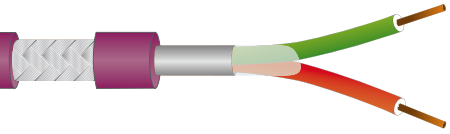


# UNIDRALL® BUS 1000F

Cavo PROFIBUS per posa fissa  
PROFIBUS cable for fixed installation

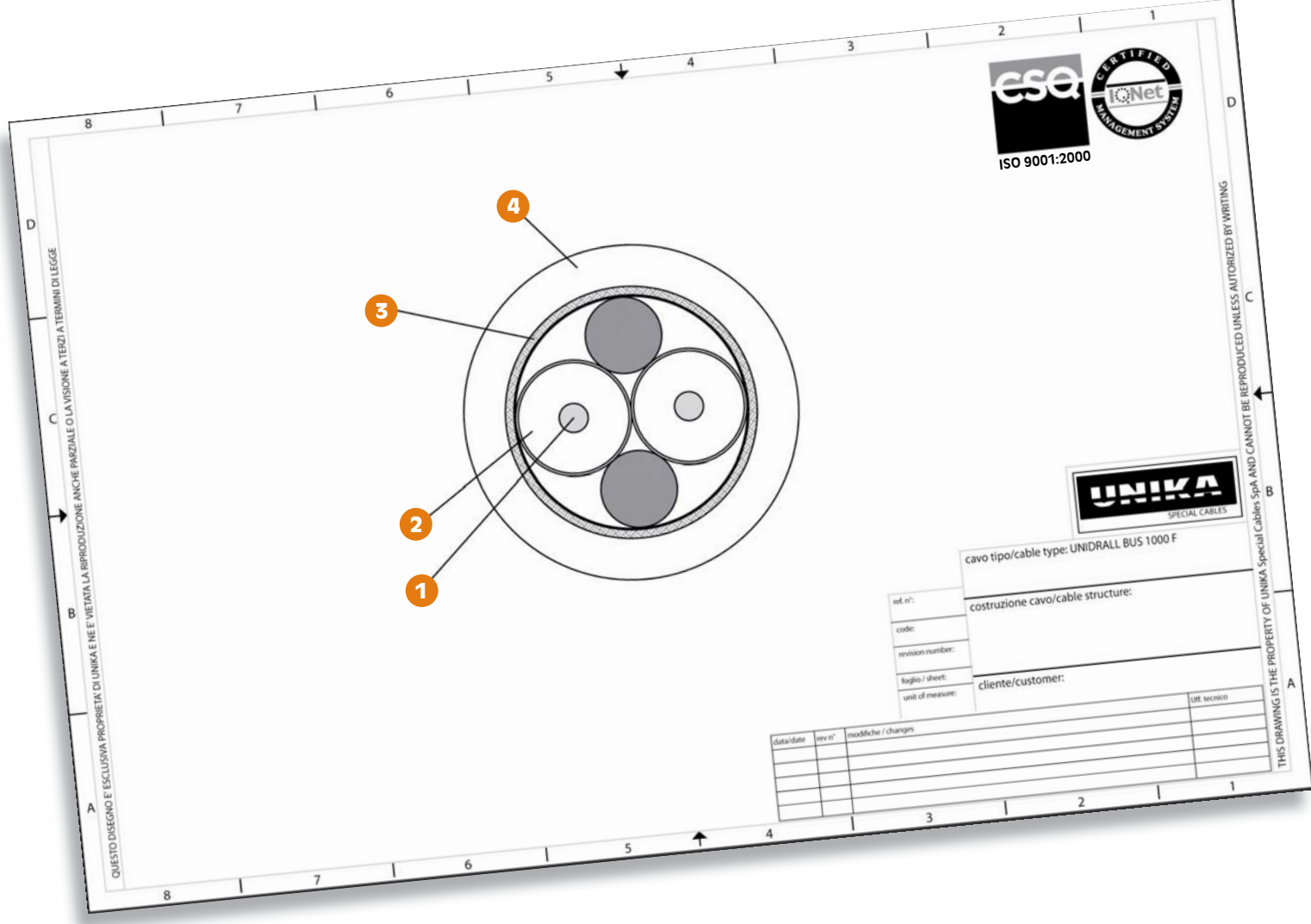
UNIKA UNIDRALL BUS 1000 F cULus AWM style 21179 80°C 1000V FT-1 CE



|   | Dati tecnici  | Technical data  |
|---|---|---|
| <b>Conduttore</b><br><b>Conductor</b>   | <b>1</b> Rame rosso secondo CEI EN 60228 (CEI 20-29) classe 1   | Bare copper complying with CEI EN 60228 (CEI 20-29) class 1                       |
| <b>Isolamento ed identificazione anime</b><br><b>Insulation and core identification</b> | <b>2</b> PE espanso con skin in HDPE. Anime colorate verde e rosso  | Foam PE with HDPE skin. Core colours: green and red                               |
| <b>Schermatura totale</b><br><b>Overall shielding</b>                                   | <b>3</b> Nastro di alluminio/poliestere e treccia di fili di rame stagnato avente copertura maggiore 60%. | Aluminium/polyester tape with tinned copper wire braid having coverage above 60%. |
| <b>Guaina</b><br><b>Jacket</b>  | <b>4</b> PVC classe 43 secondo UL 1581. Colore viola RAL 4001   | PVC class 43 according to UL1581. Colour violet RAL 4001                          |
| <b>Tensione di lavoro</b><br><b>Operating voltage</b>                                   | 30 V  | 30 V  |
| <b>Tensione di prova</b><br><b>Test voltage</b>   | 1000 V  | 1000 V  |
| <b>Resistenza di isolamento</b><br><b>Insulation resistance</b>                         | > 200 MΩ·km   | > 200 MΩ·km   |
| <b>Temperatura di lavoro</b><br><b>Operating temperature</b>                            | Posa fissa<br>-30 ÷ 80 °C   | Fixed installation<br>-30 ÷ 80 °C   |
|   | Posa flessibile<br>-5 ÷ 80 °C   | Flexible installation<br>-30 ÷ 80 °C  |
| <b>Raggio minimo di curvatura</b><br><b>Minimum bending radius</b>                      | Posa fissa<br>6 x diametro esterno  | Fixed installation<br>6 x outer diameter  |
|   | Posa flessibile<br>12 x diametro esterno  | Flexible installation<br>12 x outer diameter                                      |
| <b>Comportamento al fuoco</b><br><b>Fire behaviour</b>                                  | Prova di non propagazione fiamma UL 758 e prova FT-1 CSA C.22.2 n°210                                     | Cable flame test per UL 758 and FT-1 test per CSA C.22.2 n°210                    |
| <b>Emissione gas alogenidrici</b><br><b>Halogen gas emission</b>                        | ≤ 18% IEC 60754, CEI EN 50267-2   | ≤ 18% IEC 60754, CEI EN 50267-2   |
| <b>Resistenza agli oli industriali</b><br><b>Industrial oil resistance</b>              | IEC CEI EN 60811-2-1  | IEC CEI EN 60811-2-1  |
| <b>Assorbimento d'acqua</b><br><b>Water absorption</b>                                  | IEC CEI EN 60811-1-3  | IEC CEI EN 60811-1-3  |
| <b>Resistenza elettrica</b><br><b>Electrical resistance</b>                             | ≤ 57,5 Ω/km   | ≤ 57,5 Ω/km   |
| <b>Capacità mutua a 1 kHz</b><br><b>Mutual capacitance at 1 kHz</b>                     | ≤ 30 pF/m   | ≤ 30 pF/m   |

Approvato DESINA.  
Approvato UL/CSA:  
80°C 1000V style 21179

DESINA Approved.  
UL and CSA approvals:  
80°C 1000V style 21179



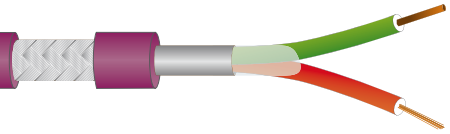
| codice code | formazione assembly | diametro esterno outer diameter [mm] | massa Cu Cu mass [Kg/km] | massa cavo cable mass [Kg/km] |
|-------------|---------------------|--------------------------------------|--------------------------|-------------------------------|
| B1123       | 1x2x0,64            | Max 8,0                              | 25                       | 73,7                          |

|   | Dati tecnici   |  | Technical data   |   |
|---|--|--|--|---|
| <b>Impedenza caratteristica</b><br><b>Characteristic impedance</b>                            | 150 ± 15 Ω   |  | 150 ± 15 Ω   |   |
| <b>Attenuazione</b><br><b>Attenuation</b>   | Frequenza [MHz]<br>0,25<br>0,625<br>1,25<br>3,125<br>16                        | Attenuazione massima [dB/km]<br>6<br>9<br>12<br>18<br>40 | Frequency [MHz]<br>0,25<br>0,625<br>1,25<br>3,125<br>16                        | Maximum attenuation [dB/km]<br>6<br>9<br>12<br>18<br>40 |
| <b>Sbilancio capacitivo verso terra</b><br><b>Capacitance earth unbalance</b>                 | ≤ 1500 pF/m  |  | ≤ 1500 pF/m  |   |
| <b>Massima lunghezza di trasmissione per tratta</b><br><b>Maximum length for each segment</b> | Transmission rate [kbit/s]<br>≤ 93,75<br>≤ 187,5<br>≤ 500<br>≤ 1500<br>≤ 12000 | Lunghezza [m]<br>1200<br>1000<br>400<br>200<br>100       | Transmission rate [kbit/s]<br>≤ 93,75<br>≤ 187,5<br>≤ 500<br>≤ 1500<br>≤ 12000 | Length [m]<br>1200<br>1000<br>400<br>200<br>100         |

# UNIDRALL® BUS 1000

Cavo PROFIBUS per posa flessibile  
PROFIBUS cable for flexible installation

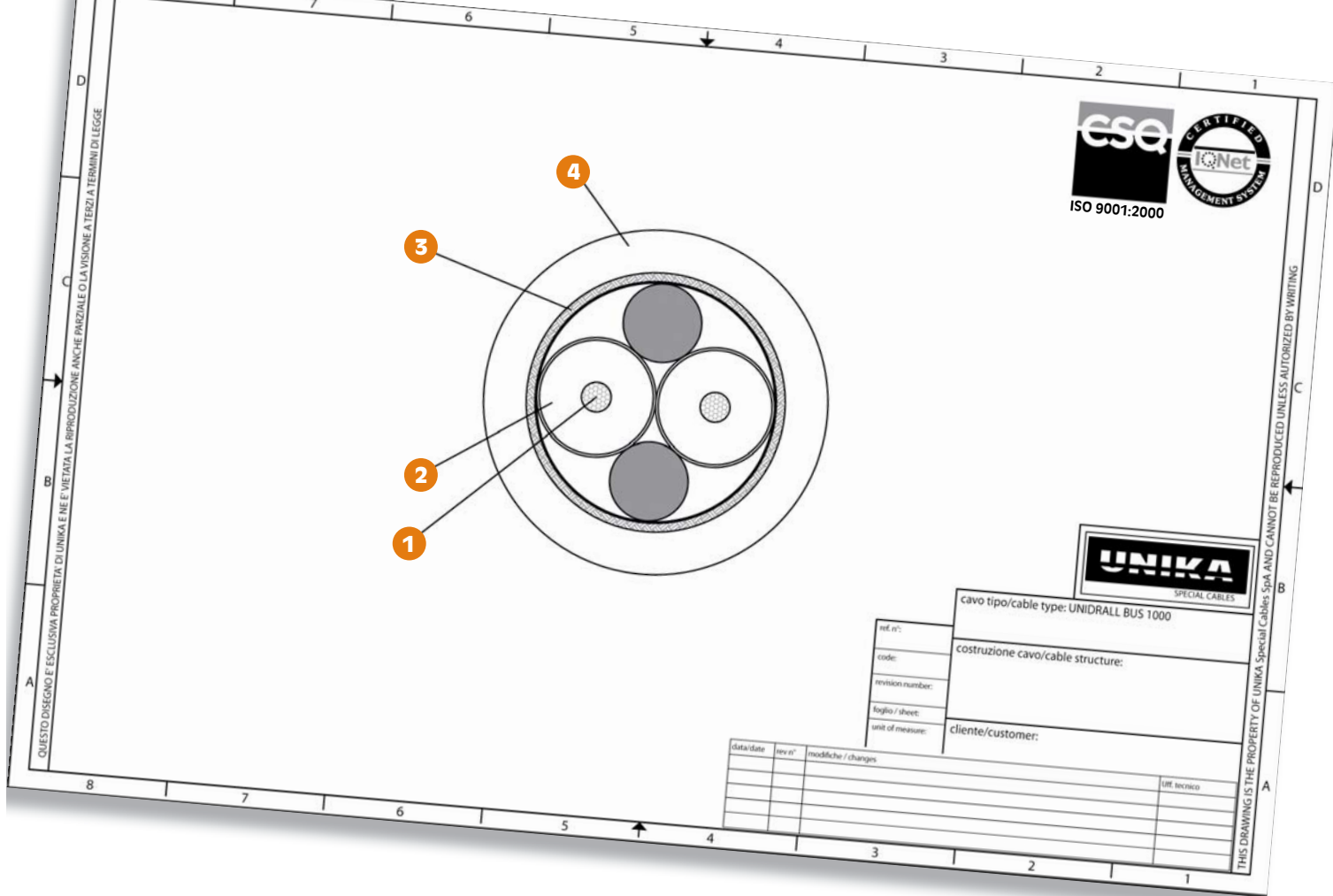
UNIKA UNIDRALL BUS 1000 cULus AWM style 21179 80°C 1000V FT-1 CE



|   | Dati tecnici   | Technical data  |
|---|--|---|
| <b>Conduttore</b><br><b>Conductor</b>   | 1 Rame rosso secondo CEI EN 60228 (CEI 20-29) classe 5   | Bare copper complying with CEI EN 60228 (CEI 20-29) class 5                       |
| <b>Isolamento ed identificazione anime</b><br><b>Insulation and core identification</b> | 2 PE espanso con skin in HDPE. Anime colorate verde e rosso  | Foam PE with HDPE skin. Core colours: green and red                               |
| <b>Schermatura totale</b><br><b>Overall shielding</b>                                   | 3 Nastro di alluminio/poliestere e treccia di fili di rame stagnato avente copertura maggiore 60%. | Aluminium/polyester tape with tinned copper wire braid having coverage above 60%. |
| <b>Guaina</b><br><b>Jacket</b>  | 4 PVC classe 43 secondo UL 1581. Colore viola RAL 4001   | PVC class 43 according to UL1581. Colour violet RAL 4001                          |
| <b>Tensione di lavoro</b><br><b>Operating voltage</b>                                   | 30 V   | 30 V  |
| <b>Tensione di prova</b><br><b>Test voltage</b>   | 1000 V   | 1000 V  |
| <b>Resistenza di isolamento</b><br><b>Insulation resistance</b>                         | > 200 MΩ·km  | > 200 MΩ·km   |
| <b>Temperatura di lavoro</b><br><b>Operating temperature</b>                            | Posa fissa<br>-30 ÷ 80 °C  | Fixed installation<br>-30 ÷ 80 °C   |
|   | Posa flessibile<br>-5 ÷ 80 °C  | Flexible installation<br>-30 ÷ 80 °C  |
| <b>Raggio minimo di curvatura</b><br><b>Minimum bending radius</b>                      | Posa fissa<br>5 x diametro esterno   | Fixed installation<br>5 x outer diameter  |
|   | Posa flessibile<br>10 x diametro esterno   | Flexible installation<br>10 x outer diameter                                      |
| <b>Comportamento al fuoco</b><br><b>Fire behaviour</b>                                  | Prova di non propagazione fiamma UL 758 e prova FT-1 CSA C.22.2 n°210                              | Cable flame test per UL 758 and FT-1 test per CSA C.22.2 n°210                    |
| <b>Emissione gas alogenidrici</b><br><b>Halogen gas emission</b>                        | ≤ 18% IEC 60754, CEI EN 50267-2  | ≤ 18% IEC 60754, CEI EN 50267-2   |
| <b>Resistenza agli oli industriali</b><br><b>Industrial oil resistance</b>              | IEC CEI EN 60811-2-1   | IEC CEI EN 60811-2-1  |
| <b>Assorbimento d'acqua</b><br><b>Water absorption</b>                                  | IEC CEI EN 60811-1-3   | IEC CEI EN 60811-1-3  |
| <b>Resistenza elettrica</b><br><b>Electrical resistance</b>                             | ≤ 76 Ω/km  | ≤ 76 Ω/km   |
| <b>Capacità mutua a 1 kHz</b><br><b>Mutual capacitance at 1 kHz</b>                     | ≤ 30 pF/m  | ≤ 30 pF/m   |

Approvato DESINA.  
Approvato UL/CSA:  
80°C 1000V style 21179

DESINA Approved.  
UL and CSA approvals:  
80°C 1000V style 21179



| codice<br>code | formazione<br>assembly | diametro<br>esterno<br>outer<br>diameter<br>[mm] | massa Cu<br>[Kg/km] | massa<br>cavo<br>cable<br>mass<br>[Kg/km] |
|----------------|------------------------|--|---------------------|---|
| B1223          | 1x2x0,64               | Max 8,0  | 25                  | 79,0                                      |

| Dati tecnici  |   | Technical data             |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
|---|---|----------------------------|------------------------------|---------|------|---------|------|-------|-----|--------|-----|---------|-----|---|----------------------------|--|-----------------|-----------------------------|---------|------|-------|-----|--------|-----|---------|-----|----|----|--|----|
| <b>Impedenza caratteristica</b><br><b>Characteristic impedance</b>                            | 150 ± 15 Ω  | 150 ± 15 Ω                 |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| <b>Attenuazione</b><br><b>Attenuation</b>   | <table border="1"> <thead> <tr> <th>Frequenza [MHz]</th> <th>Attenuazione massima [dB/km]</th> </tr> </thead> <tbody> <tr><td>0,25</td><td></td></tr> <tr><td>0,625</td><td>6</td></tr> <tr><td>1,25</td><td>9</td></tr> <tr><td>3,125</td><td>12</td></tr> <tr><td>16</td><td>18</td></tr> <tr><td></td><td>40</td></tr> </tbody> </table> | Frequenza [MHz]            | Attenuazione massima [dB/km] | 0,25    |      | 0,625   | 6    | 1,25  | 9   | 3,125  | 12  | 16      | 18  |   | 40                         | <table border="1"> <thead> <tr> <th>Frequency [MHz]</th> <th>Maximum attenuation [dB/km]</th> </tr> </thead> <tbody> <tr><td>0,25</td><td></td></tr> <tr><td>0,625</td><td>6</td></tr> <tr><td>1,25</td><td>9</td></tr> <tr><td>3,125</td><td>14</td></tr> <tr><td>16</td><td>23</td></tr> <tr><td></td><td>47</td></tr> </tbody> </table> | Frequency [MHz] | Maximum attenuation [dB/km] | 0,25    |      | 0,625 | 6   | 1,25   | 9   | 3,125   | 14  | 16 | 23 |  | 47 |
| Frequenza [MHz]   | Attenuazione massima [dB/km]  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| 0,25  |   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| 0,625   | 6   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| 1,25  | 9   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| 3,125   | 12  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| 16  | 18  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
|   | 40  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| Frequency [MHz]   | Maximum attenuation [dB/km]   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| 0,25  |   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| 0,625   | 6   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| 1,25  | 9   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| 3,125   | 14  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| 16  | 23  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
|   | 47  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| <b>Sbilancio capacitivo verso terra</b><br><b>Capacitance earth unbalance</b>                 | ≤ 1500 pF/m   | ≤ 1500 pF/m                |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| <b>Massima lunghezza di trasmissione per tratta</b><br><b>Maximum length for each segment</b> | <table border="1"> <thead> <tr> <th>Transmission rate [kbit/s]</th> <th>Lunghezza [m]</th> </tr> </thead> <tbody> <tr><td>≤ 93,75</td><td>1200</td></tr> <tr><td>≤ 187,5</td><td>1000</td></tr> <tr><td>≤ 500</td><td>400</td></tr> <tr><td>≤ 1500</td><td>200</td></tr> <tr><td>≤ 12000</td><td>100</td></tr> </tbody> </table>            | Transmission rate [kbit/s] | Lunghezza [m]                | ≤ 93,75 | 1200 | ≤ 187,5 | 1000 | ≤ 500 | 400 | ≤ 1500 | 200 | ≤ 12000 | 100 | <table border="1"> <thead> <tr> <th>Transmission rate [kbit/s]</th> <th>Length [m]</th> </tr> </thead> <tbody> <tr><td>≤ 93,75</td><td>1200</td></tr> <tr><td>≤ 187,5</td><td>1000</td></tr> <tr><td>≤ 500</td><td>400</td></tr> <tr><td>≤ 1500</td><td>200</td></tr> <tr><td>≤ 12000</td><td>100</td></tr> </tbody> </table> | Transmission rate [kbit/s] | Length [m]   | ≤ 93,75         | 1200                        | ≤ 187,5 | 1000 | ≤ 500 | 400 | ≤ 1500 | 200 | ≤ 12000 | 100 |    |    |  |    |
| Transmission rate [kbit/s]  | Lunghezza [m]   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| ≤ 93,75   | 1200  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| ≤ 187,5   | 1000  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| ≤ 500   | 400   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| ≤ 1500  | 200   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| ≤ 12000   | 100   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| Transmission rate [kbit/s]  | Length [m]  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| ≤ 93,75   | 1200  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| ≤ 187,5   | 1000  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| ≤ 500   | 400   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| ≤ 1500  | 200   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |
| ≤ 12000   | 100   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |  |                 |                             |         |      |       |     |        |     |         |     |    |    |  |    |



Cable for chain



# UNIDRAL<sup>®</sup> BUS 1000M

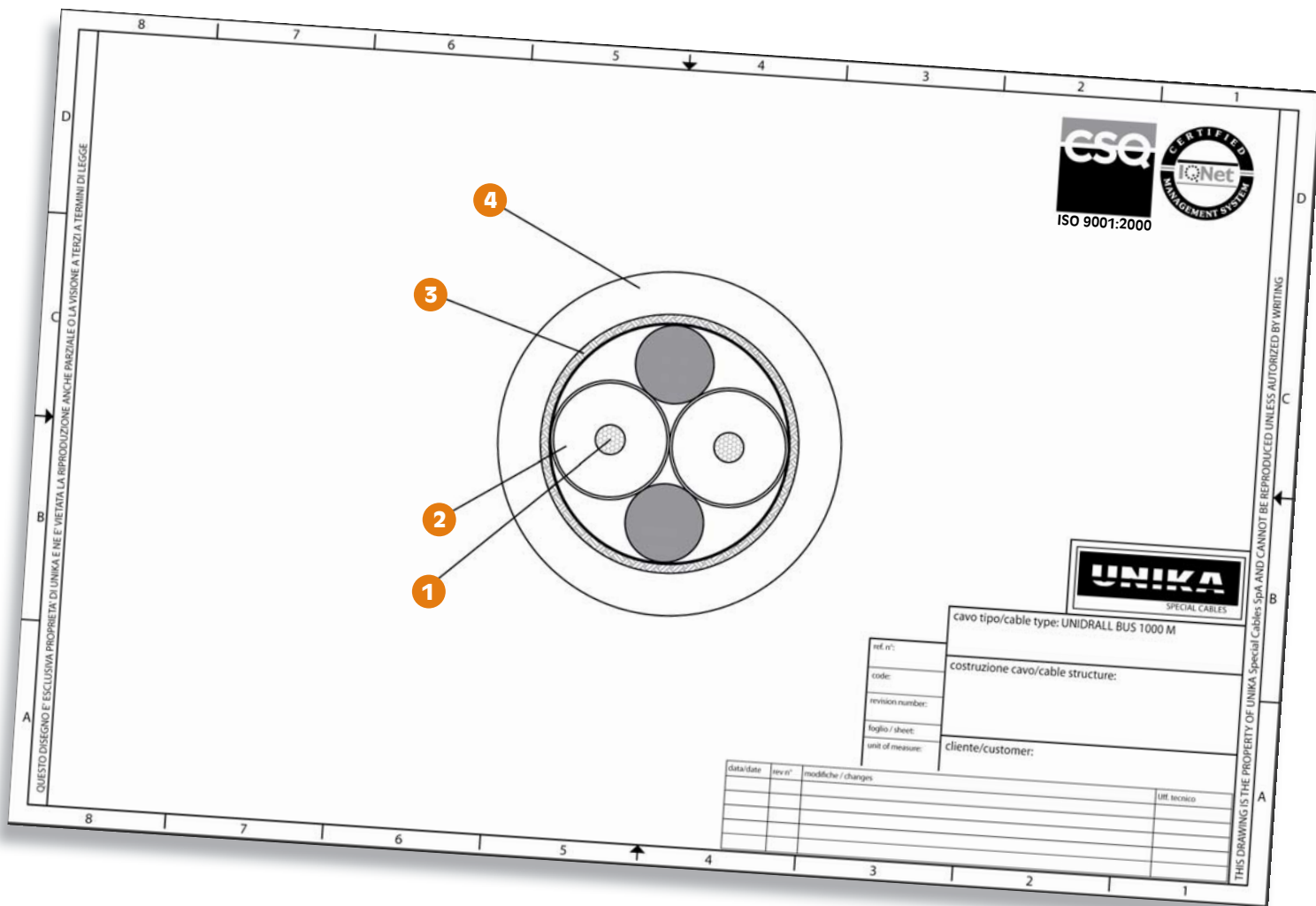
Cavi PROFIBUS per posa mobile in catena con alte prestazioni  
PROFIBUS cables for dynamic installation into chain with high performance

UNIKA UNIDRAL BUS 1000M cULus AWM style 21576 80°C 1000V FT-2 CE

|  | Dati tecnici  | Technical data   |
|--|---|--|
| <b>Conduttore</b><br><b>Conductor</b>  | 1 Rame rosso secondo CEI EN 60228 (CEI 20-29) classe 6                                | Bare copper complying with CEI EN 60228 (CEI 20-29) class 6                                  |
| <b>Isolamento ed identificazione anime</b><br><b>Insulation and core identification</b>                      | 2 PE espanso con skin in HDPE. Anime colorate verde e rosso                           | Foam PE with HDPE skin. Core colours: green and red  |
| <b>Schermatura totale</b><br><b>Overall shielding</b>  | 3 Treccia di fili di rame stagnato avente copertura maggiore 85%.                     | Tinned copper wire braid having coverage above 85%.  |
| <b>Guaina</b><br><b>Jacket</b>   | 4 PUR secondo UL 1581 and CSA C22.2 n°210. Colore viola RAL 4001                      | PUR according to UL1581 and C22.2 n°210. Colour violet RAL 4001                              |
| <b>Tensione di lavoro</b><br><b>Operating voltage</b>  | 30 V  | 30 V   |
| <b>Tensione di prova</b><br><b>Test voltage</b>  | 1000 V  | 1000 V   |
| <b>Resistenza di isolamento</b><br><b>Insulation resistance</b>  | > 200 MΩ·km   | > 200 MΩ·km  |
| <b>Temperatura di lavoro</b><br><b>Operating temperature</b>   | Posa fissa<br>-30 ÷ 80 °C<br><br>Posa flessibile<br>-5 ÷ 80 °C                        | Fixed installation<br>-30 ÷ 80 °C<br><br>Flexible installation<br>-30 ÷ 80 °C                |
| <b>Velocità [m/min]</b><br><b>Speed</b>  | 300   | 300  |
| <b>Accelerazione/ decelerazione [m/s<sup>2</sup>]</b><br><b>Acceleration/ deceleration [m/s<sup>2</sup>]</b> | 40  | 40   |
| <b>Raggio minimo di curvatura</b><br><b>Minimum bending radius</b>   | Posa fissa<br>5 x diametro esterno<br><br>Posa flessibile<br>10 x diametro esterno    | Fixed installation<br>5 x outer diameter<br><br>Flexible installation<br>10 x outer diameter |
| <b>Comportamento al fuoco</b><br><b>Fire behaviour</b>   | Prova di non propagazione fiamma UL 758 e prova FT-2 CSA C.22.2 n°210, CEI EN 60332-1 | Cable flame test per UL 758 and FT-2 test per CSA C.22.2 n°210, CEI EN 60332-1               |
| <b>Emissione gas alogenidrici</b><br><b>Halogen gas emission</b>   | ≤ 0,5% IEC 60754, CEI EN 50267-2  | ≤ 0,5% IEC 60754, CEI EN 50267-2   |
| <b>Resistenza agli oli industriali</b><br><b>Industrial oil resistance</b>                                   | <b>OIL 80° C</b> UL 758 table 15.1, HD 22.10  | <b>OIL 80° C</b> UL 758 table 15.1, HD 22.10   |
| <b>Assorbimento d'acqua</b><br><b>Water absorption</b>   | IEC CEI EN 60811-1-3  | IEC CEI EN 60811-1-3   |
| <b>Resistenza elettrica</b><br><b>Electrical resistance</b>  | ≤ 57,5 Ω/km   | ≤ 76 Ω/km  |

Approvato DESINA.  
Approvato UL/CSA:  
80°C 1000V style 21576

DESINA Approved.  
UL and CSA approvals:  
80°C 1000V style 21576



| codice code | formazione assembly | diametro outer diameter [mm] | massa Cu [Kg/km] | massa cavo cable mass [Kg/km] |
|-------------|---------------------|------------------------------|------------------|-------------------------------|
| B1423       | 1x2x0,64            | Max 8,0                      | 37,0             | 96,5                          |

| Dati tecnici  |  | Technical data             |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
|---|--|----------------------------|------------------------------|---------|------|---------|------|-------|-----|--------|-----|---------|-----|---|----------------------------|-----------------------------|---------|------|---------|------|-------|-----|--------|-----|---------|-----|--|
| <b>Capacità mutua a 1 kHz</b><br><b>Mutual capacitance at 1 kHz</b>                           | ≤ 30 pF/m  | ≤ 30 pF/m                  |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| <b>Impedenza caratterisitica</b><br><b>Characteristic impedance</b>                           | 150 ± 15 Ω   | 150 ± 15 Ω                 |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| <b>Attenuazione</b><br><b>Attenuation</b>   | <table border="1"> <thead> <tr> <th>Frequenza [MHz]</th> <th>Attenuazione massima [dB/km]</th> </tr> </thead> <tbody> <tr><td>0,25</td><td>6</td></tr> <tr><td>0,625</td><td>9</td></tr> <tr><td>1,25</td><td>14</td></tr> <tr><td>3,125</td><td>23</td></tr> <tr><td>16</td><td>47</td></tr> </tbody> </table>                  | Frequenza [MHz]            | Attenuazione massima [dB/km] | 0,25    | 6    | 0,625   | 9    | 1,25  | 14  | 3,125  | 23  | 16      | 47  | <table border="1"> <thead> <tr> <th>Frequency [MHz]</th> <th>Maximum attenuation [dB/km]</th> </tr> </thead> <tbody> <tr><td>0,25</td><td>6</td></tr> <tr><td>0,625</td><td>9</td></tr> <tr><td>1,25</td><td>14</td></tr> <tr><td>3,125</td><td>23</td></tr> <tr><td>16</td><td>47</td></tr> </tbody> </table>                | Frequency [MHz]            | Maximum attenuation [dB/km] | 0,25    | 6    | 0,625   | 9    | 1,25  | 14  | 3,125  | 23  | 16      | 47  |  |
| Frequenza [MHz]   | Attenuazione massima [dB/km]   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| 0,25  | 6  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| 0,625   | 9  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| 1,25  | 14   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| 3,125   | 23   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| 16  | 47   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| Frequency [MHz]   | Maximum attenuation [dB/km]  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| 0,25  | 6  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| 0,625   | 9  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| 1,25  | 14   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| 3,125   | 23   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| 16  | 47   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| <b>Sbilancio capacitivo verso terra</b><br><b>Capacitance earth unbalance</b>                 | ≤ 1500 pF/m  | ≤ 1500 pF/m                |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| <b>Massima lunghezza di trasmissione per tratta</b><br><b>Maximum length for each segment</b> | <table border="1"> <thead> <tr> <th>Transmission rate [kbit/s]</th> <th>Lunghezza [m]</th> </tr> </thead> <tbody> <tr><td>≤ 93,75</td><td>1200</td></tr> <tr><td>≤ 187,5</td><td>1000</td></tr> <tr><td>≤ 500</td><td>400</td></tr> <tr><td>≤ 1500</td><td>200</td></tr> <tr><td>≤ 12000</td><td>100</td></tr> </tbody> </table> | Transmission rate [kbit/s] | Lunghezza [m]                | ≤ 93,75 | 1200 | ≤ 187,5 | 1000 | ≤ 500 | 400 | ≤ 1500 | 200 | ≤ 12000 | 100 | <table border="1"> <thead> <tr> <th>Transmission rate [kbit/s]</th> <th>Length [m]</th> </tr> </thead> <tbody> <tr><td>≤ 93,75</td><td>1200</td></tr> <tr><td>≤ 187,5</td><td>1000</td></tr> <tr><td>≤ 500</td><td>400</td></tr> <tr><td>≤ 1500</td><td>200</td></tr> <tr><td>≤ 12000</td><td>100</td></tr> </tbody> </table> | Transmission rate [kbit/s] | Length [m]                  | ≤ 93,75 | 1200 | ≤ 187,5 | 1000 | ≤ 500 | 400 | ≤ 1500 | 200 | ≤ 12000 | 100 |  |
| Transmission rate [kbit/s]  | Lunghezza [m]  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| ≤ 93,75   | 1200   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| ≤ 187,5   | 1000   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| ≤ 500   | 400  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| ≤ 1500  | 200  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| ≤ 12000   | 100  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| Transmission rate [kbit/s]  | Length [m]   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| ≤ 93,75   | 1200   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| ≤ 187,5   | 1000   |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| ≤ 500   | 400  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| ≤ 1500  | 200  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |
| ≤ 12000   | 100  |                            |                              |         |      |         |      |       |     |        |     |         |     |   |                            |                             |         |      |         |      |       |     |        |     |         |     |  |