Fiber-optic & hybrid cables

2824RW SMPTE 311M CMR

3-channel Hybrid Camera Cable

SMPTE 311M / UL 1666 CMR · 300/600 V · −40…+70 °C · Min. bend 10 × OD

SMPTE 311M / UL 1666 CMR | 300/600 V



Application

SMPTE 311M / UL 1666 CMR (300/600 V, -40 to +70 °C) 3-channel waterblocked hybrid single-mode OS2 (G.657.A2) optical fiber and foil-shielded copper quad camera trunk.

Typical uses: Industrial automation & control cabinets, Inverter-fed motor drive systems, Process instrumentation & oil/gas skids, Machine tools & robotic cells, Data centers, stadiums & broadcast facilities

Construction





Cross-section, not to scale

1	3 Foil-Shielded Copper Quads (6×18 + 6×24 AWG)	3 Quads × (2×18 AWG Aux + 2×24 AWG Ctrl + TC Drain)
2	6× OS2 (G.657.A2) Tight-Buffered Optical Subunits	6× 900 µm Singlemode Fibers + Aramid + 2.1mm PVC Jackets
3	Individual 100% Aluminum/Polyester Quad Shields	3× Individual Quad Foil Shields + Tinned Cu Drain Wires
4	Polymeric Fillers + Water-Blocking Tape Wrap	Central & Interstitial Fillers + Dry Waterblocking Tape
5	Sunlight & Water-Resistant Black CPE Outer Jacket	UL 1666 CMR Chlorinated Elastomer (CPE) Sheath (22.6 mm OD)

Technical data

Typical values

Nominal / reference voltage	300/600 V	Conductor & core insulation	3 Quads × (2×18 AWG Aux + 2×24 AWG Ctrl + TC Drain) · 6× 900 µm Singlemode Fibers + Aramid + 2.1mm PVC Jackets
Routine dielectric / continuity test	100% factory drum spark & continuity verified	Operating temperature range	−40…+70 °C
Short-circuit / peak thermal limit	+160 °C to +250 °C (5 s conductor thermal limit)	Flame & fire performance	SMPTE 311M / UL 1666 CMR
Minimum bending radius	10 × OD	Screening / armour architecture	3× Individual Quad Foil Shields + Tinned Cu Drain Wires
Outer sheath material & colour	UL 1666 CMR Chlorinated Elastomer (CPE) Sheath (22.6 mm OD)	Standards	SMPTE 311M / ITU-T G.657.A2 / IEC 60794 / UL 1666 CMR

Sizes

3 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Part designation	Configuration	Conductor & shield	Insulation / wall	Outer sheath	Outer diameter mm	Min. bend radius mm	Max. conductor resistance @ 20 °C Ω/km	Copper weight kg/km	Cable weight kg/km	Key electrical /
2824RW SMPTE 311M CMR 3 sizes										
☐ 2824RW 3-Ch (6F OS2 + 6×18 AWG + 6×24 AWG)	6F OS2 + 3 Quads (6×18 + 6×24 AWG)	OS2 G.657.A2 + Tinned Cu Quads + Foil + Waterblock	6× 900 µm Singlemode Fibers + Aramid + 2.1mm PVC Jackets	CPE Elastomer	22.6	226	21.40	68.0	565	≤ 0.40 dB/km @
☐ 2824RW-2 2-Ch (4F OS2 + 4×18 AWG + 4×24 AWG)	4F OS2 + 2 Quads (4×18 + 4×24 AWG)	OS2 G.657.A2 + Tinned Cu Quads + Foil + Waterblock	6× 900 µm Singlemode Fibers + Aramid + 2.1mm PVC Jackets	CPE Elastomer	19.4	194	21.40	45.5	390	≤ 0.40 dB/km @
☐ 2824RW-4 4-Ch (8F OS2 + 8×18 AWG + 8×24 AWG)	8F OS2 + 4 Quads (8×18 + 8×24 AWG)	OS2 G.657.A2 + Tinned Cu Quads + Foil + Waterblock	6× 900 µm Singlemode Fibers + Aramid + 2.1mm PVC Jackets	CPE Elastomer	25.8	258	21.40	91.0	740	≤ 0.40 dB/km @

– Dimensions and weights are nominal manufacturing targets subject to standard production tolerances.

Standards and approvals

- ✓ SMPTE 311M / UL 1666 CMR Compliant
- ✓ EN 10204 3.1 Factory Test Certificate
- ✓ CE, RoHS 2 (2011/65/EU) & REACH

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone **+86 185 9591 3361**

Email **info@tebaoflex.com**

Web **tebaoflex.com/cables/2824rw-smpte-311m-cmr-waterblocked-hybrid-camera-cable**

Typical values for this cable type, based on Reference specification per SMPTE 311M / UL 1666 CMR (2824RW SMPTE 311M CMR). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.