



ProfiNet Type A

Application:

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.



Constructon:

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
Wrapping	Polyester foil over stranded bundle	Polyester foil over stranded bundle
Shielding	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 \pm 15 Ohm	
Conductor Resistance	62.0 Ohm/km max.	
Insulation Resistance	0.50 GOhm x km min.	
Mutual Capacitance	50.0 nF/km nom.	
Working Voltage	300V	
Test Voltage	1.5 KV	
Attenuation	10 MHz	5.2 dB/100m
	16 MHz	6.9 dB/100m
	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
Operating Temp. Range, max.	+70 °C	+70 °C



ProfiNet Type A Radiation Resistant & Armored

Application:

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.



Constructon:

Type/Area of Application	Ray loaded areas	Fixed Installation, Outdoor
Cable Construction	2x2x0.64 mm	2x2x0.64 mm
Inner Conductor Diameter	Copper, bare (AWG 22/1)	Copper, bare (AWG 22/1)
Conductor Insulation	XLPE ray cross-linking	PE
Conductor Colors	white, yellow, blue, orange	white, yellow, blue, orange
Stranding Element	Star quad	Star quad
Wrapping	Polyester foil over stranded bundle	Polyester foil over stranded bundle
Shielding	Polyester foil, aluminum-lined	Polyester foil, aluminum-lined
Total Shielding	Cu braid, tinned	Cu braid, tinned
Armoring	-	Steel Rib
Inner Jacket Material	TPR cross-linking	PVC
Outer Jacket Material	PUR	PE
Outer Diameter	6.5 mm ± 0.2 mm	9.3 mm ± 0.5 mm
Outer Jacket Color	Green	Black



Electrical Data:

Characteristic Impedance@1-100 MHz	100 Ω \pm 15 Ω	
Conductor Resistance	62.0 Ohm/km max.	
Insulation Resistance	0.50 GOhm x km min.	
Mutual Capacitance	50.0 nF/km nom.	
Working Voltage	300V	
Test Voltage	1.5 KV	
Attenuation	10 MHz	5.2 dB/100m
	16 MHz	6.9 dB/100m
	62.5 MHz	16.0 dB/100m
	100 MHz	19.5 dB/100m

Technical Data:

Weight	approximately 63.0 kg/km	approximately 124.0 kg/km
Min. Bending Radius (Laying)	46.0 mm	93.0 mm
Operating Temp. Range, min.	-40 °C	-40 °C
Operating Temp. Range, max.	+80 °C	+70 °C



ProfiNet Type B

Application:

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.



Constructon:

Type/Area of Application	Mobile Use
Cable Construction	2x2x0.64 mm (stranded) + 4x1.5 mm ²
Inner Conductor Diameter 1	Copper, tinned (AWG 22/7)
Inner Conductor Diameter 2	Copper, bare (AWG 16/84)
Conductor Insulation 1	Foam-Skin-PE
Conductor Insulation 2	Foam-Skin-PE
Conductor Colors 1	white, yellow, blue, orange
Conductor Colors 2	Black
Stranding Element	Double Conductor
Wrapping	Polyester foil over stranded bundle
Shielding	Polyester foil, aluminum lined
Total Shielding	Polyester foil
Outer Jacket Material	FRNC
Outer Diameter	10.3 mm ± 0.3 mm
Outer Jacket Color	Green



Electrical Data:

Characteristic Impedance@1-100 MHz	100 Ω \pm 15 Ω	
Conductor Resistance	60.0 Ohm/km max.	
Insulation Resistance	0.50 GOhm x km min.	
Mutual Capacitance	52.0 nF/km nom.	
Working Voltage	300V	
Test Voltage	1.5 KV	
Attenuation	10 MHz	6.3 dB/100m
	16 MHz	8.0 dB/100m
	62.5 MHz	16.5 dB/100m
	100 MHz	21.3 dB/100m

Technical Data:

Weight	approximately 153.0 kg/km
Min. Bending Radius for Laying	10 x OD mm
Operating Temperature Range, min.	-40 °C
Operating Temperature Range, max.	+70 °C



ProfiNet Type B+C

Application:

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.



Constructon:

Type/Area of Application	Mobile Use	Drag Chain Applications
Cable Construction	2x2x0.64 mm (stranded)	2x2x0.64 mm (stranded)
Inner Conductor Diamete	Copper, tinned (AWG 22/7)	Copper, tinned (AWG 22/7)
Conductor Insulation	PE	PE
Conductor Colors	white, yellow, blue, orange	white, yellow, blue, orange
Stranding Element	Star quad	Star quad
Wrapping	Polyester foil over stranded bundle	Polyester foil over stranded bundle
Shielding	Polyester foil, aluminum-lined	Polyester foil, aluminum-lined
Total Shielding	Cu braid, tinned	Cu braid, tinned
Inner Jacket Material	PVC	FRNC
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 Ω \pm 15 Ω	
Conductor Resistance	60.0 Ohm/km max.	
Insulation Resistance	0.50 GOhm x km min.	
Mutual Capacitance	52.0 nF/km nom.	
Working Voltage	300V	
Test Voltage	1.5 KV	
Attenuation	10 MHz	6.0 dB/100m
	16 MHz	7.6 dB/100m
	62.5 MHz	16 dB/100m
	100 MHz	21 dB/100m

Technical Data:

Weight	approximately 63.0 kg/km
Min. Bending Radius (Laying)	5 x OD mm
Operating Temp.Range, min.	-40 °C
Operating Temp.Range, max.	+70 °C