

**Modbus Cable RS 485**

70 °C / 500 V

Flame Retardant

**ICON BUS PRO B0000 M0 CEOS****Application**

For transmission of digital signals in instrument and control systems.

Recommended for indoor and outdoor installation, on racks, trays, in conduits, in dry and wet locations; for direct burial.

**Construction**

|                         |                                                                                                                                                                                                          |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conductor .....         | plain annealed copper wire, stranded, size: 0.5 mm <sup>2</sup>                                                                                                                                          |
| Insulation .....        | polyethylene                                                                                                                                                                                             |
| Colour code .....       | white/brown, green/yellow                                                                                                                                                                                |
| Twisting.....           | cores to pairs, pairs to cable core                                                                                                                                                                      |
| Wrapping .....          | at least 1 layer of plastic tape                                                                                                                                                                         |
| Collective screen ..... | plastic coated aluminium polyester foil, metallic surface outside, in contact with tinned copper drain wire (0.5 mm <sup>2</sup> /7) and tinned copper braid (wire-Ø 0.15 mm, optical coverage 51% min.) |
| Outer sheath.....       | polyvinyl chloride PVC, black                                                                                                                                                                            |
| Cable marking.....      | LEONI KERPEN ICON BUS PRO B0000 M0 CEOS 2x2x0.5 mm <sup>2</sup><br>MODBUS RS 485 500V<br>PRODUCTION LOT CODE YEAR LENGTH MARKING                                                                         |

**Technical data**

Flame propagation

- Test on single cable IEC 60332-1-2

**Temperature range**-40° C up to +70° C  
(during operation)-5° C up to +70° C  
(during installation)**Minimum bending radius**

10 x cable diameter

**Abbreviations**

ICON BUS

CEOS combined overall screen

**Electrical Properties at 20 °C**

|                                               |      |                 |                     |
|-----------------------------------------------|------|-----------------|---------------------|
| Conductor cross-section                       | nom. | mm <sup>2</sup> | 0.5                 |
| Conductor resistance (loop)                   | max. | Ω/km            | 73.4                |
| Insulation resistance                         | min. | MΩ x km         | 5000                |
| Mutual capacitance                            | Max. | nF/km           | 60                  |
| Impedance at f = 1 MHz                        |      |                 | 105 Ω (Tol +/- 15%) |
| Test voltage U <sub>rms</sub> (core : core)   |      | V               | 2000                |
| Test voltage U <sub>rms</sub> (core : screen) |      | V               | 2000                |
| Operating voltage                             |      | V               | 500                 |

**Modbus Cable RS 485**

70 °C / 500 V

Flame Retardant

**ICON BUS PRO B0000 M0 CEOS**

| Geometrical data            |                                 |                                    |                               |                              |                             |
|-----------------------------|---------------------------------|------------------------------------|-------------------------------|------------------------------|-----------------------------|
| No. of elements             | Dia. of core<br>approx.<br>(mm) | RT of outer sheath<br>nom.<br>(mm) | Outer dia.<br>approx.<br>(mm) | Weight<br>approx.<br>(kg/km) | Part No.<br>Colour<br>black |
| <b>0.5 mm<sup>2</sup>/7</b> |                                 |                                    |                               |                              |                             |
| 2                           | 2.1                             | 1.0                                | 10.2                          | --                           | --                          |