Marine Coaxial Communication Cable

50 / 75 Ω · IEC 60092-373

A coaxial construction for radar, satellite and radio links where attenuation, screening effectiveness and flame performance all have to be met at once.

IMPEDANCE	DIELECTRIC	SCREEN	STANDARD
50 / 75 Ω	Foam PE / PTFE	Foil + braid	IEC 60092-373

TYPICAL APPLICATIONS

- Shipborne radar systems
- Satellite communication terminals
- VHF and UHF radio links
- On-board RF and antenna distribution

CONSTRUCTION

- Solid or stranded copper inner conductor
- Foamed PE or solid PTFE dielectric
- Aluminium foil plus tinned-copper braid screen
- LSZH or SHF1 sheath
- Flame retardant to IEC 60332-1-2
- Connector compatibility confirmed to project

TECHNICAL DATA

Impedance	50 Ω or 75 Ω	**Sheath**	LSZH or SHF1 compound
Inner conductor	Solid or stranded copper, copper-clad aluminium	**Frequency range**	Up to 6 GHz depending on construction
Dielectric	Foamed PE or solid PTFE	**Velocity of propagation**	Approximately 80–85% for foamed dielectric
Screen	Aluminium foil plus tinned-copper braid	**Construction standard**	IEC 60092-373, IEC 61196

Typical values. The final construction is confirmed on the order datasheet and the released drawing.

STANDARDS, TESTING AND DOCUMENTS

Routine tests	Conductor resistance, voltage test and insulation resistance on every length
Type tests	Type-test reports for each construction, witnessed by a third party on request
Documents with the drum	Packing list, drum list, routine test certificate, datasheet, CO / FORM A
Traceability	Drum number marked and recorded against the routine test certificate

PACKING AND DELIVERY

Drum	Wooden or steel-framed export drum, 250–500 m per drum by cross-section
Packing	Sealed ends, protected lugs, desiccant, UV-resistant wrap
Marking	Drum no., designation, voltage, cross-section, length, gross weight
Lead time	15–25 working days for standard builds
Terms	FOB Qingdao, Tianjin or Shanghai. CIF, CFR and DAP on request

HOW TO ORDER

To quote, send the voltage class (U0/U), conductor material and cross-section, screen or armour, sheath, drum length, delivery port and the standard the project specifies. We return a released drawing, the test programme and a drum plan with the quotation.

SELECTION NOTES

How is attenuation specified?
Attenuation is quoted in dB per 100 m at a stated frequency, normally 100 MHz, 400 MHz, 1 GHz and 2.4 GHz for marine radar and satellite runs. The required value follows from the transmitter power and the receiver sensitivity, not from the cable alone.

Can a 75 Ω cable replace a 50 Ω type?
No. Impedance mismatch at the connector and at the antenna introduces reflection loss. The cable impedance must match the radio equipment, which for marine radar and VHF is normally 50 Ω.

Is a foil-and-braid screen necessary?
For radar and satellite runs, yes. The foil gives continuous coverage at high frequency and the braid provides a low-resistance path and mechanical strength. A braid-only screen is used only for short, low-frequency runs.

Certification. Environmental management to ISO 14001:2015 and occupational health and safety to ISO 45001:2018, with CE marking under the EU low-voltage and EMC directives. Independent inspection and type testing are carried out through ISO/IEC 17020 and 17025 accredited laboratories. Certificate numbers and validity dates are published at www.zmsmarinecable.com/certificates/.

Request a quotation for this cable

Send the specification sheet or the cable schedule and we return a released drawing, the test programme and a drum plan with the price.

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