

|   |                                  |                        |
|---|----------------------------------|------------------------|
| <b>Cable type</b><br><b>Size: 1.02/4.55</b> | <b>standard</b><br><b>aerial</b> | <b>7CW05CRT5(V)-HS</b> |
|---|----------------------------------|------------------------|

|                           | Units | Nominal                  |
|---------------------------|-------|--------------------------|
| <b>Construction</b>       |       |                          |
| <b>INNER CONDUCTOR</b>    |       |                          |
| Material and construction | -     | copper clad steel wire   |
| Diameter                  | mm    | 1.02                     |
| <b>DIELECTRIC</b>         |       |                          |
| Material                  | -     | gas-injected cellular PE |
| Diameter                  | mm    | 4.55                     |
| <b>OUTER CONDUCTOR</b>    |       |                          |
| Material and construction | -     | aluminium tape & braid   |
| Diameter over tape        | mm    | 4.8                      |
| <b>OUTER SHEATH</b>       |       |                          |
| Material                  | -     | PE (PVC)                 |
| Thickness                 | mm    | 0.8                      |
| Overall diameter          | mm    | 7.0 < 7.4                |

| <b>Cable with messenger</b> |         |   |
|-----------------------------|---------|---|
| <b>MESSENGER</b>            |         |   |
| Material                    | -       | - |
| Construction                | .. X mm | - |
| Diameter over messenger     | mm      | - |
| <b>OVERALL DIMENSIONS</b>   | mm      | - |

| <b>Mechanical characteristics</b>            |      |       |     |
|--|------|-------|-----|
| Minimum bending radius                       |      |       |     |
|  | 1 x  | cm    | 3.5 |
|  | 10 x | cm    | 7   |
| Maximum pulling strength (without messenger) |      | daN   | 20  |
| Weight                                       |      | kg/km | 53  |

| <b>Cable with messenger</b>             |  |                     |                      |
|---|--|---------------------|----------------------|
| Minimum breaking strength of messenger  |  | daN                 | -                    |
| Modulus of elasticity                   |  | daN/mm <sup>2</sup> | -                    |
| Thermal coefficient of linear expansion |  | 1/°C                | - x 10 <sup>-6</sup> |
| Weight                                  |  | kg/km               | -                    |

| <b>Electrical characteristics</b>                            |               |  |               |
|--|---------------|--|---------------|
| Characteristic impedance                                     |               | Ω  | 75 +/- 3      |
| Capacity   |               | pF/m   | 54            |
| Relative propagation velocity (velocity ratio)               |               | %  | 82            |
| DC-resistance of inner conductor at 20°C                     |               | Ω/km   | 51.6          |
| DC-resistance of outer conductor at 20°C                     |               | Ω/km   | 9.1           |
| Current rating (50 - 60) Hz                                  |               | A  | 0.5           |
| Dielectric voltage strength                                  |               | kV   | 1             |
| Longitudinal attenuation at 20°C                             |               | $\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$ |               |
|  | a =           | -  | 0.624         |
|  | b =           | -  | 0.0015        |
|  | 5 MHz         | dB/100m  | 1.40 < 1.54   |
|  | 10 MHz        | dB/100m  | 1.99 < 2.19   |
|  | 30 MHz        | dB/100m  | 3.46 < 3.81   |
|  | 50 MHz        | dB/100m  | 4.49 < 4.94   |
|  | 100 MHz       | dB/100m  | 6.39 < 7.03   |
|  | 200 MHz       | dB/100m  | 9.12 < 10.04  |
|  | 300 MHz       | dB/100m  | 11.26 < 12.38 |
|  | 400 MHz       | dB/100m  | 13.08 < 14.39 |
|  | 470 MHz       | dB/100m  | 14.23 < 15.66 |
|  | 600 MHz       | dB/100m  | 16.18 < 17.80 |
|  | 800 MHz       | dB/100m  | 18.85 < 20.73 |
|  | 860 MHz       | dB/100m  | 19.59 < 21.55 |
|  | 1000 MHz      | dB/100m  | 21.23 < 23.36 |
|  | 1750 MHz      | dB/100m  | 28.73 < 31.60 |
|  | 2150 MHz      | dB/100m  | 32.16 < 35.37 |
|  | 2400 MHz      | dB/100m  | 34.17 < 37.59 |
| Return loss (3 peak values up to 4 dB lower are permissible) |               |  |               |
|  | 5 - 470 MHz   | dB   | > 20          |
|  | 470 - 862 MHz | dB   | > 18          |
| Screening attenuation (30 - 1000 MHz)                        |               | dB   | > 90          |
| Transfer impedance (5 - 30 MHz)                              |               | m Ω/m  | < 5           |
| EN 50117 screening class                                     |               | -  | Class A       |