# Tinned Copper braiding Shielded Flex CY LSZH Control Cable

## Technical Datasheet

**Part No:** EECYX

**Description:** The ENGELEC's CY LSZH control cables are screened flexible connecting cables for instrumentation and control equipment, for tooling machinery production lines and, in flexible applications for free movement without tensile load. Suitable for use in dry, moist and wet rooms. The tinned copper wire braided shielding protect the control signal transmission from the electromagnetic interference. All plastic materials are low smoke and


## Construction

| | |
|---|---|
| **Conductor** | Class 5, Annealed plain copper, sizes: 1.5mm²,2.5mm², 4mm² & 6mm² to BS 6360 |
| **Insulation** | Low smoke halogen free compound, EN 50525 |
| **Binder** | Transparant PET tape |
| **Colour code** | According to EN60456, Blue Brown Black Grey Green/Yellow |
| **Screen** | Tinned copper wire braiding, shielding coverage > 80% |
| **Bedding Sheath** | Low smoke halogen free compound, EN 50525 |
| **Outer sheath** | Low smoke halogen free compound, EN 50525 |
| **Sheath colour** | Gray or Transparent. |

## Mechanical and Electrical Properties

* **Operating temperature** : -20˚C up to + 100˚C( fixed installation) ; -10˚C to +90˚C( flexed operation ).
* **Minimum bending radius** : 12 x overall diameter.

| | | | | | |
|---|---|---|---|---|---|
| **Conductor Area Size** | mm2 | 1.5 | 2.5 | 4.0 | 6.0 |
| **Conductor resistance max** | ohm/km | 13.3 | 7.98 | 4.95 | 3.3 |
| **Insulation resistance min** | Mohm/km | 25 | 25 | 25 | 25 |
| **Current carrying capacity at 30˚C in air** | A | 24 | 32 | 42 | 54 |
| **in conductor** | A | 15 | 18 | 26 | 34 |
| **Braided shielding coverage** | % | >80 | >80 | >80 | >80 |
| **Voltage drop** | mV/A/m | 25 | 15 | 9.5 | 6.4 |
| **AC voltage wthstand test** | V | 2500 | 2500 | 2500 | 2500 |
| **Rated voltage max** | V | 450/750 | 450/750 | 450/750 | 450/750 |

## Standards

| | | | |
|---|---|---|---|
| RoHS Compliance : | Yes | UV Resistance : | Good, ISO 4892-3† |
| CE Compliant : | Yes (2014/35/EU) | Weather Resistance : | Good, ISO 4892-3† |
| Manufactured in accordance to : | VDE0207, EN50525, IEC 60331-1 | CPR Classification | $F_{CA}$ (EN50575:2014+A1:2016) |

# Tinned Copper braiding Shielded Flex CY LSZH Control Cable

## Technical Datasheet

### Dimension Parameter

| Engelec Cable Part Number | No.of Cores | Nominal Conductor CSA | Nominal Thickness of Insulation | Nominal Thickness of bedding | Nominal Dia. over Bedding | Thickness of braid shielding | Nominal Thickness of Sheath | Nominal Dia. of Cable | Approx. Weight |
|---|---|---|---|---|---|---|---|---|---|
| | | mm2 | mm | mm | mm | mm | mm | mm | kg/km |
| EECYX3C15 | 3 | 1.5 | 0.6 | 0.5 | 6.6 | 0.12 | 0.7 | 8.2 | 90 |
| EECYX3C25 | 3 | 2.5 | 0.7 | 0.5 | 7.9 | 0.12 | 0.8 | 9.7 | 136 |
| EECYX3C40 | 3 | 4.0 | 0.8 | 0.6 | 9.6 | 0.12 | 0.9 | 11.6 | 210 |
| EECYX3C60 | 3 | 6.0 | 0.8 | 0.6 | 10.7 | 0.12 | 1.0 | 12.9 | 285 |
| EECYX4C15 | 4 | 1.5 | 0.6 | 0.5 | 7.3 | 0.12 | 0.7 | 8.9 | 114 |
| EECYX4C25 | 4 | 2.5 | 0.7 | 0.5 | 8.8 | 0.12 | 0.8 | 10.6 | 173 |
| EECYX4C40 | 4 | 4.0 | 0.8 | 0.6 | 10.6 | 0.12 | 1.0 | 12.8 | 260 |
| EECYX4C60 | 4 | 6.0 | 0.8 | 0.6 | 11.6 | 0.12 | 1.1 | 14.0 | 358 |
| EECYX5C15 | 5 | 1.5 | 0.6 | 0.5 | 8.0 | 0.12 | 0.8 | 9.8 | 142 |
| EECYX5C25 | 5 | 2.5 | 0.7 | 0.5 | 9.7 | 0.12 | 0.9 | 11.7 | 216 |
| EECYX5C40 | 5 | 4.0 | 0.8 | 0.6 | 11.5 | 0.12 | 1.0 | 13.7 | 325 |
| EECYX5C60 | 5 | 6.0 | 0.8 | 0.6 | 12.8 | 0.12 | 1.1 | 15.2 | 449 |
| EECYX7C15 | 7 | 1.5 | 0.6 | 0.5 | 8.8 | 0.12 | 0.8 | 10.6 | 180 |
| EECYX7C25 | 7 | 2.5 | 0.7 | 0.5 | 10.6 | 0.12 | 1.0 | 12.8 | 283 |
| EECYX7C40 | 7 | 4.0 | 0.8 | 0.6 | 12.6 | 0.12 | 1.1 | 15.0 | 420 |
| EECYX7C60 | 7 | 6.0 | 0.8 | 0.6 | 14.1 | 0.12 | 1.2 | 16.7 | 550 |
| EECYX12C15 | 12 | 1.5 | 0.6 | 0.6 | 11.2 | 0.12 | 1.1 | 13.6 | 307 |
| EECYX12C25 | 12 | 2.5 | 0.7 | 0.7 | 14.7 | 0.12 | 1.2 | 17.3 | 450 |
| EECYX12C40 | 12 | 4.0 | 0.8 | 0.8 | 17.4 | 0.12 | 1.4 | 20.4 | 650 |
| EECYX12C60 | 12 | 6.0 | 0.8 | 0.8 | 19.4 | 0.12 | 1.4 | 22.4 | 860 |

### Conductor

| Conductor Area Size | mm2 | 1.5 | 2.5 | 4.0 | 6.0 |
|---|---|---|---|---|---|
| Conductor Class 5 | No. x mm | 30/0.25 | 50/0.25 | 56/0.30 | 84/0.30 |

* Information and images on this datasheet are intended for guidance only and products may vary due to technical improvements and commercial factor

Find the product by : www.engeleccable.com | email: info@engelec.cn | tel:+86 577 61672337 |quick quote: +86 13505876536