	PROD. CODE
5/8"	26 x 12	HBC - 1
5/8"	40 x 12	HBC - 2
5/8"	51 x 12	HBC - 3

Also available in Gunmetal.  
Please add G to Prod. Code (Ex. HBC-1 G for HBC-1)



### Rod to Cable Clamp - C type

SIZE	MAX COND.	PROD. CODE
3/8"/9.5	35mm'	HCC - 1
5/8"/16	50mm'	HCC - 2
5/8"/16	70mm'	HCC - 3
3/4"/20	95mm'	HCC - 4

Also available in Gunmetal.  
Please add G to Prod. Code (Ex. HCC-1 G for HCC-1)



### Rod to Cable Lug Clamp - D type

ROD DIA.	PROD. CODE
3/8"/9.5	HDC - 1
5/8"/16	HDC - 2
3/4"/20	HDC - 4



### Brass Cable Clip

Used for connecting 13mm rod to a cable range of 6 - 16mm'

PROD. CODE : HBCC - 1



### U Bolt - Rod Clamp

These are made from Copper with Gunmetal plate.  
They can be supplied for all rods from 5/8" to 1" and Copper Tape

NOM. ROD	HOLE CENTRES	PROD. CODE
5/8"	37 mm	HUU - 16
3/4"	37 mm	HUU - 20
1"	37 mm	HUU - 25



## COPPER ALLOY CLAMPS

**U Bolt - Rod to Cable Clamp** These are made from Copper with Gunmetal plate. These are used for Connecting Rod to Cable. Available with different Rod & Cable size.

NOMINAL ROD DIA. TO CABLE DIA.	CONDUCTOR RANGE MM	PROD. CODE
5/8" to 16 mm	16 - 95	HURC - 1
3/4" to 20 mm	16 - 70	HURC - 2
1" to 16 mm	70 - 185	HURC - 3
5/8" to 20 mm	70 - 150	HURC - 4



### Tower Bond Clamp

Mtl - Gunmetal

These are suitable for bonding Copper cable or wire to Steel structures.

COND. SIZE mm <sup>2</sup>		CHANNEL THICKNESS MM	BOLT	PROD. CODE
MIN.	MAX.			
16	70	10	M10	HTB - 16
70	120	10	M12	HTB - 70
25	50	10	M10	HTB - 25
25	50	10	M10	HTB - 25A



## BONDS

### Tower Bond Clamp

Mtl - Gunmetal

These are used for bonding tape to Steel structures.

MAX. TAPE WIDTH mm	BOLT Size	PROD. CODE
26	M 10	HB - 26



### Rain Water Pipe Bond

Mtl - Gunmetal

These are suitable for bonding tape to Rain Water Pipes, Handrails etc.

MAX. TAPE WIDTH mm	BOLT SIZE	PROD. CODE
26	M 10	HRW - 26





## LIGHTENING PROTECTION

### Flat Saddle - A

Mtl : Brass / Gunmetal

Used for supporting taper pointed or blunt air rods on flat surfaces.

Recommended fixing :- Countersunk woodscrew 11/2 x no.10 & wall plug.

ROD LENGTH	ROD DIA.	THREAD DIA.	PROD. CODE
50 mm	15 mm	5/8	HSD - 155
70 mm	15 mm	5/8	HSD - 160
95 mm	15 mm	5/8	HSD - 165



### Rod to Tape Coupling

Mtl : Brass / Gunmetal

Used to secure elevation rod by means of a bolted connection

AIR ROD DIA. mm	THREAD DIA. mm	ROD Material	PROD. CODE
15	16	Copper	HRT - 16C
15	16	Aluminium	HRT - 16A

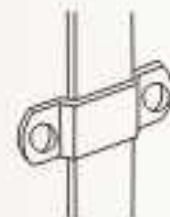


### Tape Clip

Mtl : Brass

These are used with Bare Copper Tape.

CONDUCTOR SIZE mm	PROD. CODE
20 x 3	HTC - 203
25 x 3	HTC - 253
50 x 6	HTC - 506

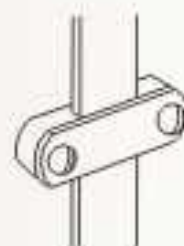


### DC Tape Clip

Mtl : Naval Brass / Gunmetal

These are used with Bare Copper Tape Conductor.

CONDUCTOR SIZE mm	PROD. CODE
25 x 3	HDTC - 253
25 x 46	HDTC - 256
40 x 6	HDTC - 406
50 x 6	HDTC - 506

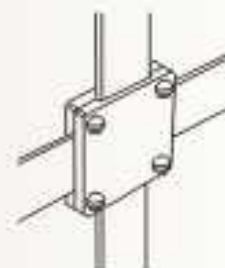


### Square Tape Clamp

Mtl : Brass / Gunmetal

These are suitable for Four Way Connections of Copper Tape

CONDUCTOR SIZE mm	PROD. CODE
25 x 3	HSTC - 253
25 x 4	HSTC - 254
25 x 6	HSTC - 256
50 x 6	HSTC - 506



## BONDS

### Watermain Bond

Material - Gunmetal

These are used for bonding Copper tape to Watermain pipes.

MAX. TAPE WIDTH mm	CONDUCTOR MATERIAL	PROD. CODE
26	Copper	HWMB - 26



### Flexible Braid Bond

Material - Copper

Copper Flexible Braids are used for bonding gates, doors, fences etc.

SIZE mm	CROSS SECTION AREA	HOLE SIZE mm	HOLE CENTRE mm	PROD. CODE
25 x 3.5	35 mm <sup>2</sup>	11	200	HFB - 252
25 x 3.5	35 mm <sup>2</sup>	11	400	HFB - 254



## LIGHTNING PROTECTION

### Aerial Elevation Rod

Material : Electrolytic Copper

Air Rod can be installed with or without Multiple Point.

ROD DIAMETER	THREAD DIAMETER	LENGTH OF ROD	PROD. CODE
15	5/8"	500	HAE - 15
15	5/8"	1000	HAE - 40
15	5/8"	2000	HAE - 120



### Multiple Point

Material : Electrolytic Copper

Multiple Point is used with Elevation rod.

ROD DIAMETER	PROD. CODE
16 - 5/8"	HMP - 16
20 - 3/4"	HMP - 20



### Terminal Base

Material : Gunmetal / Brass

Rod to Conductor. Four fixing holes are provided on it.

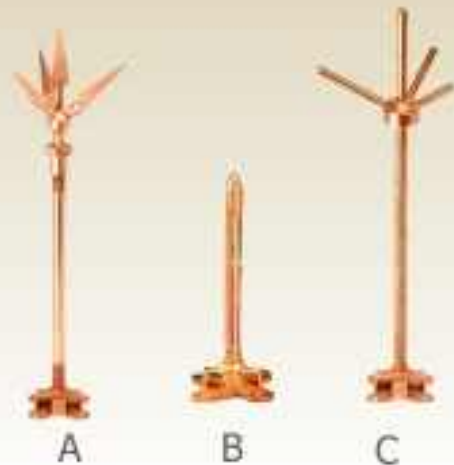




## AERIAL ROD + TERMINAL BASE

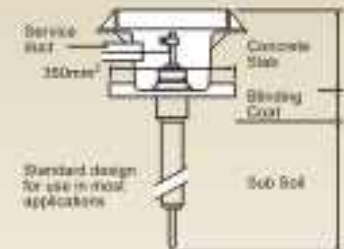
Aerial Rod + Multiple Point + Terminal Base

ITEM	PROD. CODE
A	HLA - 144
B	HLA - 14
C	HLA - 154



## EARTH SEAL

The earth rod seal is fitted when the earth rod connection is below the water level and where there is a possibility of water entering the inspection housing from below ground. The seal is particularly useful where internal earths are required such as in a basement building. Both single and double flange seals can be adapted to suit our full range of earth rod diameters by use of special compression rings and seals. The seals are used in conjunction with the HEX heavy duty earth inspection housings.



### Single Flange

EARTH ROD TYPE	FLANGE mm	PIPE LENGTH mm	PACK QTY.	PROD. CODE
16mm				HES 001-15
16mm				HES 001-16
20mm	366	300	1	HES 001-20
5/8" UNC Threaded				HES 001-58
3/4" UNC Threaded				HES 001-34

Material : Plastic

## PLASTIC EARTH PIT / HOUSING

This 'HEX' Earth housing pit is manufactured from heavy high-grade polypropylene for high strength & stress levels to absorb a maximum load of 2000 kg. Stabilised against degradation by non-brittle and by sunlight to prevent cold weather damage. The light weight feature allows easy handling, storage and transportation, thus increasing installation efficiency. Termination area is increased by 100% due to simple locking of two units together, allowing deeper earth electrode connections to be made and reducing the effects from harmful voltage gradients.



PROD. CODE : HEP

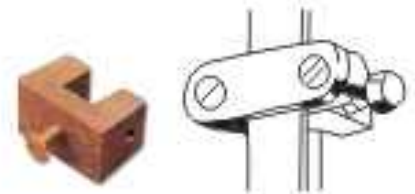
## LIGHTENING PROTECTION

### Glazing bar Holdfast

Material : Gunmetal

These are secured to Glazing Bar, Steel Frame, Girdles etc.

The Item is designed for use with appropriate size of metallic or non-metallic conductor fixing.



MAX. GLAZING BAR WIDTH mm	PROD. CODE
12	HGBH - 12

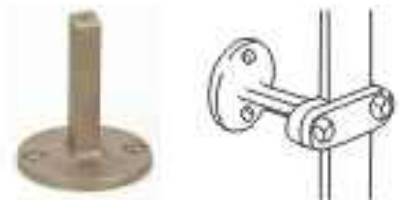
### Back Plate Holdfast Stem

Material : Gunmetal

For use with appropriate DC Tape Clip.

It is used when the installation requires the tape to be secured 75 mm away from the face of the building

Prod. Code : HBPH - 12



### Oblong Test Clamp

Material : Gunmetal / Brass

These are used with Bare Copper Tape Conductor

CONDUCTOR SIZE mm	PROD. CODE
25 x 3	HOT - 253
40 x 6	HOT - 406
50 x 6	HOT - 506



### Test Bond / Test Clamp

Material : Gunmetal / Brass

These are used for 4 way Copper Tape Connection

CONDUCTOR SIZE mm	PROD. CODE
26 x 12	HTBC - 2612





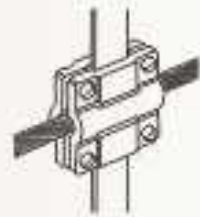
## LIGHTENING PROTECTION

### Cable to Tape Junction Clamp

Mtl : Gunmetal / Brass

These are used for connecting Copper Tape to Cable.

TAPE SIZE mm	CABLE SIZE mm <sup>2</sup>	PROD. CODE
25 x 3	50	HCTJ - 253



### Screwdown Test Clamp

Mtl : Gunmetal / Brass

These are used for fixing 2 Way Copper Tape.

CONDUCTOR SIZE mm	PROD. CODE
25 x 3	HSDTC - 253



### Tee Clamp

Mtl : Copper / Brass

These are used for forming and bonding Tee joint for conductor.

CONDUCTOR SIZE mm	PROD. CODE
8 Cu	HTEC - 8C
8 Al	HTEC - 8A



### Jointing Clamp

Mtl : Copper / Brass

These are used for forming straight through joints.

CONDUCTOR SIZE mm	PROD. CODE
8 Cu	HJC - 8C
8 Al	HJC - 8A



### One Hole Cable Clip

Mtl : Copper

These are recommended to fix cable conductors.

CONDUCTOR SIZE mm	PROD. CODE
8	HOH - 8
12	HOH - 12
16	HOH - 16
20	HOH - 20



## TEREC EARTH ENHANCING MIRACLE COMPOUND

### What happens with normal Earthing using Salt & Charcoal

The Electrical drain gets clogged in summer allowing electrical energy to remain in the circuit destroying the electronic and electrical goods

### The TEREC + Advantage

- Miracle compound
- Achieves resistance acceptable to any international body
- Maintenance Free
- Low Step and Touch Potential
- Environmentally Friendly
- Saves your electrical and electronic equipments from ground faults.

The Electrical drain does not get clogged allowing immediate exit of the energy keeping all equipments intact.

### Physical Properties

Presentation	: In granular form.
Granulometry	: 0.85mm to 4mm
Colour / Smell	: Grey / Inodorous
Volumetric Mass	: 500 to 650 Kg/m <sup>3</sup> compressed 450 to 500 Kg/m <sup>3</sup> uncompressed
Solubility in water	: Partially miscible
PH Value	: 6.9 to 7.2 of 1000gm/lit At 20o C

### Miracle Compound For Earthing

- Ionic chemicals - Salts creates ions for easy conduction.
- Dispersion chemicals - Spreads the salts equally in the earth pit.
- Expansion chemicals - Expands 18 to 20 times and removes entrapped air to create strong connection between rod and soil.
- Diffusion chemicals - Diffuses into soil pores and creates conductive silicate roots enlarging conductive zone of earth pit.
- Hygroscopic chemicals - Absorbs atmospheric & surrounding moisture & retain it in the soil in form of jelly.





## SATELIT 3

Authorised distributor only for Indian Sub-continent & Middle East Countries.

### The Early Streamer Emission Lightning Conductor Including Teletesting supervision

This third generation of the Duval Messioen "Satelit" range uses this technology to force the lightning strike to follow a predetermined path towards the earthing system. The Satelit 3 concept consists of polarising the lightning conductor tip with a voltage of between 35 kV and 45kV, synchronised with the progress of the descending tracer, and of triggering an anticipated start for the ascending tracer. with its Satelit 3 Duval Messien is offering a ground-breaking development by introducing a remote system testing facility: the TELETESTER-S3. The Satelit 3 range comprises three models with different performance characteristics: the Satelit 3-25, the Satelit 3-45 and the Satelit 3-60.

### Proven Performance

Satelit 3 lightning conductors have been conducted in various countries by independent, approved laboratories, as well as in France at the Bazet Test Centre ( COFRAC approved ) under Liloyd's Register control (the certifier European body ).

#### SATELIT 3 RANGE

PROTECTION RADII(M)										
Type	h=tip height (m)									
SATELIT3	2	3	4	5	6	10	15	20	45	60

#### LEVEL 1

SATELIT 3-25	17	25	34	42	43	44	45	45	45	45
SATELIT 3-45	26	38	50	63	63	64	65	65	65	65
SATELIT 3-60	32	48	64	79	79	79	80	80	80	80

#### LEVEL 2

SATELIT 3-25	23	34	46	57	58	61	63	65	70	70
SATELIT 3-45	34	48	64	81	81	83	85	86	90	90
SATELIT 3-60	40	59	78	97	97	99	101	102	105	105

#### LEVEL 3

SATELIT 3-25	26	39	52	65	66	69	72	75	84	85
SATELIT 3-45	36	50	72	89	90	92	95	97	104	105
SATELIT 3-60	44	65	87	107	107	109	111	113	119	120

### A New Lightning Conductor Concept

Satelit 3 has been designed around a 304L quality Stainless Steel shell in order to guarantee high resistance to impacts, corrosion and chemical agents. The electronic components selected for the Satelit 3 are completely protected inside an inert resin block. The spark gap, any body steel is designed to conduct currents greater than 180 kA. The Satelit 3 is powered by a NI-MH type battery, continuously recharged: indestructible, flexible solar cells. Faces of each cell are made of Ethylene Tetra Fluoro-Ethylene (ETFE). As well as being adhesion resistant, it does not turn Yellow or crack up over time.

### Duval Messioen A Century Of Innovations

The origins of this success are to be found in the union of two great talents: that of Paul Duval, in 1835. Today, it is recognised as one of the world's leading experts in the field of lightning protection. Benefiting from ISO 9001 and Qualifelec Certification and MASE approval, has 2 operational units in France.



### Typical Installation Scheme

1. Air Terminal - Protector
2. Support Mast
3. Down conductor
4. Lightning Strike Counter
5. Test Joint
6. PVC Protective Sheath
7. Earth Terminal



### Salient Features

- ❑ The Protector is an ESE type of 'active' lightning conductor that provides zonal protection in accordance with standard NF C 17 102.
- ❑ The PROTECTOR is a sturdy robust device made of 304 L stainless steel.
- ❑ It is protected against corrosion and needs no maintenance.
- ❑ Needs no external power source.
- ❑ Compact and easy to install.
- ❑ Warrantee for 2 years.
- ❑ Tested and certified by ODTU University Laboratories in Turkey (Europe).

### Applications

- ❑ Large multistoried / high rise residential complexes and housing colonies. A single Protector can cover several blocks.
- ❑ Large multistoried / high-rise office complexes, multiplexes, shopping malls, etc.
- ❑ Modern buildings housing IT offices, BOP's and concentration of sensitive electronic and / or telecom equipment.
- ❑ Factories having plc based controls for critical plant and machinery
- ❑ Hospitals, cinema halls, museums, old monuments, schools etc.







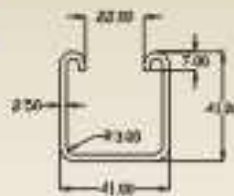
## STRUT CHANNEL

Material : Steel

Finish : Zinc Plated / Pre-Galvanised / Hot Deep Galvanised

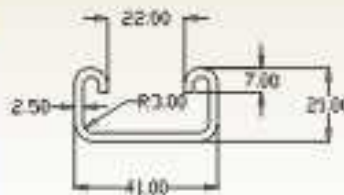
Size : 41 x 41

THICKNESS mm	LENGTH mm	PROD. CODE
1.5	3.00	HST - 41315
1.5	6.00	HST - 41615
2.0	3.00	HST - 41320
2.0	6.00	HST - 41620
2.5	3.00	HST - 41325
2.5	6.00	HST - 41625



Size : 41 x 21

THICKNESS mm	LENGTH mm	PROD. CODE
1.5	3.00	HST - 21315
1.5	6.00	HST - 21615
2.0	3.00	HST - 21320
2.0	6.00	HST - 21620
2.5	3.00	HST - 21325
2.5	6.00	HST - 21625



### While ordering :

Add the type : P for (Plain) & S for (Slotted)

Specify the finish : ZP for (Zinc Plated), PG for (Pre Galvanised) & HDG for (Hot Deep Galvanised).

## ROLLER BALL TYPE STAINLESS STEEL CABLE TIES

Material : Stainless Steel Grade 316/304

### Features :

- This roller ball design tie are self locking and very easy to install.
- Fixing can be done by hand, tool & both.

### Specification :

- Min. loop tensile strength - 4.6mm width (44.5kg) 100 lbs
- Min. loop tensile strength - 7.9mm width (113.6kg) 250 lbs

### Operating Temperature :

- 80°C to +150°C (Coated)
- 80°C to +538°C (UnCoated)

### Applications :

Construction, Automobile, Offshore, Petro-Chemical industries, Fire Protection, Aerospace, Flame Proof Installation etc.



LENGTH mm	WIDTH mm	MAX. BUNDLE DIA. mm	PROD. CODE
100	4.6	16	HH - 100
150	4.6	32	HH - 150
200	4.6	50	HH - 200
360	4.6	101	HH - 360
520	4.6	152	HH - 520
680	4.6	203	HH - 680
840	4.6	254	HH - 840
1000	4.6	298	HH - 1000
200	7.9	50	HH - 200 H
360	7.9	101	HH - 360 H
520	7.9	152	HH - 520 H
680	7.9	203	HH - 680 H
840	7.9	254	HH - 840 H
1000	7.9	298	HH - 1000 H

For coated version add Suffix 'CT' to product code  
(For example : CTHH100 for 100mm length)



## Overview of Products :



Cable Terminal Ends & Connectors



Brass Cable Gland Kits & Accessories



Conduit Accessories, Channels & Pipe Clamps



Control Panel / Switchboard Accessories



Stainless Steel Cable Ties & Markers



Cable Jointing & Termination Kit Components



## OUR GLOBAL PRESENCE



**OVERSEAS OFFICES :** USA • UK • Dubai • Malaysia



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