



## 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 $\Omega$ $\pm$ 15 $\Omega$	
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/10m
	16 MHz	6.9 dB/10m
	62.5 MHz	62.5 dB/10m
	100 MHz	19.5 dB/10m

## 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