

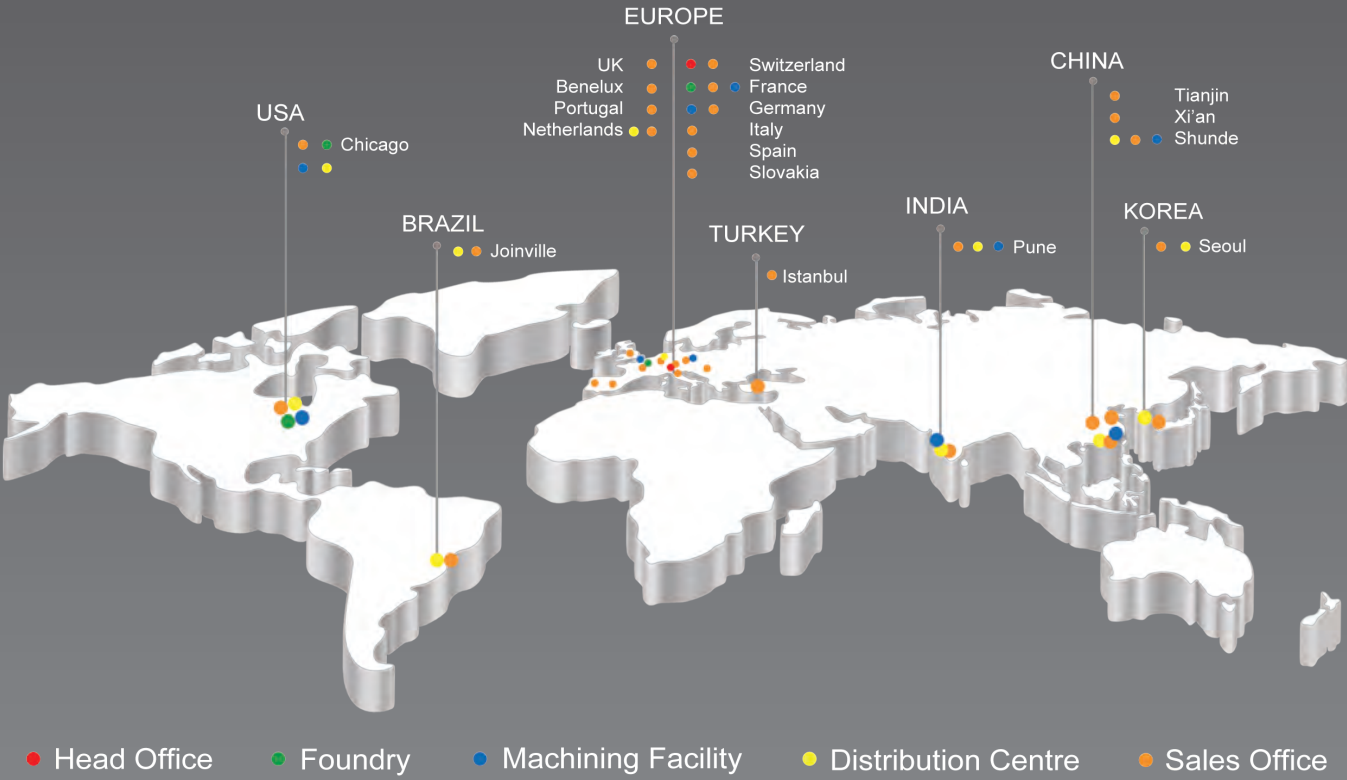
| Composición química nominal (Remanente Cobre) | | | | | | | Propiedades mecánicas y físicas | | | | | | | Parámetros de uso | | | |
|--|----|----|-------|-----|-----|------|---------------------------------|---------------------|-------------------------|---------------------|----------------|-----------------------------------|---|---|-----------------------------|------------------------|--------------------|
| Sn | Zn | Pb | Al | Fe | Ni | Mn | D Kg/dm ³ | Rm MPa | Rp 0,2 MPa | A ₅ % | HBW 10/3000 | Conductividad térmica W/m.K | Coefficiente de expansión lineal 10 ⁻⁷ / K | Coefficiente de fricción sin lubricante | Necesidad de lubricación | Velocidad media m/s | Carga media MPa |
| 0.25 | | | 6,5 | 2,5 | | | 7.95 | 552 | 283 | 40 | 153 | 54 | 16 | 0.17 | Moderada 👉 | 1.5 | 85 |
| | | | 10,5 | 3,5 | | | 7.45 | 724 | 365 | 14 | 192 | 63 | 16 | 0.18 | Moderada 👉 | 1.5 | 100 |
| | | | 10,5 | 3,5 | | | 7.45 | 758 | 386 | 16 | 207 | 63 | 16 | 0.18 | | 1.5 | 100 |
| | | | 13,1 | 4,4 | | 2 | 7.21 | 758 | 420 | 1 | 286 | 46 | 16 | 0.21 | Moderada 👉 | 0.7 | 115 |
| | | | 14,1 | 4,7 | | 2 | 7.06 | 724 | 427 | 0.5 | 332 | 42 | 16 | 0.25 | | 0.6 | 120 |
| No publicado | | | | | | | 6.93 | R _m 1580 | R _{p 0,01} 710 | 0.2 | 364 | 33 | 16 | 0.30 | Moderada 👉 | 0.5 | 125 |
| | | | | | | | 6.93 | R _m 1601 | R _{p 0,01} 720 | 0 | 420 | 33 | 16 | 0.32 | Moderada 👉 | 0.4 | 130 |
| | | | 10 | 2,5 | 5 | 1.5 | 7.53 | 814 | 517 | 15 | 228 | 46 | 16.2 | 0.23 | Alta 👇 | 1.5 | 90 |
| | | | 11 | 4,5 | 4,5 | 1.25 | 7.45 | 795 | 500 | 4 | 262 | 42 | 16 | 0.24 | | 0.9 | 300 |
| | | | 10, 5 | 4,8 | 5 | 1.5 | 7.45 | 1000 | 793 | 8 | 260/300 | 42 | 16 | 0.23 | | 1 | 330 |

| Cr | Co | Be | Zr | Ni | Si | Mn | | | | | | Conductividad térmica W/m·K | | | Conductividad eléctrica % IACS | Clase RWMA |
|----------|-----|-----|-------|-----|-----|----|------|------|-----|----|-----|--------------------------------|--------|--------|--------------------------------------|------------|
| | | | | | | | | | | | | 20 °C | 100 °C | 200 °C | | |
| | 0.5 | 2 | | | | | 8.26 | 1310 | 827 | 5 | 360 | 106 | 120 | 135 | 20% | 4 |
| 1 | | | | 7 | 2 | | 8.7 | 938 | 730 | 5 | 294 | 156 | 170 | 190 | 30% | 4 |
| 0.4 | | | | 2.5 | 0.7 | | 8.71 | 689 | 517 | 13 | 210 | 208 | 226 | 243 | 48% | 3 |
| Co + Ni2 | | 0.5 | | | | | 8.75 | 740 | 680 | 12 | 230 | 300 | 320 | 340 | 69% | 3 |
| Co + Ni2 | | 0.5 | | | | | 8.75 | 830 | 550 | 10 | 240 | 217 | 235 | 254 | 52% | 3 |
| >1 | | | >0.10 | | | | 8.87 | 520 | 466 | 18 | 151 | 333 | 350 | 367 | 82% | 2 |

| Sn | Zn | Pb | Al | Fe | Ni | Mn | | | | | | Conductividad térmica W/m·K | Coefficiente de expansión lineal | Coefficiente de fricción sin lubricante | Necesidad de lubricación | Velocidad media m/s | Carga media MPa |
|----|------|------|----|------|-------------|----|------|-----|-----|----|----|--------------------------------|-------------------------------------|---|-----------------------------|------------------------|--------------------|
| 7 | <2 | 15 | | | <2 | | 9.25 | 200 | 90 | 8 | 65 | 63 | 18.8 | 0.04 | Pequeña ● | 12 | 20 |
| 10 | <2 | 10 | | | <2 | | 9 | 220 | 110 | 8 | 70 | 54 | 18.7 | 0.05 | | 10 | 25 |
| 7 | 4 | 6.5 | | | <2 | | 8.8 | 260 | 120 | 12 | 70 | 64 | 18.5 | 0.06 | Moderada ● | 7 | 40 |
| 12 | <0,2 | <0,7 | | | <2 | | 8.6 | 300 | 150 | 12 | 90 | 46 | 18.5 | 0.07 | | 6 | 60 |
| 8 | <0,2 | | | <0,1 | P:0.01-0.24 | | 8.8 | 350 | 170 | 25 | 80 | 63 | 17 | 0.07 | | 3 | 50 |

| | | | | | | | | | | | | | | | | | |
|---------------------------|------|------|-----|-----|---|-----|-----|-----|-----|----|-----|-----|------|------|----------|-----|----|
| | 39 | <3,5 | | | | | 8.5 | 430 | 230 | 10 | 120 | 100 | 18.5 | | Muy alta | 1 | 60 |
| | 40 | | 2 | | | 2 | 8.2 | 540 | 250 | 15 | 150 | 117 | 21 | | | 1.5 | 80 |
| | 23,4 | | 4,3 | 2,5 | | 2,5 | 7.8 | 500 | 250 | 8 | 160 | 20 | 17 | 0.17 | Muy alta | 1.5 | 80 |
| | 20 | | 6,2 | 3 | | 3 | 7.6 | 750 | 500 | 8 | 220 | 20 | 17 | 0.17 | | 1 | 90 |
| <0,1 | <0,3 | | 9 | 2 | 3 | 1,5 | 7.6 | 500 | 180 | 18 | 110 | 38 | 16 | 0.23 | Alta | 1.5 | 70 |
| <0,05 | <0,5 | | 10 | 4 | 5 | <1 | 7.6 | 586 | 241 | 18 | 160 | 36 | 16 | 0.23 | | 1.5 | 90 |
| CuW de 66%, 70%, 75%, 80% | | | | | | | | | | | | | | | | | |

Los valores mencionados son nominales. Si necesita de valores mínimos pongase por favor en contacto con su representante de AMPCO METAL.



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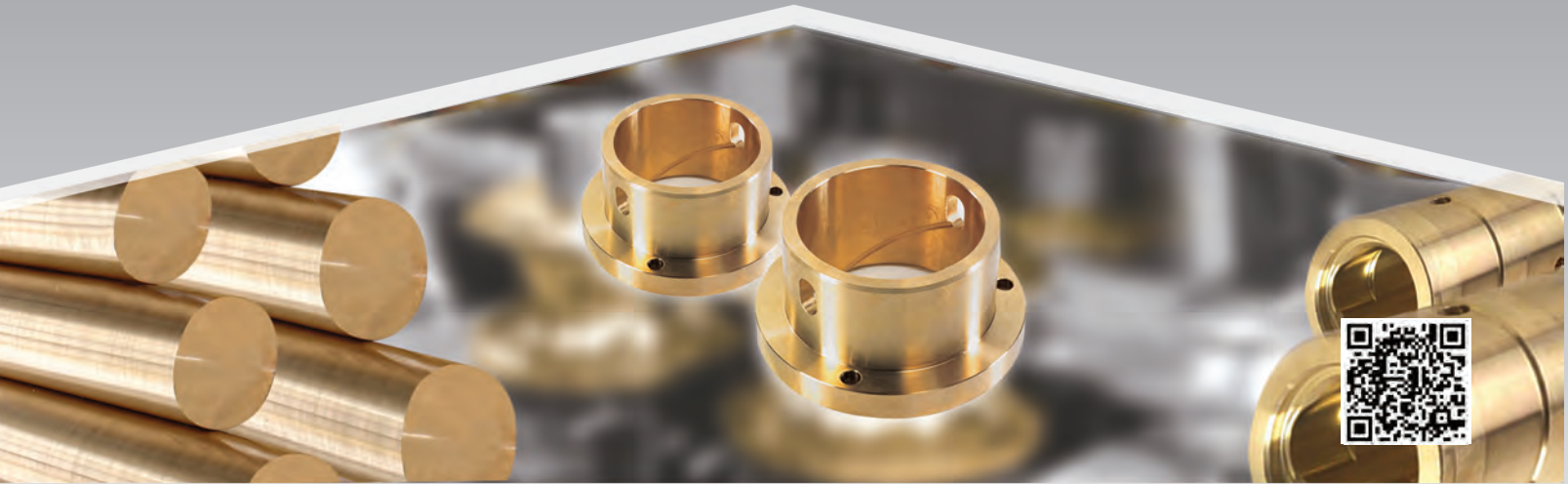
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|----------------|---------------------|------------------------------------|-------|-------------------|-----|------|
| | | ISO | AFNOR | AFNOR Aleación | DIN | ASTM |
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| | AMPCO® 18 | | | | | |
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NUEVO

| | | | | | | |
|----------------------|---------------|-------------------------------|--|---------------------------|---------|---------|
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| | AMPCOLOY® 944 | Especificación AMPCO METAL | | Aleaciones sin berilio | | |
| | AMPCOLOY® 940 | | | | | |
| | AMPCOLOY® 89 | CuNiBe | | | | |
| | AMPCOLOY® 95 | CuCoNiBe | | | ~2.1285 | ~C17510 |
| | AMPCOLOY® 972 | CuCrZr | | | 2.1293 | C18150 |

| | | | | | | |
|---|------|--------------|------------|-------|--------|--------|
| BRONCE AL PLOMO | A30 | UPb15Sn8 | NF EN1982 | UPb15 | 2.1182 | C93800 |
| | A32 | UPb10Sn10 | NF EN1982 | UPb10 | 2.1176 | C93700 |
| BRONCE AL ESTAÑO | A35 | CuSn7Pb | NF EN1982 | UE7 | 2.1090 | C93200 |
| | A712 | CuSn12P | NF EN1982 | UE12P | 2.1052 | C90800 |
| | A708 | CuSn8 P | | UE9P | 2.1030 | C52100 |
| LATÓN | A393 | CuZn39Pb3 | NF EN1982 | UZ39 | 2.0401 | C38500 |
| | A402 | CuZn40Al2 | NF EN1982 | UZ40 | 2.0550 | C28000 |
| LATÓN DE ALTA RESISTENCIA | A780 | CuZn23Al4 | NF EN1982 | UZ23 | | C86200 |
| | A820 | CuZn19Al6 | NF EN1982 | UZ19 | | |
| BRONCE AL ALUMINIO | A609 | CuAl9Ni3Fe2 | NF EN1982 | UA9 | | |
| | A608 | CuAl10Ni5Fe4 | NF L14-705 | UA10N | 2.0975 | C95800 |
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