



ProfiNet Type A

Industrial Ethernet ProfiNet cables are designed to provide reliable network communications in the demanding Industrial and Process Control environment where difficult EMC conditions are pervasive. Conforming to the EIA/TIA-568 standard, These cables support half-duplex high speed communications. It ensures superior transmission properties and can be used even under most severe conditions.

Construction:

Application:

Type/Area of Application	Fixed Installation, Indoor	Heavy duty	
Cable Construction	2x2x0.64 mm	2x2x0.64 mm	
Inner Conductor Diameter	Copper, bare (AWG 22/1)	Copper, bare (AWG 22/1)	
Conductor Insulation	PE	PE	
Conductor Colors	white, yellow, blue, orange	white, yellow, blue, orange	
Stranding Element	Star quad	Star quad	
Shielding 1	Polyester foil over stranded bundle	Polyester foil over stranded bundle	
Shielding 2	Polyester foil, aluminum-lined	Polyester foil, aluminum-lined	
Total Shielding	Cu braid, tinned	Cu braid, tinned	
Inner Jacket Material	PVC	PVC	
Outer Jacket Material	PVC	PUR	
Outer Diameter	6.5 mm ± 0.2 mm	6.5 mm ± 0.2 mm	
Outer Jacket Color	Green	Green	
Electrical Data:			
Characteristic Impedance@1-100 MHz		100 Ohm ± 15 Ohm	
Conductor Resistance		62.0 Ohm/km max.	

Operating Temp.Range, max.



Insulation Resistance	0.50 GOhm x km min.		
Mutual Capacitance		50.0 nF/km nom.	
Working Voltage		300V	
Test Voltage		1.5 KV	
		10 MHz	5.2 dB/100m
Attenuation		16 MHz	6.9 dB/100m
Attenuation		62.5 MHz	16.0 dB/100m
		100 MHz	19.5 dB/100m
Technical Data:			
Weight:	approximately 67.0 kg/km	approximately 64.0 kg/km	
Min. Bending Radius (Laying)	5 x OD mm	10 x OD mm	
Operating Temp.Range, min.	-40 °C	-40 °C	

+70 °C

+70 °C