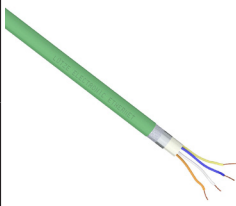
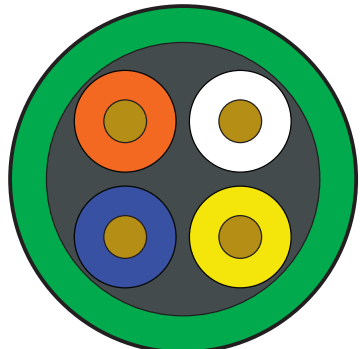


Profinet Type A Cable



SYSTEMATIC TECHNOLOGY

A104301-1 Cable Specifications						
	Part Number	Wire/Cable Type	Flexibility	Minimum Cut Length (ft) *	Approximate Weight (lb/ft)	Price per foot
	A104301-1	Profinet Type A	Flexible	20	0.04	\$1.37
Physical Properties						
Conductor Gauge		22 AWG	Conductor Stranding		solid bare copper	
Conductor Material		Bare Copper	Conductor Insulation Wall Thickness		0.015 in; nominal	
Conductor Assembly		1 star quad	Bare Conductor Diameter		0.029 in; nominal	
Color Code	Pair 1	White, Blue	Insulated Conductor Diameter		0.057 in; nominal	
	Pair 2	Yellow, Orange	Twisted Conductor Diameter		0.114 in; nominal	
	Pair 3	N/A	Overall Cable Diameter		0.256 in; nominal	
	Pair 4	N/A	Jacket Color		Green	
Voltage Rating		600V	Jacket Thickness		0.037 in; nominal	
Temperature Rating		-40 to 80 °C (-40 to 176 °F)	Jacket Material		PVC	
Plenum		No	Sunlight Resistant		Yes	
Shield		Overall Aluminized Polyester Foil And Tinned Copper Braid	Oil Resistance		Yes	
Drain		No	Flame Retardant		Yes	
Conductor Insulation Material		Special Polyolefin	Sample Print Legend		<LÜTZE logo> ELECTRONIC ETHERNET (C) PVC 104301 (2x2xAWG22/1) PROFINET TYPE A Cat 5e E336436 (UL) TYPE PLTC FT4 or c(UL) us TYPE CMG 75°C or <logo cURus> AWM STYLE 20201 60°C 600V I/II A/B FT1 RoHS <date YYWW> UKCA CE-44 <metermarking>	
Minimum Bend Radius		1.54in				
Cabled Core Diameter		0.181 in				
Electrical Characteristics (for 100 meters of cable)						
Impedance (1-100 MHz)		100 Ω 1 – 100 MHz	UL Classification		(cULus) TYPE CMG/PLTC or AWM Style 20201; (cURus) Class I and II, Div. 2; Class 1 Div. 2	
Capacitance		15.85 pF/ft @ 1MHz; Nominal	Approvals**		cULus, uURus, CE, RoHS	
Resistance, Max.		32.7 Ω DC per 1000ft	Attenuation Crosstalk Ratio, Far End (ACRF)		1 ≤ f ≤ 100 MHz: 23.8 - 20 LOG(f/100) dB MIN	
Dielectric Withstanding, Min.		1500V RMS	Insertion Loss		1 ≤ f ≤ 100 MHz: 1.967 √f + 0.023(f) + 0.050/√f dB MAX	
Return Loss		1 ≤ f < 10 MHz: 20 + 5 LOG(f) dB MIN 10 ≤ f < 20 MHz: 25 dB MIN 20 ≤ f ≤ 100 MHz: 25 - 7.0 LOG(f/20) dB MIN	Power Sum Attenuation to Crosstalk Ratio, Far End (PSACRF)		1 ≤ f ≤ 100 MHz: 20.8 - 20 LOG(f/100) dB MIN	
Near End Crosstalk (NEXT)		1 ≤ f ≤ 100 MHz: 35.3 - 15 LOG(f/100) dB MIN	Cross Section			
Power Sum Near End Crosstalk (PSNEXT)		1 ≤ f ≤ 100 MHz: 32.3 - 15 LOG(f/100) dB MIN				
TCL		1 ≤ f ≤ 100 MHz: 30 - 10 LOG(f/100) dB MIN				
ELTCTL		1 ≤ f ≤ 30 MHz: 35 - 20 LOG(f) dB MIN				
Velocity Of Propagation		65%				
Delay		4 ≤ f ≤ 100 MHz: 534 + 36/√(f ns MAX				
Delay Skew		1 ≤ f ≤ 100 MHz: <20ns/100m				

* See web store www.AutomationDirect.com for maximum cut lengths** To obtain the most current agency approval information, see the Agency Approval Checklist section on the part number's web page at www.AutomationDirect.com

Please Note: Our prices on Continuous Flexing IE Cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.