



industrial data rf cable series

LMR-400

Low-Loss 50 Ohm Double-Shielded Flexible RF Coaxial Cable

50 Ω $\varnothing$ 10.29 mm (.405") low-loss 85 % VoP double-shielded flexible RF coaxial cable

50 Ω · $\varnothing$ 10.29 mm (.405")

85 % VoP · > 90 dB Double Shield

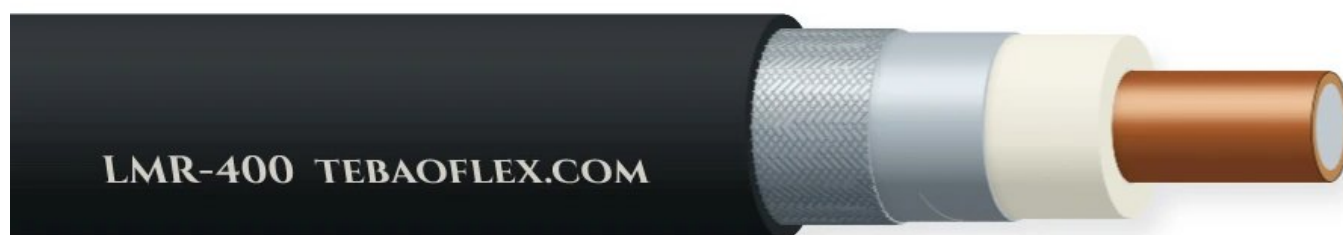
12.8 dB/100m @ 1 GHz

Application

50 Ω flexible low-loss RF coaxial cable (LMR-400) Drop-in RG-8/U and 9913 upgrade with a 2.74 mm BCCAI inner conductor, gas-injected foam PE dielectric (85 % VoP, 78.4 pF/m), bonded aluminum tape plus tinned copper braid (> 90 dB shielding), and UV PE jacket.

Typical uses: Cellular, Wi-Fi 6E & Private 5G Jumpers, SCADA, LoRaWAN & Utility Telemetry, GNSS / GPS Rooftop Timing Antennas, Marine & Port VTS / AIS Transponders, Amateur Radio & Defense Field Masts

Construction



Cross-section, not to scale

- 1 Copper-clad aluminum (BCCAI) center conductor
- 2 Gas-injected closed-cell foam PE dielectric
- 3 100 % bonded aluminum/polyester/aluminum tape
- 4 Tinned copper wire outer braid
- 5 UV-resistant PE, FR-LSZH or TPE outer jacket

Technical data

Typical values

Characteristic impedance	50 Ω $\pm$ 2 Ω	Velocity of propagation	85 % nominal (capacitance 78.4 pF/m, 3.92 ns/m)
Cutoff / max frequency	16.2 GHz cutoff · DC to 6 GHz operating	Attenuation @ 150 / 450 / 900 MHz	4.9 / 8.9 / 12.8 dB/100m
Attenuation @ 1.5 / 2.4 / 5.8 GHz	16.8 / 22.2 / 35.5 dB/100m	Conductor / shield DC resistance	4.56 Ω /km inner · 5.41 Ω /km outer shield
Operating temperature range	-40 °C to +85 °C	Peak RF power / voltage rating	16.0 kW peak · 2,500 V DC
Avg power @ 900 MHz / 2.4 GHz	0.58 kW / 0.33 kW CW at +40 °C	Inner / dielectric / braid $\varnothing$	2.74 mm / 7.24 mm / 8.13 mm
Overall jacket diameter	10.29 mm (0.405 in)	Min. bending radius	25.4 mm (1.0 in) single · 101.6 mm (4.0 in) repeated
Max. pulling tension	712 N (160 lbf) · Crush 0.71 kg/mm	Shielding effectiveness	> 90 dB (bonded Al tape + Sn-Cu braid)
Outdoor UV & water blocking	20-yr UV PE jacket · Flooded -DB water-blocked	Flame rating (-FR / -LLPL)	UL CMR / NEC Riser (-FR) · UL CMP Plenum (-LLPL)
Standards	IEC 61196-1 / MIL-DTL-17 (.405" footprint)		

Sizes

8 standard constructions

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

Order designation	Impedance / size	Conductor & dielectric	Wall $\approx$ mm	Outer $\varnothing \approx$ mm	Metal kg/km	Weight $\approx$ kg/km	Min. bend R fixed mm
Standard LMR-400 configurations 8 sizes							
☐ LMR-195	50 Ω · $\varnothing$ 4.95 mm (.195")	Cu $\varnothing$ 0.94 + Foam PE	0.64	4.95	18.0	30.0	13
☐ LMR-200	50 Ω · $\varnothing$ 4.95 mm (.195")	Cu $\varnothing$ 1.12 + Foam PE	0.64	4.95	20.0	33.0	13
☐ LMR-240	50 Ω · $\varnothing$ 6.10 mm (.240")	Cu $\varnothing$ 1.42 + Foam PE	0.84	6.10	29.0	50.0	19
☐ LMR-400 Standard PE	50 Ω · $\varnothing$ 10.29 mm (.405")	BCCAI $\varnothing$ 2.74 + Foam PE	1.08	10.29	52.0	101.0	25
☐ LMR-400-DB Flooded	50 Ω · $\varnothing$ 10.29 mm (DB)	BCCAI $\varnothing$ 2.74 + Gel/PE	1.08	10.29	52.0	108.0	25
☐ LMR-400-UF UltraFlex	50 Ω · $\varnothing$ 10.29 mm (TPE)	Stranded Cu $\varnothing$ 2.74 + TPE	1.08	10.29	72.0	130.0	25
☐ LMR-400-FR LSZH Riser	50 Ω · $\varnothing$ 10.29 mm (LSZH)	BCCAI $\varnothing$ 2.74 + LSZH	1.08	10.29	52.0	115.0	25
☐ LMR-600	50 Ω · $\varnothing$ 14.99 mm (.590")	BCCAI $\varnothing$ 4.47 + Foam PE	1.52	14.99	110.0	195.0	38

- Outer diameters and weights are nominal engineering values for LMR-400 subject to standard manufacturing tolerances per IEC 61196-1 / MIL-DTL-17 RG-8/213 Footprint (50 Ω Low-Loss Flexible Coax).

RF & electrical data

8 sizes

Configuration	Max. DC R @ 20 °C Ω /km	Char. Z0 Ω	Velocity VoP / L (% or nH/m)	Dielectric test V AC rms
LMR-195 (50 Ω · $\varnothing$ 4.95 mm (.195"))	24.90	50.0	80.0	1,500
LMR-200 (50 Ω · $\varnothing$ 4.95 mm (.195"))	17.60	50.0	83.0	1,500
LMR-240 (50 Ω · $\varnothing$ 6.10 mm (.240"))	10.50	50.0	84.0	1,500
LMR-400 Standard PE (50 Ω · $\varnothing$ 10.29 mm (.405"))	4.56	50.0	85.0	2,500
LMR-400-DB Flooded (50 Ω · $\varnothing$ 10.29 mm (DB))	4.56	50.0	85.0	2,500
LMR-400-UF UltraFlex (50 Ω · $\varnothing$ 10.29 mm (TPE))	4.79	50.0	85.0	2,500
LMR-400-FR LSZH Riser (50 Ω · $\varnothing$ 10.29 mm (LSZH))	4.56	50.0	85.0	2,500
LMR-600 (50 Ω · $\varnothing$ 14.99 mm (.590"))	1.74	50.0	87.0	4,000

- Characteristic impedance, propagation velocity, DC resistance at +20 °C, and dielectric withstand voltages verified per IEC 61196-1 / MIL-DTL-17 RG-8/213 Footprint (50 Ω Low-Loss Flexible Coax).

Standards and approvals

- ✓ IEC 61196-1 / MIL-DTL-17 RG-8/213 Footprint (50 Ω Low-Loss Flexible Coax)
- ✓ CE (2014/35/EU) & RoHS 3 (2015/863/EU) Compliant
- ✓ REACH SVHC Compliance Verified

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

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/lmr-400-low-loss-50-ohm-double-shielded-flexible-rf-coaxial-cable



Typical values for this cable type, based on IEC 61196-1 / MIL-DTL-17 RG-8/213 Footprint (50 Ω Low-Loss Flexible Coax). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.