





The Profibus-ET200X and Profibus ECOFAST lines used in the area of process automation. These BUS systems are a very economical solution for the cell and field area. For the information exchange between different automation systems as well as for communication with the connected decentralized field units, serial field bus systems are used. The series hybrid are characterized by a special construction with data and power supply in one cable. These types are suited for the application in drag chains and similar mobile applications.

## Construction:

**Application:** 

Type/Area of Application	Drag Chain Applications	Mobile Use
Cable Construction	1x2x0.65 mm + 3x1x0.75 mm2 (stranded)	1x2x0.65 mm + 4x1x1.5 mm2(stranded)
Inner Conductor Diameter 1	Copper, bare (AWG 22/19)	Copper, bare (AWG 24/19)
Inner Conductor Diameter 2	Copper, bare (AWG 18/24)	Copper, bare (AWG 18/84)
Conductor Insulation 1	Foam-skin-PE	Foam-skin-PE
Conductor Insulation 2	PVC	ТРМ
Conductor Colors 1	red, green	red, green
Conductor Colors 2	black, blue, green-yellow	back, back, back, back
Stranding Element	Double Conductor	2 conductors + 2 fillers stranded together
Shielding 1	Polyester foil over stranded bundle	Polyester foil over stranded bundle
Shielding 2	Foil + Braid	Foil + Braid
Total Shielding	Polyester foil	-
Outer Jacket Material	PUR	TPU
Outer Diameter	9.5 mm ± 0.5 mm	11.0 mm ± 0.3 mm
Outer Jacket Color	Green	Violet



Electrical Data:

<b>Characteristic Impedance@3-20MHz</b> 150 $\Omega \pm 10 \Omega$			150 Ω ± 10 Ω			
Conductor Resistance	84.0 Ohm/k	m ma	х.	89.9 Ohm/k	m ma	х.
Insulation Resistance	1.00 GOhm x km min.		1.00 GOhm x km min.			
Mutual Capacitance@1 KHz	30.0 nF/km nom.		30.0 nF/km nom.			
Working Voltage	Max: 250 V	,		Max: 250 V	/	
Test Voltage	1.5 KV			1.5 KV		
	9.6kHz	<	3.0dB/km	9.6kHz	<	3.0dB/km
Attenuation	38.4kHz	<	5.0dB/km	38.4kHz	<	5.0dB/km
Attenuation	4.0MHz	<	25.0dB/km	4.0MHz	<	30.0dB/km
	16.0MHz	<	52.0dB/km	16.0MHz	<	60.0dB/km

## Technical Data:

Weight	approximately 105.0kg/km	approximately 159.0kg/km
Min. Bending Radius (Laying)	14 x OD mm	15 x OD mm
Operating Temp.Range, min.	- 5 °C	-20 °C
Operating Temp.Range, max.	+60 °C	+60 °C