## Coax4 CT 22 S (2.2/8.8) with messenger

## CATV Aerial Cable



## Application

CATV cables with messenger element are used as aerial cables in CATV and broadband networks between headend and subscriber termination point. They are suitable for direct exposure to sun and rain and also for direct buried and duct laying.

## Standards

Screening Class A++ acc. to EN 50117-2-3,
further EN 50083-2/A1, EN 50117-1

## Construction

| Inner conductor | bare copper wire, diameter 2.2 mm |
| :--- | :--- |
| Insulation | gas injected foam PE, diameter 8.8 mm |
| Outer conductor | welded copper tube, diameter 9.5 mm |
| Sheath | element sheath: PE, diameter $12.3 \pm 0.3 \mathrm{~mm}$, black <br> overall sheath: PE, figure -8 with messenger, black, dimension approx. $13.7 \mathrm{~mm} \times 22.2 \mathrm{~mm}$ <br> Suspension wire <br> Stranded galvanized steel wires, $7 \times 1.0$ mm, diameter 3.0 mm |

Mechanical properties

| Minimum bending radius | without load | $10 \times \mathrm{D}$ ( $\mathrm{D}=$ outer diameter) |
| :--- | :--- | :--- |
|  | with load | $15 \times \mathrm{D}(\mathrm{D}=$ outer diameter) |
| Temperature range | during operation | $-40^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ |
|  | during storage | $-40^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ |
|  | during installation | $-5^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$ |
| Minimum breaking strength of suspension <br> wire |  | 7160 N |

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Electrical properties
at $20^{\circ} \mathrm{C}$

| DC resistance | Inner conductor | $4.8 \Omega / \mathrm{km}$ |
| :--- | :--- | :--- |
|  | Outer conductor | $2.6 \Omega / \mathrm{km}$ |
| Mutual capacitance |  | $50 \mathrm{pF} / \mathrm{m}$ |
| Characteristic impedance |  | $75 \Omega \pm 2 \Omega$ |
| Velocity ratio |  | $88 \%$ |
| Screening factor | $30 \mathrm{MHz}-1000 \mathrm{MHz}$ | $>120 \mathrm{~dB}$ |
| Transfer impedance | $5 \mathrm{MHz}-30 \mathrm{MHz}$ | $<0.8 \mathrm{~m} \Omega / \mathrm{m}$ |
| Electrical strength | Dielectric | 2 kV DC 1 min |
|  | Sheath | 3.75 kV DC 1 min |

Electrical data
at $20^{\circ} \mathrm{C}$

| Attenuation <br> (dB/100m) | Return loss <br> $(\mathrm{dB})$ |  |  |
| :--- | :--- | :--- | :--- |
| Frequency (MHz) | Frequency (MHz) |  |  |
|  | nominal |  |  |
| 5 | 0.65 | $5-30$ | $>26$ |
| 50 | 2.0 | $30-470$ | $>26$ |
| 100 | 2.9 | $470-1000$ | $>23$ |
| 200 | 4.2 |  |  |
| 400 | 6.0 |  |  |
| 800 | 8.7 |  |  |
| 862 | 9.1 |  |  |
| 950 | 9.6 |  |  |
| 1350 | 11.3 |  |  |
| 1750 | 13.3 |  |  |
| 2150 | 15.1 |  |  |
| 3000 | 18.0 |  |  |

Group

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## Technical data

| Product <br> code | Cable type | Weight <br> $\mathrm{Kg} / \mathrm{km}$ | Standard <br> delivery length <br> m | Drum size <br> $*$ OWD | Copper <br> content | Tensile <br> force <br> N | Bending <br> radius <br> mm | Storage <br> 1003606 <br> 60016728Coax4 CT 22 S TS PE <br> bk |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

*OWD (one-way drum)


| Diameter in mm | $2.2 / 8.8-\mathrm{TS}$ |  |
| :--- | :--- | :---: |
| Inner conductor | 2.2 |  |
| Insulation | (F) | 9.8 |
| Outer conductor | (G) | 13.7 |
| Sheath | (B) | 3.0 |
| Bridge height | (C) | 2.5 |
| Bridge width | (E) | 3.0 |
| Suspension wire | (D) | 5.5 |
| Wire sheath | (A) | 22.2 |
| Total |  |  |

[PRODUCT CODE TABLE]
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