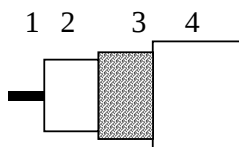


|                                                                                   |                             |  |         |                   |
|-----------------------------------------------------------------------------------|-----------------------------|--|---------|-------------------|
|  | <b>TECHNICAL DATA SHEET</b> |  | code    | <b>MRG5801</b>    |
|                                                                                   |                             |  | version | <b>1</b>          |
|                                                                                   | <b>Coax cable</b>           |  | date    | <b>2006-03-29</b> |
|                                                                                   | <b>RG58 C/U LSF</b>         |  | page    | <b>1/2</b>        |

## APPLICATION

Coaxial communication cable based on MIL-C-17.

## CONSTRUCTION



- |   |                 |                                              |
|---|-----------------|----------------------------------------------|
| 1 | Inner conductor | Stranded tinned copper                       |
| 2 | Dielectric      | Solid PE                                     |
| 3 | Braid           | Annealed tinned copper                       |
| 4 | Sheath          | LSNH according the European Standard HD 624. |

## REQUIREMENTS AND TEST METHODS

Test methods in accordance with European standard EN 50289.

### Mechanical characteristics

1. Inner conductor:
 

|           |                        |
|-----------|------------------------|
| Diameter: | 19 x 0.18 mm ± 0.02 mm |
|-----------|------------------------|
2. Dielectric:
 

|           |                   |
|-----------|-------------------|
| Diameter: | 2.95 mm ± 0.15 mm |
|-----------|-------------------|
3. Outer conductor:
 

|                  |                 |
|------------------|-----------------|
| Diameter screen: | 3.5 mm ± 0.2 mm |
| Coverage braid:  | 93 % ± 4 %      |
4. Sheath:
 

|                      |                         |
|----------------------|-------------------------|
| Diameter:            | 4.95 mm ± 0.2 mm        |
| Tensile strength:    | ≥ 9.0 N/mm <sup>2</sup> |
| Elongation at break: | ≥ 125 %                 |
5. Cable:
 

|                                       |                     |
|---------------------------------------|---------------------|
| Crush resistance of cable:            | < 1% (load of 700N) |
| Temperature range -storage/operating: | -15°C to +70°C      |
| Temperature range -installation:      | -5 °C to + 50°C     |
| Minimum static bend radius:           | 25 mm               |
| Total weight:                         | 38 kg/km            |

|                                                                                                                    |                      |  |         |            |
|--------------------------------------------------------------------------------------------------------------------|----------------------|--|---------|------------|
| <br>SENDING ALL THE RIGHT SIGNALS | TECHNICAL DATA SHEET |  | code    | MRG5801    |
|                                                                                                                    |                      |  | version | 1          |
|                                                                                                                    | Coax cable           |  | date    | 2006-03-29 |
|                                                                                                                    | RG58 C/U LSF         |  | page    | 2/2        |

### Electrical characteristics

|                                  |                                       |
|----------------------------------|---------------------------------------|
| Mean characteristic impedance:   | $50 \pm 2 \Omega$                     |
| Regularity of impedance:         | $> 40 \text{ dB}$                     |
| DC resistance inner conductor:   | $\leq 36 \Omega/\text{km}$            |
| Capacitance:                     | $100 \text{ pF/m} \pm 2 \text{ pF/m}$ |
| Nominal velocity of propagation: | 66 %                                  |
| Insulation resistance:           | $> 10^4 \text{ M}\Omega.\text{km}$    |
| Voltage Rating                   |                                       |
| DC:                              | 4 kVdc                                |
| RMS                              | 2kVrms                                |

|                |               |                        |
|----------------|---------------|------------------------|
| Return loss at | 5-30 MHz:     | $\geq 20 \text{ dB}^*$ |
|                | 30-470 MHz:   | $\geq 20 \text{ dB}^*$ |
|                | 470-1000 MHz: | $\geq 18 \text{ dB}^*$ |

\*Max. 3 peak values 4 dB lower than specified.

### Nominal Attenuation:

|           |              |
|-----------|--------------|
| 10 MHz:   | 4.5 dB/100m  |
| 200 MHz:  | 22.0 dB/100m |
| 400 MHz:  | 32.0 dB/100m |
| 1000 MHz: | 50.0 dB/100m |
| 2400 MHz: | 79.0 dB/100m |
| 3000 MHz: | 88.0 dB/100m |



Belden CDT believes this product to be in compliance with the environmental regulations EU RoHS (Directive 2002/95/EC, 27 January 2003); this is valid for all material produced after the RoHS compliant date for this product.