

Catálogo de productos

Products catalog

Catalogue de produits



 **ilardia**

Anything you need for the best connection



La mejor calidad en sus conexiones

The best quality in your connections

La meilleure qualité dans vos connexions



AENOR Asociación Española de Normalización y Certificación



CERTIFICADO DE REGISTRO DE EMPRESA

REGISTERED FIRM CERTIFICATE

ER-326/2/95

La Asociación Española de Normalización y Certificación (AENOR) certifica que el Sistema de Aseguramiento de la Calidad adoptado por la Empresa: *The Spanish Association for Standardization and Certification (AENOR) certifies that quality assurance system adopted by the firm:*

ILARDIA CONEXIONES ELECTRICAS, S.A. (ICESA)

para:

for:

LA PRODUCCIÓN DE:

PIEZAS PARA CONEXIONES ELÉCTRICAS:

TERMINALES Y EMPALMES DE TUBO DE COBRE, TERMINALES Y EMPALMES DE CHAPA DE LATÓN Y CHAPA DE COBRE, DESNUDOS Y AISLADOS CON FUNDA DE PVC. TERMINALES Y EMPALMES DE ALUMINIO O BIMETÁLICOS, COBRE-ALUMINIO.

THE PRODUCTION OF:

CONNECTORS FOR ELECTRICAL CABLES:

LUGS AND SPLICES MADE OF COPPER TUBE, TERMINALS AND SPLICES MADE OF BRASS OF COPPER SHEET, UNINSULATED AND INSULATED WITH PVC SLEEVE, LUGS, SPLICES AND UNIONS MADE OF ALUMINIUM OR BIMETALLIC COPPER-ALUMINIUM.

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CU-AL

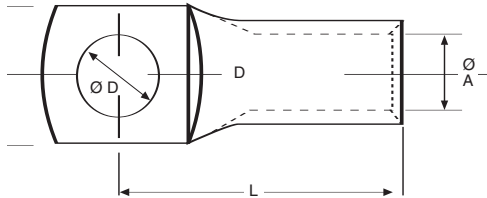
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TERMINALES TUBULARES EN COBRE A COMPRESIÓN



Apriete por punzonado

Commercial cable lugs - Crimping by punching
Cosses de cuivre - Sertissage per poinçonnage



Material:

SECU Y SFCU S/DIN 1787-73

Acabado:

ESTAÑADO, TINNED, ETAMÉ

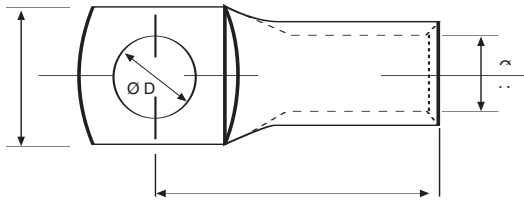
| CABLE Norm. | CABLE Flex. | Ø A | Ø C | Ø D | L | HERRAMIENTA Tool / Outil | REF. | CABLE Norm. | CABLE Flex. | Ø A | Ø C | Ø D | L | HERRAMIENTA Tool / Outil | REF. |
|-------------|-------------|-----|-------|-----|-------|--------------------------|---------|-------------|-------------|-------|-------|------|----------|--------------------------|-----------|
| 1,5 | 1 | 1,5 | 6,3 | 5,3 | 11,95 | A6, TP3 | 15 - 30 | 10 | 6 | 4,5 | 14,25 | 8,5 | 23,75 | T50 y TP3 | 43 - 80 |
| 1,5 | 1 | 1,5 | 8 | 4,3 | 13,6 | | 15 - 45 | 10 | 6 | 4,5 | 16 | 10,5 | 27,75 | | 43 - 100 |
| 1,5 | 1 | 1,5 | 8 | 5,3 | 13,6 | | 15 - 55 | 10 | 6 | 4,5 | 18,5 | 12,5 | 30 | | 43 - 120 |
| 2,5 | 1,5 | 2,5 | 6,8 | 3,2 | 14 | | 20 - 30 | 10 | 6 | 5 | 10 | 4,3 | 19,8 | | 50 - 40 |
| 2,5 | 1,5 | 2,5 | 8 | 4,2 | 14 | | 20 - 45 | 10 | 6 | 5 | 10 | 5,3 | 20,3 | | 50 - 50 |
| 2,5 | 1,5 | 2,5 | 8 | 5,2 | 14 | | 20 - 50 | 10 | 6 | 5 | 12,5 | 6,5 | 22,7 | | 50 - 60 |
| 4 | 2,5 | 3 | 8 | 4,5 | 15,5 | | 30 - 40 | 10 | 6 | 5 | 14,25 | 8,5 | 23,8 | | 50 - 80 |
| 4 | 2,5 | 3 | 8 | 5,5 | 15,5 | | 30 - 50 | 10 | 6 | 5 | 16 | 10,5 | 27,75 | | 50 - 100 |
| 4 | 2,5 | 3 | 10,5 | 6,5 | 17 | | 30 - 60 | 10 | 6 | 5 | 18,5 | 12,5 | 31,5 | | 50 - 120 |
| 6 | 4 | 4 | 9 | 4,3 | 18,5 | | 40 - 40 | 16 | 10 | 5,5 | 12 | 5,3 | 21,8 | | T50 y TP5 |
| 6 | 4 | 4 | 9 | 5,3 | 18,5 | 40 - 50 | 16 | 10 | 5,5 | 12 | 6,5 | 22,3 | 56 - 60 | | |
| 6 | 4 | 4 | 11,5 | 6,5 | 20 | 40 - 60 | 16 | 10 | 5,5 | 14,25 | 8,5 | 24,3 | 56 - 80 | | |
| 6 | 4 | 4 | 14,25 | 8,5 | 21,5 | 40 - 80 | 16 | 10 | 5,5 | 14,25 | 8,5 | 24,3 | 56 - 100 | | |
| 10 | 6 | 4,5 | 9 | 5,3 | 19,8 | 43 - 50 | 16 | 10 | 5,5 | 18,5 | 12,5 | 33 | 56 - 120 | | |
| 10 | 6 | 4,5 | 13 | 6,5 | 23,3 | 43 - 60 | 16 | 10 | 6 | 12 | 5,3 | 22,8 | 60 - 50 | | |

TERMINALES TUBULARES EN COBRE A COMPRESIÓN

Apriete por punzonado



Commercial cable lugs - Crimping by punching
Cosses de cuivre - Sertissage per poinçonnage



Material:

SECU Y SFCU S/DIN 1787-73

Acabado:

ESTAÑADO, TINNED, ETAMÉ

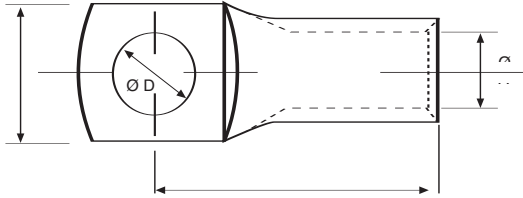
| CABLE | | Ø A | Ø C | Ø D | L | HERRAMIENTA | REF. | CABLE | | Ø A | Ø C | Ø D | L | HERRAMIENTA | REF. |
|-------|-------|-----|------|------|-------|--------------|----------|-------|-------|------|------|------|-----------|----------------|-----------|
| Norm. | Flex. | | | | | Tool / Outil | | Norm. | Flex. | | | | | Tool / Outil | |
| 16 | 10 | 6 | 12 | 6,5 | 22,8 | T50 y TP5 | 60 - 60 | 50 | 35 | 10 | 18,5 | 6,5 | 36,25 | T50, T95, PHC | 100 - 60 |
| 16 | 10 | 6 | 14,5 | 8,2 | 24,4 | | 60 - 80 | 50 | 35 | 10 | 18,5 | 8,5 | 36,25 | | 100 - 80 |
| 16 | 10 | 6 | 16 | 10,5 | 27,25 | | 60 - 100 | 50 | 35 | 10 | 18,5 | 10,5 | 36,25 | | 100 - 100 |
| 16 | 10 | 6 | 18,5 | 12,5 | 33,25 | | 60 - 120 | 50 | 35 | 10 | 20,5 | 12,5 | 39,25 | | 100 - 120 |
| 25 | 16 | 7 | 14,5 | 6,5 | 26,75 | T50 y T95 | 70 - 65 | 50 | 35 | 10 | 20,5 | 13 | 39,25 | 100 - 130 | |
| 25 | 16 | 7 | 14,5 | 8,5 | 26,75 | | 70 - 80 | 50 | 35 | 10 | 24 | 14,5 | 44,75 | 100 - 140 | |
| 25 | 16 | 7 | 16 | 10,5 | 29,75 | | 70 - 100 | 50 | 35 | 10 | 24 | 16,5 | 44,75 | 100 - 160 | |
| 25 | 16 | 7 | 18,5 | 12,5 | 34 | | 70 - 120 | 70 | | 11,5 | 20,5 | 8,5 | 39 | T95, T150, PHC | 115 - 80 |
| 35 | 25 | 8 | 15 | 6,5 | 29,5 | | 80 - 60 | 70 | | 11,5 | 20,5 | 10,5 | 39 | 115 - 100 | |
| 35 | 25 | 8 | 15 | 8,5 | 29,5 | | 80 - 80 | 70 | | 11,5 | 20,5 | 13 | 41 | 115 - 130 | |
| 35 | 25 | 8 | 16,5 | 10,5 | 31,25 | | 80 - 100 | 70 | | 11,5 | 20,5 | 13 | 41 | 115 - 140 | |
| 35 | 25 | 8 | 18,5 | 12,5 | 34 | | 80 - 120 | 70 | | 11,5 | 24 | 14,5 | 46,25 | 115 - 140 | |
| 40 | | 9 | 16,5 | 6,5 | 33 | | 90 - 60 | 70 | | 11,5 | 24 | 16,5 | 46,25 | 115 - 160 | |
| 40 | | 9 | 16,5 | 8,5 | 33 | | 90 - 80 | 70 | 50 | 12 | 22 | 8,5 | 41 | 120 - 80 | |
| 40 | | 9 | 18,7 | 10,5 | 34,5 | 90 - 100 | 70 | 50 | 12 | 22 | 10,5 | 41 | 120 - 100 | | |
| 40 | | 9 | 18,7 | 12,5 | 34,5 | 90 - 120 | | | | | | | | | |

TERMINALES TUBULARES EN COBRE A COMPRESIÓN



Apriete por punzonado

Commercial cable lugs - Crimping by punching
Cosses de cuivre - Sertissage per poinçonnage



Material:
SECU S/DIN 1787-73

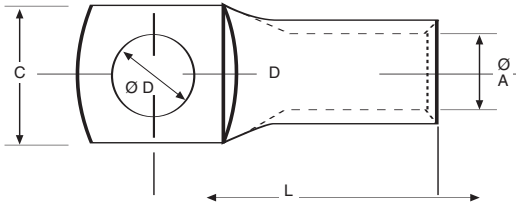
Acabado:
ESTAÑADO, TINNED, ETAMÉ

| CABLE | | Ø A | Ø C | Ø D | L | HERRAMIENTA | REF. | CABLE | | Ø A | Ø C | Ø D | L | HERRAMIENTA | REF. | |
|-------|-------|------|------|------|-------|----------------|----------------|----------|-------|------|------|------|------|----------------|---------------|-----------|
| Norm. | Flex. | | | | | Tool / Outil | | Norm. | Flex. | | | | | Tool / Outil | | |
| 70 | 50 | 12 | 22,3 | 13 | 41 | T95, T150, PHC | 120 - 130 | 120 | 95 | 15,5 | 28 | 13 | 53 | T150, PHC, HM5 | 155 - 130 | |
| 70 | 50 | 12 | 24 | 14,5 | 46,25 | | 120 - 140 | 120 | 95 | 15,5 | 28 | 14,5 | 53 | | 155 - 140 | |
| 70 | 50 | 12 | 24 | 16,5 | 46,25 | | 120 - 160 | 120 | 95 | 15,5 | 28 | 16,5 | 53 | | 155 - 160 | |
| 95 | 70 | 13,5 | 24 | 8,5 | 45,25 | | 130 - 80 | 150 | 120 | 17 | 30,5 | 10,5 | 57 | | 170 - 100 | |
| 95 | 70 | 13,5 | 24 | 10,5 | 45,25 | | 130 - 100 | 150 | 120 | 17 | 30,5 | 13,5 | 57 | | 170 - 130 | |
| 95 | 70 | 13,5 | 25 | 13,2 | 46,75 | | 130 - 130 | 150 | 120 | 17 | 30,5 | 14,5 | 57 | | 170 - 140 | |
| 95 | 70 | 13,5 | 25 | 14,5 | 46,75 | | 130 - 140 | 150 | 120 | 17 | 30,5 | 16,5 | 57 | | 170 - 160 | |
| 95 | 70 | 13,5 | 25 | 16,5 | 46,75 | | 130 - 160 | 185 | 150 | 19 | 33,5 | 12,5 | 59,5 | | PHC, PHH, HM5 | 185 - 120 |
| 100 | | 14 | 25 | 8,5 | 49 | | 140 - 80 | 185 | 150 | 19 | 33,5 | 14,5 | 59,5 | | | 185 - 140 |
| 100 | | 14 | 25 | 19,5 | 49 | | 140 - 100 | 185 | 150 | 19 | 33,5 | 16,5 | 59,5 | | | 185 - 160 |
| 100 | | 14 | 25 | 13,5 | 52,5 | | 140 - 130 | 240 | 185 | 21 | 37 | 12,5 | 67 | | | 210 - 120 |
| 100 | | 14 | 25 | 14,5 | 52,5 | | 140 - 140 | 240 | 185 | 21 | 37 | 14,5 | 67 | | 210 - 140 | |
| 100 | | 14 | 25 | 16,5 | 52,5 | | 140 - 160 | 240 | 185 | 21 | 37 | 16,5 | 67 | | 210 - 160 | |
| 120 | 95 | 15,5 | 28 | 8,5 | 51,25 | | T150, PHC, HM5 | 155 - 80 | 240 | 185 | 21 | 37 | 20,5 | | 67 | 210 - 200 |
| 120 | 95 | 15,5 | 28 | 10,5 | 51,25 | 155 - 100 | | 240 | 185 | 21 | 37 | 20,5 | 67 | 210 - 200 | | |

TERMINALES TUBULARES EN COBRE A COMPRESIÓN

Apriete por punzonado

Commercial cable lugs - Crimping by punching
Cosses de cuivre - Sertissage per poinçonnage

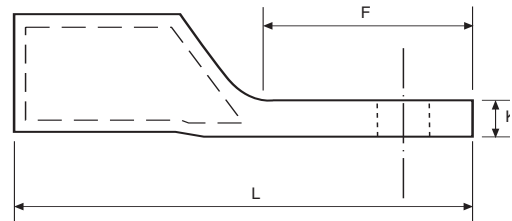


Material:
SECU S/DIN 1787-73
Acabado:
ESTAÑADO, TINNED,
ETAMÉ

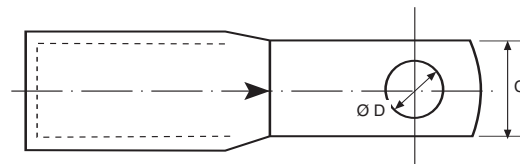
| CABLE | | Ø A | Ø C | Ø D | L | HERRAMIENTA Tool / Outil | REF. |
|-------|-------|-----|-----|------|-------|-----------------------------|-----------|
| Norm. | Flex. | | | | | | |
| 300 | 240 | 23 | 41 | 18,2 | 80,5 | PHC, PHH | 230 - 180 |
| 300 | 240 | 23 | 41 | 20,5 | 80,5 | | 230 - 200 |
| 400 | 300 | 27 | 48 | 18,2 | 93 | PHP, U20 | 270 - 180 |
| 400 | 300 | 27 | 48 | 20,5 | 93 | | 270 - 200 |
| 500 | 400 | 30 | 53 | 18,5 | 107,2 | | 290 - 180 |
| 500 | 400 | 30 | 53 | 20,5 | 107,2 | | 290 - 200 |
| 600 | 500 | 34 | 59 | 18,5 | 124 | | 340 - 180 |

TERMINALES TUBULARES COBRE PALA ESTRECHA

Copper narrow Palm Cable lugs
Cosses en cuivre, Pelle Etroit



Material:
SECU S/DIN 1787-73
Acabado: ESTAÑADO - TINNED



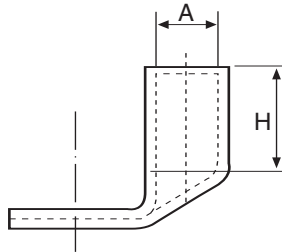
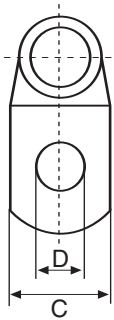
| CABLE mm ² | | C | D* | F | L | K | HERRAMIENTA Tool / Outil | REF. |
|-----------------------|-------|----|------|----|----|-----|-----------------------------|----------|
| Norm. | Flex. | | | | | | | |
| 50 | 35 | 11 | M 5 | 19 | 49 | 4 | T 50 - T 95 | 100-11 |
| 70 | 50 | 13 | M 6 | 21 | 53 | 4 | T 95 - T 150 | 115 - 13 |
| 95 | 70 | 15 | M 8 | 23 | 60 | 4,5 | | 130 - 15 |
| 120 | 95 | 17 | M 10 | 28 | 70 | 5,5 | T 150 - PHC - HM5 | 155 - 17 |
| 150 | 120 | 19 | M 10 | 30 | 76 | 6,5 | | 170 - 19 |
| 185 | 150 | 22 | M 12 | 30 | 77 | 6,5 | PHC - HM5 | 190 - 22 |
| 240 | 185 | 22 | M 12 | 30 | 85 | 8 | | 210 - 22 |

* D. Máximo

TERMINAL TUBULAR COBRE EN ESCUADRA



90° palm copper lug
Cosses de pelle equerre, cuivre



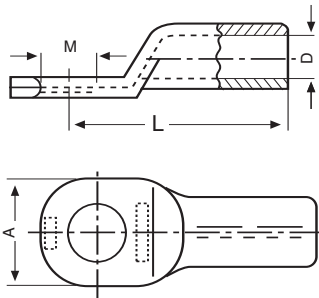
Material:
SECU S/DIN 1787-73
Acabado: ESTAÑADO-TINNED

| CABLE mm ² | | A | D | C | H | HERRAMIENTA DE APRIETE Tool / Outil | REF. |
|-----------------------|-------|------|----|----|----|--|-----------|
| Norm. | Flex. | | | | | | |
| 6 | 4 | 3,5 | 6 | 12 | 9 | T50 | KE 6- 6 |
| 6 | 4 | — | 8 | 15 | 10 | | KE 6- 8 |
| 10 | 6 | 4,5 | 6 | 12 | 10 | | KE 10- 6 |
| 10 | 6 | — | 8 | 15 | 10 | | KE 10- 8 |
| 16 | 10 | 5,5 | 6 | 12 | 13 | | KE 16- 6 |
| 16 | 10 | — | 8 | 15 | 13 | | KE 16- 8 |
| 25 | 16 | 7 | 8 | 16 | 15 | | KE 25- 8 |
| 25 | 16 | — | 10 | 18 | 15 | | KE 25-10 |
| 35 | 25 | 8,5 | 8 | 17 | 17 | | KE 35- 8 |
| 35 | 25 | — | 10 | 19 | 17 | | KE 35-10 |
| 50 | 35 | 10 | 10 | 20 | 20 | | KE 50-10 |
| — | — | — | 13 | 23 | 20 | | KE 50-12 |
| 70 | 50 | 12 | 10 | 24 | 21 | T95 | KE 70-10 |
| — | — | — | 13 | 24 | 21 | | KE 70-12 |
| 95 | 70 | 13,5 | 10 | 26 | 25 | | KE 95-10 |
| — | — | — | 13 | 26 | 25 | | KE 95-12 |
| 120 | 95 | 15 | 10 | 28 | 26 | | KE 120-10 |
| 120 | 95 | 15 | 13 | 28 | 30 | PHC | KE 120-13 |
| 150 | 120 | 16,5 | 10 | 31 | 30 | | KE 150-10 |
| — | — | — | 13 | 31 | 30 | | KE 150-12 |
| 185 | 150 | 19 | 13 | 35 | 30 | | KE 185-12 |
| 240 | 185 | 21 | 16 | 37 | 35 | | KE 240-16 |

DIN 46235 TERMINALES TUBULARES DE COBRE



Tubular copper compression lugs for hexagonal pressing DIN 46235
Cosses tubulaires en cuivre DIN 46235



Material:
SE-Cu Estañado
DIN 1787-73
Tin Plated



| CABLE mm ² | TORNILLO Bolt M | L | A | D Ø | MATRIZ HEXAG. Die. size | NÚMERO DE APRIETES Number of crimps | | REF. |
|--------------------------|-----------------------|----|-----|--------|----------------------------------|--|----------|------------------------------------|
| | | | | | | TENAZA Handtool | Hydraul. | |
| 6 | 5 | 24 | 8,5 | 3,8 | 6 | 1 | | D. 6-5 |
| 10 | 6 | 27 | 9 | 4,5 | 6 | 1 | | D. 10-6 |
| 16 | 6 | 36 | 13 | 5,5 | 8 | 2 | | D. 16-6 16-8 16-10 |
| | 8 | | 13 | | | | | |
| | 10 | | 17 | | | | | |
| 25 | 6 | 38 | 14 | 7 | 10 | 2 | | D. 25-6 25-8 25-10 25-12 |
| | 8 | | 16 | | | | | |
| | 10 | | 17 | | | | | |
| | 12 | | 19 | | | | | |
| 35 | 8 | 42 | 17 | 8,2 | 12 | 2 | | D. 35-8 35-10 35-12 |
| | 10 | | 19 | | | | | |
| | 12 | | 21 | | | | | |
| 50 | 8 | 52 | 20 | 10 | 14 | 3 | | D. 50-8 50-10 50-12 50-16 |
| | 10 | | 22 | | | | | |
| | 12 | | 24 | | | | | |
| | 16 | | 28 | | | | | |
| 70 | 10 | 55 | 24 | 11,5 | 16 | 3 | | D. 70-10 70-12 70-16 |
| | 12 | | 24 | | | | | |
| | 16 | | 30 | | | | | |
| 95 | 10 | 65 | 28 | 13,5 | 18 | 4 | 2 | D. 95-10 95-12 95-16 |
| | 12 | | | | | | | |
| | 16 | | | | | | | |
| 120 | 12 | 70 | 31 | 15,5 | 20 | 4 | 2 | D.120-12 120-16 |
| | 16 | | | | | | | |
| 150 | 12 | 78 | 34 | 17 | 22 | 4 | 2 | D.150-12 150-16 |
| | 16 | | 34 | | | | | |
| 185 | 16 | 82 | 37 | 19 | 25 | | 2 | D. 185-16 185-20 |
| | 20 | | 40 | | | | | |
| 240 | 16 | 92 | 42 | 21,5 | 28 | | 2 | D. 240-16 240-20 |
| | 20 | | 45 | | | | | |

TERMINAL TUBULAR DE COBRE ESTAÑADO NF

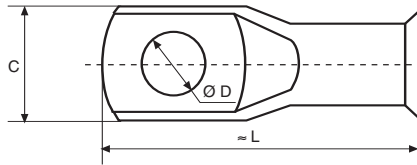
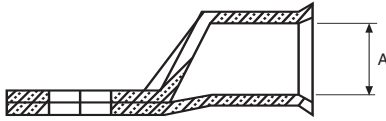


NF Tinned copper lug
Cosses de cuivre étamé NF

LAS MEDIDAS SON CONFORME A LA NORMA
NF C20-130

Measurement according to French Standard
NF C20-130

Les mesures sont suivant la Norme
NF C20-130



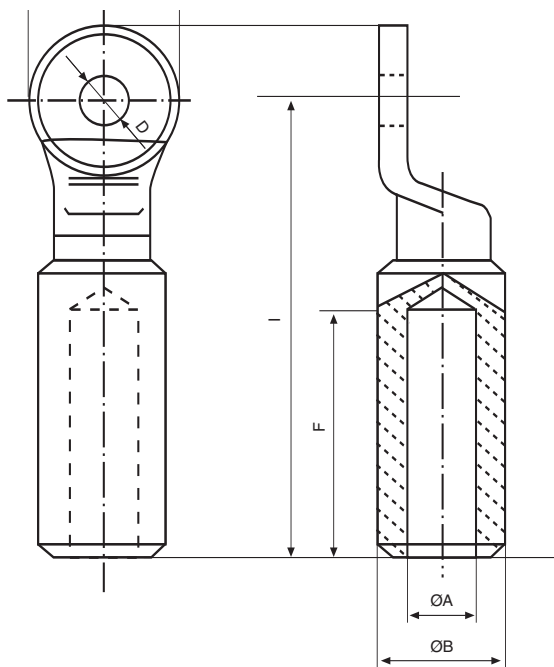
Material:
SECU S/ DIN 1787-73

| CABLE | Ø A | Ø D | C | L | HERRAMIENTA Tool / Outil | REF. |
|-------|------|------|----|-----|-----------------------------|-----------|
| 16 | 5,5 | 6,5 | 12 | 37 | T50 | NF 16- 6 |
| — | — | 8,5 | 17 | 42 | | NF 16- 8 |
| 25 | 6,8 | 8,5 | 17 | 43 | | NF 25- 8 |
| — | — | 10,5 | 17 | 43 | | NF 25-10 |
| 35 | 8 | 8,5 | 17 | 45 | | NF 35- 8 |
| — | — | 10,5 | 17 | 45 | | NF 35-10 |
| 50 | 9,4 | 10,5 | 18 | 51 | | NF 50-10 |
| — | — | 13 | 19 | 51 | | NF 50-12 |
| 70 | 11,2 | 10,5 | 21 | 55 | | NF 70-10 |
| — | — | 13 | 22 | 55 | | NF 70-12 |
| 95 | 13,3 | 13 | 24 | 66 | T95 | NF 95-12 |
| — | — | 16,5 | 24 | 66 | | NF 95-16 |
| 120 | 14,5 | 13 | 28 | 72 | | NF 120-12 |
| — | — | 16,5 | 28 | 71 | | NF 120-16 |
| 150 | 16,4 | 14,5 | 31 | 79 | PHC | NF 150-14 |
| — | — | 16,5 | 31 | 79 | | NF 150-16 |
| 185 | 18,2 | 16,5 | 33 | 83 | | NF 185-16 |
| 240 | 20,8 | 16,5 | 37 | 92 | | NF 240-16 |
| 300 | 23 | 16,5 | 41 | 102 | | NF 300-16 |

TERMINALES TC Cu MACIZO



Solid Cu cable Lugs
Cosses de cuivre massif



Material:
ECU DIN 1787-73



| SECCION mm ² | Ø A | Ø B | Ø C | Ø D | F | I | REF. |
|----------------------------|------|------|-----|------|----|-----|-------|
| 16 | 5,5 | 12,2 | 26 | 13 | 30 | 64 | TC16 |
| 25 | 7 | 12,2 | 26 | 13 | 30 | 64 | TC25 |
| 35 | 8 | 12,2 | 26 | 13 | 30 | 64 | TC35 |
| 50 | 9,5 | 12,2 | 26 | 13 | 30 | 64 | TC50 |
| 70 | 11,5 | 21 | 26 | 13 | 35 | 66 | TC70 |
| 95 | 13 | 21 | 26 | 13 | 35 | 66 | TC95 |
| 120 | 15 | 21 | 30 | 13 | 45 | 89 | TC120 |
| 150 | 16,5 | 21 | 30 | 13 | 45 | 89 | TC150 |
| 185 | 18,5 | 26,2 | 36 | 13 | 48 | 96 | TC185 |
| 240 | 21 | 26,2 | 36 | 13 | 48 | 96 | TC240 |
| 300 | 23 | 30 | 42 | 16,5 | 52 | 115 | TC300 |
| 400 | 26 | 33 | 42 | 16,5 | 52 | 115 | TC400 |

TERMINALES CHAPA COBRE C - 4



Serie S con la junta sin soldar - Serie J con la junta soldada

Cable Lugs E Cu sheet tinned - S pieces with joint no welded - J pieces with joint welded, brazed

Cosses par sertissage

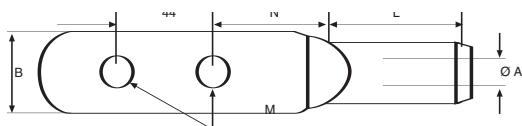


| CABLE mm ² | A | B | REFERENCIA |
|-----------------------|-----|------|------------|
| HASTA 0,5 | 3 | 6 | S 5-35 |
| | 4 | | S 5-45 |
| HASTA 1,5 | 3 | 6 | S 10-35 |
| | 3,5 | 6 | S 10-37 |
| | 3 | 5,5 | S 10-35 H |
| | 4 | 8,5 | S 10-45 |
| | 4 | 6,5 | S 10-45 H |
| | 5 | 8,5 | S 10-55 |
| 1,5 A 2,5 | 5 | 8,5 | S 10-55 H |
| | 3 | 5,5 | S 25-35 |
| | 3 | 6,5 | S 25-35 H |
| | 4 | 8,5 | S 25-45 |
| | 4 | 6,8 | S 25-45 H |
| | 5 | 8,5 | S 25-55 |
| 4 A 6 | 5 | 8,5 | S 25-55 H |
| | 6 | 12 | S 25-60 |
| | 8 | 12 | S 25-80 |
| | 4 | 8 | S 30-45 |
| | 4 | 8 | S 30-45 H |
| | 5 | 10 | S 30-55 |
| 6,1 A 10 | 5 | 10 | S 30-55 H |
| | 6 | 12 | S 30-65 |
| | 6 | 12 | S 30-65 H |
| | 8 | 14 | S 30-85 |
| | 10 | 18 | S 30-100 H |
| 10,1 A 16 | 5 | 8 | S 40-55 |
| | 6 | 14,5 | S 40-65 |
| | 8 | 14,5 | S 40-80 |
| 16,1 A 25 | 8 | 10 | S 50-55 |
| | 6 | 14,5 | S 50-60 |
| | 8 | 14,5 | S 50-80 |
| 16,1 A 25 | 8 | 18 | S 70-80 |
| | 10 | 18 | S 70-100 |

| CABLE mm ² | A | B | L | REFERENCIA | | |
|-----------------------|-------|-----|----|----------------------|-------------------|-----|
| | | | | Con junta sin soldar | Con junta soldada | |
| 1,5 | Ø 1,9 | 0,8 | 11 | SC 15 | JC 15 | 15 |
| 1,5 | 2,5 | 0,8 | 11 | SCP 15 | JCP 15 | 15 |
| 2,5 | Ø 1,9 | 0,8 | 11 | SC 26 | JC 26 | 26 |
| 2,5 | 2,5 | 0,8 | 11 | SCP 26 | JCP 26 | 26 |
| 6 | Ø 2,9 | 1 | 11 | SC 60 | JC 60 | 60 |
| 6 | 4 | 1 | 11 | SCP 60 | JCP 60 | 60 |
| 10 | 4,5 | 2 | 13 | SC 100 | JC 100 | 100 |
| 16 | 6 | 2,4 | 14 | SC 160 | JC 160 | 160 |
| 25 | 7 | 3 | 16 | SC 250 | JC 250 | 250 |
| 35 | 8 | 3 | 20 | SC 350 | JC 350 | 350 |
| 50 | 9,5 | 4 | 20 | SC 500 | JC 500 | 500 |
| 70 | 11 | 4 | 23 | | JC 700 | 700 |
| 95 | 12,5 | 5 | 23 | | JC 950 | 950 |

TERMINAL COBRE ESTAÑADO PALA LARGA 2 AGUJEROS

Copper lug, Long Palm, 2 holes
Cosses de cuivre, pelle long, 2 trous



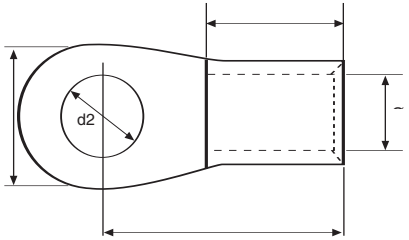
| SECCION mm ² | A | M | N | B | L | REF. |
|-------------------------|------|---------|----|----|----|-------------|
| 25 | 7 | 8 ó 10 | 16 | 16 | 18 | 25-8-2-44 |
| 35 | 8 | 8 ó 10 | 17 | 17 | 23 | 35-8-2-44 |
| 50 | 10 | 10 ó 12 | 20 | 20 | 26 | 50-10-2-44 |
| 70 | 11,5 | 10 ó 12 | 22 | 21 | 32 | 70-10-2-44 |
| 95 | 13,5 | 12 ó 16 | 27 | 25 | 35 | 95-12-2-44 |
| 120 | 15,5 | 12 ó 16 | 32 | 31 | 41 | 120-12-2-44 |
| 150 | 17 | 12 ó 16 | 32 | 31 | 41 | 120-12-2-44 |
| 185 | 19 | 12 ó 16 | 34 | 33 | 44 | 185-12-2-44 |
| 240 | 21 | 14 ó 16 | 38 | 37 | 46 | 240-14-2-44 |
| 300 | 23 | 16 ó 18 | 42 | 41 | 48 | 300-16-2-44 |

* Cualquier medida s/pedido

TERMINALES DIN 46 234



DIN 46 234 copper Lugs
Cosses cuivre DIN 46 234



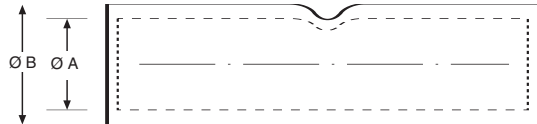
Material:
ECU
ESTAÑADO TINNED



| CABLE mm ² | DIMENSIONES / Dimensions | | | | | HERRAMIENTA Tool / Outil | REF. | CABLE mm ² | DIMENSIONES / Dimensions | | | | | HERRAMIENTA Tool / Outil | REF. | |
|--------------------------|--------------------------|------|------|------|-----|-----------------------------|---------|--------------------------|--------------------------|------|------|------|---------|-----------------------------|----------|---------|
| | d2 | B | l | E | d | | | | d2 | B | l | E | d | | | |
| 0,5-1,5 | 3,2 | 6,0 | 11,0 | 5,0 | 1,6 | TP 3 | J 1-3 | 25-35 | 6,5 | 15,0 | 26,0 | 12,0 | 9,0 | T50 | J 35-6 | |
| 0,5-1,5 | 3,7 | 6,0 | 11,0 | 5,0 | 1,6 | | J 1-3,5 | 25-35 | 8,4 | 16,0 | 26,0 | 12,0 | 9,0 | | J 35-8 | |
| 0,5-1,5 | 4,3 | 8,0 | 12,0 | 5,0 | 1,6 | | J 1-4 | 25-35 | 10,5 | 18,0 | 27,0 | 12,0 | 9,0 | | J 35-10 | |
| 0,5-1,5 | 5,3 | 10,0 | 13,0 | 5,0 | 1,6 | | J 1-5 | 25-35 | 13,0 | 22,0 | 31,0 | 12,0 | 9,0 | | J 35-12 | |
| 1,5-2,5 | 3,2 | 6,0 | 11,0 | 5,0 | 2,3 | | J 2-3 | 25-35 | 17,0 | 28,0 | 36,0 | 12,0 | 9,0 | | J 35-16 | |
| 1,5-2,5 | 3,7 | 6,0 | 11,0 | 5,0 | 2,3 | | J 2-3,5 | 35-50 | 6,5 | 18,0 | 34,0 | 16,0 | 11,0 | | J 50-6 | |
| 1,5-2,5 | 4,3 | 8,0 | 12,0 | 5,0 | 2,3 | | J 2-4 | 35-50 | 8,4 | 18,0 | 34,0 | 16,0 | 11,0 | | J 50-8 | |
| 1,5-2,5 | 5,3 | 10,0 | 14,0 | 5,0 | 2,3 | | J 2-5 | 35-50 | 10,5 | 18,0 | 34,0 | 16,0 | 11,0 | | J 50-10 | |
| 1,5-2,5 | 6,5 | 11,0 | 16,0 | 5,0 | 2,3 | | J 2-6 | 35-50 | 13,0 | 22,0 | 36,0 | 16,0 | 11,0 | | J 50-12 | |
| 1,5-2,5 | 8,4 | 14,0 | 17,0 | 5,0 | 2,3 | | J 2-8 | 35-50 | 17,0 | 28,0 | 40,0 | 16,0 | 11,0 | | J 50-16 | |
| 4 - 6,0 | 4,3 | 8,0 | 14,0 | 6,0 | 3,6 | | J 6-4 | 50-70 | 8,4 | 22,0 | 38,0 | 18,0 | 13,0 | | T 95 | J 70-8 |
| 4 - 6,0 | 5,3 | 10,0 | 15,0 | 6,0 | 3,6 | | J 6-5 | 50-70 | 10,5 | 22,0 | 38,0 | 18,0 | 13,0 | | | J 70-10 |
| 4 - 6,0 | 6,5 | 11,0 | 16,0 | 6,0 | 3,6 | | J 6-6 | 50-70 | 13,0 | 22,0 | 38,0 | 18,0 | 13,0 | | | J 70-12 |
| 4 - 6,0 | 8,4 | 14,0 | 19,0 | 6,0 | 3,6 | | J 6-8 | 50-70 | 17,0 | 28,0 | 42,0 | 18,0 | 13,0 | | | J 70-16 |
| 4 - 6,0 | 10,5 | 18,0 | 21,0 | 6,0 | 3,6 | | J 6-10 | 70-95 | 8,4 | 24,0 | 42,0 | 20,0 | 15,0 | | | J 95-8 |
| 6-10 | 5,3 | 10,0 | 16,0 | 8,0 | 4,5 | | J 10-5 | 70-95 | 10,5 | 24,0 | 42,0 | 20,0 | 15,0 | | | J 95-10 |
| 6-10 | 6,5 | 11,0 | 17,0 | 8,0 | 4,5 | J 10-6 | 70-95 | 13,0 | 24,0 | 42,0 | 20,0 | 15,0 | J 95-12 | | | |
| 6-10 | 8,4 | 14,0 | 20,0 | 8,0 | 4,5 | J 10-8 | 70-95 | 17,0 | 28,0 | 44,0 | 20,0 | 15,0 | J 95-16 | | | |
| 6-10 | 10,5 | 18,0 | 21,0 | 8,0 | 4,5 | J 10-10 | 95-120 | 10,5 | 24,0 | 44,0 | 22,0 | 16,5 | PHC | J 120-10 | | |
| 6-10 | 13,0 | 22,0 | 23,0 | 8,0 | 4,5 | J 12-10 | 95-120 | 13,0 | 24,0 | 44,0 | 22,0 | 16,5 | | J 120-12 | | |
| 10-16 | 6,5 | 11,0 | 20,0 | 10,0 | 5,8 | TP 5 | J 16-6 | 95-120 | 17,0 | 28,0 | 48,0 | 22,0 | | 16,5 | J 120-16 | |
| 10-16 | 8,4 | 14,0 | 22,0 | 10,0 | 5,8 | | J 16-8 | 120-150 | 10,5 | 30,0 | 50,0 | 24,0 | | 19,0 | J 150-10 | |
| 10-16 | 10,5 | 18,0 | 24,0 | 10,0 | 5,8 | | J 16-10 | 120-150 | 13,0 | 30,0 | 50,0 | 24,0 | 19,0 | J 150-12 | | |
| 10-16 | 13,0 | 22,0 | 26,0 | 10,0 | 5,8 | | J 16-12 | 120-150 | 17,0 | 30,0 | 50,0 | 24,0 | 19,0 | J 150-16 | | |
| 16-25 | 6,5 | 12,0 | 25,0 | 11,0 | 7,5 | T 50 | J 25-6 | 150-185 | 10,5 | 36,0 | 50,0 | 28,0 | 21,0 | J 185-10 | | |
| 16-25 | 8,4 | 16,0 | 25,0 | 11,0 | 7,5 | | J 25-8 | 150-185 | 13,0 | 36,0 | 50,0 | 28,0 | 21,0 | J 185-12 | | |
| 16-25 | 10,5 | 18,0 | 26,0 | 11,0 | 7,5 | | J 25-10 | 150-185 | 17,0 | 36,0 | 50,0 | 28,0 | 21,0 | J 185-16 | | |
| 16-25 | 13,0 | 22,0 | 31,0 | 11,0 | 7,5 | | J 25-12 | 185-240 | 10,5 | 38,0 | 56,0 | 32,0 | 23,5 | J 240-10 | | |
| 16-25 | 17,0 | 28,0 | 35,0 | 11,0 | 7,5 | | J 25-16 | 185-240 | 13,0 | 38,0 | 56,0 | 32,0 | 23,5 | J 240-12 | | |
| | | | | | | | | | 185-240 | 17,0 | 38,0 | 56,0 | 32,0 | 23,5 | J 240-16 | |

MANGUITOS DE TUBO DE COBRE

Copper Joints (Muffs)
Manchons de cuivre



Material:
SFCU S/DIN 1787-73
Hasta M9-11
Resto: SECU S/ DIN 1787-73
ESTAÑADO TINNED ETAMÉ

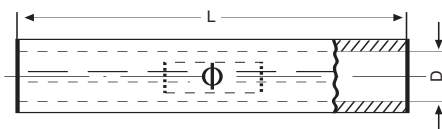
| CABLE | | Ø A | Ø C | L | HERRAMIENTA Tool / Outil | REF. |
|-------|-------|------|------|----|-----------------------------|----------|
| Norm. | Flex. | | | | | |
| 1,5 | 1 | 1,5 | 3 | 15 | A6, TP3 | M1,5 - 3 |
| 2,5 | 1,5 | 2,5 | 4 | 15 | | M2,5 - 4 |
| 4 | 2,5 | 3 | 5 | 22 | | M3 - 5 |
| 6 | 4 | 4 | 6 | 22 | | M4 - 6 |
| 10 | 6 | 5 | 7 | 28 | T50, TP3 | M5 - 7 |
| 16 | 10 | 6 | 8 | 31 | T50, TP5 | M6 - 8 |
| 25 | 16 | 7 | 9 | 32 | T50, T95 | M7 - 9 |
| 35 | 25 | 8 | 10 | 34 | | M8 - 10 |
| 40 | 35 | 9 | 11 | 40 | | M9 - 11 |
| 50 | 35 | 10,2 | 12,7 | 45 | | M10 - 13 |

| CABLE | | Ø A | Ø C | L | HERRAMIENTA Tool / Outil | REF. |
|-------|-------|------|------|-----|-----------------------------|------------|
| Norm. | Flex. | | | | | |
| 63 | 50 | 11,5 | 14 | 48 | T95, T150, PHC | M11 - 14 |
| 80 | 63 | 12 | 15 | 50 | | M12 - 15 |
| 95 | 70 | 13,5 | 16,5 | 52 | | M13 - 16 |
| 120 | 95 | 15,5 | 19 | 62 | T150, PHC, HMS | M15,5 - 19 |
| 150 | 120 | 17 | 21 | 66 | | M17 - 21 |
| 185 | 150 | 19 | 23 | 69 | | M19 - 23 |
| 240 | 185 | 21 | 25,5 | 75 | | M21 - 25,5 |
| 300 | 240 | 23 | 28 | 89 | PHC, PHH | M23 - 28 |
| 400 | 300 | 27 | 33 | 105 | | M27 - 33 |
| 500 | 400 | 30 | 36 | 115 | PHP, U20 | M30 - 36 |
| 600 | 500 | 34 | 40 | 150 | | M34 - 40 |

MANGUITOS DE COBRE Y ALUMINIO, APRIETE HEXAGONAL



Copper and aluminium muffs (Ferrules) for hexagonal pressing
Manchons en cuivre et aluminium sertissage hexagonal



Material:
E-Cu DIN 1787-73
Al 99,5

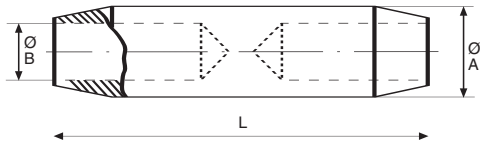
PIEZAS DE DIMENSIONAMIENTO CENTRO EUROPEO
Central Europe Dimensions

| CABLE mm ² | L | Ø D | MATRIZ HEXAGONAL Die size | NÚMERO DE APRIETES Number of crimps | | REF. |
|-----------------------------|-----|------|---------------------------------|--|-----------|---------|
| | | | | TENAZA Handtool | Hydraulic | |
| CU 6 | 30 | 3,8 | 6 | 1 - 1 | | GMC 6 |
| 10 | 30 | 4,5 | 6 | 1 - 1 | | GMC 10 |
| 16 | 50 | 5,5 | 8 | 2 - 2 | | GMC 16 |
| 25 | 50 | 7 | 10 | 2 - 2 | | GMC 25 |
| 35 | 50 | 8,2 | 12 | 2 - 2 | | GMC 35 |
| 50 | 56 | 10 | 14 | 3 - 3 | | GMC 50 |
| 70 | 56 | 11,5 | 16 | 3 - 3 | | GMC 70 |
| 95 | 70 | 13,5 | 18 | 4 - 4 | 2 - 2 | GMC 95 |
| 120 | 70 | 15 | 20 | 4 - 4 | 2 - 2 | GMC 120 |
| 150 | 80 | 17 | 22 | 5 - 5 | 2 - 2 | GMC 150 |
| 185 | 85 | 19 | 25 | 5 - 5 | 2 - 2 | GMC 185 |
| 240 | 90 | 21,5 | 28 | | 2 - 2 | GMC 240 |
| Cumplen norma DIN 46267 300 | 100 | 24 | 32 | | 2 - 2 | GMC 300 |
| ALU 25 | 70 | 6,8 | 12 | 4 - 4 | | GMA 25 |
| 35 | 85 | 8 | 14 | 5 - 5 | | GMA 35 |
| 50 | 85 | 10 | 16 | 5 - 5 | 3 - 3 | GMA 50 |
| 70 | 105 | 11,5 | 18 | 6 - 6 | 3 - 3 | GMA 70 |
| 95 | 105 | 13,5 | 22 | 6 - 6 | 3 - 3 | GMA 95 |
| 120 | 105 | 15 | 22 | 6 - 6 | 3 - 3 | GMA 120 |
| 150 | 125 | 16,5 | 25 | 7 - 7 | 3 - 3 | GMA 150 |
| 185 | 125 | 18,5 | 28 | 7 - 7 | 3 - 3 | GMA 185 |
| 240 | 145 | 21,5 | 32 | | 3 - 3 | GMA 240 |
| Cumplen norma DIN 46267 300 | 145 | 24,5 | 34 | | 3 - 3 | GMA 300 |

MANGUITO COBRE MEDIA TENSION

Apriete hexagonal

Splice joint for copper cables / Hexagonal crimping
Manchon de cuivre moyenne tension / Sertissage hexagonal



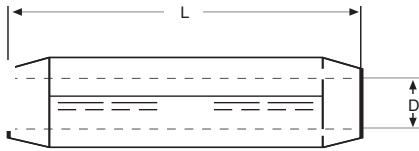
Material:
CUETP S/UNE 37150-86
PASIVADO-UNCOATED

| CABLE mm ² | DIMENSIONES / Dimensions | | | HERRAMIENTA Tool / Outil | REF. |
|--------------------------|--------------------------|------|-----|-----------------------------|----------|
| | Ø A | Ø B | L | | |
| 25 | 12,2 | 7 | 65 | PHC - PHH | MC - 25 |
| 35 | 12,2 | 8 | 65 | | MC - 35 |
| 50 | 12,2 | 9,5 | 65 | | MC - 50 |
| 70 | 21 | 11 | 100 | | MC - 70 |
| 95 | 21 | 13 | 100 | | MC - 95 |
| 120 | 21 | 14,5 | 100 | | MC - 120 |
| 150 | 21 | 16 | 100 | | MC - 150 |
| 185 | 26,2 | 18 | 140 | | MC - 185 |
| 240 | 26,2 | 20 | 140 | | MC - 240 |

MANGUITOS DE COBRE Y ALUMINIO, APRIETE HEXAGONAL 10-30 kV



Copper and aluminium muffs (Ferrules) Medium Voltage 10-30 kV for hexagonal pressing
Manchons en cuivre et aluminium sertissage hexagonal



Material:
E-Cu
Al 99,5

PIEZAS DE DIMENSIONAMIENTO CENTRO EUROPEO
Central Europe Dimensions

| CABLE mm ² | L | Ø D | MATRIZ HEXAGONAL Die size | NÚMERO DE APRIETES Number of crimps | | REF. |
|--------------------------|-----|------|---------------------------------|--|-----------|----------|
| | | | | TENAZA Handtool | Hydraulic | |
| CU 25 | 55 | 7 | 10 | 2 - 2 | | GMMC 25 |
| 35 | 55 | 8,2 | 12 | 2 - 2 | | GMMC 35 |
| 50 | 70 | 10 | 14 | 3 - 3 | 1 - 1 | GMMC 50 |
| 70 | 70 | 11,5 | 16 | 3 - 3 | 1 - 1 | GMMC 70 |
| 95 | 95 | 13,5 | 18 | 4 - 4 | 2 - 2 | GMMC 95 |
| 120 | 95 | 15,5 | 20 | | 2 - 2 | GMMC 120 |
| 150 | 110 | 17 | 22 | | 2 - 2 | GMMC 150 |
| 185 | 110 | 19 | 25 | | 2 - 2 | GMMC 185 |
| 240 | 115 | 21,5 | 28 | | 2 - 2 | GMMC 240 |
| 300 | 120 | 24 | 32 | | 2 - 2 | GMMC 300 |
| ALU 35 | 95 | 8 | 14 | 4 - 4 | | GMMA 35 |
| 50 | 95 | 10 | 16 | 4 - 4 | 2 - 2 | GMMA 50 |
| 70 | 100 | 11,5 | 18 | 4 - 4 | 2 - 2 | GMMA 70 |
| 95 | 105 | 13,5 | 22 | 4 - 4 | 2 - 2 | GMMA 95 |
| 120 | 110 | 15 | 22 | 4 - 4 | 2 - 2 | GMMA 120 |
| 150 | 110 | 16,5 | 25 | | 2 - 2 | GMMA 150 |
| 185 | 130 | 18,5 | 28 | | 2 - 2 | GMMA 185 |
| 240 | 130 | 21 | 32 | | 2 - 2 | GMMA 240 |
| 300 | 135 | 23,5 | 34 | | 2 - 2 | GMMA 300 |

TERMINALES PREAISLADOS



ECu + PVC
Insulated Terminals
Cosses preisoles

COD. ROJO / RED / ROUGE Ø 0,5 - 1,5 MM

COD. AZUL / BLUE / BLEU Ø 0,5 - 1,5 MM

| Ø | MODELO | REF. | Ø | MODELO | REF. |
|------------------------|--------|--------------------|------------------------|--------|-----------------|
| Ø 3 Ø 3,5 | | P 10-35 P 10-37 | Ø 3 | | P 25-35 |
| Ø 4 | | P 10-45 | Ø 4 | | P 25-45 |
| Ø 5 | | P 10-55 | Ø 5 | | P 25-55 |
| Ø 6 | | P 10-60 | Ø 6 | | P 25-60 |
| Ø 8 | | P 10-80 | Ø 8 | | P 25-80 |
| Ø 10 | | P 10-100 | Ø 10 | | P 25-100 |
| Ø 3 | | P 10-35H | Ø 3 | | P 25-35H |
| Ø 4 | | P 10-45H | Ø 4 | | P 25-45H |
| Ø 5 | | P 10-55H | Ø 4 | | P 25-45 R |
| Ø 6 | | P10-60H | Ø 5 | | P 25-55 |
| 2,3 x 0,8 | | PCP 15 | Ø 6 | | P 25-60 |
| Ø 1,9 x 11 | | PC 15 | Ø 1,9 x 11 | | PC-26 |
| 2,8 x 0,5 2,8 x 0,8 | | PHF 1 PHF 11 | 2,8 x 0,8 | | PCP 26 |
| 4,8 x 0,5 4,8 x 0,5 | | PHF 3 PHF 31 | 4,8 x 0,5 4,8 x 0,8 | | PHF 4 PHF 41 |
| 1 x 0,8 | | PHF 6 | 6,3 x 0,8 | | PHF 7 |
| 6,3 x 0,8 | | PL 6 | 6,3 x 0,8 | | PL 7 |
| 6,3 x 0,8 | | PHS 6 | 6,3 x 0,8 | | PHS 7 |
| 6,3 x 0,8 | | PM 6 | 6,3 x 0,8 | | PM 7 |
| | | P1,5-3 | | | P 2,5-4 |
| Ø 4 | | PV 6 | Ø 4 | | PV 7 |
| Ø 4 | | PE 6 | Ø 4 | | PE 7 |

TERMINALES PREAISLADOS



ECu + PVC
Insulated Terminals
Cosses preisoles

COD. AMARILLO / YELLOW / JEUNE Ø 4-6 mm

| Ø | MODELO | REF. |
|------------|--------|-----------|
| Ø 4 | | P 30-45 |
| Ø 5 | | P 30-55 |
| Ø 6 | | P 30-65 |
| Ø 8 | | P 30-85 |
| Ø 10 | | P 30-100 |
| Ø 12 | | P 30-120 |
| Ø 4 | | P 30-45 H |
| Ø 5 | | P 30-55 H |
| Ø 6 | | P 30-65 H |
| Ø 8 | | P 30-85 H |
| Ø 2,6 x 11 | | PC 60 |
| Ø 2,6 x 15 | | PC 60 L |
| 4 x 1 | | PCP 60 |
| 6,3 x 0,8 | | PHF 8 |
| 6,3 x 0,8 | | PL 8 |
| 9,5 x 1,2 | | PHF 10 |
| | | P 3-5 |



HERRAMIENTAS PARA TERMINALES PREAISLADOS

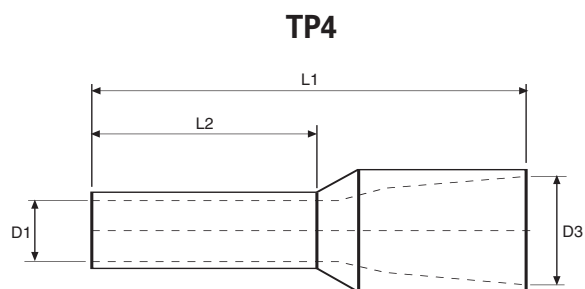
Tools for insulated terminals
Outils pour cosses preisoles

| MODELO | REF. |
|--------|----------|
| | PA PB |
| | AP1 |
| | TP1 |





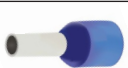







PUNTERA HUECA AISLADA

Insulated cable end
Embouts préisolés

HERRAMIENTA, Tool, Pince

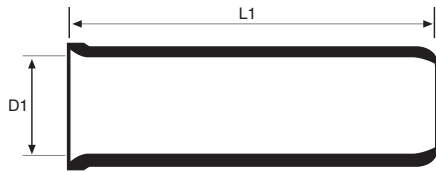


Norma DIN 46228

| | CABLE mm ² | COLOR | DIMENSIONES / Dimensions | | | | HERRAMIENTA Tool / Outil | REF. |
|---|--------------------------|-----------------------------|--------------------------|----------------|----------------|----------------|-----------------------------|-----------------|
| | | | L ¹ | L ² | D ₁ | D ₃ | | |
|  | 0,50 | BLANCO WHITE BLANCHE | 14,0 | 8,0 | 1,0 | 2,6 | AEP TP4 | TO 50 |
|  | 0,75 | GRIS GREY GRIS | 14,6 | 8,2 | 1,2 | 2,8 | | TO 75 |
|  | 1 | ROJO RED ROUGE | 14,6 18 | 8,2 12 | 1,4 | 3,0 | | T 1 T 1L |
|  | 1,50 | GRIS GREY GRIS | 14,6 24 | 8,2 18 | 1,7 | 3,5 | | T 1,5 T 1,5L |
|  | 2,50 | AZUL BLUE BLEU | 15,2 25 | 8,2 18 | 2,2 | 4,0 | | T 2,5 T 2,5L |
|  | 4 | GRIS GREY GRIS | 16,5 25 | 9,0 18 | 2,8 | 4,4 | | T 4 T 4L |
|  | 6 | AMARILLO YELLOW JAUNE | 20,0 26 | 12,0 18 | 3,5 | 6,3 | TP4-16 | T 6 T 6L |
|  | 10 | ROJO RED ROUGE | 21,5 27 | 12,0 18 | 4,5 | 7,6 | | T 10 T 10L |
|  | 16 | AZUL BLUE BLEU | 28,2 28 | 12,0 18 | 5,8 | 8,8 | | T 16 T 16L |
|  | 25 | AMARILLO YELLOW JAUNE | 29,0 35 | 16,0 22 | 7,3 | 11,2 | AEPG | T 25 T 25L |
|  | 35 | ROJO RED ROUGE | 30,0 | 16,0 | 8,3 | 12,5 | | T 35 |
|  | 50 | AZUL BLUE BLEU | 36,0 | 19,0 | 10,3 | 15,0 | | T 50 |

PUNTERA HUECA DESNUDA

Uninsulated cable ends
Embouts

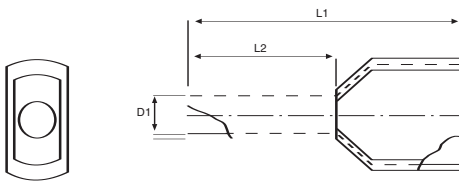


| SECCION mm ² | DIMENSIONES / Dimensions | | REF. |
|----------------------------|--------------------------|-----|--------|
| | L1 | D1 | |
| 0,50 | 6 | 1 | P5 |
| 1,00 | 6 | 1,4 | P10 |
| 1,00 | 10 | 1,4 | P10 L |
| 1,50 | 7 | 1,7 | P15 |
| 1,50 | 10 | 1,7 | P15 L |
| 2,50 | 7 | 2,2 | P25 |
| 2,50 | 10 | 2,2 | P25 L |
| 4,00 | 9 | 2,8 | P40 |
| 4,00 | 12 | 2,8 | P40 L |
| 6,00 | 12 | 3,5 | P60 |
| 6,00 | 15 | 3,5 | P60 L |
| 10,00 | 12 | 4,5 | P100 |
| 10,00 | 18 | 4,5 | P100 L |
| 16,00 | 12 | 5,8 | P160 |
| 16,00 | 18 | 5,8 | P160 L |
| 25,00 | 15 | 7,3 | P250 |
| 25,00 | 18 | 7,3 | P250 L |
| 35,00 | 18 | 8,3 | P350 |

PUNTERA HUECA PREAISLADA TIPO DOBLE

Insulated cable ends, for two cables, twin.
Embouts preisolés, deux cables.

HERRAMIENTA, Tool, Pince
TP4



Material:
CU TIN plated
COBRE ESTAÑADO





| SECCION mm ² | COLOR | DIMENSIONES / Dimensions | | | REF. |
|----------------------------|----------|--------------------------|------|------|---------|
| | | D1 | L1 | L2 | |
| 2 x 0,50 | BLANCO | 1,5 | 15,0 | 8,0 | T 0,50P |
| 2 x 0,75 | GRIS | 1,8 | 15,0 | 8,0 | T 0,75P |
| 2 x 1,00 | ROJO | 2,05 | 15,0 | 8,0 | T 1P |
| 2 x 1,50 | NEGRO | 2,3 | 16,0 | 8,0 | T 1,5P |
| 2 x 2,50 | AZUL | 2,9 | 18,5 | 10,0 | T 2,5P |
| 2 x 4,00 | GRIS | 3,8 | 23,0 | 12,0 | T 4P |
| 2 x 6,00 | AMARILLO | 4,9 | 26,0 | 14,0 | T 6P |
| 2 x 10,0 | ROJO | 6,5 | 26,0 | 14,0 | T 10P |
| 2 x 16,0 | AZUL | 8,3 | 30,0 | 14,0 | T 16P |

TERMINALES DESCONECTABLES

Apriete garras en U

Clips a enficher
Clips pour insertion

| DESIGNACION | CABLE mm ² | DIMENSIONES | REFERENCIA | |
|---|--|--|--|---|
| CLAVIJA MACHO L-2 MALE | 1,5 2,5 | 2,8 x 0,5 6,3 x 0,8 6,3 x 0,8 | MF 1 MF 6 MF 7 |  |
| | 1-2,5 | 6,3 x 0,8 | ML 7 |  |
| CLIP HEMBRA L-3 FEMALE | 1,5 2,5 | 2,8 x 0,5 2,8 x 0,8 4,8 x 0,5 4,8 x 0,8 6,3 x 0,8 4,8 x 0,5 4,8 x 0,8 6,3 x 0,8 6,3 x 0,8 9,5 x 1,2 | HF 1 HF 11 HF 3 HF 31 HF 6 HF 6 HF 41 HF 7 HF 71 HF 8 HF 10 |  |
| | Retén 4/6 | 6,3 x 0,8 6,3 x 0,8 | HF 71 HF 8 | |
| | 2,5 | Mixto 6,3 | HFM 7 |  |
| CLIP HEMBRA BANDERA | 1,5 | 6,3 x 0,8 | HF 7 BU |  |
| Terminal apriete aislamiento L-5 | 1,5 2,5 | Ø 3 Ø 4 Ø 5 Ø 4 Ø 5 Ø 6 | TA 13 TA 14 TA 15 TA 24 TA 25 TA 26 |  |
| LENGÜETA MACHO SIMPLE Ø D a indicar en pedido TAB | Plana Escuad. 90° Escuad. 135° | 2,8 x 0,5 4,8 x 0,8 6,3 x 0,8 9,5 x 1,2 2,8 x 0,5 4,8 x 0,8 6,3 x 0,8 9,5 x 1,2 2,8 x 0,5 4,8 x 0,8 6,3 x 0,8 9,5 x 1,2 | LM 01 LM 03 LM 0 LM 010 LM 91 LM 93 LM 9 LM 910 LM 41 LM 43 LM 4 LM 410 |  |
| LENGÜETA MACHO DOBLE | Plana Escuad. 135° | 6,3 x 0,8 6,3 x 0,8 6,3 x 0,8 | LMM 0 LMM 9 LMM 4 |  |

HERRAMIENTA, Tool, Pince
TP2



TERMINALES SOLDAR POR ESTAÑADO

Latón estañado

Soldering Lugs / Cosses connexion etamé

| mm ² | Ø A | Ø B |
|-----------------|------|-----|
| 1 | 3,5 | 1,5 |
| 2 | 4 | 2 |
| 3 | 4,5 | 2,5 |
| 4 | 5 | 4 |
| 6 | 5,5 | 4,5 |
| 10 | 6 | 5 |
| 16 | 8,5 | 6 |
| 25 | 8,5 | 8 |
| 35-40 | 8,5 | 10 |
| 50 | 9,5 | 12 |
| 70-80 | 10,5 | 13 |

Secciones mayores, sírvanse consultar
On request, bigger sizes

Se suministran también en rollos



CAJAS CONECTORAS

Nylon blanco, para usar con lengüetas ML7 y Clips HF71 (de 6,35 x 0,8)

Color BLANCO (sobre pedido otros colores) / Protección para MF 6 y MF 7 - REF: MP6,3



Insulations Boots / White / Protection for MF 6 and MF 7 - REF: MP6,3

Capuchons / Blanc / Protection pour MF 6 et MF 7 - REF: MP6,3

| | | | |
|---|--|---|---|
| | REF. M1 1 VIA PORTA MACHOS: ML7 | | REF. H1 1 VIA PORTA HEMBRAS: HF71 |
| | REF. M2 2 VIAS PORTA MACHOS: | | REF. H2 2 VIAS PORTA HEMBRAS: |
| | REF. M3 3 VIAS PORTA MACHOS: | | REF. H3 3 VIAS PORTA HEMBRAS: |
| | REF. M4 4 VIAS PORTA MACHOS: | | REF. H4 4 VIAS PORTA HEMBRAS: |
| | REF. M6 6 VIAS PORTA MACHOS: | | REF. H6 6 VIAS PORTA HEMBRAS: |
| | REF. M8 8 VIAS PORTA MACHOS: | | REF. H8 8 VIAS PORTA HEMBRAS: |
| PROTECCIONES PARA CLIP HEMBRA HF | REFERENCIA | Regletas 12 elementos dobles 6,3 x 0,8 | Estrechas RE - 12 |
| | FP 2,8 FP 4,8 FP 6,3 FP 9,5 | | |
| | FPD 2,8 FPD 4,8 FPD 6,3 Entrada por delante | | |

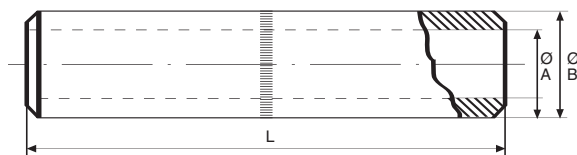
MANGUITOS TUBULARES ALUMINIO AMT



Apriete hexagonal

Aluminium Joints / Hexagonal crimping
Manchon de aluminium / Sertissage hexagonal

Material:
Al 99,5 S/UNE 38114-79
Acabado: PASIVADO



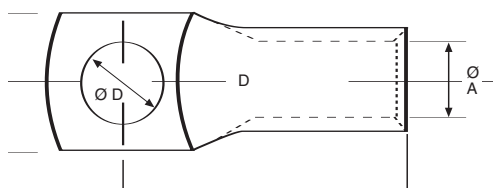
LLEVA GRASA CONDUCTORA EN EL INTERIOR Y TAPON.
Filled with conductor grease and a cap.

| CABLE mm ² | DIMENSIONES / Dimensions | | | HERRAMIENTA Tool / Outil | REF. |
|--------------------------|--------------------------|------|-----|-----------------------------|-----------|
| | Ø A | Ø B | L | | |
| 25 | 6,5 | 11 | 60 | PHC - PHC | AMT - 25 |
| 35 | 8 | 13 | 70 | | AMT - 35 |
| 50 | 10 | 15 | 80 | | AMT - 50 |
| 70 | 11 | 17 | 90 | | AMT - 70 |
| 95 | 14 | 22 | 100 | | AMT - 95 |
| 120 | 15 | 23 | 110 | | |
| 150 | 15,5 | 25 | 120 | | AMT - 150 |
| 185 | 18,5 | 28 | 130 | | AMT - 185 |
| 240 | 19,5 | 32 | 140 | | AMT - 240 |
| 300 | 23,5 | 36,5 | 160 | | AMT - 300 |

TERMINALES TUBULARES DE ALUMINO

Apriete hexagonal

Tin plated tube aluminium lugs / Hexagonal crimping
Cosses aluminium étamé / Sertissage hexagonal



Material:
Al 99,5 S/UNE 38114-79
ESTAÑADO TINNED

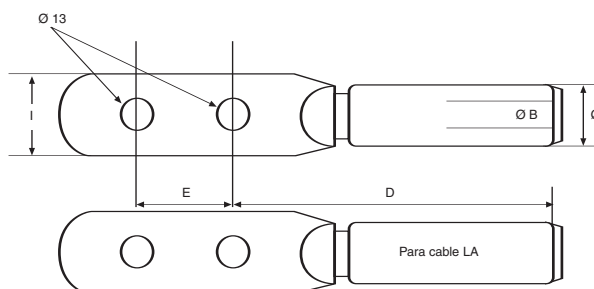


LLEVA GRASA CONDUCTORA EN EL INTERIOR Y TAPON.
Filled with conductor grease and a cap.

| CABLE mm ² | Ø A | C | Ø D | L | HERRAMIENTA Tool / Outil | REF. |
|--------------------------|------|------|------|------|-----------------------------|----------|
| 25 | 6,5 | 16,5 | 8,5 | 42,5 | PHC-PHH | AT - 25 |
| 35 | 8 | 20 | 10,5 | 47,5 | | AT - 35 |
| 50 | 10 | 21 | 10,5 | 53 | | AT - 50 |
| 70 | 11 | 23,5 | 13,5 | 61,5 | | AT - 70 |
| 95 | 14 | 30 | 13,5 | 65,5 | | AT - 95 |
| 120 | 15 | 32 | 13,5 | 80 | | AT - 120 |
| 150 | 15,5 | 34,5 | 13,5 | 77 | | AT - 150 |
| 185 | 18,5 | 38 | 13,5 | 84 | | AT - 185 |
| 240 | 19,5 | 44 | 17 | 94,5 | | AT - 240 |

TERMINAL MACIZO DE ALUMINIO ESTAÑADO PARA UNION AL-AL Y AL-CU - PALA LARGA

Solid cable Lug Aluminium Tin Plated for unions Al-Al and Al-Cu - Long Palm, two holes

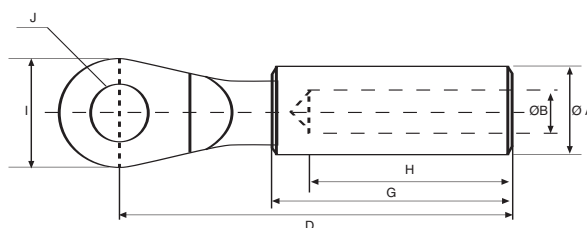


Material:
Al 99,5%
S/UNE 38114-7-9
ESTAÑADO 20 MICRAS

| SECCION mm ² | Ø A | Ø B | D | E | G | H | I | J | HERRAMIENTA DE APRIETE Tool / Outil | REF. |
|-------------------------|-----|------|------|----|------|------|----|------|-------------------------------------|-------|
| 50 | 20 | 9 | 75 | 32 | 47,5 | 40 | 26 | 13 | PHH con matriz y punzonado | PL50 |
| 95 | 20 | 12,5 | 75 | 44 | 47,5 | 40 | 28 | 13 | | PL95 |
| 150 | 25 | 15,5 | 95 | 44 | 64 | 55,5 | 30 | 13 | | PL150 |
| 240 | 32 | 19,5 | 99 | 44 | 64 | 55,5 | 36 | 13 | | PL240 |
| 400 | 40 | 26 | 145 | 44 | 100 | 89 | 40 | 16,5 | | PL400 |
| LA56 | 20 | 10 | 79,5 | 44 | 52,5 | 40 | 26 | 13 | PHH Matriz Hexagonal | PL56 |
| LA80 | 20 | 12,5 | 79,5 | 44 | 52,5 | 40 | 26 | 13 | | PL80 |
| LA110 | 25 | 14,5 | 95 | 44 | 65 | 55,5 | 30 | 13 | | |

TERMINAL MACIZO DE ALUMINIO ESTAÑADO PARA UNION AL-AL Y AL-CU - PALA UN AGUJERO

Solid cable Lug Aluminium Tin Plated for unions Al-Al and Al-Cu - Short Palm, 1 hole

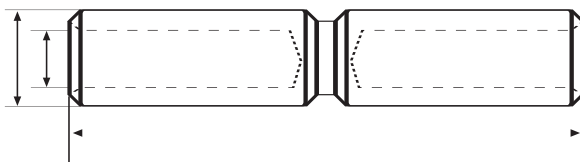


| SECCION mm ² | Ø A | Ø B | D | G | H | I | Ø J | HERRAMIENTA DE APRIETE Tool / Outil | REF. |
|-------------------------|-----|------|------|------|------|----|------|-------------------------------------|------|
| 50 | 20 | 9 | 75 | 47,5 | 40 | 26 | 12,8 | PHH Matriz Punzonado | EM50 |
| 95 | 20 | 12,5 | 75 | 47,5 | 40 | 28 | 12,8 | | EM95 |
| 150 | 25 | 15,5 | 95 | 64 | 55,5 | 30 | 12,8 | | 150 |
| 240 | 32 | 19,5 | 99 | 64 | 55,5 | 36 | 12,8 | | 240 |
| 400 | 40 | 26 | 145 | 100 | 89 | 40 | 16,5 | | 400 |
| LA56 | 20 | 10 | 79,5 | 52,5 | 40 | 26 | 12,8 | PHH Apriete Hexagonal | 54,6 |
| LA80 | 20 | 12,5 | 79,5 | 52,5 | 40 | 26 | 12,8 | | 80 |

MANGUITOS PARA EMPALME DE DOS CABLES IGUALES DE ALUMINIO

Baja tensión

Aluminium joint - Crimping by punching - Low Voltage
Manchons de Aluminium - Sertissage per poinçonnage - Basse Tension



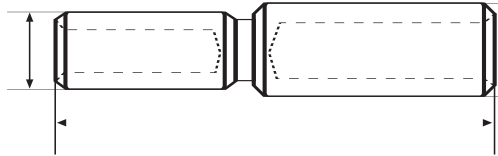
Material:
CUETP S/UNE 37150-86
AL 99,5 S/UNE 38114-79
PASIVADO

| CABLE mm ² | Ø A | Ø B | L | HERRAMIENTA Tool / Outil | REF. |
|--------------------------|--------|--------|-----|--|----------|
| 16 | 5,5 | 20 | 100 | PHH Punzonado Punching / Poinçonnage | AM - 16 |
| 25 | 6,5 | 20 | 100 | | AM - 25 |
| 35 | 8 | 20 | 100 | | AM - 35 |
| 50 | 9 | 20 | 100 | | AM - 50 |
| 70 | 11 | 20 | 100 | | AM - 70 |
| 95 | 12,5 | 20 | 100 | | AM - 95 |
| 120 | 13,7 | 25 | 133 | | AM - 120 |
| 150 | 15,5 | 25 | 133 | | AM - 150 |
| 185 | 17 | 32 | 133 | | AM - 185 |
| 240 | 19,5 | 32 | 133 | | AM - 240 |
| 300 | 23,3 | 36 | 186 | PHP U20 Punzonado Punching / Poinçonnage | AM - 300 |
| 400 | 26 | 36 | 186 | | AM - 400 |
| 500 | 29,1 | 47 | 213 | | AM - 500 |
| 650 | 33,5 | 47 | 213 | | AM - 650 |

MANGUITOS BAJA TENSIÓN CONDUCTORES ALUMINIO

de reducción

Aluminium joint - Commercial cable lugs - Crimping by punching - Low Voltage
Manchons de Aluminium - Cosses de cuivre - Sertissage per poinçonnage - Basse Tension



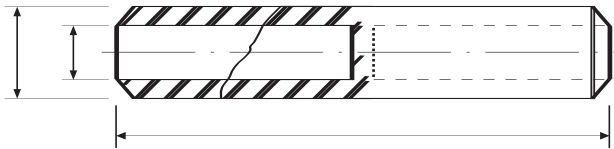
Material:
CUETP S/UNE 37150-86
AL 99,5 S/UNE 38114-79
PASIVADO UNCOATED

| CABLE mm ² | Ø A | Ø B | L | HERRAMIENTA Tool / Outil | REF. |
|--------------------------|--------|--------|-------|------------------------------------|--------------|
| 50 - 35 | 20 | 20 | 100 | PHH Punzón y matriz Punch & Die | AM 50 - 35 |
| 70 - 35 | 20 | 20 | 100 | | AM 70 - 35 |
| 70 - 50 | 20 | 20 | 100 | | AM 70 - 50 |
| 95 - 35 | 20 | 20 | 100 | | AM 95 - 35 |
| 95 - 50 | 20 | 20 | 100 | | AM 95 - 50 |
| 120 - 95 | 25 | 20 | 121 | | AM 120 - 95 |
| 150 - 95 | 25 | 20 | 121 | | AM 150 - 95 |
| 150 - 120 | 25 | 25 | 133 | | AM 150 - 120 |
| 185 - 150 | 32 | 25 | 123,5 | | AM 185 - 150 |
| 240 - 95 | 32 | 20 | 115 | | AM 240 - 95 |
| 240 - 150 | 32 | 25 | 133 | | AM 240 - 150 |
| 300 - 240 | 36 | 32 | 155 | | AM 300 - 240 |

MANGUITOS POLIVALENTES CABLES ALUMINIO según HN 68-S-90 de E, D, F para Media y Baja Tensión



Aluminium Joints - Crimp: Punch & Die - Low and Medium Tension
Manchons de Aluminium - Sertissage per poinçonnage - Basse et Moyenne Tension

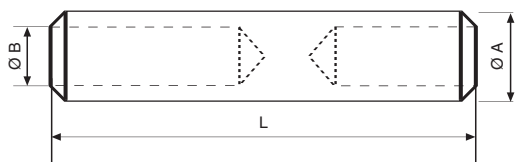


Material:
AL 99,5 S/UNE 38114-79
PASIVADO UNCOATED

| CABLE Al mm ² | Ø A | Ø B | L | HERRAMIENTA Tool / Outil | REF. |
|-----------------------------|--------|--------|-----|--|-----------|
| 25 | 16 | 6,5 | 91 | PHH y PHP U20 Matriz Larga y Punzón Long Die and Punch | AMM - 25 |
| 35 | 16 | 8 | 91 | | AMM - 35 |
| 50 | 20 | 9 | 107 | | AMM - 50 |
| 70 | 20 | 11 | 107 | | AMM - 70 |
| 95 | 20 | 12,5 | 107 | | AMM - 95 |
| 120 | 25 | 13,7 | 133 | | AMM - 120 |
| 150 | 25 | 15,5 | 133 | | AMM - 150 |
| 185 | 32 | 17 | 144 | | AMM - 185 |
| 240 | 32 | 19,5 | 144 | | AMM - 240 |
| 300 | 40 | 23,3 | 207 | | AMM - 300 |
| 400 | 40 | 26 | 207 | | AMM - 400 |
| 500 | 47 | 29 | 218 | | AMM - 500 |
| 630 | 47 | 32,5 | 218 | | AMM - 630 |

MANGUITOS POLIVALENTES CABLES AI distinta sección

Aluminium Joints - Crimp: Punch & Die - Low and Medium Tension for two different cable areas
Manchons de Aluminium - Sertissage per poinçonnage - Basse et Moyenne Tension



Material:
AL 99,5 S/UNE 38114-79
PASIVADO UNCOATED

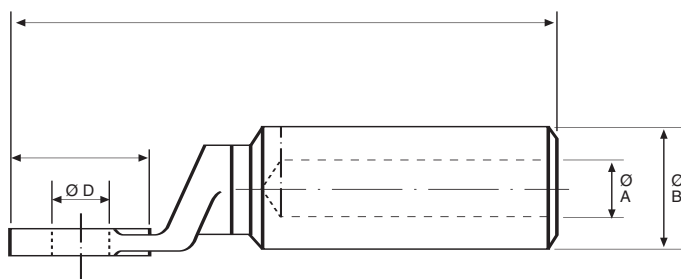
| CABLE Al mm ² | Ø A | Ø B | L | HERRAMIENTA Tool / Outil | REF. |
|-----------------------------|--------|-------------|-----|--|---------------|
| 50 y 35 | 20 | 9 y 8 | 107 | PHH Matriz Larga y Punzón Long Die and Punch | AMM 50 - 35 |
| 70 y 35 | 20 | 11 y 8 | 107 | | AMM 70 - 35 |
| 70 y 50 | 20 | 11 y 9 | 107 | | AMM 70 - 50 |
| 95 y 35 | 20 | 12 y 8 | 107 | | AMM 95 - 35 |
| 95 y 50 | 20 | 12 y 9 | 107 | | AMM 95 - 50 |
| 120 y 95 | 25 | 13,7 y 12 | 133 | | AMM 120 - 95 |
| 150 y 95 | 25 | 15,5 y 12 | 133 | | AMM 150 - 95 |
| 150 y 120 | 25 | 15,5 y 13,7 | 133 | | AMM 150 - 120 |
| 185 y 150 | 32 | 17 y 15,5 | 144 | | AMM 185 - 120 |
| 240 y 95 | 32 | 19 y 12 | 144 | | AMM 240 - 95 |
| 240 y 150 | 32 | 19 y 15,5 | 144 | | AMM 240 - 150 |
| 300 y 240 | 40 | 23 y 19 | 218 | | AMM 300 - 240 |

TERMINALES BIMETÁLICOS BT

Engaste por punzonado profundo



Bimetallic Lug, Crimping Punch & Die
Cosse bimetallique, Sertissage per poinçonnage



Material:
CUETP S/UNE 37150-86
AL 99,5 S/UNE 38114-79

Acabado:
PASIVADO

| CABLE mm ² | Ø A | Ø B | Ø C | Ø D | L | HERRAMIENTA Tool / Outil | REF. |
|--------------------------|--------|--------|---------|--------|-----|-------------------------------------|-------------|
| 16 | 5,5 | 20 | 20 | 10,5 | 81 | PHH, Punzón y matriz Punch & die | BT - 16 |
| 25 | 6,5 | 20 | 20 | 10,5 | 81 | | BT - 25 |
| 35 | 8 | 20 | 20 | 10,5 | 81 | | BT - 35 |
| 50 | 9 | 20 | 20 | 10,5 | 81 | | BT - 50/10 |
| 50 | 9 | 20 | 26 | 12,8 | 90 | | BT - 50/12 |
| 70 | 11 | 20 | 26 | 12,8 | 90 | | BT - 70 |
| 95 | 12,5 | 20 | 26 | 12,8 | 90 | | BT - 95 |
| 120 | 13,7 | 25 | 30 | 12,8 | 112 | | BT - 120 |
| 150 | 15,5 | 25 | 30 | 12,8 | 112 | | BT - 150 |
| 185 | 17 | 32 | 36 | 12,8 | 119 | | BT - 185 |
| 240 | 19,5 | 32 | 36 | 12,8 | 119 | | BT - 240 |
| 300 | 23,3 | 36 | 42 | 16,5 | 153 | PHP-U20 | BT - 300 |
| 400 | 26 | 36 | 42 | 16,5 | 153 | | BT - 400 |
| 300 | 23,3 | 40 | 42 | 16,5 | 163 | | BT - 300/40 |
| 400 | 26 | 40 | 42 | 16,5 | 163 | | BT - 400/40 |
| 500 | 29 | 47 | 60 x 60 | 4Ø9 | 200 | | BT - 500 |
| 630 | 32,5 | 47 | 60 x 60 | 4Ø9 | 200 | | BT - 630 |

TERMINALES BIMETALICOS BTC APRIETE HEXAGONAL

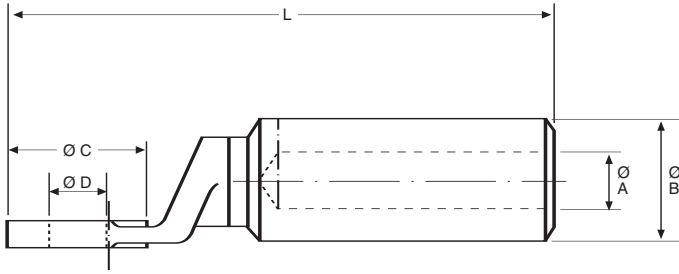
para línea aérea

Bimetallic cable lug, hexagonal Crimping for aerial line
Cosses bimetaliques, sertissage hexagonal pour ligne aerienne



Material:
CUETP S/UNE 37150-86
AL 99,5 S/UNE 38114-79

Acabado: PASIVADO
UNCOATED

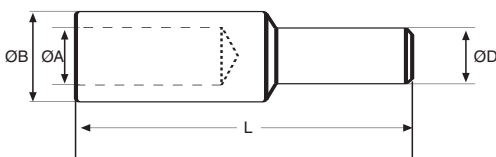


| CABLE mm ² | Ø A | Ø B | Ø C | Ø D | L | HERRAMIENTA Tool / Outil | REF. |
|--------------------------|--------|--------|--------|--------|-----|--|---------|
| LA 30 | 7,3 | 20 | 26 | 12,8 | 96 | PHC Matrices hexagonales Hexagonal dies | BT 30C |
| LA 43 | 9,25 | 20 | 26 | 12,8 | 96 | | BT 43C |
| LA 56 | 10 | 20 | 26 | 12,8 | 96 | | BT 56C |
| LA 80 | 11,8 | 20 | 26 | 12,8 | 96 | | BT 80C |
| LA 93 | 12,8 | 20 | 26 | 12,8 | 96 | | BT 93C |
| LA 110 | 14,5 | 25 | 30 | 12,8 | 112 | | BT 110C |
| LA 180 | 18,3 | 32 | 36 | 12,8 | 119 | | BT 180C |
| LA 280 | 23,2 | 36 | 42 | 16,5 | 153 | | BT 280C |

PIEZA BIMETALICA PARA CABLE DE ALUMINIO CON ESPIGA LISA DE COBRE, REF. BB

Apriete por punzonado del Al

Bimetallic Rod - Rod of copper and Al for Al cable
Cosses tubulaires en cuivre din 46235

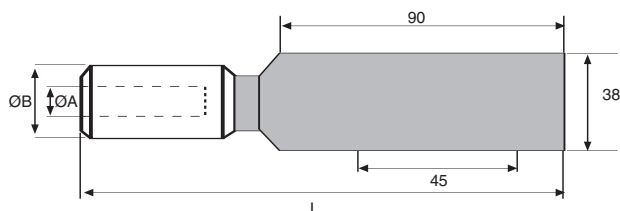


| CABLE mm ² | Ø A | Ø B | Ø D | L | HERRAMIENTA Tool / Outil | REF. |
|--------------------------|------|-----|-----------------|-----|---|------------|
| 25 | 6,5 | 20 | 12 | 102 | PHH Matriz y punzón en el Al y hexagonal en cobre Die and punch in Al side and hexagonal die in Cu side | BB - 25 |
| 35 | 8 | 20 | 12 | 102 | | BB - 35 |
| 50 | 9 | 20 | 12 | 102 | | BB - 50 |
| 70 | 11 | 20 | 12 | 102 | | BB - 70 |
| 95 | 12,5 | 20 | 12 | 102 | | BB - 95 |
| 120 | 13,7 | 25 | 14 | 125 | | BB - 120 |
| 150 | 15,5 | 25 | 14 | 125 | | BB - 150 |
| 185 | 17 | 32 | 14 | 125 | | BB - 185 |
| 240 | 19,5 | 32 | 14 | 125 | | BB - 240 |
| 300 | 23,3 | 36 | * Medidas bulón | | | BB - 300 |
| 400 | 26,2 | 36 | bajo pedido | | BB - 400 | |
| 110 | 14,7 | 25 | 12 | 120 | PHC y PHH Matrices hexagonales / Hexagonal crimping both sides | BB - 110 C |

TERMINALES BIMETÁLICOS PARA LINEAS AÉREAS CONDUCTOR ALU-ACERO

Engastado mediante apriete hexagonal o circunferencial

Bimetallic lugs for Aerial lines, ACSR - Hexagonal Crimping
Cosses bimetalliques - Hexagonal sertissage



Material:

CUETP S/UNE 37150-86

AL 99,5 S/UNE 38114-79

PASIVADO UNCOATED

| CABLE mm ² | Ø A | Ø B | L | HERRAMIENTA Tool / Outil | REF. |
|--------------------------|--------|--------|-----|--|-------------|
| LA - 30 | 7,3 | 20 | 155 | PHH Matrices hexagonales hexagonal dies | BPL - 30 C |
| LA - 43 | 9,25 | 20 | 155 | | BPL - 43 C |
| LA - 56 | 10 | 20 | 155 | | BPL - 56 C |
| LA - 78 | 11,8 | 20 | 155 | | BPL - 78 C |
| LA - 110 | 14,5 | 25 | 170 | | BPL - 110 C |
| LA - 180 | 18,3 | 32 | 170 | | BPL - 180 C |
| LA - 280 | 23,2 | 36 | 195 | | BPL - 280 C |

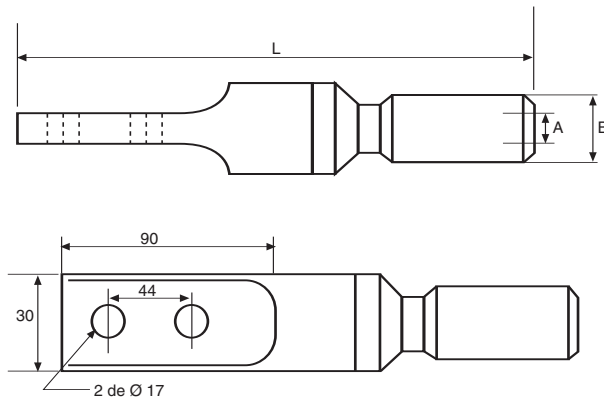
PARA REDES DE DISTRIBUCIÓN - Apriete por punzonado

| | | | | | |
|-----|------|----|-----|------------------------------------|-----------|
| 16 | 5,5 | 20 | 155 | PHC Matriz - punzón die - punch | BPL - 16 |
| 25 | 0,5 | 20 | 155 | | BPL - 25 |
| 35 | 8 | 20 | 155 | | BPL - 35 |
| 50 | 9 | 20 | 155 | | BPL - 50 |
| 70 | 11 | 20 | 155 | | BPL - 70 |
| 95 | 12,5 | 20 | 155 | | BPL - 95 |
| 120 | 13,7 | 25 | 170 | | BPL - 120 |
| 150 | 15,5 | 25 | 170 | | BPL - 150 |
| 185 | 17 | 32 | 170 | | BPL - 185 |
| 240 | 19,5 | 32 | 170 | | BPL - 240 |
| 300 | 23,3 | 36 | 195 | | BPL - 300 |
| 400 | 26,2 | 36 | 195 | | BPL - 400 |

TERMINAL BIMETALICO PARA SALIDA DE CABLE DE ALUMINIO A BOTELLA TERMINAL



Bimetallic Lug - Long Palm, 2 holes
Cosse Bimétallique - Deux Trous, Pelle Long



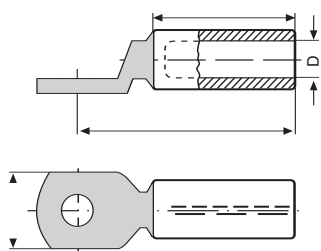
Material:
CUETP S/ UNE 37150-86
AL 99,5 S/UNE 38114-79
Acabado: PASIVADO

| CABLE mm ² Al | Ø A | Ø B | L | HERRAMIENTA Tool / Outil | REF. |
|-----------------------------|------|-----|-------|---|---------|
| 35 | 8 | 20 | 190 | PHH Matriz y Punzón Die and Punch | B - 35 |
| 50 | 9 | 20 | 190 | | B - 50 |
| 70 | 11 | 20 | 190 | | B - 70 |
| 95 | 12,5 | 20 | 190 | | B - 95 |
| 120 | 13,7 | 25 | 203 | | B - 120 |
| 150 | 15,5 | 25 | 203 | | B - 150 |
| 185 | 17 | 32 | 203 | | B - 185 |
| 240 | 19,5 | 32 | 203 | | B - 240 |
| 300 | 23,3 | 40 | 228,5 | | B - 300 |
| 400 | 26,2 | 40 | 228,5 | | B - 400 |
| 500 | 29 | 47 | 245 | | B - 500 |
| 630 | 32,5 | 47 | 245 | | B - 630 |

TERMINALES BIMETÁLICOS, SOLDADOS A FRICCIÓN, ENGASTADO HEXAGONAL



Bimetallic friction welded lugs for hexagonal pressing
Cosses bimétalliques, soudées à froid, sertissage hexagonal



Material:
E-Cu
Al 99,5



PIEZAS DE DIMENSIONAMIENTO CENTRO EUROPEO
Central Europe Dimensions

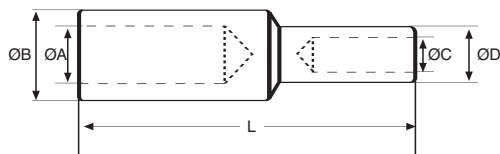
| CABLE SIZE mm ² | | TORNILLO Hole for M | L | A | Ø D | L1 | NÚMERO DE APRIETES Number of crimps | | MATRIZ Die size | REF. |
|-------------------------------|----|---------------------------|-----|----|------|----|--|-----------|--------------------|------------|
| rm sm | se | | | | | | TENAZA Handtool | Hydraulic | | |
| 25 | | 8 | 65 | 20 | 6,8 | 37 | 4 | 2 | 12 | GBL 25-8 |
| | | 10 | | 25 | | | | | | 25-10 |
| | | 12 | | 26 | | | | | | 25-12 |
| 35 | | 10 | 75 | 20 | 8 | 47 | 5 | 3 | 14 | GBL 35-10 |
| | | 12 | | 26 | | | | | | 35-12 |
| 50 | | 10 | 75 | 20 | 9,8 | 47 | 5 | 3 | 16 | GBL 50-10 |
| | | 12 | | 26 | | | | | | 50-12 |
| 70 | | 10 | 85 | 26 | 11,2 | 55 | 6 | 3 | 18 | GBL 70-10 |
| | | 12 | | | | | | | | 70-12 |
| 95 | | 12 | 85 | 26 | 13,2 | 57 | 6 | 3 | 22 | GBL 95-10 |
| | | 16 | | 30 | | | | | | 95-16 |
| 120 | | 12 | 87 | 26 | 14,7 | 57 | 6 | 3 | 22 | GBL 120-12 |
| | | 16 | | 30 | | | | | | 120-16 |
| 150 | | 12 | 100 | | 16,3 | 67 | | 3 | 25 | GBL 150-12 |
| | | 16 | | 30 | | | | | | 150-16 |
| | | 20 | | | | | | | | 150-20 |
| 185 | | 12 | 101 | 30 | 18,3 | 68 | | 3 | 28 | GBL 185-12 |
| | | 16 | | 36 | | | | | | 185-16 |
| 240 | | 12 | 112 | 30 | 21 | 79 | | 3 | 32 | GBL 240-12 |
| | | 16 | | 36 | | | | | | 240-16 |
| 300 | | 16 | 120 | 42 | 23,3 | 79 | | 3 | 34 | GBL 300-16 |
| | | 20 | | 42 | | | | | | 300-20 |

MANGUITOS EMPALME BIMETALICOS PARA CABLES DE ALUMINIO Y COBRE B.T.



Apriete hexagonal del cobre y punzonado prof. del Al.

Bimetallic splices Al and Cu cables L.V. / Hexagonal crimping copper and punch + die aluminium
Manchons bimetaliques Al et Cu cables B.T. / Sertissage hexagonal de cuivre et poinçonnage Al.



Material:
CUETP S/UNE 37150-86
AL 99,5 S/UNE 38114-79
Acabado: PASIVADO
UNCOATED

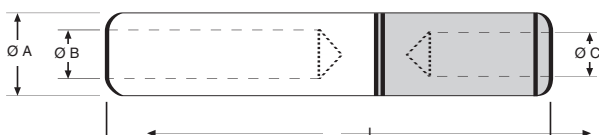


| CABLE mm ² | | DIMENSIONES / Dimensions | | | | | HERRAMIENTA Tool / Outil | REF. |
|-----------------------|-----|--------------------------|-----|------|------|-----|---|------------|
| Al | Cu. | Ø A | Ø B | Ø C | Ø D | L | | |
| 25 | 16 | 6,5 | 20 | 5,7 | 12,2 | 92 | PHH Matriz y Punzón en Al y hexagonal en cobre Die and Punch in Al and hexagonal die in Cu side | BM- 25- 16 |
| 35 | 25 | 8 | 20 | 7 | 12,2 | 92 | | BM- 35- 25 |
| 50 | 35 | 9 | 20 | 8,5 | 12,2 | 92 | | BM- 50- 35 |
| 70 | 50 | 11 | 20 | 9,5 | 12,2 | 92 | | BM- 70- 50 |
| 95 | 70 | 12,5 | 20 | 11,5 | 17 | 112 | | BM- 95- 70 |
| 120 | 70 | 13,7 | 25 | 11,5 | 17 | 112 | | BM-120- 70 |
| 120 | 95 | 13,7 | 25 | 13 | 21 | 112 | | BM-120- 95 |
| 150 | 95 | 15,5 | 25 | 13 | 21 | 112 | | BM-150- 95 |
| 150 | 120 | 15,5 | 25 | 15 | 21 | 112 | | BM-150-120 |
| 185 | 120 | 17 | 32 | 15 | 21 | 112 | | BM-185-120 |
| 185 | 150 | 17 | 32 | 16,5 | 21 | 112 | | BM-185-150 |
| 240 | 150 | 19,5 | 32 | 16,5 | 21 | 112 | | BM-240-150 |
| 240 | 185 | 19,5 | 32 | 18 | 26 | 125 | | BM-240-185 |

MANGUITOS BIMETALICOS CU-AL según HN 68-S-90 de EDF (RJAU)

para MediaTensión

Bimetallic Joints-Medium Tension
Manchons Bimetaliques-Moyenne Tension



Material:
AL 99,5 S/UNE 38114-79
PASIVADO UNCOATED

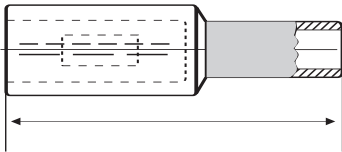


| CABLE | | Ø A | Ø B | Ø C | L | HERRAMIENTA Tool / Outil | REF. |
|--------------------|--------------------|-----|------|------|-----|--|-------------|
| Al mm ² | Cu mm ² | | | | | | |
| 95 | 50 | 20 | 12,5 | 10 | 107 | PHH y PHP U20 en Alu Matriz Larga y Punzón Long Die and Punch Al side Cobre Hexagonal Hexagonal crimping Cu side | BMM 95-50 |
| 95 | 95 | 20 | 12,5 | 13 | 107 | | BMM 95 |
| 150 | 50 | 25 | 15,5 | 10 | 133 | | BMM150-50 |
| 150 | 70 | 25 | 15,5 | 11 | 133 | | BMM150-70 |
| 150 | 95 | 25 | 15,5 | 13 | 133 | | BMM 150-95 |
| 150 | 120 | 25 | 15,5 | 14,2 | 133 | | BMM150-120 |
| 150 | 150 | 25 | 15,5 | 16 | 133 | | BMM150 |
| 185 | 150 | 32 | 19,5 | 16 | 144 | | BMM 185-150 |
| 240 | 95 | 32 | 19,5 | 13 | 144 | | BMM 240-95 |
| 240 | 120 | 32 | 19,5 | 14,2 | 144 | | BMM 240-120 |
| 240 | 150 | 32 | 19,5 | 16 | 144 | | BMM 240-150 |
| 240 | 185 | 32 | 19,5 | 18 | 144 | | BMM 240-185 |
| 240 | 240 | 32 | 19,5 | 20 | 144 | | BMM 240 |

MANGUITOS BIMETÁLICOS, ENGASTADO HEXAGONAL



Bimetallic compression joints for hexagonal pressing
Machons bimetallics, sertissage hexagonal



Material:
E-Cu
Al 99,5

PIEZAS DE DIMENSIONAMIENTO CENTRO EUROPEO
Central Europe Dimensions

| CABLE mm ² | | | AGUJEROS Boring | | L | MATRICES Die size | | NÚMERO DE APRIETES Number of crimps | | | | REF. | | | |
|-----------------------|-----|-----|--------------------|------|------|----------------------|----|--|----|-----------|----|--|----|----|---|
| Al | | Cu | Al | Cu | | Al | Cu | TENAZA/Handtool | | Hydraulic | | | | | |
| rm/sm | se | | | | | | | Al | Cu | Al | Cu | | Al | Cu | |
| 25 | | 10 | 6,8 | 4,5 | 55 | 12 | 6 | 4 | 1 | 2 | - | GBM 25-10 25-16 25-25 | | | |
| | | 16 | | 5,5 | 61 | | | | | | | | 8 | 2 | |
| | | 25 | | 7 | 61 | | | | | | | | 10 | 2 | |
| 35 | 50 | 16 | 8 | 5,5 | 71 | 14 | 8 | 5 | 2 | 3 | - | GBM 35-16 35-25 35-35 | | | |
| | | 25 | | 7 | 71 | | | | | | | | 10 | 2 | |
| | | 35 | | 8,2 | 71 | | | | | | | | 12 | 2 | |
| 50 | 70 | 25 | 10 | 7 | 71 | 16 | 10 | 5 | 2 | 3 | - | GBM 50-25 50-35 50-50 | | | |
| | | 35 | | 8,2 | 71,5 | | | | | | | | 12 | | |
| | | 50 | | 10 | 71,5 | | | | | | | | 14 | | |
| 70 | 95 | 25 | 11,2 | 7 | 79 | 18 | 10 | 6 | 2 | 3 | - | GBM 70-25 70-35 70-50 70-70 | | | |
| | | 35 | | 8,2 | 79 | | | | | | | | 12 | 3 | |
| | | 50 | | 10 | 85 | | | | | | | | 14 | 3 | |
| | | 70 | | 11,5 | 86 | | | | | | | | 16 | 3 | |
| 95 | 120 | 35 | 13,2 | 8,2 | 79 | 22 | 12 | 6 | 2 | 3 | - | GBM 95-35 95-50 95-70 95-95 | | | |
| | | 50 | | 10 | 85 | | | | | | | | 14 | 3 | |
| | | 70 | | 11,5 | 86 | | | | | | | | 16 | 3 | |
| | | 95 | | 13,5 | 95 | | | | | | | | 18 | 4 | 2 |
| 120 | 150 | 50 | 15 | 10 | 87 | 22 | 14 | 6 | 3 | 3 | - | GBM 120-50 120-70 120-95 120-120 | | | |
| | | 70 | | 11,5 | 89 | | | | | | | | 16 | 4 | |
| | | 95 | | 13,5 | 97 | | | | | | | | 18 | 3 | 2 |
| | | 120 | | 15 | 97 | | | | | | | | 20 | 4 | 2 |
| 150 | 185 | 70 | 16,3 | 11,5 | 100 | 25 | 16 | | | 3 | - | GBM 150-70 150-95 150-120 150-150 | | | |
| | | 95 | | 13,5 | 108 | | | | | | | | 18 | 2 | |
| | | 120 | | 15 | 108 | | | | | | | | 20 | 2 | |
| | | 150 | | 17 | 113 | | | | | | | | 22 | 2 | |
| 185 | 240 | 95 | 18,3 | 13,5 | 108 | 28 | 18 | | | 3 | 2 | GBM 185-95 185-120 185-150 185-185 | | | |
| | | 120 | | 15 | 108 | | | | | | | | 20 | 2 | |
| | | 150 | | 17 | 113 | | | | | | | | 22 | 2 | |
| | | 185 | | 19 | 116 | | | | | | | | 25 | 2 | |
| 240 | 300 | 120 | 21,5 | 15 | 119 | 32 | 20 | | | 3 | 2 | GBM 240-120 240-150 240-185 240-240 | | | |
| | | 150 | | 17 | 124 | | | | | | | | 22 | 2 | |
| | | 185 | | 19 | 127 | | | | | | | | 25 | 2 | |
| | | 240 | | 21,5 | 128 | | | | | | | | 28 | 2 | |
| 300 | | 185 | 23,3 | 19 | 127 | 34 | 25 | | | 3 | 2 | GBM 300-185 300-240 300-300 | | | |
| | | 240 | | 21,5 | 128 | | | | | | | | 28 | 2 | |
| | | 300 | | 24,5 | 134 | | | | | | | | 32 | 2 | |

TERMINALES DE APRIETE UNIVERSAL

Con bridas reversibles y horquillas para varillas o cables de cobre



Mechanical clamps connectors - Brass, Fork and Nuts cinc plated on request stainless steel
Connecteurs à serrage mécanique -

TERMINALES DESPLAZADOS CON PALA REDONDA (de latón estampado - serie TT)

| REF. | CABLE mm ² | | VARILLA/Rod Ø | | PALA | | LARGO LENGTH |
|-----------|--------------------------|------|------------------|------|----------------|-----------------|-----------------|
| | MIN. | MAX. | MIN. | MAX. | ANCHO WIDTH | AGUJERO HOLE | |
| TT - 10 A | 10 | 50 | 6 | 10 | 24 | 12,5 | 49 |
| TT - 11 A | 25 | 70 | 5 | 11 | 26 | 12,5 | 57 |
| TT - 14 A | 25 | 120 | 6 | 14 | 32 | 12,5 | 68 |
| TT - 16 A | 70 | 150 | 10 | 16 | 36 | 12,5 | 77 |
| TT - 20 A | 120 | 240 | 12 | 20 | 30 | 12,5 | 74 |

LATON BRASS
Horquillas y tuercas acero cincado
Sobre pedido en acero inoxidable
Forks and nuts steel cinc plated
On request stainless steel



TERMINALES DESPLAZADOS CON PALA CUADRADA (de bronce - serie CT)

| REF. | CABLE mm ² | | PALA | | LARGO LENGTH |
|------------------------|--------------------------|------|-------------|--------------------------|-----------------|
| | MIN. | MAX. | ANCHO/WIDTH | AGUJERO/HOLE | |
| CT - 300 A | 70 | 300 | 50 | A petición On request | 125 |
| Escuadra CT - 300 A | 70 | 300 | 50 | | — |



TERMINALES BANDERA CON PALA REDONDA (de latón estampado - serie TB)

| REF. | CABLE mm ² | | VARILLA/Rod Ø | | PALA | | LARGO LENGTH |
|-----------|--------------------------|------|------------------|------|----------------|-----------------|-----------------|
| | MIN. | MAX. | MIN. | MAX. | ANCHO WIDTH | AGUJERO HOLE | |
| TB - 11 A | 25 | 70 | 5 | 11 | 26 | 11 | 55 |

fotor

TERMINALES EN ESCUADRA CON PALA REDONDA (de latón estampado - serie TE)

| REF. | CABLE mm ² | | VARILLA/Rod Ø | | PALA | | LARGO LENGTH |
|-----------|--------------------------|------|------------------|------|----------------|-----------------|-----------------|
| | MIN. | MAX. | MIN. | MAX. | ANCHO WIDTH | AGUJERO HOLE | |
| TE - 10 A | 10 | 50 | 6 | 10 | 20 | 12,5 | 50 |
| TE - 14 A | 25 | 120 | 6 | 14 | 32 | 12,5 | 74 |



EMPALMES RECTOS (de latón estampado - serie MT)

| REF. | CABLE mm ² | | VARILLA/Rod Ø | | LARGO LENGTH | ANCHO WIDTH |
|-----------|--------------------------|------|------------------|------|-----------------|----------------|
| | MIN. | MAX. | MIN. | MAX. | | |
| MT - 10 A | 10 | 50 | 6 | 10 | | |
| MT - 11 A | 25 | 70 | 5 | 11 | 48 | 31 |
| MT - 14 A | 35 | 120 | 6 | 14 | 58 | 40 |
| MT - 16 A | 70 | 150 | 10 | 16 | 66 | 47 |



TES DE DERIVACION (de latón estampado - serie TD)

| REF. | CABLE mm ² | | VARILLA/Rod Ø | | LARGO LENGTH | ANCHO WIDTH |
|-----------|--------------------------|------|------------------|------|-----------------|----------------|
| | MIN. | MAX. | MIN. | MAX. | | |
| TD - 10 A | 10 | 50 | 6 | 10 | 49 | 20 |
| TD - 11 A | 25 | 70 | 5 | 11 | 56 | 24 |
| TD - 14 A | 25 | 120 | 6 | 14 | 68 | 30 |
| TD - 16 A | 70 | 150 | 10 | 16 | 71 | 30 |



GRAPAS PARA DERIVACION

Tap off clamps

Connecteurs serrage mécanique



PARA CONDUCTORES ALUMINIO Y COBRE **BIMET**

| Conductor Sección | REF. |
|-------------------|-------|
| 16 - 70 | 309 M |
| 25 - 150 | 311 M |

Las piezas bimetalicas van dotadas además, de una lámina bimetalica prensada en los cuerpos de aluminio con un sellado de las juntas mediante una resina impermeable experimentada.



GRAPA para Derivación de Cables **COBRE**

| Longitud | REF. |
|----------|------|
| 62 mm | GDCC |
| 90 mm | GDCL |

De latón, con dos tornillos M12.
Principal de 25 a 150 mm².
Derivado de 25 a 150 mm².



PARA CONDUCTORES ALUMINIO Y ALU/ACERO **AL**

| Conductor Sección | REF. |
|-------------------|-------|
| 16 - 50 | 338 M |
| 16 - 95 | 390 M |
| 25 - 50 | 392 M |
| 35 - 185 | 393 M |

Cuerpos: Aleación aluminio alta resistencia.
Tornillería: Acero galvanizado en caliente.

PARA CONDUCTORES COBRE **CU**

| Conductor Sección | REF. |
|-------------------|-------|
| 6 - 50 | 308 M |
| 6 - 35 | 327 M |
| 6 - 50 | 328 M |
| 16 - 95 | 330 M |

Cuerpos: Cobre.
Tornillos: Bronce de alta resistencia.
Cuerpo y brida simple, con un solo tornillo.

GRAPA Empalme y Derivación en **COBRE**

| Principal | Secciones | | REF. |
|-----------|-----------|------------|------|
| | Principal | Derivado | |
| 10 | 2,5 - 10 | CC 10 - 10 | |
| 16 | 2,5 - 16 | 16 - 16 | |
| 16 ó 25 | 2,5 - 10 | 25 - 10 | |
| 25 | 16 - 25 | 25 - 25 | |
| 35 | 2,5 - 16 | CC 35 - 16 | |
| 35 | 25 - 35 | 35 - 35 | |
| 50 | 4 - 25 | 50 - 25 | |
| 50 | 35 - 50 | 50 - 50 | |
| 95 | 35 - 50 | CC 95 - 50 | |
| 95 | 70 - 95 | 95 - 95 | |



CONECTORES PARA COBRE TIPO PARTIDO **CU**

| Conductor | Sección | REF. |
|-----------|---------|-------|
| 4 a | 16 | 465 M |
| 10 a | 35 | 467 M |
| 16 a | 50 | 468 M |
| 35 a | 95 | 461 M |
| 70 a | 150 | 462 M |

Cuerpo: Cobre

GRAPAS PARA DERIVACION



Tap off clamps
Connecteurs a perforation d'isolant

GRAPAS PARA DERIVACION AISLADAS **CU y AL**

Aptas para conductores aislados, CONEXION POR PENETRACION DEL AISLAMIENTO, no necesitándose el pelado del cable que puede estar energizado. Apta para exterior.

| Tipo | Sección Principal | Sección derivada | Ancho x Largo | REF. |
|------|-------------------|------------------|---------------|-------|
| 1 | 25 - 70 | 6 - 35 | 38 x 33 | 505 M |
| 2 | 25 - 95 | 10 - 50 | 52 x 54 | 502 M |
| 2 | 50 - 120 | 10 - 95 | 56 x 54 | 508 M |



Cuerpos: Aleación de cobre.
Aislamiento: Plástico reforzado con fibra Vidrio.
Tornillería: Acero galvanizado en caliente.

GRAPA Empalme y Derivación en **ALUMINIO**

APRIETE CON PRENSA PHC

Crimping with PHC hydraulic press

Sertissage pompe hydraulique PHC

| Secciones | | REF. | Secciones | | REF. |
|-----------|----------|-------------|-----------|----------|-------------|
| Principal | Derivado | | Principal | Derivado | |
| 50 | 25 - 35 | CA 50 - 35 | 16 - 25 | 10 - 25 | GG 25 - 25 |
| 50 - 70 | 10 - 25 | 70 - 25 | 16 - 50 | 10 - 50 | 50 - 50 |
| 50 - 70 | 50 - 63 | 70 - 50 | 50 - 120 | 10 - 70 | 120 - 70 |
| 95 - 120 | 10 - 35 | CA 120 - 35 | 150 - 185 | 10 - 70 | GG 185 - 70 |
| 95 - 120 | 50 - 63 | 120 - 63 | 50 - 120 | 25 - 70 | 120 - 70 |
| 95 - 120 | 95 - 120 | 120 - 120 | 120 - 240 | 70 - 120 | 240 - 120 |
| 150 - 185 | 25 - 63 | 185 - 63 | 240 - 300 | 10 - 70 | 300 - 70 |
| 150 - 185 | 63 - 63 | 185 - 95 | | | |



Mechanical Clamps

Connecteurs serrage mecanique

BORNAS DE CONEXION DE DOS PISOS

| Secciones | | REF. |
|-----------|--------|--------|
| Mínima | Máxima | |
| 4 | 50 | BD 50 |
| 10 | 95 | BD 95 |
| 16 | 150 | BD 150 |
| 50 | 240 | BD 240 |

Bornas paralelas: **Sírvase consultar.**

BORNAS DE CONEXION DE UN PISO

| Secciones | | REF. |
|-----------|--------|--------|
| Mínima | Máxima | |
| 4 | 50 | BS 50 |
| 10 | 95 | BS 95 |
| 16 | 150 | BS 150 |
| 50 | 240 | BS 240 |

EN LATON ESTAMPADO Y ESTAÑO



HERRAMIENTAS PARA CONEXIONAR

(para Terminales y Manguitos Tubulares de presión)



Tools for crimping
Outils pour sertir



ALICATE A6
Pince 1 à 6 mm²

De 1 a 6 mm².
Terminal de 15-30 al 40-60



TENAZA T50
T50
Pince pour cosses de 6 à 50 mm²

De 6 a 50 mm².
Terminal de 43-65 al 100-130



TENAZA T150
Tool 150 Hexagonal crimping 10-150 mm²
Interchangeable dies
Pince retreint hexagonal
Roues avec matrices Interchangeables

Para apriete de terminales sobre cable de cobre, por
matrizado hexagonal.



TENAZA 10-95 mm²
Tool 10-95
Pince 10-95

Compresión por punzonado. Cambio de sección por
regulación a tornillo
Crimping by punching with bolt of adjustment
Poinçonnage - Reglace par vis
Para terminales no aislados
For uninsulated terminals
Pour des cosses non isolées

HERRAMIENTAS PARA CONEXIONAR



PRENSA HIDRÁULICA PHC (12 Ton. esfuerzo)
PHC Hydraulic tool (Crimping force: 12 Ton.)
 Outil hydraulique PHC (Force de sertissage: 12 Ton.)

5,60 kg.
 Largo / Length 620 mm.



PRENSA HIDRÁULICA PHP
PHP Hydraulic tool
 Outil hydraulique PHP

Con matrices para punzonado o apriete hexagonal de Cobre y Aluminio. Bomba a trabajar con U12 ó U20, manguera de 3 m.

Pump with 3 m. hose, to work with U12 or U20.



APRIETA TERMINALES HIDRÁULICOS U12
 (12 Ton. esfuerzo)

**Hydraulic crimping tools
 (Crimping force: 12 Ton.)**

Serre cosses hydrauliques
 (Force de sertissage: 12 Ton.)

Cabezal de compresión hidráulico, dotado de enchufe rápido

Hydraulic compression head, featuring a rapid connection to a hydraulic pump

Poupée fixe de compression hydraulique dotée de raccord rapide pour connecter a une pompe hydraulique



APRIETA TERMINALES HIDRÁULICOS U20
 (20 Ton. esfuerzo)

**Hydraulic crimping tools
 (Crimping force: 20 Ton.)**

Serre cosses hydrauliques (Force de sertissage: 20 Ton.)

Cabezal de compresión hidráulico, dotado de enchufe rápido/ 20 Ton. / 8,50 kg. / Largo 350 mm.

Hydraulic compression head, featuring a rapid connection to a hydraulic pump. length 350 mm.

Poupée fixe de compression hydraulique dotée de raccord rapide pour connecter a une pompe hydraulique

HERRAMIENTAS PARA CONEXIONAR



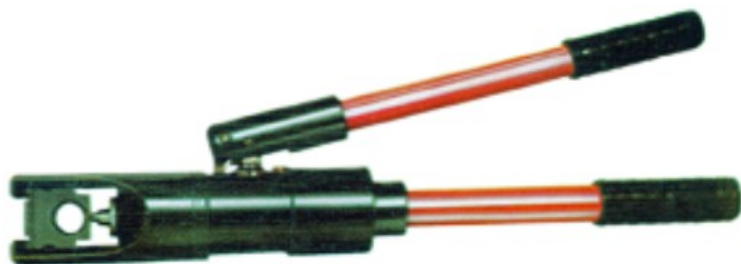
PRENSA HIDRAULICA HM5 (5 Ton. esfuerzo)
Hydraulic Tool (Crimping force: 5 Ton.)
Outil hydraulique (Force de sertissage: 5 Ton.)

Apriete Hexagonal de:
Empalmes y Terminales Alu hasta 150 mm².
Empalmes y Terminales de Cobre Tubulares hasta
240 mm².
2,40 kg
Largo / Length 350 mm.



APRIETA TERMINALES HIDRAULICOS Ref. HM5B
Hydraulic crimping tools
Serre cosses hydrauliques

Herramienta portátil electro-hidráulica con batería recargable.
Electrohydraulic portable tool with rechargeable battery
Outil électro-hydraulique portable avec batterie rechargeable
3,50 kg.
Largo / Length 330 mm. 80 aprietes / Carga



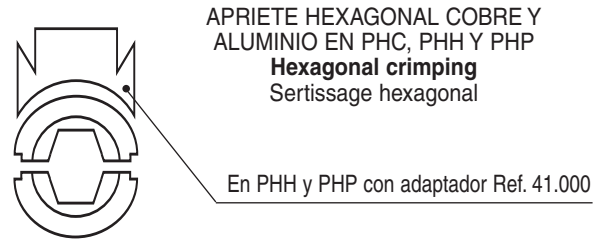
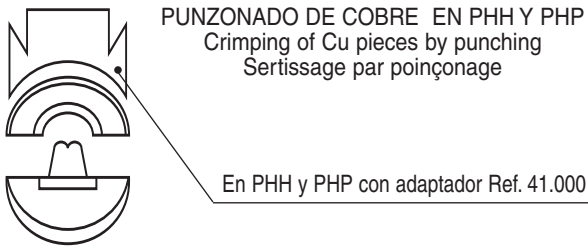
PRENSA HIDRÁULICA PHH (12 Ton. esfuerzo)
PHC Hydraulic tool (Crimping force: 12 Ton.)
Outil hydraulique PHC (Force de sertissage: 12 Ton.)

Manual. Con cabeza en U12
5 kg.
Largo / Length 620 mm.



APRIETA TERMINALES HIDRAULICOS Ref. PHHB
Hydraulic crimping tools
Serre cosses hydrauliques

12 Ton.
6,90 Kg.
Largo / Length 410 mm.



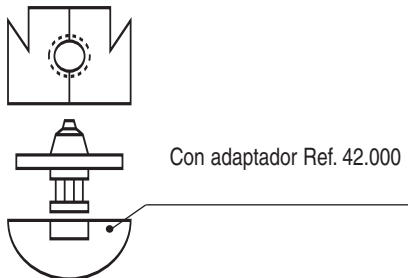
| Sección mm ² | REF. | | |
|-------------------------|------------|--------------|-----|
| | Matriz/Die | Punzón/Punch | |
| 50 | 31.050 | 32.050 | U12 |
| 70 | 31.070 | 32.120 | |
| 95 | 31.095 | 32.120 | |
| 120 | 31.120 | 32.120 | |
| 150 | 31.150 | 32.300 | |
| 185 | 31.185 | 32.300 | |
| 240 | 31.240 | 32.300 | |
| 300 | 31.300 | 32.300 | U20 |
| 400 | 71.400 | 72.400 | |
| 500 | 71.500 | 72.500 | |

| Sección mm ² Cu | REF. Matrices | Sección mm ² ALU | REF. Matriz |
|----------------------------|---------------|-----------------------------|-------------|
| | | | |
| 70 | 35.120 | 70 | 35.160 |
| 95 | 35.140 | 95 | 35.173 |
| 120 | 35.160 | 120 | 35.190 |
| U12 150 | 35.173 | 150 | 35.210 |
| 185 | 35.190 | 185 | 35.230 |
| 240 | 35.210 | 240 | 35.280 |
| 300 | 35.230 | | |
| U20 400 | 75.280 | | |
| 500 | 75.310 | | |

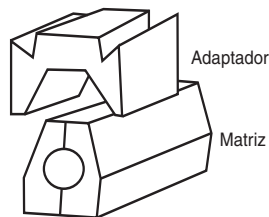
PUNZONADO PROFUNDO ALUMINIO (MATRIZ CERRADA) EN PHH, PHHB Y PHP

Punching in closed die

Poinçonnage profond etage en Matrice Fermée



MATRICES LARGAS PUNZONADO PROFUNDO EMPALMES ALUMINIO
For Long Alu joints



| Sección mm ² ALU | REF. Matrices |
|-----------------------------|---------------|
| Hasta 95 | L43095 |
| 120 y 150 | L43150 |
| 185 y 240 | L43240 |

Con adaptadores L1 y L2

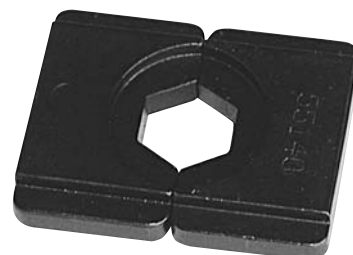
APRIETE CIRCULAR GRAPAS AI y AI-Cu EN PHC, PHH y PHP



| Para CC | Para CA | Para GG | REF. Matrices |
|----------------|-------------------|-------------------|---------------|
| 16-16 25-25 | | 25-25 | 38.000 |
| 35-16 35-35 | | | 38.100 |
| 50-25 50-50 | | | 38.200 |
| | 50-35 70-25 | | 38.300 |
| 95-50 95-95 | | | 38.400 |
| | 120-35 120-120 | 50-50 120-70 | 38.500 |
| | | 185-95 185-63 | 38.600 |
| | | 240-120 300-70 | 38800 |

MATRICES HM5 y HM5B
Hexagonales para Cu y Al

| Sección Cu mm ² | REF. Matrices | Sección Al mm ² | REF. Matrices |
|----------------------------|---------------|----------------------------|---------------|
| 16 | 55.068 | 25 | 55.090 |
| 25 | 55.072 | 35 | 55.110 |
| 35 | 55.083 | 50 | 55.120 |
| 50 | 55.100 | 70 | 55.140 |
| 70 | 55.120 | 95 | 55.160 |
| 95 | 55.140 | 120 | 55.190 |
| 120 | 55.160 | 150 | 55.210 |
| 150 | 55.173 | | |



HERRAMIENTAS PARA CONEXIONAR

(para Terminales y Manguitos Tubulares de presión)



Handtools for crimping
Pinces par sertissage



TP2. Para terminales garras en U
For U crimping terminals

TP4. Para punteras aisladas y desnudas: 0,5 a 6 mm²
For tube cable ends

TP4/16. De 6 a 16 mm²
For tube cable ends

TP3. Para tubulares hasta 10 mm²
For tube lugs terminals up to 10

TP5. Para tubulares 10 y 16 mm²
For lugs 10-16 mm²

AEP. Alicate sencillo para punteras 0,5 a 2,5 mm²
For tube cable ends



CORTACABLES KT

Para cable de cobre y aluminio



CORTACABLES
Cable cutters
Coupe cables

PEQ. Hasta Ø 12
GR. Hasta Ø 27



PELACABLES PK 1 - 6 mm.
Cable stripping tool
Outil a denuder cables



PELAMANGUERAS

PMP para mangueras 5 a 19 mm. Ø ext.
PMG para mangueras 19 a 38 mm. Ø ext.

FUNDA HELICOIDAL Y FUNDA TRENZADA



FUNDA HELICOIDAL - Para protección de cables.
Fabricada en Polipropileno.

| Tipo | Campo de aplicación Mazo de Ø mm. | Metros por rollo |
|-------|--------------------------------------|------------------|
| FHP 1 | 2,5 - 12 | 30 |
| FHP 2 | 4,5 - 50 | 30 |
| FHP 3 | 10 - 100 | 30 |

FUNDA ABIERTA fácil colocación (Sírvanse consultar)

FUNDA TRENZADA - Para protección de cables en Nylon negro

| Tipo | Campo de aplicación Mazo de Ø mm. | Metros por rollo |
|------|--------------------------------------|------------------|
| FH 1 | 5 - 10 | 100 |
| FH 2 | 8 - 14 | 100 |
| FH 3 | 12 - 18 | 50 |
| FH 4 | 15 - 23 | 50 |



PIEZAS ACOPLABLES Y EXPANDIBLES NUMEROS Y LETRAS

| Gama de diámetros de cable | | REF. |
|----------------------------|------|-----------|
| Mín. | Máx. | |
| 2,25 | 5 | HG 2 - 5 |
| 4 | 9 | HG 4 - 9 |
| 8 | 16 | HG 8 - 16 |

- EMBALAJE 2 / 5 1.000 piezas de un dígito, semicortadas en carretes
- 4 / 9 500 piezas de un dígito, semicortadas en carretes
- 8 / 16 500 piezas de un dígito, semicortadas en bolsas de polietileno



ABOCARDADORAS

| Para manguito | REF. |
|---------------|---------|
| 0 - 1 | NA 0/1 |
| 2 - 3 | NA 1K/3 |
| 4 - 5 | NA 4/5 |
| 8 - 10 | NA 8/10 |

MANGUITOS NEOPRENO HPS

| Ø Interior | Para Sección | REF. |
|------------|--------------|--------|
| 1,25 | 1 | HPS-0 |
| 1,75 | 1,5 - 2,5 | HPS-1 |
| 2,5 | 2,5 - 4 | HPS-1K |
| 3 | 2,5 - 4 | HPS-2 |
| 4 | 6 - 10 | HPS-2K |
| 5 | 10 - 16 | HPS-3 |
| 7,5 | 25 - 50 | HPS-4 |
| 10 | 50 - 100 | HPS-5 |
| 12 | 70 - 120 | HPS-8 |
| 14 | 120 - 185 | HPS-9 |
| 17 | 185 - 500 | HPS-10 |

BRIDAS

Nylon: Blanco B, Negro N

| A | Long. | Ø Mazo | REF. |
|-----|-------|--------|--------|
| 2,5 | 92 | 16 | 118 |
| 2,5 | 200 | 50 | 123 |
| 3,5 | 140 | 28 | 130 |
| 3,5 | 190 | 45 | 1.301 |
| 3,5 | 300 | 70 | 1.302 |
| 5 | 155 | 32 | 1.500 |
| 5 | 200 | 50 | 1.501 |
| 5 | 380 | 102 | 1.502 |
| 5 | 300 | 70 | 1.600 |
| 8 | 380 | 102 | 11.200 |
| 9 | 430 | 120 | 14.000 |

Cable ties
Colliers



GUIAS PASACABLES

Tipo normal nylon reforzado

| Metros | REF. |
|--------|-------|
| 5 | GP5R |
| 10 | GP10R |
| 15 | GP15R |
| 20 | GP20R |
| 25 | GP25R |
| 30 | GP30R |

Malla acoplable para tiro de varios cables a la vez



TUBO TERMORETRACTIL

| Ø mm. | En PVC metros/rollo | Autoextinguible Poliolefina metros/rollo también en barra de 1 m. | REF. |
|-------|---------------------|---|--------|
| 1,6 | - | 300 | TR 1 |
| 2,4 | - | 150 | TR 2 |
| 3,2 | 100 | 150 | TR 3 |
| 4,8 | 100 | 150 | TR 4 |
| 6,4 | 100 | 75 | TR 6 |
| 9,5 | 50 | 75 | TR 9 |
| 12,7 | 50 | 75 | TR 12 |
| 19 | 50 | 75 | TR 19 |
| 25,4 | 25 | 30 | TR 25 |
| 38 | 25 | 30 | TR 38 |
| 50,8 | 25 | 30 | TR 50 |
| 76 | 25 | Consultar | TR 75 |
| 102 | 25 | Consultar | TR 102 |

CONTRACCION 2:1
COLOR STANDARD: NEGRO
OTROS COLORES: CONSULTAR
Tubo de 12,7: al final contraído 6,40 mm.

REGLETAS CONEXION



| Sección | REF. |
|---------|-------|
| 1 a 4 | RC 4 |
| 2,5 a 6 | RC 6 |
| 4 a 10 | RC 10 |
| 6 a 16 | RC 16 |
| 10 a 25 | RC 25 |

HOMOLOGADAS OFERTA SOBRE CONSULTA

ilardia in the world



Export

- Francia
- Luxemburgo
- Malta
- Portugal
- Alemania
- Noruega
- Suecia
- Finlandia
- Dinamarca
- Arabia Saudi
- Omán

- Estados Unidos
- Canadá
- México
- Colombia
- Guatemala
- Perú
- Republica dominicana
- Marruecos
- Kenya
- Chipre
- Grecia



Polígono Ind. Bekea s/nº
48960 Galdakao
Bizkaia (Spain)

Tel.: (34) 944 560 080
Email: ilardia@ilardia.com



ilardia.com

