CAN-Bus

Application:

CAN Bus are field bus cables that comform to international CAN standard ISO-11898, CAN Bus (Control Area Network) is a non addressable system which treats all devices as equal allowing fast transmission of data. Due to its robust nature it has been widely adopted in the automotive industry. Several versions of CAN Bus cables have been developed to meet the fast changing needs of the automation industry. The PVC jacket version is designed for stationary applications,while the Halogen free PUR version is for highly flexing application

Construction:

0.22 mm^2

Type/Area of Application	Fixed Installation, Indoor	Fixed Installation, Indoor
Cable Construction	1x2x0.22 mm^2 (stranded)	4x1x0.22 mm^2 (stranded)
		2x2x0.22 mm^2 (stranded)
Conductor Insulation	Cellular PE/ Foam skin PE	Cellular PE/ Foam skin PE
Conductor Colors	white, brown	white, brown, green, yellow
Stranding Element	Double conductor	Star quad/ 2 pairs
Wrapping	Polyester foil over stranded bundle	Polyester foil over stranded bundle
Total Shielding	Copper braid, tinned	Copper braid, tinned
Outer Jacket Material	PVC	PVC
Outer Diameter	5.4 mm ± 0.2 mm	6.9 mm ± 0.2 mm(quad) 7.5 mm ± 0.2 mm(pair)
Outer Jacket Color	Violet	Violet
Cable Weight	approximately 41.0 kg/km	approximately 60.0 kg/km

Electrical Data:

Characteristic Impedance@1MHz	120 Ω ± 10 Ω				120 Ω ± 10 Ω			
Insulation Resistance	1.00 GOhm x km min.				1.00 GOhm x km min.			
Loop Resistance	186 Ohm/km max.				186 Ohm/km max.			
Mutual Capacitance@800Hz	40.0 nF/km nom.				40.0 nF/km nom.			
Nonimal Voltage	30V				30V			
Test Voltage	1.5 kV				1.5 kV			
Attenuation	100	kHz	0.6	dB/100m	100	kHz	0.6	dB/100m
	1	MHz	1.7	dB/100m	1	MHz	1.7	dB/100m
	5	MHz	3.9	dB/100m	5	MHz	3.9	dB/100m
	10	MHz	5.6	dB/100m	10	MHz	5.6	dB/100m
	20	MHz	8.1	dB/100m	20	MHz	8.1	dB/100m

0.34 mm^2

Type/Area of Application	Fixed Installation, Indoor	Fixed Installation, Indoor
Cable Construction	1x2x0.34 mm^2 (stranded)	4x1x0.34 mm^2 (stranded)
		2x2x0.34 mm^2 (stranded)
Conductor Insulation	Cellular PE/ Foam skin PE	Cellular PE/ Foam skin PE
Conductor Colors	white, brown	white, brown, green, yellow
Stranding Element	Double conductor	Star quad/ 2 pairs
Wrapping	Polyester foil over stranded bundle	Polyester foil over stranded bundle
Total Shielding	Copper braid, tinned	Copper braid, tinned
Outer Jacket Material	PVC	PVC
Outer Diameter	6.5 mm ± 0.2 mm	8.0 mm ± 0.2 mm(quad) 8.5 mm ± 0.2 mm(pair)
Outer Jacket Color	Violet	Violet
Cable Weight	approximately 54.0 kg/km	approximately 77.0 kg/km(quad) approximately 85.0 kg/km(pair)

Electrical Data:

Characteristic Impedance@1MHz	120 Ω ± 10 Ω	120 Ω ± 10 Ω
Insulation Resistance	1.00 GOhm x km min.	1.00 GOhm x km min.
Loop Resistance	115 Ohm/km max.	115 Ohm/km max.
Mutual Capacitance@800Hz	40.0 nF/km nom.	40.0 nF/km nom.
Nonimal Voltage	30V	30V
Test Voltage	1.5 kV	1.5 kV

Attenuation	100	kHz	0.4	dB/100m	100	kHz	0.4	dB/100m
	1	MHz	1.3	dB/100m	1	MHz	1.3	dB/100m
	5	MHz	3.0	dB/100m	5	MHz	3.0	dB/100m
	10	MHz	4.3	dB/100m	10	MHz	4.3	dB/100m
	20	MHz	6.4	dB/100m	20	MHz	6.4	dB/100m

0.50 mm^2

Type/Area of Application	Fixed Installation, Indoor	Fixed Installation, Indoor
Cable Construction	1x2x0.50 mm^2 (stranded)	4x1x0.50 mm^2 (stranded)
		2x2x0.50 mm^2 (stranded)
Conductor Insulation	Cellular PE/ Foam skin PE	Cellular PE/ Foam skin PE
Conductor Colors	white, brown	white, brown, green, yellow
Stranding Element	Double conductor	Star quad/ 2 pairs
Wrapping	Polyester foil over stranded bundle	Polyester foil over stranded bundle
Total Shielding	Copper braid, tinned	Copper braid, tinned
Outer Jacket Material	PVC	PVC
Outer Diameter	7.0 mm ± 0.2 mm	8.5 mm ± 0.2 mm(quad) 9.6 mm ± 0.2 mm(pair)
Outer Jacket Color	Violet	Violet
Cable Weight	approximately 69.0 kg/km	approximately 100.0 kg/km(quad) approximately 116.0 kg/km(pair)

Electrical Data:

Characteristic Impedance@1MHz	120 Ω ± 10 Ω				120 Ω ± 10 Ω			
Insulation Resistance	1.00 GOhm x km min.				1.00 GOhm x km min.			
Loop Resistance	78 Ohm/km max.				78 Ohm/km max.			
Mutual Capacitance@800Hz	40.0 nF/km nom.				40.0 nF/km nom.			
Nonimal Voltage	30V				30V			
Test Voltage	1.5 kV				1.5 kV			
Attenuation	100	kHz	0.3	dB/100m	100	kHz	0.3	dB/100m
	1	MHz	1.1	dB/100m	1	MHz	1.1	dB/100m
	5	MHz	2.8	dB/100m	5	MHz	2.8	dB/100m
	10	MHz	3.9	dB/100m	10	MHz	3.9	dB/100m
	20	MHz	5.7	dB/100m	20	MHz	5.7	dB/100m

0.75 mm²

Type/Area of Application	Fixed Installation, Indoor	Fixed Installation, Indoor
Cable Construction	1x2x0.75 mm² (stranded)	4x1x0.75 mm² (stranded)
		2x2x0.75 mm² (stranded)
Conductor Insulation	Cellular PE/ Foam skin PE	Cellular PE/ Foam skin PE
Conductor Colors	white, brown	white, brown, green, yellow
Stranding Element	Double conductor	Star quad/ 2 pairs
Wrapping	Polyester foil over stranded bundle	Polyester foil over stranded bundle
Total Shielding	Copper braid, tinned	Copper braid, tinned
Outer Jacket Material	PVC	PVC
Outer Diameter	8.7 mm ± 0.2 mm	10.4 mm ± 0.2 mm(quad) 11.8 mm ± 0.2 mm(pair)
Outer Jacket Color	Violet	Violet
Cable Weight	approximately 101.0 kg/km	approximately 112.0 kg/km

Electrical Data:

Characteristic Impedance@1MHz	120 Ω ± 10 Ω				120 Ω ± 10 Ω			
Insulation Resistance	1.00 GOhm x km min.				1.00 GOhm x km min.			
Loop Resistance	52 Ohm/km max.				52 Ohm/km max.			
Mutual Capacitance@800Hz	40.0 nF/km nom.				40.0 nF/km nom.			
Nonimal Voltage	30V				30V			
Test Voltage	1.5 kV				1.5 kV			
Attenuation	100	kHz	0.3	dB/100m	100	kHz	0.3	dB/100m
	1	MHz	0.9	dB/100m	1	MHz	0.9	dB/100m
	5	MHz	2.4	dB/100m	5	MHz	2.4	dB/100m
	10	MHz	3.5	dB/100m	10	MHz	3.5	dB/100m
	20	MHz	5.2	dB/100m	20	MHz	5.2	dB/100m

Technical Data:

Bending Radius (Approx.)	15 x OD mm	15 x OD mm
Operating Temp.Range, min.	- 30 °C	- 30 °C
Operating Temp.Range, max.	+70 °C	+70 °C