



industrial data rf cable series

ControlNet RG-6 Quad-Shield

ed 75 Ω Industrial Coaxial Trunk Cable

75 Ω RG-6 quad-shielded industrial ControlNet coaxial trunk cable (5 Mbps, 82 % VoP)



IEC 61158 / ODVA ControlNet

75 $\Omega \pm 2 \Omega$ · Quad-Shield RG-6

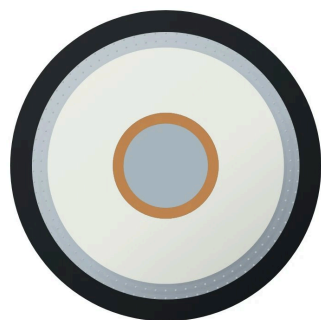
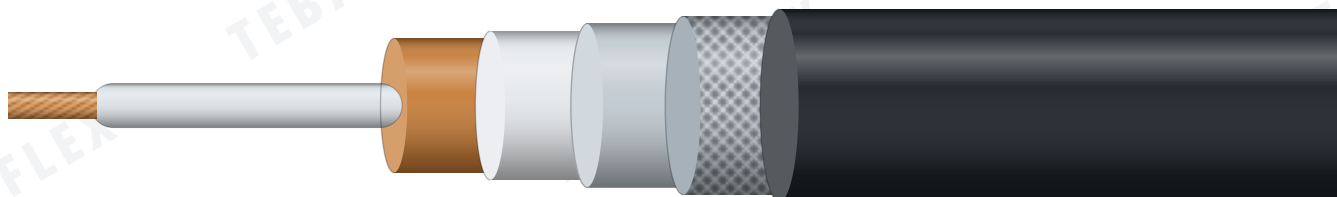
5 Mbps · 82% VoP

Application

75 Ω quad-shielded RG-6 industrial coaxial trunk and drop cable (3092A / 3092F) for Rockwell Allen-Bradley ControlNet (5 Mbps Manchester) with an 18 AWG CCS core, gas-injected foam PE (82 % VoP, 53.1 pF/m), and Duobond Plus dual-foil/dual-braid quad shield.

Typical uses: Process Automation & DCS Redundancy, Automotive Stamping & Paint Lines, Water & Wastewater Treatment Plants, Power Generation Turbine Control, Metallurgical Rolling Mills

Construction



Cross-section, not to scale

- 1 18 AWG copper-clad steel (CCS) conductor
- 2 Gas-injected foam polyethylene dielectric
- 3 Inner bonded aluminum/polyester/aluminum tape
- 4 Dual aluminum braids + second foil shield (Quad)
- 5 Industrial PVC, CPE, LSZH or FEP outer jacket

Technical data

Typical values

Characteristic impedance	75 $\Omega \pm 2 \Omega$	Nominal capacitance	53.1 pF/m (16.2 pF/ft)
Velocity of propagation	82 % nominal (4.06 ns/m delay)	Attenuation @ 1 / 5 / 10 MHz	1.18 / 2.20 / 2.95 dB/100m (3092A)
Conductor / shield DC resistance	91.9 Ω /km center · 17.7 Ω /km quad shield	Operating temperature (PVC)	-30 °C to +75 °C (3092A / 3092F)
Plenum FEP version (3093A)	-70 °C to +200 °C (UL CMP)	UL voltage rating	300 V RMS (UL CM / CL2)
Conductor / dielectric $\emptyset$	1.02 mm (18 AWG) / 4.57 mm foam PE	Overall diameter	7.57 mm (0.298 in) nominal
Min. bending radius	75 mm (10 × OD) installation	Max. pulling tension	614 N (138 lbf)
Flame retardancy	UL 1685 FT4 / UL CMG / IEC 60332-1-2	Sunlight & oil resistance	UL Oil Res I & UV sunlight resistant
Transfer impedance	Quad-shield Class A++ EMC isolation	Standards	IEC 61158 Type 2 / ODVA ControlNet

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 $\emptyset \approx$ mm	Metal kg/km	Weight $\approx$ kg/km	Min. bend R fixed mm
Standard ControlNet 3092A / 3092F configurations 8 sizes							
☐ 3092A Standard Trunk	75 Ω · 18 AWG Solid	Solid CCS $\emptyset$ 1.02 + Quad	0.95	7.57	32.0	61.0	75
☐ 3092F Flex Trunk	75 Ω · 18 AWG Flex	19×30 AWG + Quad Shield	0.95	7.62	33.0	63.0	76
☐ 3092A-CPE Chemical	75 Ω · 18 AWG CPE	Solid CCS + Quad + CPE	1.00	7.65	32.0	66.0	77
☐ 3093A Plenum FEP	75 Ω · 18 AWG FEP	Solid CCS + Quad + FEP	0.65	6.86	32.0	58.0	69
☐ 3092A-LSZH	75 Ω · 18 AWG LSZH	Solid CCS + Quad + LSZH	0.98	7.60	32.0	65.0	76
☐ 3094A RG-11 Long Trunk	75 Ω · 14 AWG Solid	Solid CCS $\emptyset$ 1.63 + Quad	1.20	10.30	58.0	112.0	103
☐ 3095A Armored Trunk	75 Ω · 18 AWG AIA	Solid CCS + Quad + Al Armor	1.35	11.80	52.0	145.0	118
☐ ControlNet Drop Coax	75 Ω · 20 AWG Flex	Stranded + Quad Tap Cord	0.85	6.90	28.0	52.0	55

– Outer diameters and weights are nominal engineering values for ControlNet 3092A / 3092F subject to standard manufacturing tolerances per IEC 61158 Type 2 / ODVA ControlNet (RG-6 75 Ω Quad-Shield 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
3092A Standard Trunk (75 Ω · 18 AWG Solid)	91.90	75.0	82.0	2,000
3092F Flex Trunk (75 Ω · 18 AWG Flex)	108.00	75.0	80.0	2,000
3092A-CPE Chemical (75 Ω · 18 AWG CPE)	91.90	75.0	82.0	2,000
3093A Plenum FEP (75 Ω · 18 AWG FEP)	91.90	75.0	83.0	2,000
3092A-LSZH (75 Ω · 18 AWG LSZH)	91.90	75.0	82.0	2,000
3094A RG-11 Long Trunk (75 Ω · 14 AWG Solid)	36.10	75.0	82.0	2,500
3095A Armored Trunk (75 Ω · 18 AWG AIA)	91.90	75.0	82.0	2,000
ControlNet Drop Coax (75 Ω · 20 AWG Flex)	138.00	75.0	80.0	1,500

– Characteristic impedance, propagation velocity, DC resistance at +20 °C, and dielectric withstand voltages verified per IEC 61158 Type 2 / ODVA ControlNet (RG-6 75 Ω Quad-Shield Coax).

Standards and approvals

- ✓ IEC 61158 Type 2 / ODVA ControlNet (RG-6 75 Ω Quad-Shield 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

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Web

tebaoflex.com/cables/controlnet-quad-shielded-75-ohm-industrial-coaxial-trunk-cable



Typical values for this cable type, based on IEC 61158 Type 2 / ODVA ControlNet (RG-6 75 Ω Quad-Shield Coax). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.