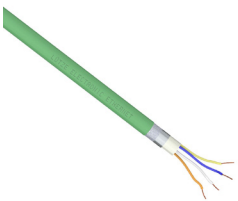
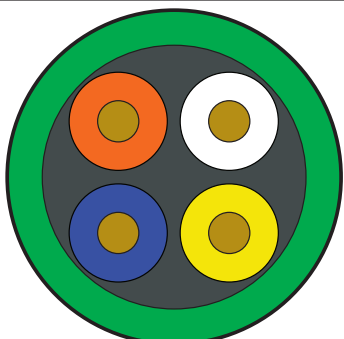


Profinet Type A Cable



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 /III 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)	$1 \leq f \leq 100$ MHz: 23.8 - 20 LOG(f/100) dB MIN			
Dielectric Withstanding, Min.	1500V RMS	Insertion Loss	$1 \leq f \leq 100$ MHz: $1.967 \sqrt{f} + 0.023(f) + 0.050/\sqrt{f}$ dB MAX			
Return Loss	$1 \leq f < 10$ MHz: 20 + 5 LOG(f) dB MIN $10 \leq f < 20$ MHz: 25 dB MIN $20 \leq f \leq 100$ MHz: 25 - 7.0 LOG(f/20) dB MIN	Power Sum Attenuation to Crosstalk Ratio, Far End (PSACRF)	$1 \leq f \leq 100$ MHz: 20.8 - 20 LOG(f/100) dB MIN			
Near End Crosstalk (NEXT)	$1 \leq f \leq 100$ MHz: 35.3 - 15 LOG(f/100) dB MIN	Cross Section				
Power Sum Near End Crosstalk (PSNEXT)	$1 \leq f \leq 100$ MHz: 32.3 - 15 LOG(f/100) dB MIN					
TCL	$1 \leq f \leq 100$ MHz: 30 - 10 LOG(f/100) dB MIN					
ELTCTL	$1 \leq f \leq 30$ MHz: 35 - 20 LOG(f) dB MIN					
Velocity Of Propagation	65%					
Delay	$4 \leq f \leq 100$ MHz: 534 + 36/√(f) ns MAX					
Delay Skew	$1 \leq f \leq 100$ 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.